

REQUESTOR NAME: **Clean Energy Association of B.C. (CEBC)**

INFORMATION REQUEST ROUND NO: **2**

TO: **BRITISH COLUMBIA HYDRO & POWER AUTHORITY**

DATE: March 8, 2016

PROJECT NO:

APPLICATION NAME: **2015 Rate Design Application (2015 RDA)**

1.0 **Reference: Exhibit B-17, Evidentiary Update**

On page 1 of the introductory letter, BCH states the following:

“The Load Resource Balance and Load Forecast provided in this Evidentiary Update are 20-year forecasts which were finalized in October 2015.”

Since the full Load Forecast has been prepared and finalized in October 2015, will BC Hydro please provide the following:

- 1.1 Please submit a copy of the full Load Forecast report into the record of this proceeding. Even though there may be further revisions to come, it will be very useful to have the latest information, since the last previous Load Forecast is now over 3 years out of date.
- 1.2 Please summarize the key underlying assumptions that were used for this updated Load Forecast.
- 1.3 Please provide the breakdown of the energy and capacity demand by customer type, including industrial customers, large commercial, medium commercial, small commercial, and residential (with residential broken down by dwelling type and by heating type). Please include at least 4 years of actual history prior to the forecast years, and please also provide this data in the form of a working Excel model.
- 1.4 According to BC Hydro's F2015 Annual Report, page 21, the total domestic load for F2015 was only 51,213 GWh, presumably not including line losses and system use. However, the Evidentiary Update forecasts a demand of 60,231 GWh in F2017 (before DSM, excluding LNG and presumably including line losses and system use) which becomes 58,695 GWh after deducting committed DSM and SMI Theft Reduction. Please explain why the domestic load is forecast to increase between F2015 and F2017?
- 1.5 Please summarize the additional changes that will be forthcoming in the further update to be delivered in the summer of 2016.
- 1.6 What impact does BC Hydro anticipate from the government's recently announced program to allow mining companies to defer a portion of their electricity payments?
- 1.7 If industrial customers have been faced with significant declines in prices for the commodities they produce, what impact does BC Hydro expect this current decline to have on electricity consumption 5 years and 10 years in the future?
- 1.8 If BC Hydro's industrial rates continue to increase as BC Hydro's spending on capital improvements averages about \$2.4 billion annually, does BC Hydro anticipate that some of these customers will produce their own electricity for self-use using natural gas? Please provide the full

details.

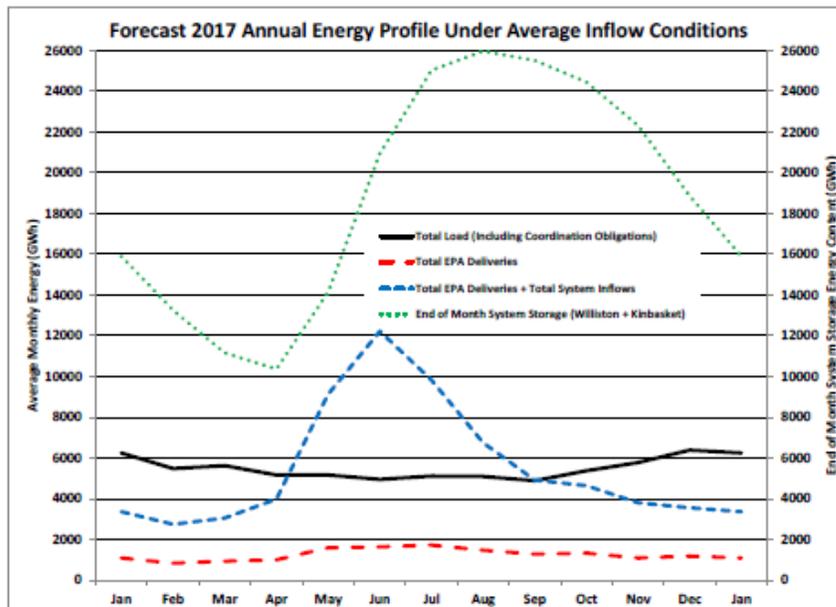
2.0 Reference: Exhibit B-1, Chapter 5, Residential Rate Design

According to the charts in Figures 5-7 to 5-12, BCH maintains statistics on residential customer accounts and consumption broken down by heating type, by household size, and by income level.

- 2.1 How does BC Hydro obtain this information, and is it considered reliable?
- 2.2 Has BC Hydro considered adjusting the Step 2 threshold consumption level to allow for household size or dwelling size? If not, why not?
- 2.3 As electric vehicles become more prevalent in British Columbia, how does BC Hydro propose to adjust the RIB Step 2 threshold level to ensure that electric vehicle owners will not be penalized by having to pay Step 2 rates when charging their vehicles, even if they charge them overnight?

3.0 Reference: Exhibit B-5, Response to BCUC IR 1.104.2

The response to this IR gives the following excellent chart showing how the management of system storage is coordinated with system loads and system inflows for the forecast year 2017:



A chart such as this of recent history will be invaluable in evaluating the performance of the Freshet Pilot Rate being inaugurated this spring season. Such a chart can provide the context of history in order to tell to what extent the inflows are “wet”, “dry”, or average, and to what extent the Freshet Pilot Rate is relieving the freshet oversupply situation or simply shifting demand from other periods. If the Pilot Rate is underutilized, such a chart could reveal if the cause is due to the current year being anomalous relative to recent history.

- 3.1 Please provide similar charts for the years of recent history, going back to 2012 (a “wet” year) through 2015 (a “dry” year). Furthermore, in the future, when producing the evaluation report for the Freshet Pilot Rate after this year’s trial period, please include such a chart for the 2016 year,

and then subsequently for the 2017 year.

3.2 Please also provide the chart data in tabular form, and include a working Excel model.

4.0 **Reference: Exhibit B-5, Response to CEBC IR 1.3.1, Energy Long-Run Marginal Cost**

In its response, BC Hydro states that:

“On average, BC Hydro’s opportunity costs are estimated to be approximately \$95/MWh for bio-energy EPA renewals and approximately \$70/MWh for run-of-river EPA renewals (\$F2016).”

4.1 Please explain how BC Hydro’s “opportunity costs” are determined, and why is the opportunity cost different for these two categories of renewals.

4.2 Would BC Hydro be willing to pay \$25/MWh more (i.e. 36% more) for a bio-energy renewal than for a run-of-river renewal? If so, why?

5.0 **Reference: Exhibit B-17, Evidentiary Update, Section 2, Energy LRMC**

On page 8 of the Evidentiary Update, under DSM, BC Hydro states:

“The \$85/MWh LRMC upper limit was used to inform the development of the DSM plan including by ensuring that all DSM initiatives were cost effective in a Total Resource Cost (TRC) test against the \$85/MWh threshold.”

5.1 The Total Resource Cost of DSM initiatives does not represent the cost of those initiatives to BC Hydro’s ratepayers. As a measure of BC Hydro’s cost, it is not, therefore, comparable to the EPA renewal cost. Why is it being used to establish the LRMC?

5.2 The cost of DSM initiatives to BC Hydro ratepayers is more appropriately measured using the Utility Cost metric. Please provide a table listing the various DSM initiatives being undertaken and/or proposed, and showing both their Total Resource Cost and their respective Utility Cost metrics for comparison purposes.