

ALBERTA UTILITIES COMMISSION

PROCEEDING 22942

Alberta Electric System Operator Application 2018 ISO Tariff
Application pursuant to sections 30 and 119 of the *Electric
Utilities Act*

Application 22942-A001

REPLY ARGUMENT OF THE COMMUNITY GENERATION WORKING GROUP

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REPLY ARGUMENT OF THE COMMUNITY GENERATION WORKING GROUP

I. OVERVIEW

1. The Community Generation Working Group (“CGWG”) submits this reply argument in support of its intervention in the Alberta Utilities Commission (“AUC” or “Commission”) proceeding to consider the Alberta Electric System Operator’s (“AESO”) 2018 ISO Tariff (“Tariff”) Application (“Application”).¹ Specifically, the CGWG responds to the AESO’s written argument² and AltaLink Management Ltd.’s (“AltaLink”) written argument.³ The CGWG does not respond to every point or position with which it disagrees. However, this does not indicate that the CGWG agrees with or accepts these positions. This document should be read with the CGWG argument as a number of counter arguments to the AESO and AltaLink written arguments were included in the CGWG’s initial argument.
2. The CGWG’s positions regarding the arguments raised by the AESO and AltaLink are:
 - a. The AESO has not provided a sound rationale to support the need for the adjusted metering practice;
 - b. The issues identified by the AESO are better addressed through tariff rate design;
 - c. To ensure equal treatment between distribution-connected generators (“DCG”) and industrial direct-connect sites, load served by DCG on an adjacent feeder should not be charged transmission system costs;
 - d. The existence of DCG credits is out of scope for this proceeding and better discussed in the distribution system inquiry or distribution tariff applications; and
 - e. The evidence provided by Power Advisory and Peters Energy should be given considerable weight.
3. The CGWG remains of the view that the proposed changes to feeder level totalization reflected in Information Document #2018-019T (“ID”)⁴ and the Application should be rejected. The CGWG also has concerns regarding the use of the substation fraction methodology to allocate costs to DCG. Therefore, the CGWG requests that the Commission reject the ID and the associated changes in the Application, that the Commission examine concerns regarding DCG credits in future proceedings, and that the

¹ Exhibit 22942-X0163.

² Exhibit 22942-X0558.

³ Exhibit 22942-X0555.

⁴ Exhibit 22942-X0201.

Commission direct the AESO to consult on the issues of revised costs and substation upgrades via the substation fractioning methodology.

II. NEED FOR THE ADJUSTED METERING PRACTICE

4. The AESO provides several reasons for implementing its adjusted metering practice that are unsupported. The AESO claims “the circumstances and legislative scheme that supported approval of the existing net metering practice almost twenty years ago in Decision 2000-1 no longer apply.”⁵ However, the situation leading to Decision 2000-1 has not changed and the arguments made in that proceeding remain valid.⁶ The AESO has brought forward two new pieces of information to suggest that Decision 2000-1 is no longer relevant: (1) many DCGs are intermittent; and (2) power flows through the substation when a DCG serves load on another feeder.⁷ Power Advisory has provided evidence that the stable or intermittent nature of DCGs is not something that should be addressed through the totalization methodology.⁸ Further, while Power Advisory acknowledges that DCG does make use of the substation, the AESO’s reliance on this point is flawed and has the potential for unfair results.⁹
5. The AESO also suggests that the adjusted metering practice is necessary as DCG credits (FortisAlberta’s Option M, ATCO Electric’s rate D32, and ENMAX’s rate D600), which are enabled by the net metering practice, represent an inappropriate signal to DCG.¹⁰ The AESO claims that section 47(b) of the *Transmission Regulation* provides for three locational signals and DCG credits represent a fourth, inappropriate locational signal.¹¹ However, the AESO’s position ignores the long-standing policy in Alberta. The DCG credits have been in place since 2001¹² and represent a policy choice to incent generation to locate in locations that can minimize transmission losses.¹³
6. The AESO asserts that DCG credits are a subsidy and claims “the parties that represent the interests of DCG and oppose the adjusted metering practice present interest-based positions without regard to the impacts the cross-subsidy has on ratepayers...”¹⁴ This allegation is without merit. Power Advisory has provided principled evidence that the DCG credits are

⁵ Exhibit 22942-X0558, para 54.

⁶ Exhibit 22942-X0329, para 24.

⁷ Exhibit 22942-X0257, AESO-AUC-2018NOV01-021, PDF pages 39-42.

⁸ Exhibit 22942-X0329, para 26; Transcript, Volume 4, page 764 line 1 – page 765 line 1 (Ms. Runge).

⁹ Exhibit 22942-X0329, paras 27-29; Transcript, Volume 4, page 765 lines 2-19 (Ms. Runge).

¹⁰ Exhibit 22942-X0558, para 54.

¹¹ Exhibit 22942-X0558, para 54.

¹² Transcript, Volume 4, page 736 lines 3-5 (Mr. Hildebrand).

¹³ Transcript, Volume 4, page 768 lines 18-23 (Mr. Hildebrand).

¹⁴ Exhibit 22942-X0558, paras 54, 71.

strongly supported by rate design principles such as cost causation.¹⁵ DCG credits originated on the basis that DGC customers be the recipient of any transmission cost savings created due to their operation.¹⁶ Further, the rate designs and price signals established within ISO and DFO tariffs are expressly intended to reflect the costs associated with particular actions and induce behaviours that result in fewer costs.

7. It should come as no surprise that market participants will respond to price signals in their favour. There are other instances of market participants taking advantage of price signals to which the AESO does not object. For example, the coincident metered demand rate design (“12 CP Methodology”) incents reductions in utilization of the transmission system when use of the transmission system is highest.¹⁷ The 12 CP Methodology allocates costs and provides incentives.¹⁸ The CGWG’s position remains that it is only seeking fair treatment. The AESO expresses no concern when loads or industrial-connected generators respond to these price signals. However, when a DCG responds to these price signals, the AESO portrays the response as a problem. Further, as stated in the CGWG’s argument, even if it were accepted that DCG credits are a subsidy, the ISO tariff is not the appropriate place to address this perceived problem, as these credits are a feature of a DFO’s approved tariff.¹⁹
8. The AESO also rationalizes the adjusted metering practice by suggesting that the current metering practice results in outcomes that are contrary to the purpose of the *Electric Utilities Act* (“EUA”) and the AESO’s obligation to carry out its duties in a manner that promotes a fair, efficient and openly competitive (“FEOC”) market for electricity.²⁰ The CGWG does not agree that the current metering practice is contrary to FEOC and instead, submits that the proposed changes are inconsistent with the “fair” and the “efficiency” requirements in FEOC. As illustrated in Power Advisory’s evidence:

In Scenario C, the DCG is able to fully serve the load at the substation and supply additional electricity to the transmission system. In effect, this substation has similar properties to a behind-the-fence load and generation at an industrial substation. However, under the AESO’s proposal, a percentage of the load at this substation will be subject to DTS charges as if the DCG were not connected simply because some load is connected to different feeders than the feeder to which the DCG is connected. This is inconsistent with how the load would be charged were it connected to the transmission system at an industrial substation and is inconsistent with the “Fair” in FEOC. The load at an industrial substation with behind-the-fence generation would be charged based on its net flows to the bulk and regional transmission system, measured at the transmission voltage.

¹⁵ Exhibit 22942-X0329, para 13.

¹⁶ Exhibit 22942-X0329, para 16.

¹⁷ Exhibit 22942-X0331, para 14.

¹⁸ Exhibit 22942-X0331, para 14.

¹⁹ Exhibit 22942-X0560, para 31.

²⁰ Exhibit 22942-X0558, para 54.

However, under the AESO's proposal, the load is charged based on the net flows to the feeder, measured at the distribution voltage.

...

In addition, these proposed changes are inconsistent with efficiency, as contemplated in FEOC. The AESO's proposed changes will result in a price signal to either (1) downsize new DCGs such that they serve feeder load without producing any excess electricity; (2) avoid siting new DCGs on the distribution system but rather consider behind-the-fence generation at industrial sites only; (3) connect at the transmission voltage, causing new transmission assets to be built, operated and maintained, resulting in unnecessary new system costs; or (4) avoid building DCG in Alberta. The Peters Energy evidence outlines the value of DCG and, accordingly, this is not an efficient price signal.²¹

9. The AESO submits that the adjusted metering practice is required to align with the definitions of "transmission facility" and "transmission system" in the EUA and suggests that Mr. Hildebrand's position regarding policy is contrary to the legislative scheme.²² These definitions have existed in the EUA since it was brought into place in 2003 and the CGWG is not aware of any proceedings that have previously challenged the interpretation of the EUA in such a manner. The AESO selectively relies on these definitions in an attempt to illustrate the transmission system as a single entity and to buttress its contention that briefly touching the system is tantamount to utilizing the entire system. Further, the AESO abandons this interpretation of the legislation for industrial complexes and suggests that industrial sites should be able to choose totalized metering in certain circumstances.²³
10. The AESO argues that the government policy directing DFOs to provide DCG credits was implemented "nearly twenty years ago under a prior version of the EUA and prior to enactment of the *Transmission Regulation*."²⁴ The CGWG submits that government policies do not lose their effect over the course of time. If the Alberta government determines that DCG credits are no longer appropriate, then the Alberta government will provide such direction to the DFOs. It is not for the AESO to try to overturn Alberta government policy through changes to its tariff.
11. The AESO's interpretation of the EUA also does not reflect the principles of cost causation. As illustrated by Peters Energy, the components of the DTS charges for the Bulk, Regional, and POD costs under the adjusted metering practice do not reflect the physical flows of energy.²⁵ In physical terms, generation behind a DFO POD reduces the demand flows from the Bulk and Regional systems. Where generation exceeds load on its own feeder, energy flows to adjacent feeders across the bus within the POD goes up. Under the proposed metering practice, totalization at the feeder level in this situation increases the Bulk and

²¹ Exhibit 22942-X0329, paras 59, 61.

²² Exhibit 22942-X0558, paras 56-58.

²³ Exhibit 22942-X0558, paras 73, 78.

²⁴ Exhibit 22942-X0558, para 57.

²⁵ Exhibit 22942-X0409, CGWG-AUC-2019JAN28-013.

Regional charges and decreases the POD charge. This is in direct contradiction of the changes in physical energy flows.

12. In its argument, the AESO proposes that grandfathering be applied to assist with the transition to the adjusted metering practice.²⁶ This must not be interpreted as a means of reasonably reducing the negative impacts of the adjusted metering practice. The AESO's only rationale for adopting the grandfathering approach was that it would be appropriate to do so "given the potential facilities costs that would be incurred to bring all existing DFO feeders into compliance with the adjusted metering practice."²⁷ With this reasoning, one would expect that the grandfathering would be applied based on available metering equipment.
13. The limitations to the grandfathering serve to create a situation that discriminates against solar generation, and particularly community generation. Grandfathering is unlikely to benefit any appreciable quantity of proposed generation projects, since generation developers that have not started construction by the completion of this proceeding, developers that make any adjustment to their output, or make any adjustments to their originally-planned in-service dates may not qualify for the grandfathering.²⁸

III. THE ISSUES IDENTIFIED ARE BETTER ADDRESSED THROUGH TARIFF RATE DESIGN

14. The AESO contends that, contrary to Ms. Runge's suggestion, the issues it has identified cannot be addressed as a matter of tariff rate design:

Ms. Runge, on behalf of the CGWG, suggests that the problems identified by the AESO in connection with the adjusted metering practice should be addressed as a matter of tariff design. Ms. Runge's suggested approach would not address the issues that have been identified by the AESO related to the current net metering practice and would continue to prevent accurate billing determinants from being applied and continuation of that practice would not resolve the issue of inaccurate billing determinants, regardless of changes that could be made to how the ISO tariff is designed.²⁹

15. The CGWG disagrees. If there is a concern that ratepayers are able to avoid costs without providing a benefit to the system, then the rates are not correctly designed, *i.e.*, if avoiding consumption or increasing behind the fence generation during the monthly coincident peak is not resulting in long-run transmission cost savings, then another rate structure should be proposed and the 12CP rates should be reduced and those costs should be reallocated to a different charge.
16. The CGWG is not advocating for the specific solutions outlined in Power Advisory's evidence but is instead simply noting that these are potential solutions to illustrate that there

²⁶ Exhibit 22942-X0558, para 59.

²⁷ Exhibit 22942-X0558, para 60.

²⁸ Exhibit 22942-X0271, AESO-CanSIA-2018NOV01-001.

²⁹ Exhibit 22942-X0558, para 62.

can be no confidence that the AESO's proposed solution is ideal. Further, as stated by Ms. Runge, changing the tariff rates results in a more fair outcome as the changes will apply equally to increases in behind-the-fence generation at an industrial site, increases in generation at the distribution-connected level, or a decrease in load anywhere on the system.³⁰ As previously stated by Power Advisory, the AESO is currently consulting on tariff cost allocation in regard to its 2021 tariff application. These issues are more appropriately addressed in that context.³¹

17. Changing the rate design also addresses the concerns of the AESO and AltaLink regarding billing determinant erosion. AltaLink submits "the continued penetration of DCG will erode DTS billing determinants, resulting in higher DTS rates and cross-subsidization between market participants."³² The CGWG notes that the issue of DTS billing determinant erosion occurs equally whether a DCG increases generation or a load engages in peak shifting or energy efficiency programs that reduce usage during the 12CP. For example, load customers have implemented the installation of more efficient light bulbs, which reduces electricity consumption and therefore net flows on the transmission system.³³ As outlined in Peters Energy's evidence, the installation of more efficient light bulbs has resulted in avoidance of almost the same DTS charges as all DCG installed by the end of 2016.³⁴
18. The proposed move to feeder level totalization of Rate STS will result in lower benefits to DCG of responding to the 12CP price signal and, accordingly, may address the issue of DTS billing determinant erosion from one source (as DCGs will be able to offset less DTS billing determinants at each POD). However, this proposal does nothing to address DTS billing determinant erosion from Rate DTS. This is a partial solution that is very much a band aid and disproportionately applies to one type of market participant and not another. On the other hand, a change in the tariff rates themselves would apply equally to all sources of DTS billing determinant erosion and would apply equally to DFO PODs and industrial customers connected to the transmission system.

IV. POSTAGE STAMP RATES

19. The AESO claims Ms. Runge's suggestion that load served by DCG on a neighboring feeder not be charged regional and bulk transmission system costs would be contrary to the requirement that transmission system rates be charged on a postage stamp basis.³⁵

³⁰ Transcript, Volume 4, page 766 lines 18-24 (Ms. Runge).

³¹ Exhibit 22942-X0329, para 23.

³² Exhibit 22942-X0555, para 290.

³³ Exhibit 22942-X0331, para 12.

³⁴ Exhibit 22942-X0331, para 13.

³⁵ Exhibit 22942-X0558, para 63.

20. Ms. Runge is not suggesting that postage stamp rates not be charged. Instead, Ms. Runge is suggesting that postage stamp rates be applied to reflect actual flows on the bulk and regional system, and load served by DCG on an adjacent feeder should not be charged at all. This follows the AESO's logic regarding industrial direct-connect sites. The AESO explicitly plans not to charge regional and bulk transmission system costs for load served by a generator connected to a neighboring feeder when that generator is on an industrial direct-connect site.³⁶ This contradictory proposal cannot legitimately proceed.

V. DCG PROVIDES PUBLIC BENEFITS

21. The AESO suggests that none of the CGWG's witnesses were able to identify any benefits that DCG provides to the transmission system.³⁷ The AESO incorrectly references the questioning by Commission member van Egteren regarding public benefits provided by DCG as "benefits to the transmission system." This confuses the needs of the transmission system with the needs of the public. Further, as set out in its written argument, the CGWG has clearly identified numerous public benefits of DCG.³⁸

VI. DCG CREDITS

22. The AESO challenges the position of CGWG's witnesses that DCG "offsets" load and therefore should receive DCG credits.³⁹ The AESO also reiterates its false assertion that DCG "does not specifically supply load, including load at a neighbouring DFO substation. Rather, generation flows energy onto the transmission system and supplies load in accordance with applicable market rules."⁴⁰ This assertion ignores the physical realities of the flows of energy. In the absence of DCG, all energy needed to serve a load flows across the bulk and regional systems and through the POD transformer. By contrast, when DCG is present on a given POD feeder, energy amounts supplied by that DCG will be consumed:
- a. first on the feeder (detectable via reduced flows from the POD bus to the feeder and reduced flows across the POD transformer),
 - b. second on adjacent feeders (detectable via flow from the DCG feeder to the bus, flow from the bus to adjacent feeders, and further reduced flows across the POD transformer),
 - c. and finally excess energy will be exported to the regional system (detectable via "reverse" flows across the POD transformer).⁴¹

³⁶ Exhibit 22942-X0165, 3.2(2)(f) and 3.6(4).

³⁷ Exhibit 22942-X0558, para 65.

³⁸ Exhibit 22942-X0560, paras 7-18. ³

³⁹ Exhibit 22942-X0558, para 64.

⁴⁰ Exhibit 22942-X0558, para 64.

⁴¹ See discussion in Exhibit 22942-X0331, paras 47-56.

23. If the DCG produces the same amount of power as consumed on the POD, there will be no flow in either direction across the POD transformer – the generation precisely offsets the load. As DCG does offset load, rate design principles such as cost causation support the continued existence of the DCG credits.⁴²
24. Other parties, such as AltaLink, have expressed concerns regarding the DCG credits and have suggested that the Commission approve the adjusted metering practices and further consider eliminating the DCG credits in future DFO tariff proceedings.⁴³ As stated in the CGWG’s argument, the Commission should not consider the DCG credits in this proceeding as this issue is out of scope for the ISO tariff. DCG credits are a construct of the DFO tariff, not the ISO tariff, and the AESO has no jurisdiction over these credits. This issue should be re-visited in the distribution system inquiry and eventually determined in a DFO tariff proceeding.⁴⁴

VII. DISCRIMINATORY TREATMENT

25. As stated elsewhere, the CGWG is simply requesting that it receive equal treatment to transmission connected generators.⁴⁵ AltaLink submits that there are substantial benefits of connecting to the grid.⁴⁶ Similarly, the AESO continues to assert its position that DCGs benefit from the transmission system and as such should be required to pay.⁴⁷
26. To the extent that DCGs benefit from any embedded transmission facilities, so do transmission-connected generators. Accordingly, to ensure equal and fair treatment, DCGs should pay the same as transmission connected generators. Transmission connected generators are only required to pay connection costs, not any embedded costs of past substation upgrades and not any bulk or regional costs. Transmission connected generators are also not required to pay any additional costs associated with transmission system upgrades after they have connected. DCGs should be treated the same and should not be subject to the substation fractioning methodology that allocated embedded transmission system costs and continues to allocate additional transmission system costs in the years after connection.

VIII. EVIDENCE AND WEIGHT

27. The AESO has suggested that certain evidence cannot be relied upon by the Commission panel. Specifically, the AESO asserts that the evidence presented by Ms. Runge regarding the BluEarth Bull Creek project was provided later in the proceeding after the AESO’s

⁴² Exhibit 22942-X0329, para 13.

⁴³ Exhibit 22942-X0555, para 304.

⁴⁴ Exhibit 22942-X0560, para 5.

⁴⁵ Exhibit 22942-X0560, para 67.

⁴⁶ Exhibit 22942-X0555, para 289.

⁴⁷ Exhibit 22942-X0558, para 93.

witnesses had been dismissed and as such, should not be relied upon by the Commission.⁴⁸ The AESO was given an opportunity to test this evidence but chose not to do so.

28. Chair Kolesar provided the AESO's counsel an opportunity to cross examine Ms. Runge with respect to the information that was put on the record regarding the BluEarth Bull Creek project.⁴⁹ However, the AESO's counsel stated they saw no need to cross on this material.⁵⁰ Additionally, the AESO did not seek to sit a rebuttal panel to address this evidence. As the AESO has had opportunities to test and respond to this evidence, which it did not avail itself of, it is now unfair for it to assert that the evidence cannot be relied upon.
29. Additionally, the AESO claims that despite presenting written evidence regarding transmission system impacts, Mr. Peters does not have any expertise in electric transmission operations or transmission system planning, therefore his evidence should be given no weight.⁵¹ Mr. Peters provided evidence regarding the features of DCG, the characteristics of solar generation, energy flows and the impact of the ID. As a professional engineer with significant work experience in many areas of the utility sector and familiarity with the electricity system in Alberta,⁵² Mr. Peters is well suited to provide evidence on the topics addressed in his evidence, and as such it should be given considerable weight.

IX. CONCLUSION & REQUESTED RELIEF

30. In light of the above and the submissions in CGWG's argument, the CGWG respectfully requests that the Commission grant the following relief:
 - a. Reject the ID, Section 7.3.2 of the Application,⁵³ and Section 5.2(2) of the AESO's terms and conditions;⁵⁴
 - b. Consider examination of concerns regarding the DFO tariff, such as DCG credits, during the distribution system inquiry or during a distribution tariff proceeding;
 - c. Direct the AESO to take steps and consult with market participants on methods that can be employed by the AESO to eliminate the issuance of revised costs to DCGs;
 - d. Direct the AESO to consult with market participants, including DCGs, with a view to amending its tariff to ensure that customer contributions are designed to cover only the substation upgrade costs that are directly caused by a DCG and that DCGs

⁴⁸ Exhibit 22942-X0558, paras 95-96.

⁴⁹ Transcript, Volume 4, page 769 line 23 – page 770 line 1 (Chair Kolesar).

⁵⁰ Transcript, Volume 4, page 770, lines 7-9 (Mr. Miller).

⁵¹ Exhibit 22942-X0558, para 70.

⁵² Exhibit 22942-X0331, PDF pages 37-40.

⁵³ Exhibit 22942-X0163.

⁵⁴ Exhibit 22942-X0016.02, PDF page 63.

will not receive substation upgrade or system reliability costs after in-service dates;
and

- e. Confirm in this decision whether a DFO has discretion to flow through costs in a manner different than that dictated in an AESO CCDs.

ALL OF WHICH IS RESPECTFULLY SUBMITTED this 17th day of May, 2019.

A handwritten signature in black ink, appearing to be 'M. P. O.', written over a horizontal line.

Osler, Hoskin & Harcourt LLP
Counsel for the CGWG