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November 25, 2019

British Columbia Utilities Commission
6th floor, 900 Howe Street
Vancouver, BC V6Z 2N3
Attention: Patrick Wruck
Commission Secretary and Manager Regulatory Services

Dear Mr. Wruck:

Riverside Energy Systems has been providing solar PV consulting and installation services since 1995. We are also registered as intervenors in the current proceeding: **Application to Amend BC Hydro Net Metering Service under Rate Schedule 1289 - Project No. 1599004**

I am writing to share two points of evidence gleaned from our experience that we hope could be useful.

1. Regarding BC Hydro's Proposed 5 kW System Threshold for Consumption Review

Of the grid-connected solar PV system we have installed under the BC Hydro Net-Metering Program, about 70% are larger than the proposed 5 kW threshold above which building electrical consumption justification would be required of applicants. Our initiation of solar PV based net-metering applications is on the rise, and client requested system size (kW) is increasing. Meanwhile, increased residential and commercial electrical consumption is assured both in the short and longer terms as our buildings gradually transition towards reduced dependence on natural gas, and EV adoption increases.

In light of the above, we suggest considering an increase to the proposed 5 kW to simplify Net-Metering program review and reduce associated costs. We also suggest differing thresholds based on applicant rate class may also be appropriate. Medium (MGS) and Large General Service (LGS) customers on average will almost certainly have much higher consumption than their Residential Conservation Rate (RCR) counter-parts; justifying a higher consumption review threshold.

We respectfully propose 10 kW (RCR) and 25 kW (MGS and LGS) thresholds for solar PV based generation as alternatives to BC Hydro's proposed 5 kW threshold across the board for all generation types and rate classes.

2. Regarding High Performance Building Project Outcomes

We work extensively with individual home builders, Canadian Home Builders Associations (CHBA), and NRCAN Leadership in Energy Efficiency Partnerships Program (LEEP) to support the industry in use of grid-connected solar PV in residential building projects. Presently, BC Building Step Code prescribes increasing energy performance levels over time, culminating in Net-Zero Ready performance expectations for Part 9 residential buildings by 2032.

Progressive BC builders (and their clients) have been pursuing Net-Zero Ready (NZR), Net-Zero (NZ), Passive House (PH), and/or Living Building Challenge (LBC) performance for quite some time. BC Building Step Code adoption is accelerating this trend as builders prepare for the future. When electricity is not the sole fuel, achieving these levels of performance relies on annualized electrical overproduction to fully offset energy from other fuels. Under proposed rate schedule 1289 changes, this level of electrical overproduction would not be permissible; rendering NZR, NZ, PH, or LBC outcomes possible only in the case of fully electric buildings.

To encourage high performance building trends, we respectfully suggest BC Hydro consider Net-Metering provisions to allow for annualized electrical energy overproduction in cases where high performance building energy targets have been identified.

We believe the BC Hydro Net-Metering program is very important to British Columbia and will play an important role in sustainably realizing our long-term energy goals.

We appreciate the opportunity of sharing these points of evidence in support of your review.



Ben Giudici, P.Eng
Director
Riverside Energy Systems