AUC
Alberta Utilities Commission

Bulletin 2020-01

January 9, 2020

Exploring market concerns and tariff issues related to self-supply and export reform

In a number of recent decisions, the Alberta Utilities Commission has found that, subject to limited exceptions, the owner of a generating unit is prohibited from using that generating unit to self-supply its own load and export excess electricity produced by that generating unit to the power pool. In AUC Bulletin 2019-16: *Consultation on the issue of power plant self-supply and export*, the Commission sought feedback from stakeholders on whether changes to the statutory scheme may be necessary to resolve the issues arising from those decisions. The AUC, on behalf of the Department of Energy, asked stakeholders to comment on three options to address the self-supply and export issue.

- **Option 1:** Status quo.
- **Option 2:** Limited self-supply and export.
- **Option 3:** Unlimited self-supply and export.

Stakeholder responses

The AUC received 33 submissions in response to Bulletin 2019-16. The submissions were posted to the AUC's Engage web page and are publicly available. The submissions were also provided to the Department of Energy.

The majority of stakeholders preferred Option 3. While not all stakeholders agreed with the AUC's interpretation of the legislation, there was widespread support for statutory amendments to clarify whether self-supply and export is available to all generators. Stakeholders emphasized the need for regulatory certainty and recognized that this can be achieved by clear statutory direction.

<u>Options 1 and 2</u>

Few stakeholders supported options 1 and 2. Those that did argued that the current framework promotes the fair, efficient and openly competitive operation of the energy-only market and expressed concerns that allowing unlimited self-supply and export would negatively affect the operation of that market. In its submission, Capital Power Corporation stated as follows:

> The legislative framework for the generation and exchange of electricity in Alberta is founded on the principles of fair, efficient and open competition. The energy-only market is based on these principles and was established to support efficient investment in and development of supply to meet demand in a competitive, deregulated market. One of the

stated purposes of the Electric Utilities Act ("EUA") is:

> to provide for a competitive power pool so that an efficient market for electricity based on fair and open competition can develop, where all persons wishing to exchange electric energy through the power pool may do so on non-discriminatory terms and may make financial arrangements to manage financial risk associated with the pool price;

Section 18(2) of the EUA goes further and provides that "[a]ll electric energy entering or leaving the interconnected electric system must be exchanged through the power pool unless regulations made under section 41, section 99 or section 142 provide otherwise." And must-offer provisions in the *Fair Efficient and Open Competition Regulation* ensure that all available energy is offered in to the market. These provisions recognize the importance of and prescribe broad participation in a common power pool to facilitate competition in the market. For the proper formation of price signals in real-time and over a longer term, it is necessary that all available supply be required to submit energy offers. <u>Allowing an exemption for some energy reduces the amount of supply competing to be dispatched. Further, an expanded amount of self-supply and export reduces market visibility of both available supply and load to be served inhibiting price discovery. Exempting supply or some energy from pool participation reduces the effectiveness of and benefits from having a competitive market.</u> … (Emphasis added)

The limitations placed on self-supply in the legislation recognize the trade-off between the efficient development of generation in a fair, efficient and openly competitive market, avoiding uneconomic bypass or unnecessary duplication of the transmission system, and facilitating consumer choice.

The Commission is interested in stakeholders' responses to the market concerns identified by Capital Power. Please provide your views on the concerns expressed and whether, or to what degree, such concerns may be addressed through changes to existing transmission and distribution tariffs or to market rules.

<u>Option 3</u>

Stakeholders that supported Option 3 were divided on the issue of cost apportionment. Some market participants submitted that current tariff treatment of such facilities requires no amendment. Others expressed a need for new or different tariff treatment for self-supply and export facilities. These stakeholders emphasized that changes made to the statutory scheme to accommodate unlimited self-supply and export must be carefully considered to ensure that the resultant scheme fully aligns with the principles set out in Section 5 of the *Electric Utilities Act* and does not produce unintended consequences. AltaLink Management Ltd. comprehensively addressed this issue in its submissions.

> 12. Under the AESO's current tariff, the services provided by the grid outlined above (reliability, start-up power, voltage quality, efficiency and facilitation of energy transactions) are not explicitly metered or charged. Instead, the only mechanism through which a market participant is charged for these services is by way of a DTS contract. In certain circumstances, where customers self-supply, their DTS contract may not reflect the costs and benefits of being connected to the grid.
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> 13. The Alberta electric industry has a number of customers who self-supply generation to either supply their operations (electric and/or steam), peak shave, provide back-up power and/or to sell any excess energy into the power pool. Self-supply generation in

Alberta is approximately 5,000 MW. The AESO's tariff recovers transmission costs from these self-supplied loads on a net metered basis meaning that these loads are not paying for the full value of being connected to the transmission grid.

14. In a similar vein, some DFOs provide transmission credits under their respective distribution tariffs to certain distributed connected generators (DCGs). AltaLink understands that self-supply generation can qualify for these transmission credits in some instances. These credits are calculated simply as the difference in DTS charges at a transmission point of delivery with a DCG operating in comparison to if it were not operating. The AESO has stated that DCG generally does not defer transmission build and cannot be used for planning purposes. These transmission credits lead to a DFO paying less in DTS costs to the AESO which means these costs must be recovered from (and are therefore cross-subsidized by) other market participants.

15. In addition, the AESO's tariff recovers transmission costs through three main rate schedules: bulk system; regional system; and point of delivery. The AESO recovers bulk system costs based on a 12-Coincident Peak methodology at the current cost recovery rate of $10,524/MW/month. This bulk recovery rate has provided an economic signal to customers to add generation to their sites in an effort to reduce their metered demand at the time of the monthly coincident peak (which will reduce their transmission costs).

16. Once transmission facilities are built, these costs become embedded and need to be recovered from customers. Therefore customers that reduce demands at the time of the monthly peak reduce their transmission costs which end up shifting grid costs to other customers. Further, the net-metering practices in the AESO tariff result in material cost shifting and cross-subsidization of the cost of grid services between those that have self-supply generation and those that do not. Transmission credits, included in some of the DFOs' tariffs, provide similar issues with cross-subsidization. Expanding the current legislation to allow for more self-supply and export will create further incentives to install self-supply generation resulting in an increase in the cost shifting (cross-subsidization) between the customers that can install self-supply generation and those that cannot.

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37. As discussed previously, the decision to expand the circumstances in which a market participant can self-supply and export beyond those currently allowed under the legislation cannot be made without considering the larger electricity system as a whole. More specifically, the Commission must also consider the current legislation and tariff framework. A key concern, as already discussed, is that under the current tariff, those that self-supply benefit from net-metering and not paying their fair share of the cost for being connected to the grid.

38. Until a comprehensive review is completed of the current tariff design and legislation is completed, and cross-subsidization is addressed then the status quo (albeit not optimal) should continue (Option 1).

The Commission is interested in stakeholders' responses to tariff issues raised by AltaLink. Please provide your views on the concerns expressed by AltaLink. Specifically, please comment on whether current tariffs ensure that the transmission and distribution costs are fairly allocated among users. If you believe that no changes to the current tariff framework are required, please provide your rationale for that position.

<u>Legacy facilities</u>

The submissions received primarily focused on the options presented. However, stakeholders also provided their views on how legacy facilities should be treated from an enforcement perspective.

Several stakeholders expressed concern regarding the ongoing operations of a limited number of existing power plants that may be engaged in self-supply and export.

In its response to Bulletin 2019-16, the Market Surveillance Administrator stated that "…the MSA is not currently investigating any market participants in relation to the issues raised in the Bulletin and does not intend to begin any such investigation while the Commission is consulting on these issues."

The AUC considers that the approval holders for these power plants have been operating based upon a reasonable reliance on the approvals granted to them. The AUC does not consider that these operators have engaged in any form of intentional misconduct or non-compliance by operating their plants in the manner that they have. The AUC confirms that it is not investigating any market participants in relation to self-supply and export issues and does not intend to initiate any such investigations while consultation on this issue is ongoing.

Next steps

The Department of Energy requested that the AUC follow up with a second round of consultation focused on the market and tariff implications of unlimited self-supply and export. Accordingly, the AUC is seeking additional stakeholder feedback on the following questions:

<u>Question 1</u>

Please provide your views on the concerns expressed by Capital Power about the impact of unlimited self-supply and export on the energy-only market. Please comment on whether, or to what degree, such concerns may be addressed through changes to market rules or to existing transmission and distribution tariffs.

<u>Question 2</u>

Please comment on the following:

(a) The concerns expressed by AltaLink about allowing unlimited self-supply and export under the current tariff structure.

(b) The potential impacts of changing existing tariff structures to eliminate net billing for transmission-connected generation, transmission credits for distributed-connected generation, and the Alberta Electric System Operator's use of the 12-coincident peak methodology to recover bulk transmission costs.

(c) Whether other tariff-based solutions exist to ensure that the transmission and distribution costs are fairly allocated between users.

(d) If you believe that no changes to the current tariff framework are required please provide your rationale for that position.

Stakeholders can provide comments on any of the topics listed above, and on the specific options proposed, to Trevor Richards at trevor.richards@auc.ab.ca, or at fac-correspondence@auc.ab.ca. Comments should be submitted by **February 14, 2020**. All submissions will be posted publicly on the AUC's Engage web page.

If you have questions with respect to the process or the issue of self-supply and export, please contact JP Mousseau at 403-592-4452, or by email at jp.mousseau@auc.ab.ca, or Trevor Richards at 403-592-4469 or by email at trevor.richards@auc.ab.ca.

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