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August 21, 2019

VIA ELECTRONIC MAIL

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: FortisBC Energy Inc. and FortisBC Inc. (collectively "FortisBC") Multi-Year Rate Plan Application for 2020 to 2024 - Project No. 1598996

We are counsel to the Commercial Energy Consumers Association of British Columbia (the "CEC"). Attached please find the CEC's second set of Information Requests with respect to the above-noted matter.

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: FortisBC
cc: Registered Interveners

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COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA

INTERVENER INFORMATION REQUEST NO. 2

FortisBC Energy Inc. ("FEI") and FortisBC Inc. ("FBC"), (and collectively "FortisBC" or the "Utilities") Multi-Year Rate Plan Application for 2020 to 2024 Project No. 1598996

August 21, 2019

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51. Reference: Exhibit B-7, CEC 1.1

8 customer amount. FortisBC will therefore continue to pursue productivity improvements during
9 the term of the proposed MRPs, with a focus on the efficient allocation of resources and "doing
10 more with what we have".

24 This, combined with the incentive in O&M, will encourage the Companies to continue to be
25 focussed on cost efficiencies in both capital and O&M spending.

51.1 Please state whether or not FortisBC would continue to seek efficiencies if the Commission denied the utilities application for the company's shareholder to receive incentives.

52. Reference: Exhibit B-7, CEC 2.1

21 5. Index-based O&M which is rebased using 2018 actuals (with adjustments) is the only
22 major element that would otherwise be prepared differently under Cost of Service.
23 Using 2018 Actuals (with adjustments) is reasonable given that it reflects multiple years
24 of cost efficiencies achieved under the Current PBR Plans. FortisBC has also identified
25 cost pressures that it has not incorporated into its proposed Base O&M, but instead
26 proposes to manage within the indexed-based amount. If FortisBC were to prepare a
27 cost of service forecast of O&M for 2020, FortisBC would incorporate those cost

52.1 Please provide an analysis of cost of service data for the utilities, and in particularly for the portion represented in 5 above, that is different than the other data provided.

53. Reference: Exhibit B-7, CEC 2.2, Page 4

> Although FEI and FBC have had cost-of-service revenue requirements applications between PBR plans, both utilities have had significant extension periods added to initial PBR terms without a cost-of-service review. The Utilities' experience with PBR prior to the Current PBR Plans is described in Appendix C1. FEI's 1998-2000 plan was extended to 2001 and its 2004-2007 plan was extended to 2009, without a cost-of-service period before the extensions. FBC's 1996-1998 plan was extended four times for a total term of 9 years. FBC's 2007-2008 formula-based plan was extended by three years to 2011. Again for FBC, there was no cost-of-service period before the extension periods for these two PBRs. These examples of extensions to previous rate plans demonstrate that the transition between rate plans does not require a cost of service review.

53.1 Please confirm that during the extension periods Fortis BC received that Fortis did not provide a rebasing of costs in favour of its customers.

54. Reference: Exhibit B-7, CEC 3.2, Page 8

> FortisBC believes that the savings and efficiencies achieved to date have been driven in full or in part by the incentive mechanisms and other features of the Current PBR Plans, including the six-year test period. However, the Utilities cannot speculate what they would have done in the hypothetical situation in which they were under a series of forecast cost of service ratemaking plans over the same time period. As such, FortisBC cannot identify the portion of savings and efficiencies achieved to date (e.g., O&M productivity improvements that could have or would have normally been undertaken under prudent management absent the Current PBR Plans) that would not have been achieved in the absence of the incentive mechanisms and other features of the Current PBR Plans.

54.1 Please identify and quantify the investment made by the FortisBC shareholder over the prior PBR for which it would not have recovered costs under a cost of service arrangement in which it projected adequate funding for initiatives to be undertaken and on which for capital investments it would not have earned a return on investment had it projected adequate capital investment and additions.

55. Reference: Exhibit B-7, CEC 5.3, Page 15

Table 1: FEI Utility Income, 2014-2018 ($000s)

	2014	2015	2016	2017	2018	Total
After-Sharing	$ 96,988	$128,987	$131,379	$129,767	$151,045	
Before-Sharing	100,645	133,585	136,541	132,711	152,040	
Difference	$ (3,657)	$ (4,598)	$ (5,162)	$ (2,944)	$ (995)	$ (17,356)

Table 2: FBC Utility Income, 2014-2018 ($000s)

	2014	2015	2016	2017	2018	Total
After-Sharing	$ 44,457	$ 46,336	$ 48,093	$ 48,072	$ 49,121	
Before-Sharing	44,789	46,817	48,820	48,597	49,254	
Difference	$ (332)	$ (481)	$ (727)	$ (525)	$ (133)	$ (2,198)

55.1 Please describe what FEI's and FBC's shareholder has earned over this period relative to its allowed return on any capital investment from customers and relative to capital investments required to generate these additional benefits for the shareholder.

55.2 Please provide the actual return on capital investment earned and the allowed return on capital investment for each year (excluding the above additional PBR returns).

55.3 Please confirm that all operating costs for achieving the above benefits have been recovered by FEI and FBC from customer revenues for each of the above years.

56. Reference: Exhibit B-7, CEC 6.9, Page 20 & BCUC 1.8.4

6.9 Please confirm that the Utilities have costs for managing the Utilities which are fixed over time and/or are partially fixed.

Response:

Please refer to the response to BCUC IR 1.17.7 which discusses why the proposed Index-Based formulaic approach is reasonable and appropriate for determining allowed O&M funding for the proposed MRPs.

8.4 Please calculate the correlation coefficients for actual and formula O&M and explain all inputs and assumptions.

Response:

FEI presumes that the question asks for the correlation of the actual and formula O&M against the O&M formula cost driver (average number of customers). With this assumption, the correlation coefficient numbers and related input data are provided below. The results indicate a strong linear association between the cost driver and both actual and formula O&M.

Variables	2014	2015	2016	2017	2018	2019P	Correlation Coefficient
Avg number of customers	959,196	968,766	983,807	997,380	1,016,353	1,024,962	0.95
Actual formula O&M ($ millions)	223,967	225,380	225,925	232,503	238,693	246,939	

Variables	2014	2015	2016	2017	2018	2019P	Correlation Coefficient
Avg number of customers	959,196	968,766	983,807	997,380	1,016,353	1,024,962	0.97
Formula O&M ($ millions)	233,712	235,619	238,068	240,412	243,585	248,939	

56.1 Please provide the full formula definition used to generate the data in the 2nd data set and compare that to the formula proposed in the MRP.

57. Reference: Exhibit B-7, CEC 8.1, Page 32

For FBC, the predictability and flexibility provided by the longer term of the Current PBR Plan has enabled it to achieve greater capital efficiencies. For example, by having the ability to enter into multi-year agreements with vendors/contractors that may not otherwise be possible under a shorter term rate making agreement, FBC has been able to achieve cost efficiencies. An example of this was discussed at the FBC Annual Review for 2018 Rates Workshop on the topic of Capital Efficiencies[5] where Mr. Marshall explained:

> I'd also like to share the following example regarding FortisBC's distribution condition assessment program, as it shows the benefits of leveraging the predictability offered by PBR. In 2016, FortisBC was presented with an opportunity to seek proposals from vendors for their distribution condition assessment program for a three-year period spanning from 2017 to 2019. Following the RFP process, FortisBC entered into an agreement with one of its contractors for the three-year period. In addition, the agreement included the two one-year optional extensions for 2020 and 2021. By providing the contractor with a multi-year commitment, the contractor was willing to make investments that it would not otherwise had. This resulted in annual savings of approximately $300,000, or 25 percent annually, until the end of the PBR period, and potentially in to 2021 [dependent] on whether or not those optional extensions are taken.

57.1 Please discuss whether or not the Utilities are prevented from entering into long-term multi-year contracts with suppliers under cost of service regulation and provide any evidence that the Commission has restricted the Utilities contracting time frames.

57.2 Please provide a list of all contractors that either of the Utilities has provided an arrangement where the vendor can earn half of any savings made under a contract with the Utilities and the details of any such arrangements.

57.3 Please provide a list of all contracts the Utilities have with incentives for vendor performance and provide the terms for the same, with a limit of providing the 20 with the highest incentives.

58. Reference: Exhibit B-7, CEC 11.3, Page 44

11.3 Please explain and identify the metrics that ratepayers can utilize to understand whether or not capital spending is cost-efficient on a cost-benefit basis during the proposed MRP.

Response:

FortisBC interprets the reference to "capital spending is cost-efficient on a cost-benefit basis" as meaning incurring capital expenditures that result in financial payback/return to ratepayers and not necessarily capital expenditures that are considered cost efficient by comparing expenditures to a reference point (i.e., allowed funding, historical spending, other utilities spending).

58.1 Assuming that the CEC intended that benefits for capital spending projects would include financial benefits and non-financial benefits, would FortisBC agree that virtually all of its capital expenditures would have net aggregate benefits in excess of the capital spending cost or investment?

58.2 Would FortisBC agree that under the above assumptions if it deferred capital expenditures for good reasons it would defer both the costs and the benefits derived from making the capital investment.

59. Reference: Exhibit B-7, CEC 2.1

> 5. Index-based O&M which is rebased using 2018 actuals (with adjustments) is the only major element that would otherwise be prepared differently under Cost of Service. Using 2018 Actuals (with adjustments) is reasonable given that it reflects multiple years of cost efficiencies achieved under the Current PBR Plans. FortisBC has also identified cost pressures that it has not incorporated into its proposed Base O&M, but instead proposes to manage within the indexed-based amount. If FortisBC were to prepare a cost of service forecast of O&M for 2020, FortisBC would incorporate those cost

59.1 Please provide a 3-year Cost of Service Summary of all relevant data in this application that would be the same, including a version for the parts that are not the same that would qualify as a cost of service approach (please provide assumptions used).

59.2 Please provide the revenue requirements for 3 years and the proposed rates required.

59.3 Please provide any of the proposed initiatives in this application that the Utilities would choose not to undertake under cost of service and explanations for why it would not undertake them (please assume that the costs for carrying out the initiatives can be included in the cost of service forecast and provide the Utilities best estimates for those costs included in the cost of service revenue requirements and proposed rates).

59.4 If such a scenario were set to formulas for O&M for the 3 years and the Commission rejected the MRP process, would the Utilities' have any reason to suggest that this would be a decision that would be outside of the Commission's jurisdiction in this proceeding?

60. Reference: Exhibit B-7, CEC 32.1

Does FortisBC have any specific direction from government or the BCUC that it must develop a Clean Growth Innovation Fund or equivalent? Please explain.

Response:

No. The Clean Growth Innovation Fund is one of FortisBC's strategic responses to specific climate policy direction from government such as the CleanBC's renewable gas content target of 15 percent by 2030. As also stated in Section C6.2.3 of the Application,

advancing clean growth innovation is a shared responsibility between utilities, regulators and policy makers.

60.1 FBC states it is responding to "specific climate policy direction from government." Why does FBC require a fund to be created to incent it to comply with specific policy direction?

60.2 Does CleanBC's renewable gas content target refer to the overall proportion of renewable natural gas, or does it refer to the 10% blend currently supplied by FBC?

61. Reference: Exhibit B-7, CEC 43.1 & CEC 43.2

43.1 Please provide quantitative evidence that the infrastructure as a whole is aging to a degree that significantly affects its maintenance requirements. Please demonstrate how these have changed over the last 10 years.

Response:

Generation infrastructure such as concrete structures and auxiliary systems including cooling systems, valves, piping, pumps, cranes, hoists and gates have been in service between 78 to 110 years. While the 15 major generating units in operation have undergone upgrades in the past, plant auxiliary systems have not. As concrete structures and auxiliary systems age, they require additional maintenance. The following examples illustrate the nature of maintenance activities that have increased over the last 10 years as FBC infrastructure ages:

- Major generating unit Inspections require more in depth condition assessments and testing to ensure that the units and auxiliary systems are functioning as required. FBC has had to implement a variety of asset management tools such as condition assessments, 3D scanning and advanced testing methods (such as bearing clearance checks) to improve maintenance practices and equipment condition knowledge. Due to the absence of detailed drawings of the existing generating units, FBC needs to implement a program to 3D scan the unit, parts and pieces and use the 3D model as an engineering tool to develop drawings and disassembly and assembly instructions that will help provide for safer work practices.
- Customized tooling, jigs and fixtures are required to safely jack the unit shafts around to determine bearing clearances and to lower and remove the guide bearing housings safely.

- Equipment such as drop stops, audible alarms, hook latches, load limiters, rail sweeps, load capacity markings are required to be installed and maintained on cranes and hoists. These items were not required when the cranes and hoists were commissioned. Each FBC plant has a variety of cranes and hoists which have components that have not been upgraded since first installed. Today's standards for this type of equipment are more stringent than when they were first commissioned.
- The intake gates and tailrace gates used to isolate the generating units from the water flow require additional sealant to eliminate leaks. Due to their style (metal to metal) and age, the seals on the gates are not effective in stopping the water entering the unit water passage and FBC needs to place ash between the gates and the embedded seals to obtain an adequate seal.
- Concrete spalling is present on some concrete structures. The spalling is a result of corrosion on the reinforcing bars used in the concrete. More frequent inspections and maintenance is required to manage the structure.

61.1 As requested in CEC IR.1.43.1, please provide quantitative evidence that the infrastructure as a whole is aging to a degree that significantly affects its maintenance requirements.

61.2 Please provide quantitative evidence of increases in maintenance expenses over the last 10 years that would support the contention that infrastructure is aging is significantly affecting maintenance requirements.

> 43.2 Please provide forecasts of the increases in maintenance that FBC anticipates over the next five years

Response:

FBC is proposing an Index-Based approach to determine overall O&M funding for the MRP period. As a result, FBC has not prepared a five-year forecast for the term of the proposed MRP.

61.3 Please provide quantitative evidence of the impact the proposed increases in maintenance costs will have on ratepayers.

62. Reference: Exhibit B-7, CEC 47.1 & CEC 47.2 & CEC 47.3

> 47.1 Please confirm that it is in the Utilities' best interests to pursue projects which address its strategic and other challenges.

Response:

It is in the best interest of customers, the Utilities and society for the Utilities to pursue projects which address strategic and emerging issues, serve customer needs, and maintain the long-term health of the Utilities. In this regard, FortisBC believes its interests are aligned with its customers.

62.1 Please confirm that it is specifically in the Utilities' best interests to pursue projects which address its strategic and other challenges.

> 47.2 Is it the Utilities' position that they would not continue the work being done, or on the challenges and opportunities it faces in the absence of incentives? Please discuss.

Response:

Please refer to the response to BCUC IR 1.96.3.

62.2 In the referenced response to BCUC IR 1.96.3, FBC confirms it would pursue each of the targets in the absence of approval (of incentives). The CEC notes that the costs of making effort and investment of resources can already be recovered in rates. Please describe the impact on rates the proposed incentives would have and the additional costs to which ratepayers would be subjected.

47.3 Does the BCUC have the authority to direct the Utilities to conduct such initiatives without offering incentives to do so or not? Please explain and provide reference links to any authorities cited.

Response:

The BCUC cannot direct FortisBC to achieve the proposed targets. As context for the discussion below, assuming such a direction were valid, the utility would be liable for administrative penalties or other sanctions if it failed to achieve the direction.

By their nature, FortisBC's proposed targets are not something that can be directed by the BCUC. The proposed targets are designed to be stretch targets that will require significant effort to achieve and may not be achievable over the term of the proposed MRPs. The targets for Renewable Natural Gas, for example, require agreements with third party suppliers, while achieving growth in Natural Gas for Transportation requires businesses to agree to convert their fleets and become customers of FEI. The purpose of the proposed targeted incentives is to provide an incentive for FortisBC to engage in the extraordinary efforts required to achieve the proposed stretch targets, which will in turn provide benefits to customers. It would not be

62.3 Please clarify exactly how achieving the proposed stretch targets will benefit FBC ratepayers.

62.4 Please describe and quantify the effort expected to be undertaken and classify the effort into (a) capital investment, (b) operating costs, and (c) FortisBC shareholder investment.

62.5 Does FortisBC expect the costs for achieving the proposed stretch targets will be borne by FBC ratepayers, though the benefits will potentially accrue to a wider group?

62.6 What will be the effect on rates for those who have to pay for the program?

More generally, such a direction would intrude about the zone of utility management. The case of *British Columbia Hydro and Power Authority v. British Columbia Utilities Commission*, [1996] B.C.J. No. 379, 71 B.C.A.C. 271, 20 B.C.L.R. (3d) 106, put it this way:

> 58 Taken as a whole the *Utilities Act*, viewed in the purposive sense required, does not reflect any intention on the part of the legislature to confer upon the Commission a jurisdiction so to determine, punishable on default by sanctions, the manner in which the directors of a public utility manage its affairs.

62.7 Please clarify how the Commission's setting of rates based on the Utility selection of stretch targets might intrude on utility management.

63. Reference: Exhibit B-7, CEC 50.1

> 50.1 Please confirm that FortisBC has always maintained that it works to the best of its ability to manage Power supply as cost effectively and safely as possible.
>
> **Response:**
>
> FBC continues to manage power supply costs effectively and safely. FBC is proposing the PSI to incent FBC to increase efficiency, reduce costs and enhance performance in the area of power supply, which will further align the interests of the customer and FBC. Customers benefit when FBC exerts substantial effort on power supply optimization, and further alignment of these interests will provide additional benefits to the customer.

63.1 Please explain how ratepayers will directly benefit from incentives provided to FBC, if the Commission determined that incentives were not required.

63.2 Please explain why the Utility would not conduct power supply optimization, increase efficiency, reduce cost and enhance performance in regard to power supply for the revenue requirements it could apply for in a normal rate setting process.