



February 14, 2020

Trevor Richards

Alberta Utilities Commission
Eau Claire Tower
1400, 600 Third Avenue S.W.
Calgary, Alberta T2P 0G5

Dear Mr. Richards,

Re: Heartland Generation Ltd. Comments on Bulletin 2020-01

On January 9, 2020, the Alberta Utilities Commission (“AUC” or the “Commission”) issued Bulletin 2020-01, *Exploring market concerns and tariff issues related to self-supply and export reform*. This bulletin was in furtherance of consultation that had begun with AUC Bulletin 2019-16, whereby the Commission sought stakeholder feedback on the self-supply and export issue.

At the request of the Department of Energy, the AUC is soliciting stakeholder feedback on the market and tariff implications of unlimited self-supply and export. Heartland Generation Ltd (“Heartland”) has addressed the questions of the AUC regarding the positions of Capital Power Corporation (“Capital Power”) and AltaLink Management Ltd. (“AltaLink”) in the following submission.

Please contact me at shanelle.sinclair@heartlandgeneration.com or 403-369-7769 if you have any questions.

Sincerely,

Shanelle Sinclair, Manager Regulatory & Policy



Heartland Generation Ltd.
Comments on Bulletin 2020-01

In Bulletin 2019-016, the Commission invited 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

As the Commission indicated, the majority of stakeholders supported Option 3 and “there was widespread support for statutory amendments to clarify whether self-supply and export is available to generators.”¹

In its recent E.L. Smith Decision, the Commission changed its view on the legal permissibility of self-supply and export.² As Heartland explained in its response to Bulletin 2019-16, the Commission has traditionally allowed self-supply and export under Section 2(1)(b) of the *Electric Utilities Act*:

Historically, the AUC has liberally applied Section 2(1) and allowed parties to rely on the self-supply exemption if the annual power produced is approximately equal to the annual onsite load. Recently, however, the Commission has concluded that, where no exemptions apply, the owner of a generating unit is prohibited from using that unit to supply on-site load and export electricity generated by that unit for exchange through the power pool.³

Heartland continues to support the Commission’s pre- E.L. Smith understanding of the regulatory framework related to self-supply and export. The Commission’s new, post- E.L. Smith interpretation represents an abrupt shift in Alberta’s regulatory paradigm with significant adverse consequences for market participants; Heartland submits:

If the legislation is not changed, there would be unequal treatment for those parties who currently self-supply and export to the grid and new industrials who seek to locate in Alberta. HGL understands that the Commission believes they cannot interpret the legislation as they once did. However, the effect of Decisions 23418-D01-2019, 23756-D01-2019 and 24393-D01-2019 was to change the understanding of the market years after its inception.

¹ Bulletin 2020-01, second paragraph under heading “stakeholder responses”, January 9, 2020.

² See AUC Decision 23418-D01-2019.

³ Heartland Generation Ltd., Response to AUC Bulletin 2019-16, page 2.

Parties who currently self-supply and export are prohibited from replacing old units with more efficient ones or making other needed modifications to their plants without being at risk of losing their connection orders, which legally permit them to export to the grid without exchanging all of their energy through the power pool.⁴

The Commission issued Bulletin 2020-01 in response to the Department of Energy requesting a second round of consultation on “the market and tariff implications of unlimited self-supply.”⁵ Bulletin 2020-01 outlines concerns of Capital Power and AltaLink, and the Commission requests feedback from stakeholders on whether potential ISO Tariff changes could address those concerns.

Even if an ISO Tariff change could accomplish the same ends as a legislative solution, a legislative solution is fundamentally different than a regulatory solution, like the Independent System Operator (“ISO”) Tariff. Legislation provides certainty in a way that an ISO Tariff change simply cannot. Unlike the ISO Tariff, which is evolving and is subject to fundamental changes through AUC approval every two or three years, the legislative framework, for the most part, remains consistent. The ISO Tariff, like other regulatory instruments, is a less reliable investment signal to investors. Investors in the electricity market make their investment decisions in part based on the legislative framework. Investment in self-supply projects was based on the understanding that these projects were consistent with the legislative scheme.

Prior to the E.L. Smith Decision, self-supply proponents filed their applications with the AUC indicating that their units would self-supply and export; therefore, they received both power plant approvals and interconnection orders on that basis. As such, a legislative change will restore the investor confidence in self-supply that existed prior to the issuance of the E.L. Smith Decision.

Heartland’s previous submission in response to Bulletin 2019-16 did not address possible resolution through changes to the ISO Tariff. Heartland submits that a legislative change is the preferred approach, as it restores investor confidence and can directly address self-supply and export. However, since the Commission is requesting feedback on the ISO Tariff specifically, Heartland provides its advice within this context below.

It appears that Capital Power and AltaLink’s concerns with self-supply can be categorized as follows:

- 1) **The “Market-Related” Concern:** Capital Power submits that self-supply compromises the “proper formation of price signals in real-time and over a longer term” and “reduces the effectiveness of and benefits from having a competitive market.”⁶
- 2) **The “Tariff-Related” Concern:** Capital Power submits that escalating wires costs and the tariff design have “created significant incentives to develop and co-locate generation and load,” thereby creating the risk of “leaving residual consumers with a greater share of the cost burden

⁴ Heartland Generation Ltd., Response to AUC Bulletin 2019-16, page 5.

⁵ Bulletin 2020-01, under heading “Next Steps”, January 9, 2020.

⁶ Capital Power Corporation, Response to AUC Bulletin 2019-16, page 2.

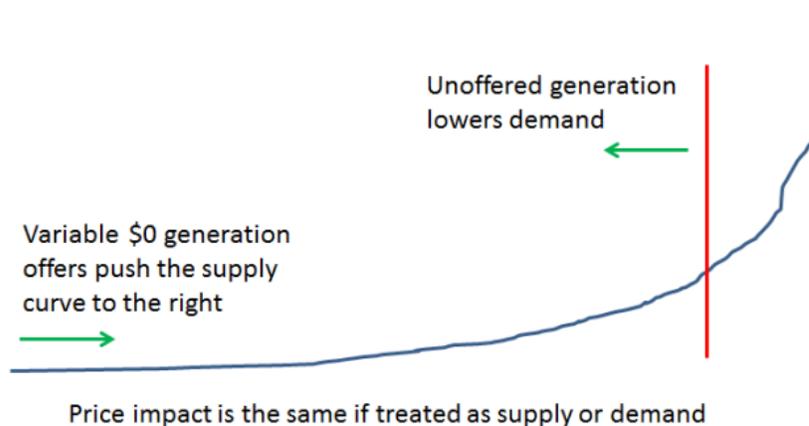
and creating issues of cross-subsidization between different customer classes.”⁷ Similarly, AltaLink submits that “the current AESO tariff mechanisms of collecting bulk system costs based on a 12-Coincident Peak methodology and net-metering allow those with self-supply generation to avoid paying for their full cost of using the grid.”⁸

Heartland addresses each concern below and concludes that both are misdirected at self-supply and do not alone adduce sufficient evidence to warrant revisions to the current ISO Tariff design or constraints on self-supply and export configurations.

The “Market-Related” Concern

It is not clear to Heartland how self-supply compromises the “proper formation of price signals in real-time and over a longer term” or “reduces the effectiveness of and benefits from having a competitive market,” as described by Capital Power.

As its name suggests, self-supply involves a load providing some or all its needs with co-located generation. This self-supply generation is either offered into the market to ensure dispatch (i.e. at or near \$0/MWh), in which case it pushes the supply curve to the right, or it is unoffered, in which case it acts as negative load and lowers market demand. As illustrated by the Alberta Electric System Operator (“AESO”), the price impact is the same in both cases:⁹



While Heartland acknowledges that self-supply generation may affect market outcomes, as shown in the preceding figure, this would also be true of any additional generation (or reduction in load). Therefore, it is unclear from Capital Power’s submission why self-supply generation should be singled out in this regard.

Further, a change in either supply or demand should not be characterized as compromising the effectiveness and integrity of the wholesale market itself. Capital Power has not provided a concern

⁷ Capital Power Corporation, Response to AUC Bulletin 2019-16, page 3.

⁸ AltaLink Management Ltd, Response to AUC Bulletin 2019-16, para 31.

⁹ Exhibit 24116-X0518, AESO-AUC-2019NOV29-001to013, page 6.

that would warrant changes to the distribution or transmission tariffs, or the ISO Rules. Self-supply does not inherently undermine the fair, efficient, and openly competitive operation of the wholesale electricity market.

The “Tariff-Related” Concern

Heartland understands concerns related to rising wires costs. However, as discussed further below, placing constraints on how self-supply sites configure themselves to address those concerns is discriminatory, presumptuous, and distortionary.

Grid-connected loads are subject to the AESO’s Rate Demand Transmission Service (DTS), which is the portion of the ISO Tariff that recovers both wires and non-wires costs. Under the current net-metering practice, self-supply (like a reduction in load) allows a DTS customer to reduce its metered demand at the time of the monthly coincident peak, which in turn reduces its transmission bill.¹⁰

While this result could be characterized as reflecting a deficiency in the ISO Tariff,¹¹ it is in fact working as intended. Indeed, in the 2014 Tariff proceeding,¹² the AESO provided extensive evidence supporting the 12 Coincident Peak (12 CP) methodology for recovering Bulk System costs that is still in use today. Specifically, as shown in the following excerpt from AUC Decision 2014-242, it confirmed that the Bulk System is planned for system peak, and that it is both desirable and rational for customers to reduce their load to avoid that system peak:

127. With respect to the AESO proposal to continue the use of the 12 CP method, the Commission notes the testimony of Mr. Martin that the existing rate design appropriately allocates costs based on cost causation:

Yes. The 12CP method seems to reflect one of the major considerations for planning and developing the transmission system. The system is studied and developed under system peak conditions, which would be coincident peak in the CP terminology: winter system peak, summer system peak. And it charges customers for the cost of the system based on their contribution to that system peak. If a market participant contributes a greater share to that system peak than other market participants, then the contribution of the greater share should lead to greater costs being charged. A perfectly flat load profile that an industrial customer can sometimes almost achieve, contributes 100 percent of the load to that system peak and pays a fair share of the bulk system based on that contribution. I think the issue is for market participants who can respond to the system peak signal and be able to reduce their load during the

¹⁰ Bulk System Charge is the portion of the Rate DTS connection charge that is reflective of the costs of transmission facilities generally 100 kV or higher. See Bulk Electric System as defined in the AESO Consolidated Authoritative Document Glossary.

¹¹ See Capital Power Corporation, Response to AUC Bulletin 2019-16, page 3, and AltaLink Management Ltd., Response to AUC Bulletin 2019-16, paras 15-16 and 31.

¹² AESO 2014 ISO Tariff Application and 2013 ISO Tariff Update, AUC Proceeding #2718.

periods in which system peak usually occurs. So those customers end up paying somewhat less towards the bulk system because they're not on peak. So that seems like a reasonable outcome to me and a fair reflection of cost causation to the allocation of cost. Doesn't seem like favouring one party over the other.¹³ [emphasis added]

Based on the AESO's evidence, the Commission concluded that customers who reduce their load to avoid system peak are not "gaming the system," but rather appropriately responding to the price signal that is given to them:

124. The Commission considers that when viewed in context, Mr. Martin is not stating customers are gaming the system. Rather, they are responding to the price signal appropriately – reducing load to avoid system peak and thereby reducing the need for bulk system expansion. The Commission agrees with the assessment of the AESO that the response of market participants to the coincident peak demand price signal demonstrates the effectiveness of the rate design rather than providing evidence of gaming the billing determinant.¹⁴

The current ISO Tariff (including the 12 CP methodology) was approved by the AUC as just and reasonable, as were the billions of dollars of wires costs that have recently been functionalized as "bulk" and thereby subject to recovery by way of 12 CP. Just because certain components of the ISO Tariff have increased does not automatically invalidate its design. When the going rate per MW of coincident metered demand is around \$10,000 per month, it is unsurprising that certain price sensitive loads respond to that price signal by reducing their coincident metered demand (e.g. through self-supply, energy efficiency, demand response, etc.). As evidenced in the provided quotes from the AESO and AUC, the 12 CP methodology was explicitly adopted for the purpose of leveraging this price responsiveness to avoid future transmission expansion. It is therefore discriminatory and presumptuous to target self-supply as the source of concern given the approved tariff design.

Finally, Heartland submits that Option 1 (the status quo) constrains self-supply to a degree that is distortionary. As explained by the AESO:

... by imposing a legislative limitation on concurrent self-supply and export configurations, Option 1 limits the ability of market participants to choose how to optimize the consumption of energy, with support from a physical connection to the AIES, in the most economic manner possible. This, in the AESO's view, is a sub-optimal outcome.¹⁵

Heartland agrees with the AESO that, because Option 1 is overly prescriptive, it is inconsistent with fair, efficient and openly competitive markets. Limiting or otherwise constraining the configuration of self-supply sites in this way is inefficient and causes immediate damage. Significant investments have

¹³ AUC Decision 2014-242, para. 127.

¹⁴ AUC Decision 2014-242, para 124.

¹⁵ Alberta Electric System Operator, Response to AUC Bulletin 2019-16, page 2.

been made under a regulatory paradigm that has been abruptly turned on its head, potentially stranding millions of dollars of capital and increasing regulatory risk in the process.

Conclusion

Heartland concludes that the concerns expressed by both Capital Power and AltaLink are misdirected at self-supply and do not themselves raise sufficient evidence to impugn the current ISO Tariff. Self-supply is an important choice for consumers that, along with other load-reducing methods, allows them to respond to the price signal provided by the AUC approved ISO Tariff; furthermore, it is entirely consistent with the fair, efficient, and openly competitive operation of Alberta's wholesale market. For these reasons, Heartland submits that self-supply and export should not be arbitrarily constrained and continues to support a legislative change to that effect. Doing so is the appropriate way to restore the investor confidence that was lost because of the E.L. Smith Decision.