

May 2, 2019

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Dear Mr. Wruck:

**Re: BC Hydro F2020 – F2021 Revenue Requirements Application
Intervener IR No. 1**

The attached are my Information Requests No. 1. Note that the references given for each question are sections or page numbers in BC Hydro's 2020 – 2021 Revenue Application.

Sincerely

Original signed by Paul Willis

Paul Willis

Question 1

Reference: Chapter 3, page 11

“As with the forecast used for the Previous Application, the use per account forecast employs SAE regression models that establish a relationship between data and factors that influence the average use per account.”

In the SAE regression model has the continuing growing penetration of LED lighting been considered? If so what was the baseline penetration of residential LED lighting in 2015 and what is it expected to be in 2020?

Question 2

Reference: Chapter 3, Pag 14

“Rate impacts: Load reductions estimated using price elasticity and bill impact projections in real dollars (net of inflation).”

Has BC Hydro developed cost indices for typical residential customer groups? For example; what is the annual cost of electricity for a typical single-family home, typical apartment, typical townhouse today compared to five years ago? (rates have increased but energy use per account has decreased)

Question 3

Reference: Appendix O, page 22 of 170

“a decline in the average use per account. In fact, over the past five fiscal years ending fiscal 2018, the average residential use per account (annual billed sales divided by the average number of accounts) has declined on both an actual basis and on a temperature normalized basis by 0.9 per cent and 1.1 per cent respectively.”

Has BC Hydro analyzed this five-year decline and is it expected to continue?

Question 4

Reference: Chapter 3, section 3.2.8.1 Account by Account Approach

BC Hydro has a Strategic Energy Management (SEM) program in place for most if not all of their transmission customers; do the SEMs include electricity consumption forecasts for each customer facility?

Question 5

Reference: Chapter 3, top of page 3 – 25

Are customers that are applying for new power, asked to complete a SEM for their potential facility? If so would this SEM include a consumption forecast?

Question 6

Reference: Chapter 3. Page 3 – 40

BC Hydro as an organization can have a significant impact on trends. Considering the aggressive goals that the provincial government has with respect to Electric Vehicles, will BC Hydro implement their own program to aggressively market electric vehicles?

Question 7

Reference: Chapter 3, page 3 – 51

“The forecast assumes historical average temperature trends. If temperatures are colder than normal this can led to higher sales.”

Considering the discussion on Climate Change what are the assumptions with respect to normal? This may be a more important item when considering long-term forecasts but it is important to document in modeling work how normal is calculated.

Question 8

Reference: Chapter 3, page 3 – 52

“The Revenue Forecast is used to determine the revenue shortfall and the proposed rate increases to meet BC Hydro’s forecast revenue requirements.”

There is a significant margin between BCH rates and the wholesale market price of electricity. Is BC Hydro considering any programs where surplus electricity would be marketed to BC Hydro’s own customers at a discounted price?

Question 9

Reference: Section 6.7.4 Fleet Capital Expenditures and Additions, page 6-166

With respect to BCH's own vehicle fleet, what strategy do they have in place for converting from gasoline powered cars or trucks to electric vehicles?

Question 10

Reference: Appendix L , page 7 of 27 section on Technology Trends

A number of institutions including the provincial government are implementing Blockchain technology with respect to Smart Contracts and other procurement activities; is BC Hydro implementing any Blockchain pilot activities?

Question 11

Reference: Appendix X, page 2, near bottom of page “We also need to create opportunities to help our customers shift the timing of when they use electricity to optimize our grid and reduce costs and constraints across BC Hydro’s system.”

Is BC Hydro considering any new rate initiatives that would reward customers for using electricity at non-peak periods; this may become important particularly with the charging of electric vehicles?

Question 12

Reference: Appendix X, page 7, Table 2

Why is the budget for capacity focused programs declining from F2020 to F2022; considering that BCH has surplus energy, it would seem that the focus for Capacity DSM should actually be expanding and not declining, particularly at the distribution level?

Question 13

Reference: Appendix X, page 7, Table 3

The Utility Test and the Modified Resource Test seem appropriate but does BC Hydro also use the Participant or Customer Test to evaluate individual programs?

Question 14

Reference: Appendix X, section 3.2, page 16, footnote 10

Why has the savings from capacity-focused demand-side management activities not been quantified?

Question 15

Reference: Appendix X, Section 10.1, page 73

“The most recent Residential Inclining Block Evaluation Report finds that no new incremental savings are anticipated in future years. However, the current pricing signal continues to encourage customers to maintain previous savings. As shown, no new incremental costs are planned.”

What was the level of previous savings evaluated to have been obtained by the Rate Inclined Block (RIB)?

Has BCH performed any evaluation or surveys to determine the impact that RIB has on discouraging the use of heat pumps during the winter season?

Question 16

Reference: Appendix Y, Low Carbon Electrification

BC Hydro has already strongly promoted Electric Vehicles, but in Appendix Y there does not appear to be any mention of an electric vehicles program. Will an EV program be part of BC Hydro’s LCE initiative?

Question 17

Reference: Appendix AA, Attachment 1, Demand Side Management Milestone Evaluation Summary Report

Evaluation efforts have involved surveys, in future evaluations will BCH consider using survey data in combination with Smart Meter data; a number of customers would probably agree to have BCH analyze their Smart Meter data as long as there were some anonymity conditions in place?