Alberta Electric System Operator 2022 ISO Tariff Update and Rider J Amendment Application

Date: November 15, 2021

Alberta Electric System Operator

Calgary Place, 2500, 330-5th Avenue SW Calgary, AB T2P 0L4

Phone: 403-539-2450 | Fax: 403-539-2949

www.aeso.ca

@theaeso

Contents

Tables and Figures

1 Introduction

1 Pursuant to sections 30 and 119 of the *Electric Utilities Act*, S.A. 2003, c. E-5.1 ("Act"), the Alberta Electricity System Operator ("AESO") applies to the Alberta Utilities Commission ("Commission") for approval of its 2022 update to the Independent System Operator ("ISO") tariff, and for amendments to Rider J of the ISO tariff, *Wind Forecasting Service Cost Recovery Rider* ("Rider J") to include solar forecasting services for solar-powered assets (the "Application").

2 As detailed further below, this Application seeks approval of changes to the rates to be charged by the AESO in 2022 for system access service, and for amendments to ensure that the costs associated with solar forecasting services can, in addition to the costs of wind forecasting services, be recovered through Rider J.

3 If approved, this Application would change only the levels (that is, the dollar-based and percentage of pool price amounts) included in the rates and local investment amounts[1] of the ISO tariff, based on costs and billing determinants forecast by the AESO for the 2022 calendar year.

4 This Application is consistent with the tariff update methodology accepted by the Commission in Decision 2010-606.[2]

1.1 Organization of Application

5 This Application is organized into the following sections:

1 **Introduction** — Provides background on the Application and specifies the relief requested.

2 **2022 Forecast Revenue Requirement** — Summarizes the AESO's forecast revenue requirement for 2022, including costs that have either been approved by the Commission (for transmission facility owner ("TFO") tariffs) or proposed for approval by the AESO Board (for ancillary services, transmission line losses, and the AESO's own administration).

3 **2022 Tariff Update and Rider J Amendment** — Discusses the calculation of rate levels based on the 2022 forecast revenue requirement, 2020 classification and functionalization values approved by the Commission in Decision 22942-D02-2019, and the 2022 forecast billing determinants and the AESO's proposed amendments to Rider J.

4 **2022 ISO Maximum Investment Levels Update** – Discusses the calculation of 2022 maximum investment levels using the 2022 escalation factor.

5 **Conclusion —** Reiterates the relief requested**.**

6 This Application also includes the following appendices:

A **AESO 2022 Business Plan and Budget Proposal** — Document prepared by AESO management in consultation with stakeholders, as proposed on November 2, 2021, containing the AESO's proposed 2022 business initiatives and proposed 2022 budgets

[1] Set out in subsection 4.7(2)(b) of the ISO tariff approved in Decision 25175-D02-2020.
[2] Decision 2010-606, *Alberta Electric System Operator 2010 ISO Tariff* (December 22, 2010), paras. 536-545.

and forecasts for ancillary services costs, transmission line losses costs, and administrative costs.

B **2022 Rate Calculations** — Microsoft Excel workbook which calculates the updated dollar and percentage of pool price amounts for the 2022 rates, based on the same methodology used for the AESO's currently approved rates.

C **2022 Escalation Factor and Investment Levels** — Microsoft Excel workbook which calculates the composite inflation index and escalation factor used to update maximum investment levels.

D **2022 Rates, Riders of the ISO Tariff** — The proposed 2022 rates, and riders that incorporate the 2022 updated amounts included as Appendix B to this Application. The AESO's proposed amendments to Rider J have also been included in this appendix.

E **2022 Rates, Riders of the ISO Tariff (blackline)** — The blackline version of the proposed 2022 rates, and riders that incorporate the 2022 updated amounts included as Appendix B to this Application. The AESO's proposed amendments to Rider J have also been included in this appendix.

F **Proposed Amendments to Rider J** – The AESO's proposed amendments to Rider J, as described further in section 3.2 of this Application.

1.2 Relief Requested

7 For the reasons outlined below, the AESO submits that the tariff updates and amendments to Rider J proposed in this Application are just and reasonable, and respectfully requests that the Commission approve this Application, including (i) the updated amounts included as Appendix B to this Application (ii) the proposed 2022 ISO tariff Rate DTS, Rate FTS, Rate DOS, Rate XOS, Rate XOM, Rate PSC, Rate STS, and (iii) the amended Rider J included as Appendix F to this Application.

8 The AESO respectfully requests that this Application be approved effective January 1, 2022. The AESO further requests that the Commission issue its approval on or before December 29, 2021 as this is the last approval date that will allow the AESO to implement the proposed tariff updates effective January 1, 2022 on a prospective basis and inform market participants in advance of rate changes. If the timing of this Application does not permit the granting of final approval on or before December 29, 2021, the AESO also requests that the Commission issue its approval on an interim refundable basis.

9 For additional clarity, the AESO requests that the updated rates and riders proposed in this Application apply on a go-forward basis only, commencing from the effective date approved by the Commission. Consistent with the Commission's statements in Decision 2014-242,[3] the AESO submits that currently-approved deferral account rider and reconciliation mechanisms should continue to be used to address any variances between costs and revenues occurring prior to the approval of the applied-for rates. The AESO is not seeking any retroactive adjustments with respect to the rates proposed for approval in this Application.

[3] Decision 2014-242*, Alberta Electric System Operator 2014 ISO Tariff Application and 2013 ISO Tariff Update* (August 21, 2014), para 617.

2 AESO 2022 Forecast Revenue Requirement

10 The AESO's revenue requirement consists of 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). The AESO's forecast costs for 2022 are detailed in Table B-1 of Appendix B to this Application.

11 The total revenue requirement forecast for 2022 of $2,351.2 million represents a decrease of $17.6 million (or 0.7%) over the 2021 total revenue requirement forecast of $2,368.8 million included in the 2021 ISO tariff Application. The decrease results from a forecast decrease in 2022 of $62.1 million (or 3.3%) in wires costs, which is partly offset by 2022 forecast increases to ancillary services costs of $11.8 million (or 5.6%) and transmission losses of $38.9 million or (27.1%).

2.1 AESO Board Approval of Costs

12 The AESO is not seeking approval of its 2022 forecast revenue requirement in this Application. The AESO's forecast costs are approved through other processes provided for in relevant legislation, described below. These costs, as provided in column A of Table B-1 of Appendix B, were addressed in the AESO *2022 Business Plan and Budget Proposal,* dated November 2, 2021 and included as Appendix A to this Application.

13 With respect to the AESO's costs, including their approval processes:

(a) Wires costs reflect the amounts paid by the AESO to TFOs in the TFO tariffs approved by the Commission under section 37 of the Act. The wires costs forecast included in the AESO *2022 Business Plan and Budget Proposal* reflected TFO tariffs applied for or approved by the Commission at the time the AESO budget was prepared.

(b) Ancillary services costs reflect recovery of the prudent costs incurred by the AESO related to the provision of ancillary services acquired from market participants under subsection 30(4) of the Act.

(c) Losses costs reflect recovery of the prudent costs of transmission line losses under subsection 30(4) of the Act.

(d) Administrative costs reflect the transmission-related costs and expenses incurred by the AESO and described under subsection 1(1)(g) of the *Transmission Regulation*.

14 The ancillary services costs, losses costs, and administrative costs described above are approved by the AESO Board (consisting of the "ISO members" appointed under section 8 of the Act) in accordance with the *Transmission Regulation*. Section 3 of the *Transmission Regulation* requires that the AESO consult with market participants with respect to proposed costs to be approved by the AESO Board. Subsection 48(1) of the *Transmission Regulation* provides that a reference to "prudent" or "appropriate" in the Act in relation to the costs of ancillary services and losses means the amounts of those costs that have been approved by the AESO Board. In addition, subsection 46(1) of the *Transmission Regulation* provides that the AESO's administrative costs, once approved by the AESO Board, must be considered as "prudent" by the Commission unless an interested person satisfies the Commission otherwise.

15 The practice established by the AESO to carry out consultation on ancillary services, losses, and administrative costs is the Budget Review Process. The Budget Review Process is a transparent

stakeholder process which provides a prudence review with input from stakeholders. At the conclusion of the Budget Review Process, AESO management proposes a business plan and budget to the AESO Board, including a request for approval of ancillary services costs, losses costs, and administrative costs.

16 As part of the AESO Budget Review Process for its 2022 budget, AESO management consulted with stakeholders in a planning process that had been first established with stakeholders in 2005. The *2022 Business Plan and Budget Proposal* includes details on the consultation process and on the proposal for the AESO's business plan and budget as it relates to forecasted ancillary services costs, forecasted losses costs, and the AESO's business priorities and budget for 2022. The *2022 Business Plan and Budget Proposal* was also provided to stakeholders and posted on the AESO website.

17 The AESO's 2022 forecast ancillary services, losses and administrative costs have not, as of the date of filing this Application, been approved by the AESO Board. The Budget Review Process moved through the first round of consultation with preliminary 2022 forecasts costs provided to stakeholders in September 2021. The AESO will file a letter to advise the Commission of AESO Board approval once it has been received. The AESO Board approval is expected in December 2021.

18 Additional information on the AESO's business priorities and budget for 2022 is available on the AESO website at www.aeso.ca by following the path AESO ▶ Business Planning.

2.2 Wires Costs

19 As shown in column A of Table B-1 of Appendix B, the 2022 forecast costs for wires are $1,889.5 million and represent approximately 80.4% of the AESO's transmission revenue requirement. Wires costs include primarily wires-related costs of TFOs as well as two small non-wires costs.

20 The AESO has determined the 2022 wires costs for TFOs using the following approach, which was described in section 2.2.1 of the AESO's 2014 ISO tariff application and 2013 ISO tariff update,[4] approved in Decision 2010-606, referred to in Decision 2014-242[5] and updated in Decision 22093-D02-2017[6]:

(a) If a transmission facility owner has received final Commission approval for its applicable tariff, the AESO includes the approved costs for that transmission facility owner tariff.

(b) If a transmission facility owner has applied for its tariff, the Commission has issued an initial decision on the application, and the transmission facility owner has submitted a refiling in compliance with the decision, the AESO includes the transmission facility owner tariff costs included in the refiling.

(c) If a transmission facility owner 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 transmission facility owner has not yet submitted its compliance refiling, the AESO includes the most recent of the following: (i) the transmission facility owner tariff costs last approved by the Commission on a final basis for the transmission facility owner plus 72% of any increase or decrease included in the transmission facility owner's tariff application above or below the prior approved costs, and (ii) the transmission facility owner tariff costs last applied-for by the transmission facility owner in a compliance refiling plus 72% of any increase or

[4] Exhibit 0026.00.AESO-2718, paras. 53-57.
[5] Decision 2014-242, para. 43.
[6] Decision 22093-D02-2017, *Alberta Electric System Operator 2017 ISO Tariff Update*, para. 37.

decrease included in the transmission facility owner's tariff application above or below the prior approved costs.

(d) If a transmission facility owner has not yet applied for its tariff, the AESO includes the most recent of the following: (i) the transmission facility owner tariff costs last approved by the Commission on either a final or interim basis, and (ii) the transmission facility owner tariff costs last applied-for by the transmission facility owner in a compliance refiling.

21 As noted in the 2014 ISO tariff application, "the inclusion of 72% of an applied-for increase or decrease in (c) above was determined from the percentages of applied-for changes which had received final approval in recent transmission facility owner tariff applications, and is not meant to indicate any predetermination of the result of a transmission facility owner tariff proceeding, nor be interpreted as AESO support for any specific components of a transmission facility owner tariff application."[7]

22 The majority of the TFO tariff applications applicable to this Application have been filed and a number have been final approved or interim approved by the Commission. The TFO tariff costs are included as Table B-2 of Appendix B to this Application.

2.3 Ancillary Services Costs

23 As shown in column A of Table B-1 of Appendix B, the forecast 2022 costs for ancillary services are $210.1 million and represent approximately 8.9% of the AESO's transmission revenue requirement. Ancillary services, as defined in subsection 1(1)(b) of the Act, are services required to ensure that the interconnected electric system is operated in a manner that provides a satisfactory level of service with acceptable levels of voltage and frequency. The largest component of ancillary services costs is operating reserve, which represents the real power capability above system demand required to provide for regulation, forced outages and unplanned outages.

24 Ancillary service costs are primarily a function of volume forecasts and market-based commodity pricing forecasts. The 2022 forecast costs for ancillary services were based on a forecast average pool price of $74.01/MWh.

2.4 Losses Costs

25 As shown in column A of Table B-1 of Appendix B, the 2022 forecast costs for transmission line losses are $143.3 million and represent approximately 6.1% of the AESO's transmission revenue requirement. Losses are the energy lost on the transmission system when power is transmitted from suppliers to loads. Losses are the residual of the metered generation plus scheduled imports less metered loads and less scheduled exports.

26 Losses costs are a function of volume forecasts and market-based commodity pricing forecasts. The 2022 forecast costs for losses were based on a forecast average pool price of $74.01/MWh.

2.5 Administrative Costs

27 As shown in column A of Table B-1 of Appendix B, the 2022 general and administrative costs are $108.3 million and represent approximately 4.6% of the AESO's transmission revenue requirement.

[7] Exhibit 0026.00.AESO-2718, para. 58.

28 Administrative costs are defined in paragraph 1(1)(g) of the *Transmission Regulation* as follows:

> 1(1)(g) "ISO's own administrative costs" means
>
> (i) the transmission-related costs and expenses of the ISO respecting the administration, operation and management of the ISO,
>
> (ii) the transmission-related costs and expenses of the ISO respecting reliability standards and reliability management systems, and
>
> (iii) the transmission-related costs and expenses required to be paid, or otherwise appropriately paid, by the ISO, except for the following:
> (A) costs for the provision of ancillary services;
> (B) costs of transmission line losses;
> (C) amounts payable under TFO transmission tariffs.

29 The AESO Board approves the AESO's administrative costs in their entirety. However, only the transmission-related portions of those costs (as defined in subsection 1(1)(g) of the *Transmission Regulation*) are recovered through the ISO tariff. Further, the AESO *2022 Business Plan and Budget Proposal* allocates administrative costs among the four functions of the AESO; namely, transmission, energy market, renewables (the Renewable Electricity Program) and load settlement.

3 2022 Rates Update and Rider J Amendments

30 The 2022 rate calculations are included as Appendix B to this Application, in Tables B-1 through B-16.

31 The rate calculations use the following inputs:

(a) the 2022 forecast revenue requirement discussed in section 2 of this Application;

(b) the functionalization and classification of wires costs and the point-of delivery cost function approved for 2020 in Decision 22942-D02-2019;[8] and

(c) the 2022 forecast billing determinants prepared by the AESO.

3.1 Specific Rate Changes

32 Where applicable, rates in the ISO tariff have been updated to reflect the 2022 forecast revenue requirement, 2020 classification and functionalization values, and 2022 forecast billing determinants. Specifically, levels of dollar-based and percentage of pool price amounts have been updated in the following rates:

- Rate DTS, *Demand Transmission Service*;
- Rate FTS, *Fort Nelson Demand Transmission Service*;
- Rate DOS, *Demand Opportunity Service*;
- Rate XOS, *Export Opportunity Service*; and
- Rate XOM, *Export Opportunity Merchant Service*.

---

[8] Exhibit 22942-X0025, Appendix D, Transmission System Cost Causation Study 2018 Update dated September 14, 2017, page 5, Table D-5. At the time of writing this application the 2020 classification and functionalization values were the most recently approved values available.

33 The levels for each of the above rates have been calculated in accordance with Appendix B to this Application. The updated rate sheets themselves are provided in the proposed 2022 ISO tariff included as Appendix D to this Application.

3.1.1 Rate PSC, Primary Service Credit

34 The 2022 primary service credit is calculated as[9]:

- 79% of the substation fraction ($/month) tier of the Rate DTS point of delivery charge;
- 79% of the first three capacity (7.5 MW, 9.5 MW, and 23 MW) tiers of the Rate DTS point of delivery charge; and
- 100% of the fourth capacity (remaining capacity above 40 MW) tier of the Rate DTS point of delivery charge.

35 As the Rate DTS point of delivery charge has been updated in this Application, the AESO has correspondingly updated the primary service credit as provided in Table B-8 of Appendix B to this Application.

3.2 Proposed Amendments to Rider J

36 As the AESO explained in its 2014 ISO tariff application, charges under Rider J recover both costs associated with the AESO's contracted wind forecasting service as well as variances from forecasts of costs and energy initially used to determine the values of the rider.[10] In 2022, Rider J is expected to recover all costs of the contracted wind forecasting service that have been incurred since it was initially implemented in 2011.

37 With this Application, the AESO is proposing to modify Rider J to include solar forecasting service costs for solar-powered assets. Currently, there is approximately 336 MW of solar capacity in the province, of which 128 MW are transmission connected and this number is expected to increase.[11] Solar assets have similar characteristics to wind assets in that the energy production of a solar asset can be variable in nature, which has the potential to affect the reliable operation of the transmission system. Accurate forecast data is important for both wind and solar assets as it impacts grid reliability and managing net demand variability. Charging forecasting services costs through Rider J to solar-powered assets is consistent with the principle of cost causation as these assets are causing the need for additional forecasting services. The AESO is therefore proposing that the existing Rider J methodology be applied to both wind and solar assets so that both wind and solar assets can be charged for the cost of the AESO's wind and solar forecasting services.

38 A blackline of the AESO's proposed amendments to Rider J, which are required to allow the recovery of Rider J costs from both wind and solar assets, is included as Appendix F of this Application. The AESO's proposed revisions to Rider J have also been incorporated into Appendices D and E of this Application.

39 On a cumulative forecast basis, the AESO will over-collect $42,702 through Rider J by the end of 2021. The wind and solar annual forecasting service cost for 2022 is $125,000, representing an increase of $70,400 from the annual forecasting service cost of $54,600 in 2021, which is attributable to the increase scope of services being provided with the addition of solar forecasting. Given the 2022 annual wind and solar forecasting cost of $125,000 and the 2022 annual wind and solar powered generation metered energy forecast of 10.8 million MWh, the AESO proposes to set the Rider J charge at $0.01/MWh.

---

[9] AUC Decision 2010-606, Table 2

[10] Exhibit 0026.00.AESO-2718, paras. 124-126.

[11] More information on solar and wind forecast can be found in the 2021 Long-term Outlook, which can be found using the following path: www.aeso.ca > Grid > Forecasting.

40 The proposed 2022 Rider J charge will increase by $0.01/MWh from the charge of $0.00/MWh in the current ISO tariff. This increase results from the previous year's surplus being applied to the 2022 year and the increased forecasting services costs for 2022. Table 3-1 below illustrates the changes from year to year to achieve as close to a zero balance as possible at the end of 2022. Table 3-1 only includes forecast solar costs, volumes and revenues starting in 2022.

Table 3-1 – Wind and Solar Forecasting Service Cumulative Balance

Line No.	Description	Actual 2010 – 2019	Actual 2020	Forecast 2021	Forecast 2022
1	Contracted wind and solar forecasting service* ($000)	$3,142.9	$54.6	$54.6	$125.0
2	Volumes (GWh)	32,190.5	5,952.8	6,275.0	10,836.2
3	Rider J Charge ($/MWh)	-	0.08**	0.00	0.01
4	Revenue ($000)	3,168.0	126.8	0.0	108.4
5	Annual (undercollection) / overcollection ($000)	25.1	72.2	(54.6)	(16.6)
6	**Cumulative Balance (undercollection) / overcollection ($000)**	**$25.1**	**$97.3**	**$42.7**	**$26.1**

* Assumes solar forecasting begins in 2022

**Rider J charge for 2020 was $0.08/MWh from January to March and $0.00/MWh from April to December.

3.3 2022 Forecast Billing Determinants

41 The rate calculations for the 2022 rates update are based on the AESO's forecast of billing determinants for 2022. The 2022 billing determinants are estimated using a combination of historical analysis and a DTS energy forecast that is described below. The updated DTS energy forecast, developed using a methodology similar to that applied to create the AESO's 2021 Long-Term Outlook with the most up to date actual load data and economic outlook, was used to estimate the billing determinants. The DTS energy forecast is generated from historic trends and economic growth (gross domestic product, population and employment) information and oilsands production forecasts. The AESO 2021 Long-term Outlook, including its data file, is available on the AESO website at www.aeso.ca by following the path Grid ▶ Forecasting. A comparison of the billing determinants used in the 2022 and 2021 rate calculations are provided in Table B-12 of Appendix B to this Application.

42 To further examine the reasonableness of the 2022 forecast billing determinants, Table 3-2 below provides a comparison of the forecast billing determinants in this Application to the 2017, 2018, 2019 and 2020 recorded billing determinants. The AESO considers that the overall increase in billing determinants forecast for 2022 is reasonable considering that impacts of the COVID-19 pandemic have begun subsiding in 2021 and oil prices have increased in 2021. Looking at Table 3-2 below, 2020 billing determinants were lower than previous years as a result of being negatively impacted by the pandemic. The AESO posted a report on the impact of the pandemic and low oil prices on December 3, 2020.[12] The 2021 year to date recorded billing determinants suggest that billing determinants for the full year will show an overall increase which aligns with the pre-pandemic billing determinants. This is reflected in the 2022 billing determinant forecast.

[12] Impact of COVID-19 pandemic and low oil prices on Alberta Load December 2020 Update: https://www.aeso.ca/assets/Uploads/COVID-and-Oil-Prices-Impact-on-Load.pdf

Table 3-2 – 2022 Forecast and 2020, 2019, 2018 and 2017 Recorded Billing Determinants

Rate DTS Billing Determinants	Units	2022 Forecast	2020 Recorded	2019 Recorded	2018 Recorded	2017 Recorded
Coincident Metered Demand	MW-months	93,328.4	91,292.0	93,436.3	95,806.9	94,486.6
Billing Capacity (Total)	MW-months	160,927.5	159,632.9	159,312.7	157,737.2	155,274.4
Highest Metered Demand	MW-months	120,841.6	117,711.8	120,522.7	121,845.0	120,536.9
Metered Energy (All Hours)	GWh	59,966.4.5	58,118.2	59,652.3	61,016.8	60,010.0
Market Participants (Total)	customer-months	5,373.6	5,384.6	5,407.4	5,285.1	5,283.2

43 Overall, the AESO considers that the 2022 forecast provides the best estimate, given the information available, of billing determinants for the rate calculations in this Application.

3.4 Bill Impacts

44 As noted in sections 2 and 3.3 of this Application, the AESO’s 2022 forecast revenue requirement has decreased and the AESO’s 2022 forecast of billing determinants has increased, both of which contribute to an overall rate decrease. As a result, the AESO’s 2022 updated rates represent an overall decrease of 6.4% from the 2021 rates currently in place, including a decrease of 6.7% to Rate DTS, and a decrease of 1.0% to Rate STS.

45 Deferral accounts provide certainty that the AESO’s costs will be exactly recovered by revenue, either through base rates or through the deferral account rider and reconciliations. Adjustments to costs paid by the AESO will therefore flow to and impact market participants through deferral accounts if rates are not adjusted. The changes in rates summarized above improve the timeliness and accompanying accuracy of the recovery of costs from market participants.

46 The decreases to the different components of Rate DTS are provided in Table B-13 of Appendix B to this Application. The Rate DTS decrease of 6.7% represents a revenue-weighted average decrease over all components of Rate DTS.

47 Individual bill impacts experienced by market participants will vary, depending on the specific characteristics of a market participant’s service including peak demand coincidence, billing capacity, load factor, and hourly pool price and transmission constraint rebalancing charge at the time of usage.

48 To allow individual market participants to estimate the impact of the 2022 rates on their own Rate DTS bills, the AESO has included a bill impact estimator as Table B-16 in the rate calculations included as Appendix B to this Application. The bill impact estimator calculates bills for a given set of billing inputs under both the current 2021 Rate DTS and the updated 2022 Rate DTS, to allow the impact of the rates update on an individual service to be estimated.

49 The changes to the different components of Rate STS are provided in Table B-13 of Appendix B to this Application. The Rate STS decrease of 1.0% represents a revenue-weighted average decrease over all components of the rate.

50 Individual bill impacts experienced by market participants will vary, depending on the specific characteristics of a market participant’s system access service.

51 In particular, the AESO notes that the loss factors provided in Table B-13 of Appendix B to this Application are representative average loss factors only. The actual losses charge applicable to an individual market participant will be based on a location-specific loss factor determined in accordance with section 501.10 of the ISO rules, *Transmission Loss Factors* ("Section 501.10"), as specified in the ISO tariff Rate STS, *Supply Transmission Service*. Section 501.10 was approved by the Commission in Decision 790-D05-2016[13] in Proceeding 790, although the AESO notes that the losses charge remains as approved on an interim basis in Commission Decision 2014-242.[14]

4 Maximum Investment Levels Update

52 This Application includes updated investment amounts approved in Decision 22942-D02-2019[15] to revise the existing point-of-delivery cost curve to Option 2[16] and reflect an escalation factor based on a composite of specified recent inflation indices.

53 The AESO has accordingly updated the composite inflation index used for developing the point of delivery cost function to 2022, using additional Statistics Canada cost index values and the most recent Conference Board of Canada forecast of the Alberta consumer price index. Appendix C included in this Application provides the composite inflation index values for 2018 to 2022 on the Escalation Factor sheet, and the 2022 investment levels on the 2022 Investment sheet.

54 The resulting escalation factor for updating the 2022 maximum investment levels in section 4 of the ISO tariff, *Classification and Allocation of Connection Projects Costs* ("Section 4"), is 1.0640, which represents an increase to the 2018 maximum investment levels. The increase reflects increases in the latest underlying indices used for the composite index. The detailed calculation of the composite inflation index is included in Appendix C of this Application.

55 The AESO has applied the resulting 1.0640 escalation factor to the 2018 Rate DTS maximum investment levels to determine the 2022 Rate DTS maximum investment levels, as summarized in the 2022 Investment sheet included in Appendix C to this Application. Given that the 2021 escalation factor of 1.0641 used in the 2021 ISO Tariff Update Application[17] was not significantly different from the 2022 escalation factor of 1.0640, the 2022 investment levels remain unchanged from what is currently approved.

[13] Decision 790-D05-2016, *Milner Power Inc. and ATCO Power Ltd. Complaints Regarding the ISO Transmission Loss Factor Rule and Loss Factor Methodology* (November 30, 2016), para. 1.
[14] Decision 2014-242, para. 730.
[15] Decision 22942-D02-2019, para 201.
[16] Exhibit 22942.0018.03, Appendix G – Options for POD Cost Function Workbook, Tab 'Option 2 Investment Proposed', Cells C11 to G11.
[17] Exhibit 26054.0005, Appendix C - 2021 Escalation Factor and Investment Levels, Tab 'Escalation Factor', Cell E13

5 Generating Unit Owner's Contribution Rates

56 As part of the AESO's 2018 comprehensive ISO tariff application (the "2018 Application"),[18] the AESO proposed to include the rates for a generating unit owner's contribution ("GUOC") as part of the ISO Tariff (rather than as part of a separate document posted to the AESO's website, which had been the practice to that point). The GUOC rate calculation methodology and subsequent rates proposed by the AESO in the 2018 Application were approved by the Commission in Decision 22942-D02-2019. The currently approved GUOC rates are set out in section 7.3(1) of the ISO tariff, as follows:

Table 5-1 – 2022 Generating Unit Owner's Contribution Rates

Planning Region	Current Rate ($/MW)
Northwest	$10,000
Northeast	$20,000
Edmonton	$30,000
Central	$50,000
Calgary	$40,000
South	$20,000

57 The AESO is not proposing any changes to the existing GUOC rates in this Application. The AESO will be reviewing its process for updating GUOC rates and providing sufficient notice to stakeholders in advance of any changes. The AESO intends to file a separate GUOC rates update application with the Commission in 2022.

6 Conclusion

58 Based on all of the foregoing, the AESO submits that the tariff updates and Rider J amendments proposed in this Application are just and reasonable, and comply with the update methodology approved by the Commission for the ISO tariff in Decision 2010-606.[19] The AESO respectfully requests that the Commission approve this Application effective January 1, 2022, including:

(i) the updated amounts included as Appendix B to this Application,

(ii) (the proposed 2022 ISO tariff Rate DTS, Rate FTS, Rate DOS, Rate XOS, Rate XOM, Rate PSC, Rate STS, and Rider J, and

(iii) the AESO's proposed amendments to Rider J, as described in section 3.2 and included as Appendix F to this Application.

59 The AESO further requests that the Commission issue its approval on or before December 29, 2021, as this is the last approval date that will allow the proposed tariff updates to be implemented by the AESO effective January 1, 2022 on a prospective basis. If the timing of this application does not permit the

[18] Exhibit 22942-X0163, para. 299.
[19] Decision 2010-606, paras. 536-545.

granting of final approval on or before December 29, 2021, the AESO requests that the Commission approve this application on an interim refundable basis.

60 All of which is respectfully submitted this 15th day of November 2021.

Alberta Electric System Operator

Per: "*Miranda Keating Erickson*"

Miranda Keating Erickson
Vice-President, Markets