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April 24, 2017

VIA ELECTRONIC FILING

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Patrick Wruck, Commission Secretary and Manager, Regulatory Support

Dear Sirs/Mesdames:

Re: BC Hydro F2017 to F2019 Revenue Requirements Application

We are counsel to the Commercial Energy Consumers Association of British Columbia (CEC). Attached please find the CEC's third set of Information Requests to BC Hydro with respect to the above.

If you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Yours truly,

OWEN BIRD LAW CORPORATION

Christopher P. Weafer

CPW/jj
cc: CEC
cc: BC Hydro
cc: Registered Interveners

REQUESTOR NAME:	Commercial Energy Consumers Association of British Columbia (CEC)
IR ROUND NO:	#3
TO:	British Columbia Hydro and Power Authority (BC Hydro)
DATE:	April 24, 2017
PROJECT NO	3698869
APPLICATION NAME:	F2017 to F2019 Revenue Requirements Application

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176. Reference: Exhibit B-20, page 2

- Regarding BCSEA's position that it would be more beneficial to increase demand-side management expenditures, BC Hydro's rationale for its proposed level of demand-side expenditures is explained in section 10.3 of the Application and also in BC Hydro's responses to BCSEA IR 1.2.1 and BCUC IR 2.312.1, with supporting details in numerous other responses to information requests.

176.1. BC Hydro states there are numerous other responses to information requests which explain its rationale. Please provide a complete list of these IRs.

177. Reference: Exhibit B-20, pages 3 and 4

Q3. Are there any plans to revisit the percent of load growth target that is currently included in the Clean Energy Act?

A3. Yes. As indicated in the Minister's letter of December 16, 2015, attached as Appendix BB of the Application, we will be consulting on a new long-term conservation target (post 2020) through the 2018 integrated resource planning process. Through that process, we anticipate conducting a jurisdictional review, which will look at different metrics for the target and the applicability of those metrics to BC Hydro's demand-side management plan. We expect to recommend a new target in the 2018 Integrated Resource Plan, which will be submitted to Government for their consideration and approval.

177.1. Does BC Hydro consider itself to be a leader in its target levels of Demand Side Management?

177.1.1. If no, please explain why not.

177.2. Please identify the metrics that BC Hydro will examine in the jurisdictional review.

177.3. Please explain why metrics in other jurisdictions are relevant in assessing the appropriate level of DSM for BC.

177.4. Would BC Hydro agree that cost effectively reducing customer costs and reducing energy consumption could both be considered as appropriate key objectives?

177.4.1. If no, please explain why not.

178. Reference: Exhibit B-20, page 4

A4. No. EFG's position is inconsistent with the policy direction of government. The conservation targets set by government for BC Hydro have been a percentage of load growth, which is different than taking all cost-effective demand-side management (i.e., all demand-side measures with a benefit to cost ratio of 1.0 or greater). The 2013 Integrated Resource Plan, which was approved by government, also included a larger portfolio of demand-side management that had a benefit to cost ratio of 1.0 or greater, but was not selected. This reflects government policy to balance a variety of objectives, including the pursuit of demand-side management. A summary of the policy direction on this topic is set out below.

178.1. Please provide BC Hydro's views as to what objectives are being balanced in the 'government policy to balance a variety of objectives, including the pursuit of demand-side management'.

179. Reference: Exhibit B-20, page 8 and page 4

- changing system needs (BC Hydro's load resource balance showed a reduced need for additional resources than what was forecast in the 2013 Integrated Resource Plan), and

179.1. Please summarize all the supply related cutbacks that BC Hydro has made in response to its reduced need for additional resources than what was forecast in the 2013 Integrated Resource Plan. Please relate the total supply cutbacks to the total additional resources that what were forecast in the 2013 Integrated Resource Plan.

180. Reference: Exhibit B-20, page 9

A6. It is very difficult to draw valid comparisons between the budgets of Maryland's full-fledged programs, as provided by EFG, and our budgets for pilots. Generally, the costs and capacity requirements in other jurisdictions are not likely to be comparable to the costs and requirements in British Columbia. For example, BC Hydro's capacity need is unlike that of other jurisdictions. While most load curtailment programs focus on the utility's operational needs and use curtailment as a short-term resource option, BC Hydro's pilot program focuses on a product for planning purposes and potential deferment of long-term generation assets, which has been defined as 36 days of curtailment of 16-hours per day. Pilot programs also require costs that are not typically required for full-fledged programs, such as testing new technology and measuring and analyzing results. Due to factors such as these, the budgets of Maryland's full-fledged programs cannot be validly used to make determinations on the budgets of our pilot programs.

180.1. Please elaborate on how BC Hydro's cost and capacity requirements differ from those in other jurisdictions, and why jurisdictional comparisons are very difficult to draw valid conclusions from.

181. Reference: Exhibit B-20, page 10

While capacity-only demand side management programs and pilots are common in the industry, as far as BC Hydro is aware, no other jurisdiction has run a pilot or program for the product that BC Hydro requires to meet its system needs (36 days of curtailment of 16-hours per day). This underscores the importance of BC Hydro conducting its own pilot work and not simply relying on the results of successful pilots in other jurisdictions.

181.1. Please provide the basis behind the statement that BC Hydro system needs require 36 days of curtailment 16 hours per day.

181.2. Please elaborate on when the 16 hours occur, and when the 36 days occur.

181.3. Please confirm that the number of days and the number of hours per day could be supplied by the coordinated curtailment from 2 or more parties.

181.3.1. If not confirmed, please explain why not.

181.3.2. If confirmed, is BC Hydro allowing for participants that could meet partial criteria such that it could be aggregated into a group?

181.3.2.1. If not, please explain why not.

182. Reference: Exhibit B-20, page 21 and page 22

Q5. AMPC's response to BCSEA-AMPC IR 2.2 states: "BC Hydro's most recent analysis in its F2010 Demand-Side Management Milestone Evaluation Summary Report indicates a -0.16 price elasticity for industrial customers." Is the -0.16 price elasticity in the Evaluation Summary Report comparable to the -0.05 price elasticity used in the load forecasting methodology?

A5. No. These two numbers cannot be compared on an "apples to apples" basis. The tier 2 price elasticity estimate of -0.16 was based on a top-down analysis of aggregate consumption for Transmission Service Rate customers between April 2002 and February 2009, controlling for economic conditions, energy savings achieved through BC Hydro's demand-side management programs, and electricity prices. This approach to estimating price elasticity did not involve analyzing individual facilities and did not adjust for known or expected conditions at individual sites, such as closures or expansions. The analysis period of 2002 to 2009 included the economic recession that started in 2008, which introduces uncertainty to the resulting elasticity estimate.

In contrast, the load forecast methodology uses a customer-specific probability assessment that accounts for the impact of changes in production input costs like electricity. This approach involves the analysis of known or expected conditions at individual sites, and as such it already captures some of the price effects that are reflected in the price elasticity estimate of -0.16. Therefore, it is not appropriate to apply the price elasticity of -0.16 to the load forecast, as doing so could double count price responsiveness effects

182.1. Given that the -0.16 price elasticity applies to Tier 2, and would therefore applicable to 10% or less of the consumption, would the implied elasticity at Tier 1 be appropriately defined as -0.0306 for the remaining 90% of consumption; using BC Hydro's price elasticity value 0.05 used? Please explain why or why not.

182.2. Please comment on whether or not price elasticity estimates should be expected to be higher after a large cumulative increase in rates.

182.3. Logically, would it make sense that a very large cumulative increase could have greater load destruction impacts than more modest cumulative increases? Please comment.

183. Reference: Exhibit B-20, page 30

Q1. CECBC characterizes electrification of Montney gas production growth as "a very significant opportunity for BC Hydro".[36] Does BC Hydro agree?

A1. CECBC's evidence is based on documented government sources and corporate information. CECBC's comments regarding future British Columbia gas production are generally consistent with BC Hydro's assessment.

BC Hydro agrees that electrification of Montney gas production presents a significant, albeit uncertain, opportunity for BC Hydro. The uncertainty is related to: (1) changing demand and supply conditions of future North American gas and liquids markets, as well as global LNG markets; and (2) the extent to which gas producers decide to electrify portions of their operations.

Q2. Does BC Hydro's May 2016 Load Forecast account for the growth discussed by CEABC?

A2. Yes, the May 2016 Load Forecast generally accounts for growth as discussed by CEABC. Oil and gas facilities in the forecast are probabilistically weighted to reflect expected electrification and plant start-up potential.

183.1. Under what circumstances will BC Hydro undertake to adjust its load forecasts, and how will these be monitored? Please identify any thresholds or other criteria that BC Hydro has established which will result in BC Hydro adjusting its load forecasts.

183.2. Please advise as to how and when changing demand and supply considerations of future North American gas and liquids markets, as well as global LNG markets, will be crystallized into BC Hydro's load forecast.

183.3. Please advise as to how and when decision information related to the extent to which gas producers decide to electrify portions of their operations will be crystallized into BC Hydro's load forecast.

183.4. Since the May 2016 load forecast, has BC Hydro changed its views with regard to the timing and/or quantity of expected electrification? Please explain.

184. Reference: Exhibit B-20, page 48

Q10. In Zone II's response to BCUC-Zone II IR 5.1, Zone II stated that BC Hydro has made a commitment in Fort Ware to provide LED streetlights that has not been fulfilled. How do you respond?

A10. BC Hydro has maintained that until an LED rate for BC Hydro-owned streetlight customers taking service under rate schedule 1701 is approved by the Commission, BC Hydro is not able to offer this service to customers, because there would not be an approved rate to charge under. The design of this rate is currently underway in Module 2 of the Rate Design Application and if the rate is approved, BC Hydro expects to begin five year staged roll out of LED streetlights on its poles starting in 2018.

184.1. Could BC Hydro have applied for a temporary rate while it is applying for a rate under Module 2? Please explain why or why not.

184.2. How many streetlights will be transferred to LED?

184.3. Please confirm that BC Hydro under SMI, changed out all the meters in the province over a period of 2 years.

184.4. Please explain why BC Hydro requires 5 years for its staged roll-out.

185. Reference: Exhibit B-20, page 49

Nation in recent years. Due to the unique load requirements of Non Integrated Areas, the SOP program is not available in Non Integrated Areas. However, BC Hydro would be open to pricing consistent with the Standing Offer Program, or potentially higher in Non-Integrated Areas where there is diesel generation. As part of the overall technical and financial review of a proposal, BC Hydro would consider a cost of service review of the project and undertake negotiations of the project pricing on a bilateral basis with the proponent.

185.1. Please elaborate on the 'unique load requirements' that preclude the SOP program.

185.2. How would BC Hydro provide pricing 'consistent with the Standing Offer Program, without being part of the Standing Offer Program.?

185.3. Why does BC Hydro propose to potentially offer higher pricing where there is diesel generation?

185.3.1. Please provide the marginal cost of supply of diesel in a non-integrated area.

185.3.2. What is the appropriate price range that BC Hydro could consider for SOP supply in the Non Integrated Area? Please provide an explanation.

185.3.3. Please confirm that the SOP is not legislated, but is Provincial Policy and is an action item in the 2013 IRP for the Utility Commission to consider.

185.3.3.1. If not confirmed, please explain.

185.3.4. Please confirm that the applicable legislation identifying the issues the BCUC must consider in setting rates for supply would be the Utilities Commission Act.

185.3.4.1. If not confirmed, please explain why not and provide the correct legislative framework under which to consider SOP issues.

185.3.5. Please confirm that the economic circumstances for purchasing energy where diesel is the current supply are substantively different than the circumstances for supply on the integrated grid.

185.3.5.1. If not confirmed, please explain why not.

186. Reference: Exhibit B-20, page 50

BC Hydro currently operates under an outsourcing contract with Accenture Business Services of British Columbia Limited Partnership (**ABSBC**). The outsourcing contract includes the following services: Customer Care (customer call centre, billing, learning and knowledge, credit/collections); Human Resources (payroll, recruitment services, pension administration); Finance (accounts payable); Office Services (switchboard, mail and document services, and graphic design). BC Hydro's partnership with ABSBC has been successful.

The contract expires April 30, 2018, providing BC Hydro with an opportunity to consider what structure for these services is in the long-term best interests of our business. In February, 2017, BC Hydro's Board of Directors approved the repatriation of services upon the expiry of the outsourcing contract. An important consideration in BC Hydro's analysis was our key corporate objective of making it easier for customers to do business with us. The outsourcing contract includes our call centre agents, who are often the first contact with our customers. It also includes critical back office functions that ultimately have customer service implications. BC Hydro has made the decision to bring these functions back in-house so that we can adapt and grow these services and align them with our future business needs.

186.1. Please provide the documents on which BC Hydro's Board of Directors approved the repatriation of services.

186.2. Please provide any other service or financial aspects that BC Hydro considered in its decision to repatriate the services.

186.3. Why does BC Hydro believe the repatriation of services would make it easier for customers to do business with them?

186.3.1. Please describe any negative consequences of which BC Hydro has experienced as a result of the outsourcing.

186.3.2. Please elaborate on how bringing the functions back in house would enable BC Hydro to 'adapt and grow' the services, and 'align them' with future business needs.

186.4. Please provide the non-financial cost-benefit analysis of the repatriation of services.

186.5. How many staff will be 'repatriated'? Please break down the total by function.

187. Reference: Exhibit B-20, page 51 and page 52

The repatriation did not have any material impacts on fiscal 2017 revenue requirements. The overall impact of the repatriation on BC Hydro's fiscal 2018 and fiscal 2019 revenue requirements is also expected to be minimal. BC Hydro will incur additional costs during fiscal 2018 as repatriation activities are planned and executed.

The additional costs forecasted for fiscal 2018 include the following: Transition Costs (all transition activities including repatriation planning, making job offers to transitioning staff, setting up security and IT access, updating signage, change management, onboarding and training, and communications); Early On-boarding (early on-boarding of specific roles required prior to the transition date to plan post-transition operations, or to replace experienced staff may who choose to retire instead of transfer to BC Hydro); Legal Support (commercial and labour relations legal advice to support the wind down of the outsourcing contract). BC Hydro has established a high level cost estimate for these activities based on the professional opinion of managers within the impacted operational areas. However, BC Hydro notes that several underlying assumptions need to be confirmed and additional data obtained to refine the estimate. Detailed planning activities are currently underway to further define the required activities and related costs.

The savings forecasted for fiscal 2019 represent the avoided fees for managing the currently outsourced services. These savings are an estimate, and will also be impacted by the decisions and negotiations that will take place over the next few months.

Based on the potential variability of the fiscal 2018 costs and fiscal 2019 savings, it is BC Hydro's best estimate at this time that the net impact on revenue requirements for the current test period will be in the range of $0-2 million. BC Hydro is not requesting a new regulatory account or seeking to use an existing regulatory account for the deferral of costs or savings related to the termination of the Accenture contract, and as a result there will be no forecast additions or reductions to the regulatory accounts related to this over the test period.

187.1. Do the costs outlined for 2018 account for all the one-time or non-ongoing costs that are going to be experienced as a result of the transition?

187.2. If not, please provide any additional one time or non-ongoing costs that BC Hydro expects to experience.

187.3. Are the savings described for 2019 'net' savings?

187.4. If so, please provide details of what has been netted from the savings.

187.4.1. If not, please provide the expected net savings.

187.5. Please provide the total costs of the repatriation by year, commencing from the decision and extending for the next 20 years.

187.6. Please provide the total financial benefits of the repatriation, by year, commencing from the decision and extending for the next 20 years.

187.7. Please provide the net NPV of the repatriation of services to BC Hydro, with assumptions.

187.8. Please provide the net impacts on revenue requirements by year for the next 20 years.

187.9. Please provide further details as to the types of decisions and negotiations that BC Hydro will be making that will impact the savings.

187.10. Is it possible that the repatriation will not result in net annual savings? Please explain and provide order of magnitude quantification.

187.11. Has BC Hydro discussed its case for repatriation with the current service provider?

187.11.1. If yes, does the current service provider agree that there will be a net benefit to BC Hydro from repatriating the services?

187.11.2. If no, please explain why not.

187.12. Please confirm that BC Hydro did not make a quantitative cost-benefit case in order to support its decision.

187.12.1. If not confirmed, please provide the quantitative cost-benefit analysis.