



**bcuc**  
British Columbia  
Utilities Commission

**Patrick Wruck**  
Commission Secretary

Commission.Secretary@bcuc.com  
**bcuc.com**

Suite 410, 900 Howe Street  
Vancouver, BC Canada V6Z 2N3  
**P:** 604.660.4700  
**TF:** 1.800.663.1385  
**F:** 604.660.1102

December 17, 2019

Sent via eFile

|   |
|---|
| <b>BC HYDRO F2020–F2021<br/>REVENUE REQUIREMENTS EXHIBIT A-27</b> |
|---|

Mr. Fred James  
Chief Regulatory Officer  
Regulatory & Rates Group  
British Columbia Hydro and Power Authority  
16th Floor - 333 Dunsmuir Street  
Vancouver, BC V6B 5R3  
bhydroregulatorygroup@bhydro.com

**Re: British Columbia Hydro and Power Authority – F2020–F2021 Revenue Requirements Application – Project No. 1598990 – Information Request No. 1 on Association of Major Power Customers of BC Intervener Evidence**

Dear Mr. James:

Further to British Columbia Utilities Commission Order G-312-19, enclosed please find BCUC Information Request No. 1 on Association of Major Power Customers of BC Intervener Evidence. In accordance with the Regulatory Timetable, please file your responses no later than Monday, January 13, 2020.

Sincerely,

*Original Signed By:*

Patrick Wruck  
Commission Secretary

/nd  
Enclosure



British Columbia Hydro and Power Authority  
F2020-F2021 Revenue Requirements Application

**INFORMATION REQUEST NO. 1 ON INTERVENER EVIDENCE TO  
ASSOCIATION OF MAJOR POWER CUSTOMERS OF BC**

---

- 1.0 Reference: RECOVERY OF FULL REVENUE REQUIREMENT  
Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed  
Testimony of InterGroup Consultants, Section 4.2, p. 20, Appendix A, p. A-11  
Deferral Account Rate Rider (DARR)**

In Association of Major Power Customers of BC's (AMPC) evidence, InterGroup Consultants state:

Including setting the DARR to 0%, BC Hydro is able to propose rate increases to permit the full F2020 costs to be recovered, including full collection of the desired \$712 million ROE [return on equity], with limited net increase to customer bills. This means that rate reductions that may have otherwise been mathematically possible with the declining balances in the deferral accounts (notwithstanding the past policy that locked in the DARR at 5%) will not be seen by customers.

[...]

The BCUC should find that absent the redirection of Deferral Account Rate Rider funds into a Government-directed ROE, customers would have seen a material rate reduction in F2020, all else being equal.

On page A-11 of Appendix A to their Pre-filed Testimony, InterGroup Consultants provide a table to illustratively show the impact on the cost of energy deferral accounts of a 5 percent DARR for fiscal 2020 and fiscal 2021 (F2020 and F2021). InterGroup Consultants also state that "the transfer of this allotment to general revenues has not yet been approved by the BCUC for F2020 and F2021."

- 1.1 Please clarify how the absence of "the redirection of Deferral Account rate Rider funds into a Government-directed ROE" would have resulted in "material rate reductions" in the Test Period. As part of the response, please quantify the rate reductions, where possible, or include an illustrative example of the rate reduction.
- 1.2 To the best of your ability, please compare the revenue requirement, the rate impact and the bill impact for each of F2020 and F2021 if British Columbia Hydro and Power Authority (BC Hydro) had proposed to continue collecting the 5 percent DARR pursuant to section 10 of Direction No. 7 versus BC Hydro's current proposal of reducing the DARR to 0 percent.

**2.0 Reference: INDEPENDENTLY ESTABLISH FAIR RETURN ON EQUITY**  
**Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed Testimony of InterGroup Consultants, Section 4.4, pp. 21–23;**  
**Exhibit B-1, Application, Section 8.3, p. 8-8**  
**Review scope of BC Hydro return on equity**

InterGroup Consultants introduce several factors that should be considered when reviewing BC Hydro's ROE, which include:

- The extent to which the "equity" reported is in fact BC Government investment in the utility in the first place;
- The extent of risk actually borne by the shareholder considering the range of regulatory directives, tools and deferral accounts; and
- The extent to which an issue caused by Provincial Policy has undermined rate competitiveness.

On page 23, InterGroup Consultants recommend that "The BCUC should issue directives out of this proceeding that provide a clear scope for the coming ROE review so as to deal with matters prior to F2022. BC Hydro should be expected to provide materials to respond to this scope."

In its Application, BC Hydro states:

BC Hydro's return on equity is prescribed by section 3 of Direction No. 8 as a specific dollar amount of \$712 million per fiscal year in each of fiscal 2020 and fiscal 2021...

For fiscal 2022 onwards, the BCUC will be able to determine BC Hydro's Return on Equity. In the Comprehensive Review Report, the Government of B.C. indicated that it may provide policy guidance to the BCUC to inform this process.

- 2.1 Considering that the government may provide policy guidance in the Cost of Capital review for F2022 onwards, please explain the advantages and potential risks if the Panel in this F2020-F2021 Revenue Requirements Application (RRA) proceeding issues directives relating to a future ROE review.

**3.0 Reference: EXCESSIVE REGULATORY ACCOUNT COMPLEXITY**  
**Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed Testimony of InterGroup Consultants, Section 4.5, p. 24**  
**Government-owned Canadian utilities**

In AMPC's evidence, InterGroup Consultants state:

**Complexity:** Perhaps the most notable feature of BC Hydro's regulatory and deferral accounts that is not directly addressed by the AG is the issue of the complexity associated with these accounts, which makes transparent regulation difficult. No government owned Canadian utility appears to maintain regulatory accounts with as broad a scope and function as BC Hydro.

- 3.1 Please identify the government-owned Canadian utilities that InterGroup Consultants reviewed when evaluating the complexity of BC Hydro's regulatory accounts.

**4.0 Reference: FINANCE CHARGES AND DEBT MANAGEMENT REGULATORY ACCOUNT  
Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed  
Testimony of InterGroup Consultants, Section 5.2, pp. 41–43  
Finance charges forecast**

On page 42, InterGroup Consultants discuss BC Hydro’s actual borrowings in F2020 to date and the interest rates with respect to BC Hydro’s long-term debt. InterGroup Consultant also compare these rates with the average long-term forecast debt rate used to forecast the Test Period revenue requirement, and state “[i]f actual experience to date for F2020 for interest rates is carried over into the test years at 2.95%, this would reduce finance charges materially.”

With respect to BC Hydro’s short-term debt, InterGroup Consultants state that BC Hydro’s forecast is based on the Treasury Board of BC’s January 2019 forecast. InterGroup Consultants further state:

Since January 2019, the BC Treasury Board’s outlook for interest rates has lowered, with its First Quarterly Report 2019/20 in September 2019 lowering the F2020 rate from 2.35% to 1.73% and F2021 rate from 2.69% to 1.71%. Based on current forecast short-term debt, this would appear to result in a decrease of short-term debt interest costs from \$69.3 million to \$51.0 million in F2020 and from \$81.9 million to \$52.1 million in F2021.

InterGroup Consultants state on page 43 of AMPC’s evidence that “BC Hydro should update its finance charge forecasts for relevant known conditions and values to ensure the best available data is used to set rates. This is particularly true in an era where utilities have exhibited a trend of overforecasting finance charges (due to difficult to forecast market conditions).”

- 4.1 To the best of your ability, please explain the magnitude and impact to the Test Period revenue requirement and rates if BC Hydro were to update its Test Period forecasts based on the known conditions and values as recommended by InterGroup Consultants (i.e. to include the actual borrowings in F2020 to date and the interest rates in the BC Treasury Board’s September 2019 quarterly report). Please quantify where possible.
- 4.2 Please elaborate on what are the difficult to forecast market conditions that could impact the accuracy of finance charge forecasts.
- 4.3 Please discuss what are industry accepted methods to forecast finance charges for the purpose of determining the revenue requirements. Please provide references where possible.
  - 4.3.1 Please evaluate whether BC Hydro’s methodology to forecast finance charges is consistent with known accepted industry practice.

**5.0 Reference: DEPRECIATION  
Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed  
Testimony of InterGroup Consultants, Section 5.4, pp. 48–49, 54;  
Depreciation methodology**

InterGroup Consultants discuss BC Hydro’s Depreciation Methodology on page 48 of AMPC’s evidence:

BC Hydro’s current depreciation expense is based on parameters and methodology from its depreciation study for year ending March 31, 2005. This study was undertaken by external consultant Gannett Fleming approved as part of the F2007-F2008 RRA negotiated settlement by the BCUC in Order G-143-06. Additionally, BC Hydro implemented some new component asset classes in the F2012-F2014 RRA as a result of IFRS implementation. At that time, BC Hydro had noted it expected to complete a depreciation study before the next RRA, however BC Hydro later decided against it.

InterGroup Consultants further state on page 49:

Currently, BC Hydro indicates that even though it has been 15 years since its last depreciation study it has no plans to update its depreciation parameters, as it has no indication that asset life expectations have changed in a significant way that would have a material impact on depreciation expense. BC Hydro also states that its adoption of IFRS did not change the accounting principles applicable to the depreciation of property, plant and equipment. Therefore, BC Hydro believes that the cost and effort of performing the study would outweigh the benefits. For comparison, the cost of the F2005 study, not including internal BC Hydro staff efforts, cost \$161,025.

This is an unusual conclusion. There are many accounts in BC Hydro's 2005 study that did not have extensive retirement experience, and the almost 15 years of time that have passed would typically help to review the adequacy of current service life estimates for these accounts, as well as determine if asset characteristics, technological advances or operational, maintenance or environmental considerations have resulted in changes to the depreciation parameters currently in place.

InterGroup Consultants conclude on page 54 of AMPC's evidence:

There is significant basis for concern that BC Hydro's depreciation rates do not reflect reliable estimates of asset life and the consumption of service value in the test years. The BCUC should direct BC Hydro to complete a full depreciation study including assessment of the adequacy of accumulated depreciation balances. Such study should be completed prior to the next RRA and be slated for detailed review and testing at that time.

- 5.1 For Canadian utilities of similar size to BC Hydro, please provide the average time between full depreciation studies. To the best of your knowledge, please discuss whether comparable utilities provide updated depreciation studies on a regular interval?
- 5.2 Please discuss whether there are any specific changes that have occurred since 2005, such as technological advances or operational, maintenance or environmental considerations, that would materially impact the service life of BC Hydro's capital assets. If so, please describe these changes and the magnitude of the impact to the test period revenue requirement and rates.
- 5.3 Considering BC Hydro recently adopted International Financial Reporting Standards (IFRS), please discuss whether AMPC expected to see accounting principal changes regarding the treatment of depreciation. If so, please describe these accounting principal changes and the magnitude of the impact to the test period revenue requirement and rates.

**6.0 Reference: COST OF ENERGY  
Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed  
Testimony of InterGroup Consultants, Section 4.6, p. 30  
Prudence and least cost utility planning**

In AMPC's evidence, InterGroup Consultants state:

**RECOMMENDATION/CONCLUSION:** With a return to full regulation, the BCUC must ensure future rate reviews consider and test the prudence and least cost nature of all costs that continue to be included in revenue requirement (even costs committed in previous periods, which have to date not been properly tested or adjusted in rates). A number of costs are now explicitly acknowledged by either the BC Government (Independent Power Producer costs, Water Rentals) or the BCUC (Capital projects which merited an 'ex post facto' review to determine prudence) as not meeting the test for

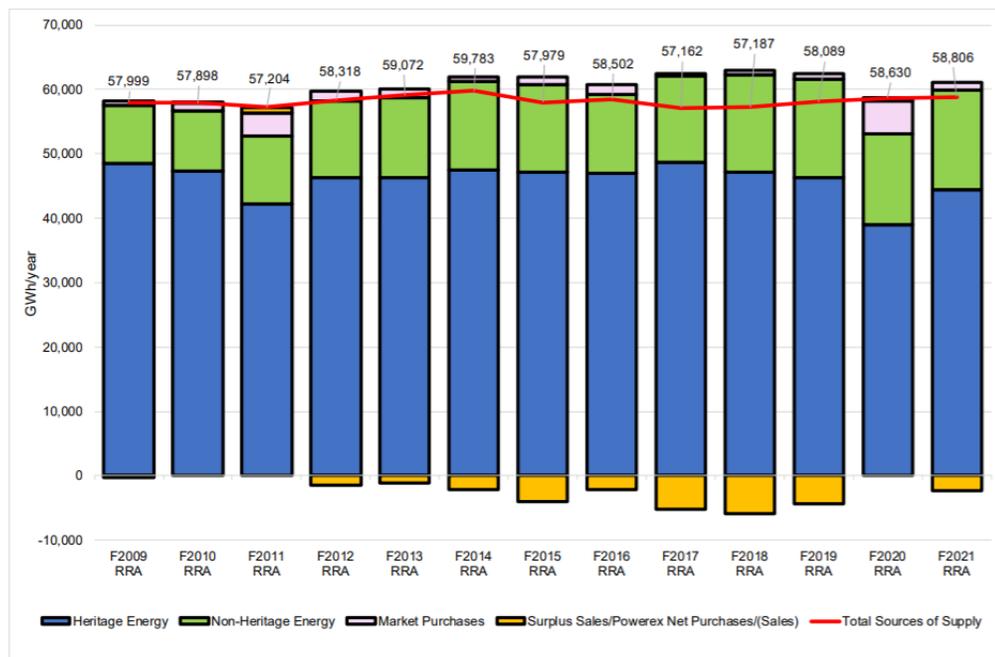
least cost utility planning or full and transparent regulatory review.

6.1 Please describe what is meant by the term “least cost utility planning.”

**7.0 Reference: COST OF ENERGY**  
**Exhibit C11-11, Association of Major Power Customers of BC Evidence, Pre-Filed Testimony of InterGroup Consultants, Appendix E, Figure E-1, p. E-4**  
**Revenue requirements application source of supply**

Figure E-1 of Appendix E shows the forecast supply mix between heritage, non-heritage (Independent Power Producers) and market energy:

**Figure E-1: RRA Source of Supply F2009 to F2021<sup>8</sup>**



7.1 For comparative purposes, please reproduce the same figure using Actuals for F2009 to F2019.

7.2 For comparative purposes, please reproduce the same figure to reflect the variance between RRA and Actual volumes for F2009 to F2019.