Alberta Electric System Operator

AESO Adjusted Metering Practice and Substation Fraction Methodology

Proceeding 26215

Compliance Filing of the AESO

Date: January 11, 2021

1 Introduction

1 On December 23, 2020, the Alberta Utilities Commission ("**Commission**") issued Decision 25848-D01-2020 ("**Decision**") regarding the Stage 2 review and variance of Decision 22942-D02-2019, the AESO's adjusted metering practice ("**AMP**"), and the substation fraction methodology

2 This compliance filing responds to Directions 1-4 and 8-11 of the Decision. As an overview:

- The AESO has implemented the SSF=1 proposal through amendments to the definition of "substation fraction" in the AESO's *Consolidated Authoritative Document Glossary* ("**CADG**") and to subsection 4.5(5) of the ISO tariff. Amendments to the ISO tariff can be found in Appendices A and B (containing clean and blackline versions, respectively). Amendments to the CADG definition of "substation fraction" can be found in Appendix C.
- For new connection projects, the AESO will work with distribution facility owners ("**DFOs**") to clearly identify in future construction contribution decisions ("**CCDs**") where distribution-connected generation ("**DCG**") is responsible for incremental transmission connection costs, and to identify and articulate those costs. For existing projects, the AESO will recalculate CCDs going back to December 1, 2015 to reflect demand-related SSF=1 for connection projects where the reallocation of supply-related costs does not reflect incremental costs caused by DCG, as directed (in effect, the AESO will retroactively set supply-related costs to zero for these projects). As previously submitted by the AESO,[1] some DTS POD charge rebilling may be appropriate as a result of the recalculation of CCDs.
- The AESO has proposed tariff provisions required to implement the AMP through amendments to subsections 3.2(2), 3.6(2) and 3.6(3), as well as a new subsection 3.6(4) of the ISO tariff. With the exception of grandfathering language, which has been removed, these revisions are the same as originally proposed in the AESO's 2018 ISO tariff compliance filing but that were removed from the AESO's compliance filing as a consequence of the Commission's ruling of September 1, 2020 in Proceeding 25848.[2] To fully implement the Commission's approval of the AMP, the AESO intends to revise the AESO's forthcoming metering rule (proposed Section 502.10 of the ISO rules, *Revenue Metering System Technical and Operating Requirements*)[3] to require feeder level metering at all DFO-contracted substations. The AESO is currently engaging with stakeholders on the proposed metering rule and anticipates that it will be filed with the Commission for approval in February 2021. In addition, the AESO is developing an implementation plan on how to operationalize the AMP and address the natural transition period required for the installation of gross meters at existing facilities. The AESO will file the implementation plan as part of its Phase 2 tariff application.

3 Accordingly, the AESO requests that the Commission approve its proposed amendments to the ISO tariff and CADG and, as described below, confirm the AESO's plan to rebill DTS POD charges if appropriate, following discussions with DFOs.

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[1] Exhibit 25848-X0059, PDF 6; and Exhibit 25848-X0048, PDF 137 & 151.

[2] Exhibit 25175-X0111.

[3] https://www.aeso.ca/stakeholder-engagement/rules-standards-and-tariff/new-section-502-10-of-the-iso-rules-revenue-metering-technical-requirements/

2 Responses to Specific Directions

4 The AESO's responses to the directions issued in the Decision are set out below.

Direction 1

File the necessary tariff amendments to implement the SSF=1 proposal

Direction

5 *"The Stage 2 panel directs the AESO to file its compliance filing to this decision by January 11, 2021, with the necessary tariff amendments to implement the SSF=1 proposal. The Stage 2 panel expects that the compliance proceeding will be largely administrative in nature, and that no further participation by parties or substantial process will be required."* [Paragraph 28 of the Decision]

Response

6 The proposed tariff revisions to implement the SSF=1 proposal are found in the definition of "substation fraction" set out in the CADG, and in subsection 4.5(5) of the ISO tariff. Please see Appendices A and B for clean and blackline versions of the amended ISO tariff, and Appendix C for a blackline highlighting the amendments to the CADG.

Amendment to the definition of "substation fraction"

7 In keeping with the Commission's direction to implement the SSF=1 proposal, the AESO has amended the definition of "substation fraction" such that for a DFO, the substation fraction for Rate DTS service is set to one or, in cases where the DFO shares a substation with another market participant, to be equal to the whole of the DFO's share of the total contract capacity at that substation.

8 The AESO considers that in the uncommon circumstance where a DFO shares a substation with another market participant, the intent of the SSF=1 proposal requires setting the substation fraction for Rate DTS not literally to one, but rather to the whole of the DFO's share of the total contract capacity at that substation. The intent of the SSF=1 proposal was to address the "unlimited liability issue" that arises where both Rate DTS and Rate STS services are provided at a DFO-contracted substation. That issue is resolved by, in effect, treating the DFO's Rate STS capacity as if it were Rate DTS capacity for the sake of determining the DFO's substation fractions, which are used by the AESO for the determination of supply-related costs and AESO investment. At a DFO-only substation, that intention can be realized by setting the Rate DTS substation fraction to one. But at a shared substation, setting the substation fraction to one for the DFO has the unwanted and unjust side effect of upsetting the allocation of costs *among* market participants. The AESO's proposed definition of "substation fraction" avoids this unintended result.

Amendment to subsection 4.5(5) of the ISO tariff

9 In describing its SSF=1 proposal, the AESO indicated that the proposal included "removing provisions in the ISO tariff that require the AESO to deem supply-related and demand-related amounts at DFO contracted substations".[4] To implement this aspect of the SSF=1 proposal, the AESO has amended subsection 4.5(5) of the ISO tariff such that the AESO is no longer required to deem costs related to a

[4] Exhibit 25848-X0079, AESO reply submission, para. 9.

DFO's Rate STS capacity to be "supply-related costs". Instead, costs related to a DFO's Rate STS capacity are deemed to be zero. As a result of this amendment, there are no costs associated with Rate STS in the DFO's construction contribution.

10 This amendment effects the AESO's proposal to remove the "deeming" provisions as they previously stood. While the amended tariff leaves the deeming provision in place as it applies to a DFO's Rate DTS capacity (subsection 4.5(4)), that residual deeming is necessary to ensure that the provisions related to construction contributions and local investment in respect of Rate DTS capacity continue to operate as before. This is consistent with the intent of the SSF=1 proposal, with the result that all costs will become eligible for local investment, but which will ensure that *Rate STS* capacity can no longer give rise to construction contributions for DFOs, thereby avoiding the "unlimited liability problem" faced by DCG.

11 As acknowledged by the Commission, the AESO's SSF=1 proposal will result in an increase in billing determinants under Rate DTS.[5] However, an application to update Rate DTS billing determinants commencing January 1, 2022 will be filed by the AESO as part of its next ISO tariff rate update, to be filed later in 2021. In the interim, Rider C will address any variances between actual DTS billing determinants and what they would have been had the SSF=1 proposal been factored into the AESO's POD charge in 2021. No price signal interference should be expected given the relatively small dollar amounts at issue.

Direction 2

Identify, to the extent practical, the DCG incremental transmission connection costs in all future customer contribution decisions

Direction

12 *"The Stage 2 panel finds that in order to facilitate DFOs accurately allocating incremental connection costs of the transmission system to the DCGs that caused those costs, the AESO must identify the costs of specific facilities required for the connection of DCG customers and communicate this information to the DFO. The Stage 2 panel therefore directs the AESO to clearly identify, to the extent practical, the DCG incremental transmission connection costs in all future customer contribution decisions (CCDs). The Stage 2 panel further directs the AESO to work with all DFOs to identify costs of specific facilities required for the connection of DCG customers on an ongoing basis. With respect to existing connection projects, the AESO is directed to inform DFOs of the relevant calculations as set out in paragraph 36 of this decision."* [Paragraph 32 of the Decision]

Response

13 The AESO will work with DFOs to clearly identify, to the extent practical, the incremental transmission connection costs associated with DCG customers in all future CCDs. In other words, as directed by the Commission, the AESO will work with DFOs on an ongoing basis to ensure that the incremental costs of specific facilities required for the connection of future DCG customers are identified and articulated in CCDs. With regard to the existing connection projects referred to in paragraph 36 of the Decision, the AESO will inform DFOs of the relevant CCD recalculations using SSF=1 and the principles articulated in Section 3.5 of the Decision.

[5] Decision 25848-D01-2020, para. 27.

14 As noted in the Commission's Decision,[6] the AESO proposed that for the purposes of the interim SSF=1 proposal, for new connection projects, DFOs should be required only to allocate to DCG incremental transmission connection costs that are caused directly by the DCG and are incurred for new or modified transmission connection facilities.[7] The AESO's support of this principle, however, is limited to its use as an interim solution to the unlimited liability issue, pending the AESO's upcoming Phase 2 tariff application.[8]

15 The AESO does not, however, believe that connection costs to DCG should be limited to only the incremental costs of connecting the DCG. As DCG receive benefits from the use of pre-existing transmission connection facilities, it may be appropriate for DCG to pay, at the time of initial connection, a contribution toward the historical costs of those facilities. As long as this contribution is fixed at the time of the DCG's initial connection, it does not give rise to the unlimited liability problem or to investment uncertainty.

16 In its submissions in this proceeding, the AESO identified the lack of such a charge as a shortcoming of the interim SSF=1 proposal:

> It does not provide for a charge to DCG to reflect the value that DCG receives from its use of preexisting transmission connection facilities. As discussed by the AESO in the SSF technical sessions, achieving a methodology to charge DCG as part of the ISO tariff to reflect a DCG's use of existing transmission facilities would be challenging, and the AESO considers that DFOs, rather than the AESO, are best positioned to implement and administer a charge to DCG for the use of existing transmission connection facilities. As already noted above, DFOs have a greater understanding of and access to DCG cost and usage info, including any recognition that may be appropriate on account of value that DCG provides to distribution load.[9]

17 The AESO notes the Commission's direction to consider the principle of fair competition between TCG and DCG in developing its future Phase 2 tariff application.[10] Achieving this parity likely requires that a DCG pay for both (i) incremental transmission connection costs directly caused by DCG, and (ii) an amount reflecting the benefit a DCG receives from the use of existing transmission connection facilities. The AESO agrees with the Commission that the AESO's SSF=1 proposal only partially resolves the unlimited liability issue and that a complete resolution of this issue must ultimately be grounded in DFO tariffs.[11]

Direction 3

Reallocate additional charges that did not reflect incremental costs caused

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Direction

18 *"The Stage 2 panel considers that the unlimited liability issue resulted from a combination of a new application of the substation fraction methodology to DFO-contracted substations, regulatory lag, and a lack of communication. In the Stage 2 panel's view, investors in affected DCG projects could not have*

[6] At para. 30.
[7] Exhibit 25848-X0059, AESO Submission, para. 13.
[8] Exhibit 25848-X0059, AESO Submission, para. 13.
[9] Exhibit 25848-X0059, AESO Submission, para. 17.
[10] Decision 25848-D01-2020, para. 39.
[11] Decision 25848-D01-2020, paras. 29, 30.

reasonably anticipated the risk that these circumstances would have resulted in their connection costs being increased after their final investment decisions were made. The CGWG filed evidence showing affected DCG projects totaling approximately 57 megawatts of DCG experienced approximately $18 million of such connection cost increases. The Stage 2 panel considers that such unanticipated cost increases represent material changes to affected projects which, left unaddressed, would increase investor risk and impair future investment in the Alberta electricity market. Accordingly, the Stage 2 panel finds that addressing those historical costs back to December 1, 2015, when the first contract was affected, would accord with principles of sound utility regulation and would be in the public interest. For any instance that has arisen since December 1, 2015, for which reallocations did not reflect incremental costs caused, the AESO is directed to reallocate those additional charges from the Rate STS contract to the Rate DTS contract at that DFO substation." [Paragraph 35 of the Decision]

Response

19 The AESO will reallocate any additional charges for supply-related costs that did not reflect incremental costs caused by DCG from December 1, 2015 forward. It is the AESO's understanding that, prior to December 1, 2015, no existing DCG were charged for DFO-driven transmission connection costs as a result of the AESO deeming costs to be supply-related.

Direction 4

Recalculate CCDs

Direction

20 "*To facilitate a resolution of those projects that are affected, the AESO is directed to recalculate CCDs using SSF=1 and the principles articulated in Section 3.5 of this decision, and to inform affected DFOs of those recalculations. The DFOs can then work with DCGs to resolve any outstanding contribution concerns. If resolution among the DFOs, the AESO and other affected parties is unsuccessful, the Commission will resolve any disagreements."* [Paragraph 36 of the Decision]

Response

21 For those projects identified as requiring recalculation in accordance with Direction 3 above, the AESO will recalculate CCDs according to the SSF=1 proposal and the principles set out in Section 3.5 of the Decision, and inform DFOs of those recalculations. In particular, the AESO will apply its SSF=1 proposal on a retroactive basis to reflect zero supply-related costs, starting with and from the year that STS service is added at a DFO-contracted substations as a result of DCG. To recalculate the CCDs, the AESO will need to obtain information from and work with TFOs and DFOs, and anticipates being able to complete all of the required CCD recalculations by June 30, 2021.

22 Fairness and market efficiency may require adjusting historical Rate DTS bills in some circumstances, after recalculating historical CCDs in accordance with the SSF=1 proposal. In the AESO's earlier submission in this matter, the AESO submitted that the "rebilling of historical Rate DTS bills could be appropriate if the Commission approved the retroactive application of the Interim SSF=1 Proposal to a project that has

already connected. The inter-relationship of maximum investment levels and Rate DTS point of delivery charges is intended to ensure reasonable recovery of investment."[12]

23 The AESO understands, however, that there may be distribution tariff impacts associated with rebilling, and therefore intends to work with DFOs to determine whether rebilling DTS charges is, in fact, appropriate. Following DFO discussions, the AESO intends to report on its determinations regarding rebilling alongside the reports DFOs will file in response to Direction 5. The AESO requests that the Commission confirm that the AESO may proceed in this manner.

Directions 8, 9 and 10

Provide revised tariff language to implement the adjusted metering practice

Directions

24 *"For the reasons that follow, the Stage 2 panel (i) finds that the adjusted metering practice should be implemented without grandfathering; and (ii) directs the AESO to submit revised tariff language as part of its compliance filing and implementation details in its next Phase 2 tariff application, to operationalize the adjusted metering practice."* [Paragraph 44 of the Decision]

25 *"The hearing panel was persuaded, in part, that there was a need to implement the AESO's adjusted metering practice to rectify billing determinant erosion. As found above, SSF=1 delinks the adjusted metering practice with connection costs. The Stage 2 panel therefore varies the hearing panel's findings at paragraph 796 of the Decision, and directs the AESO to implement the adjusted metering practice with no grandfathering provisions."* [Paragraph 49 of the Decision]

26 *"In order to bring into effect the direction in paragraph 44 of this decision, the AESO is directed to submit the proposed tariff language to implement the adjusted metering practice, as part of its compliance filing directed in Section 3.3 above."* [Paragraph 50 of the Decision]

Response

27 Please see Appendix B for proposed amendments to subsections 3.2(2), 3.6(2) and 3.6(3), and new subsection 3.6(4) of the ISO tariff, required to implement the adjusted metering practice. As a result of these revisions, the AESO has also updated section references in subsections 3.6(5)-(10), 3.8(1), 3.8(3) and 7.4(2) of the ISO tariff.

28 With the exception of grandfathering language, the AESO's proposed revisions to the ISO tariff restore those tariff provisions that were originally proposed to implement the AMP as part of its 2018 ISO tariff compliance filing, but that were removed from the AESO's compliance filing as a consequence of the Commission's ruling of September 1, 2020 in Proceeding 25848.[13]

29 The proposed revisions to the ISO tariff require the execution of system access service agreements, on a prospective basis, at a contract capacity that reflects feeder-level metering at DFO-contracted substations. The proposed revisions also allow market participants to execute system access service agreements on either a gross or net basis if the connection project is for a Commission-designated industrial system or the

[12] Exhibit 25848-X0059, AESO Submission, para. 16.
[13] Exhibit 25175-X0111.

market participant has otherwise received Commission approval to both self-supply load and export excess electric energy to the grid.

30 To fully implement Directions 8 to 10, the AESO intends to include technical metering requirements in the AESO's forthcoming metering rule (proposed Section 502.10 of the ISO rules, *Revenue Metering System Technical and Operating Requirements*), to require feeder level metering at DFO-contracted substations. The metering rule is now under development and subject to an ongoing consultation process. The AESO anticipates filing the metering rule for approval by the Commission in February 2021.

31 Additionally, upon issuance of the Commission's approval of this compliance filing, the AESO confirms that it will rescind Information Document #2018-019T, *Determination of Rate STS, Rate DTS and Metering Levels for a DFO*, which was suspended effective May 15, 2018, in accordance with the direction issued by the Commission on October 2, 2018 in Proceeding 22942.[14]

Direction 11

Develop plan to operationalize the AMP

Direction

32 "*The Stage 2 panel considers that there will be a natural transition period required to install the new gross meters, and that it will only be possible for the AESO to develop a plan to operationalize the adjusted metering practice following the approval of the compliance filing language. The Stage 2 panel therefore directs the AESO, in its Phase 2 tariff application, to submit a plan setting out the details on how to operationalize the implementation, such as extent, timing, and costs of the adjusted metering practice.*" [Paragraph 50 of the Decision]

Response

33 In response to Direction 11, the AESO confirms it will submit an implementation plan setting out the details of how to operationalize the AMP as part of its Phase 2 tariff application. The AESO expects that implementing the AMP may be challenging at some substations. For example, there may be physical or other locational challenges to installing "gross" meters, installations may be cost-prohibitive, and installing gross meters at certain substations (e.g., load-only substations) will not have a material impact to the metering information used for calculating tariff charges. Each market participant's transition period is expected to vary as a result.

3 Conclusion

34 The AESO submits the foregoing for approval in accordance with the Decision. The AESO respectfully requests that the Commission approve the amendments to the ISO tariff and CADG contained in the Appendices to this submission, and confirm that the AESO can rebill DTS POD charges in the manner proposed by the AESO in response to Direction 4.

[14] Exhibit 22942-X0207, para. 18.