STIRLING LLP
Suite 1460 | 701 West Georgia Street
PO Box 10156 LCD Pacific Centre
Vancouver, BC V7Y 1E4

t. 604.674.3818
f. 604.674.3819

STIRLING
BUSINESS LAW

David A. Austin
d: 604.674.3824
daustin@stirlingllp.com

November 15, 2019

Via Electronic Filing **File no.**

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C. V67 2N3

Attention: Patrick Wruck
Commission Secretary and Manager Regulator Support

Dear Sirs/Mesdames:

Re: BC Hydro and Power Authority – F2020-F2021 Revenue Requirements Application – Project No. 1598990 – Amended Regulatory Timetable

We are writing on behalf of the Clean Energy Association of B.C. ("CEABC") in response to the BCUC Order G-279-19, Exhibit A-21, amending the Regulatory Timetable with reasons for decision and in particular the invitation by the BCUC to interveners whose Information Requests ("IRs") are included in Attachment A to BC Hydro' Extension Letter ("Extension Letter") to clearly explain how each of its respective IRs would inform the BCUC's decision regarding the requested rates for F2020-F2021.

In general terms, BC Hydro's request to decline to answer CEABC IRs 4.58.1, 4.58.3, 4.58.4, 4.59.4, 4.60.1, 4.61.1, 4.62.2 and 4.8.1 ("CEABC IRs") because they are out of scope is not reasonable.

The June 2019 Load Forecast, Exhibit B-15, to which these CEABC IRs relate is not a document that consists of silos for each of the years in the period fiscal 2020 to fiscal 2039. Assumptions and decisions made about electrical load in any one year can, and will, impact electrical load forecasts for following years.

In the Extension Letter BC Hydro states[1]:

> *"BC Hydro previously provided a comprehensive 20-year load forecast in the 2013 Integrated Resource Plan (**IRP**) and in the Fiscal 2017 to Fiscal 2019 Revenue Requirements Application. BC Hydro's 2021 IRP filing will include a new comprehensive load forecast, which will reflect more current information and assumptions. Accordingly, BC Hydro suggests that Information Requests on the June 2019 Load Forecast be focused on the Test Period of the Application (fiscal 2020 and fiscal 2021). Questions regarding the years beyond the Test Period are more appropriately addressed in the 2021 IRP proceeding."*

[1] Page 1

BC Hydro is acknowledging that the 2013 IRP is out of date and is suggesting to the BCUC, CEABC and other interveners that they should wait for the 2021 IRP and, in the interim, accept the silo approach.

CEABC submits that this suggestion ignores the importance of the passage of time when forecasting electrical demand and in particular the need to promptly identify potential new customers and to develop the transmission and distribution facilities to deliver electricity to them.

By way of example the natural gas industry has a choice whether it electrifies gas processing facilities or meets the energy requirements of these facilities by using field or pipeline gas. Electrification results in a substantial reduction in greenhouse gas emissions whereas the use of gas results in a substantial increase in greenhouse gas emissions ("GHGs"). But the use of gas is entirely within the control of the producers and can be implemented immediately, without waiting for BC Hydro to make decisions, get approvals, and build transmission and distribution facilities.

With the ability to choose between two energy sources, the natural gas industry doesn't have to wait for BC Hydro to prepare and obtain approval for its IRP before making investment decisions for gas processing plants in British Columbia. If there is no electrical transmission and distribution system in the vicinity of a proposed gas processing plant, and there won't be one prior to commercial operation, then electrification is not a viable option. BC Hydro loses a potential new load and the resulting revenue which would cover a portion of its ever increasing fixed costs.

That is precisely why time is of the essence in the effort to electrify oil and gas production facilities.

The historical evidence of this point can be seen by examining material relating to the Dawson Creek transmission planning area ("Dawson Creek") of the Montney shale fields in the Northeast B.C. BC Hydro's 2012 Load Forecast shows that the service percentage for Dawson Creek would grow from[2]:

> "*40% ramping to 85% over the forecast horizon.*"

This level of penetration could only be achieved if the necessary transmission and distribution facilities are in place when needed by the gas industry. Primarily meaning the timely completion of the construction of projects like the Peace Region Electricity Supply ("PRES") project.

In response to a CEABC IR BC Hydro said in relation to Dawson Creek it is[3]:

> *"... expecting a service percentage for total energy requirements of 50% ramping up to 54%, then down to 53% over the forecast period."*

The expected in service date for PRES is October 2021[4]. The implication to be drawn is that if the construction of PRES and possibly another transmission line would have been started and completed sooner, a higher electrical penetration level than 50% to 53% could have been achieved.

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[2] Page 93
[3]F2020-F2021 Revenue Requirements, BC Hydro response to CEABC IR 2.41.1
[4]F2020-F2021 Revenue Requirements, BC Hydro response to BCOAPO IR 2.139.1

The gas industry didn't wait for BC Hydro to make a decision about PRES or additional transmission lines. It turned to gas generated energy.

The CEABC's IRs are aimed at learning about what steps BC Hydro is carrying out during the Test Period, to increase electrification of the Northeast gas fields, including planning and construction of electrical distribution and transmission facilities, and the impact these steps will have over the term of the 2019 Load Forecast. This will assist the BCUC in determining whether BC Hydro is acting with sufficient diligence and urgency to meet the greenhouse gas reduction objectives of the Clean Energy Act[5] and targets of the Climate Change Accountability Act[6]. And also to achieve the increase in revenue required to cover its ever expanding fixed costs.

The electrification of the Northeast gas fields is a significant new load which can assist BC Hydro in achieving both of these crucial objectives. The load is materializing over the next few years or, possibly well beyond the Test period. However the actions needed to serve this load must be urgently undertaken during the Test period. The purpose of CEABC's questions is simply to clarify for the BCUC and interveners, exactly what BC Hydro has already done, what it is intending to do within the Test period, and what it has yet to do, in order to advance this urgent need.

The CEABC's comments, which are supplemental to the above general comments, about each specific IR are set out in the below table. The CEABC is not going to repeat the general comments with respect to each IR.

CEABC IR	CEABC Comment
4.58.1 Since the Table 1 and Table 2 format provided a very useful and understandable synopsis, please update and augment Tables 1 and 2, and the associated discussion, to include all the new information that informed the new 20-Year Load Forecast (June, 2019), that includes projections going beyond F2024. In the associated discussion, please describe the main factors that result in material changes from the October 2018 Load Forecast.	Since time is of the essence in servicing new customers, CEABC presumes that this information is not new to BC Hydro, but would have already been completed in order to be incorporated into the updated 2019 Load Forecast, and in order to meet the industry's tight timelines.
4.58.3 If a North Montney transmission project is developed, what impact could it have on the service percentages in the 5 Montney regions, in particular the GM Shrum area?	This is important information in relation to the BCUC's understanding about the electrical requirement of the Northeast gas fields as reflected in the 2019 Load Forecast.
4.58.4 To what extent will an increasing carbon tax offset the decline in gas prices? How much will a $50/tonne carbon tax add to a gas producer's cost per MMBtu of natural gas?	Since the use of gas is the chief competition for BC Hydro electrification, this is information about that competition as it impacts the 2019 Load Forecast.

[5] Section 2 (g)
[6] Section 2

How many MMBtus of natural gas are required to generate one MWh of work energy in the gas processing plants? (i.e. what is the fuel efficiency of the gas-fired compressors that deliver the work energy?)	This is information that will assist the BCUC is assessing the potential electrical requirements of the Northeast gas industry and the extent to which BC Hydro intends to meet them as reflected in the 2019 Load Forecast.
4.59.4 As a proportion of the total work energy to be consumed by all the existing and planned facilities in the area, what proportion is represented by BC Hydro's June 2019 High Forecast for F2027?	This information helps to show how close BC Hydro is able to come to fulfilling the available opportunity, how much room is left for improvement, and what steps can be taken to close the gap.
4.60.1 How does this 1% growth expectation compare to that of other electric utilities in jurisdictions across Canada and the U.S.? Which of these other utilities have a carbon tax similar to British Columbia's or a low carbon electrification plan similar to the CleanBC Plan designed to also allow the major expansion of a fossil fuel export industry such as LNG in B.C.?	Given the unique circumstances in B.C. the CEABC is asking whether BC Hydro's 2019 Load Forecast is appropriate. The assumptions BC Hydro has made in the Test Period have a knock on effect in the following years in the term of the 2019 Load Forecast.
4.61.1 Is BC Hydro's 1% load growth expectation, over the next 20 years, consistent with the Clean Energy Act's objectives for GHG reductions, or its objective for switching energy sources to a source "that decreases greenhouse gas emissions in British Columbia"? If not, why not?	Since the impact of BC Hydro's planned actions during the Test Period must have been incorporated into the 2019 Load Forecast, CEABC is trying to clarify for the BCUC and other interveners to what extent these actions are expected to align with B.C.'s objectives, and to what extent they will not.
4.62.1 How does the 1% 20-year load growth featured in the June 2019 Load Forecast "align with Government's new climate plan"?	Since the impact of BC Hydro's planned actions during the Test Period must have been incorporated into the 2019 Load Forecast it is important for the BCUC to understand the extent to which these actions will bring about an alignment with the Government's new climate plan, as required in the Minister's mandate letter to BC Hydro.

Yours truly,

STIRLING LLP

David A. Austin*
**a Law Corporation*