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July 17, 2019

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC V6Z 2N3

Attention: Patrick Wruck, Commission Secretary

RE: PROJECT 1599004 – BC HYDRO APPLICATION TO AMEND NET METERING SERVICE

Dear Mr. Wruck et al.

Please find attached, questions from Energy Canvas, a renewable energy consulting firm based in the Lower Mainland.

The questions have been generated based on our understanding of the Net Metering situation with BC Hydro and in consideration of numerous hearing documents already published early today. Although attention has been given to many of the points, our focus is based on our experience in distributed energy resources design and development at our clients across the BC Hydro distribution system over the past 5 years. We tried not to repeat the questions of our fellow interveners.

We thank the commission, BC Hydro and the other interveners for their efforts on trying to update and improve the situation here in the province for customers who want to invest in onsite and distributed generation of renewable energy.

Very best regards

Energy Canvas

Per: Stephen Tordoff

REQUESTOR NAME: Energy Canvas Ltd
INFORMATION REQUEST ROUND #: 1
TO: BC Hydro Power Authority
DATE: July 17, 2019
PROJECT #: 1599004
APPLICATION NAME: BC Hydro Application to Amend Net Metering Service under Rate Schedule 1289

Introduction and Perspective

We know of numerous MGS and LGS BC Hydro customers that have chosen not to invest in net metered assets on their existing and new construction buildings due to rates and electricity price structures that are highly unattractive. We find the attempt to make things "simple" and "fair" to the customer to be misplaced sentiment because this requires perspective and the perspective being presented in this document does not represent that of our commercial or municipal customers who have chosen not to invest because the simplicity sought by BC Hydro is not fair to them investing in an asset that would need substantial grant funding to make any sort of financial sense. We in general find this concept economically inefficient and undermining the industry.

We have questions around three main topics: Duty of Service, Establishing Design Limits, Establishing the value of give and take.

Questions

<u>Topic 1: Duty of service versus electricity supply.</u>

Can you please confirm what BC Hydro means by a customer's "supply" as noted in Exhibit B-1 section 1.2.2? Does this intend to mean electricity supply as a duty of service or the more technical delivery of electrical energy and power that can then be charged to that customer?

<u>Topic 2: Establishing Load Estimates for Oversizing Limits</u>

Section 2.7 presents three main concepts for customers regarding Intent, Fairness and Flexibility. Based on lines 1-5 of the same page, the customer is the specific consumer who will directly benefit from the installation not the general rate payer.

a. Can you please provide what is acceptable information to BC Hydro as per line 16 that a new build construction can provide to justify a certain energy forecast? We have seen these estimates vary as much as 40-50% even on LEED buildings. Annual Load + 10% is highly restrictive and does not represent the active use versus estimated use reality of the corporations we have worked with.
b. If a new building has a reduced load from that forecast in Q2a, and a PV was sized to 100% offset that buildings annual load, what happens to extra energy generated if that load forecast was wrong by more than 10%? This discrepancy unfortunately does not demonstrate an intent to sell or be a net-generator.
c. If the owner of the building has multiple meters on site, or around the BC Hydro distribution area, how can load be added or aggregated if the point of new load is inconvenient? This is particularly relevant to the BC Hydro conversation in section 7.3.

- Eg 1: industrial customer in Richmond has 6 meters due to historical activity, solar and batteries located at meter 2 and are now overpowering due to moving workforce but they can install 5 EV chargers near to meter 5. How would this work?
- Eg 2: building 1 of an LGS customer has solar installed in 2020 but they have demand charge issues on their billing as well as they try to lower overall energy consumption, but as a result have high demand cycling. What do you recommend as a way to encourage renewable energy, lower consumption, fairness to the customer who is looking to do what is right, all while encouraging flexibility and fairness?

Topic 3: Establishing a Fair Overage Price

As established throughout the document, BC Hydro has made an attempt to keep the ability to put solar on a roof as being as simple as possible. As presented in section 4.2, we agree with many of the components of short run and long run value, but the problem is, the Net Metering program is simplified to the point where short run conversations are moot points.

a. Can you please provide the evidence that points in section 4.2 lines 19-21, are true? How do you determine fair value to non-participating customers?
b. Section 4.3 and 4.4, if after 5 years of over generating a customer has excess credits, they expire, getting zero for them, how is this acknowledging BC Hydro's support of short run pricing?
c. If BC Hydro is interested in Short Run pricing, why do we not have time of day or seasonal energy pricing? Establishing Net Metering Overage by taking the average of the average of the previous years Mid-C price as proposed is anything but short run.
d. The scenarios proposed in section 7.3 has a lot of suppositions. Can BC Hydro please provide data to support demonstrating high PV generation capacity with low energy rate in our regional market? Lines 1-12 on p50, in particular, are problematic.
e. Section 7.4 this is problematic in practice for net metering, as marginal cost on next day is not the price of today.
f. In the current program how does BC Hydro aggregate and sell the carbon reduction rights of the Net Metered projects? What are the revenues from this over the past 5 years?