

BRITISH COLUMBIA UTILITIES COMMISSION

FORTISBC ENERGY INC AND FORTISBC INC  
MULTI-YEAR RATE PLAN APPLICATION FOR 2020-2024  
PROJECT NO. 1598996

INFORMATION REQUEST NO. 1 TO FORTISBC ENERGY INC AND FORTISBC INC FROM MoveUP

**1.0 Climate-related Financial Risks**

- 1.1 Please file a copy of the 17 April 2019 “Open Letter on Climate-related Financial Risks” published by the Bank of England, the Bank of France, and the Network for Greening the Financial Service (the “Open Letter”), available online at <https://www.bankofengland.co.uk/news/2019/april/open-letter-on-climate-related-financial-risks>.

**Reference: Open Letter paragraphs 1 and 2**

The catastrophic effects of climate change are already visible around the world. From blistering heatwaves in North America to typhoons in south-east Asia and droughts in Africa and Australia, no country or community is immune. These events damage infrastructure and private property, negatively affect health, decrease productivity and destroy wealth. And they are extremely costly: insured losses have risen five-fold in the past three decades. The enormous human and financial costs of climate change are having a devastating effect on our collective wellbeing.

The impact of climate change has compelled governments to act. Catalysed by the Paris agreement, governments around the world are putting policies in place to limit the global rise in temperatures to 2C, and preferably as close to 1.5C as possible. The actions undertaken by individual countries will deliver a collective transition to a low-carbon economy. But this transition brings its own risks. Carbon emissions have to decline by 45% from 2010 levels over the next decade in order to reach net zero by 2050. This requires a massive reallocation of capital. If some companies and industries fail to adjust to this new world, they will fail to exist.

- 1.2 Please file a copy of the Bank of Canada’s 2019 Financial System Review, available online at <https://www.bankofcanada.ca/wp-content/uploads/2019/05/Financial-System-Review%E2%80%942019-Bank-of-Canada.pdf>.

**Reference: Financial System Review page 29:**

The move to a low-carbon economy involves complex structural adjustments, creating new opportunities as well as transition risk. Investor and consumer preferences are

**shifting toward lower-carbon sources and production processes, suggesting that the move to a low-carbon economy is underway. Transition costs will be felt most in carbon-intensive sectors, such as the oil and gas sector. If some fossil fuel reserves remain unexploited, assets in this sector may become stranded, losing much of their value. At the same time, other sectors such as green technology and alternative energy will likely benefit.**

**Both physical and transition risks are likely to have broad impacts on the economy. Moving labour and capital toward less carbon-intensive sectors is costly and takes time. Global trade patterns may also shift as production costs and the value of resources change.**

- 1.3 Does FortisBC agree with this analysis? If not, to what extent does it disagree and for what reasons?
- 1.4 In the present application, has FortisBC considered the impact of climate change on the future viability of FEI? If so, in what manner does the transition to a low-carbon economy inform the present application?
- 1.5 What are the implications of this analysis for the Commission as regulator of FEI in particular?

**2.0 City of Vancouver 2019 Memorandum of Understanding**

- 2.1 Please file the 2019 Memorandum of Understanding between FortisBC and the City of Vancouver, available online at <https://vancouver.ca/files/cov/fortisbc-and-city-of-vancouver-memorandum-of-understanding.pdf>.
- 2.2 What are the consequences of the MOU in relation to this application and the issues facing FEI during the proposed term of the MRP and beyond?

### 3.0 Municipal and Regional Climate Emergency Policies

- 3.1 Please file the City of Vancouver April 2019 Climate Emergency Response Report (<https://council.vancouver.ca/20190424/documents/cfsc1.pdf>) and Climate Emergency Response Final Motion (<https://vancouver.ca/files/cov/climate-emergency-response-council-amendments.pdf>).
- 3.2 Please confirm that Vancouver City Council approved the Final Motion by a unanimous vote.

#### Reference: Climate Emergency Response Final Motion Item “E”:

**THAT Council adopt the new target that by 2025, all new and replacement heating and hot water systems will be zero emissions, and direct staff to report back by Fall 2020 with a strategy and budget to achieve the target (“Big Move #4”).**

- 3.3 What is FortisBC’s understanding of the likely processes required, and their likely time-frames, for the City of Vancouver to implement Big Move #4 by 2025?
- 3.4 How soon does FortisBC expect that the adoption of this recommendation will begin to influence decisions by project developers in the City of Vancouver with respect to the selection of energy sources for space and water heating?
- 3.5 Please that confirm that the following municipal or regional governments in British Columbia have passed resolutions since the beginning of the year recognizing a climate emergency and directing staff to develop response plans: the Capital Regional District, the City of Richmond, the City of New Westminster, the City of Nanaimo, the Regional District of Central Kootenay, the Islands Trust, the City of Powell River, the District of Saanich, and the District of Sooke.
- 3.6 Please confirm that in February 2019 the City of North Vancouver passed a resolution setting accelerated targets for GHG reductions and directing staff to develop plans to achieve these targets.
- 3.7 Please confirm that other cities in Canada, including Ottawa, Montreal, Hamilton, Kingston, and Halifax have also adopted climate emergency resolutions this year.
- 3.8 Does FortisBC anticipate that policies similar to Vancouver’s “Big Move #4” will be adopted by other municipalities or regions in British Columbia?
- 3.9 What is FortisBC’s best estimate of the implications of this development – the growing momentum among municipal and regional governments in this province to move away from greenhouse gas-emitting energy sources for heat and hot water – on the prospects

for FEI's customer growth and load forecast through the proposed term of the MRP and beyond?

- 3.10 What risks does this development pose for FEI and its existing core customers?
- 3.11 What strategies are being considered by FEI to respond to and mitigate these risks?
- 3.12 Recalling the warning from the leaders of global financial institutions in the Open Letter cited above, that companies must act quickly to adapt or they will cease to exist, what are the likely implications of this development in relation to the time-scale within which FEI will need to adapt and achieve transition to a low-carbon future?

#### **4.0 Evaluation of Current PBR plan**

**Reference: Section B2.3.1, page B29**

**In Section B2.3.1 FortisBC provides information on FEI and FBC's O&M expenditures and capital investments over the term of the current PBR.**

- 4.1 Please provide tables, for each of FEI and FBC, showing the utilities' actual or achieved equity rates of return over the PBR term, including if available forecasts for 2019. Please show ESM sharing amounts that flowed to shareholders and customers separately and as part of total equity return.
- 4.2 Please provide tables, for each of FEI and FBC, showing total annual capital expenditures, including Major Project expenditures, over the PBR term.

## 5.0 Indexing of O&M Expenses – Growth Factor

Reference: Section C 1.4.2, page C-8 to C-10

For the purposes of forecasting O&M expenses, FortisBC has proposed to escalate forecast expenditures in proportion to growth in the number of customers. At page C-9, line 8, the Company says that

**“...the correlation coefficients between the average number of customers and actual formula O&M expenditures for FEI and FBC are calculated at 0.95 and 0.90 respectively. These high correlation coefficient numbers indicate a strong linear relationship between the variable and negate the need for the 0.5 multiplier.”**

- 5.1 Please provide workpapers showing the calculations and underlying data that support the referenced correlation coefficients.
- 5.2 Is it FortisBC’s position that FEI and FBC’s O&M expenses (or the portion of those expenses that are accounted for in the index mechanism) are, on an expected basis, directly proportional to the number of customers that each utility has? Why or why not?
- 5.3 Is it FortisBC’s position that the “high correlation coefficient numbers” referred to, which evaluate the relationship between (1) Formula O&M expenditures that include an inflation escalation and a 50% growth factor, and (2) customer numbers, demonstrate that O&M expenses are on average directly proportional to customer numbers without taking account of inflation? Why or why not?
- 5.4 If the response to 5.3 is “yes”, please explain in detail, with a numerical example, why that result follows from the correlation coefficient results provided in response to 3.1.
- 5.5 Please provide any other studies or analyses the FortisBC has undertaken, obtained from third parties, or otherwise relied on, that support the claim that O&M expenses are directly proportional to customer numbers, either for the FortisBC utilities or for utilities in general.

## 6.0 O&M Base Funding – Incremental Funding

Reference: Table C2-7, p. C-19 (FEI), Table C2-14, p.C-44 (FBC) and the discussions that follow

**In Tables C2-7 and C2-14 FortisBC sets out proposed calculations of 2019 Base O&M expenditures for FEI and FBC, respectively. For FEI Table C2-7 shows total incremental O&M spending of \$10.416 million, while for FBC the corresponding figure in Table C2-14 is \$0.763 million. These proposed incremental amounts are broken down into various categories and the need for them explained in the remaining sections of sections 2.4 and 2.5.**

- 6.1 The referenced tables show the proposed incremental O&M amounts as adjustments to 2019 Base O&M. Please confirm that the calculation of the proposed “2019 Base O&M” reflected in the tables is intended to establish a notional or theoretical 2019 O&M figure that would serve only as a base from which formula 2020 O&M expenditures would be derived through the application of the escalation formula, i.e. without affecting formula O&M expenditures for 2019.
- 6.2 If the response to 6.1 is “not confirmed”, please explain what adjustments to formula O&M are being proposed for 2019.
- 6.3 Given that FortisBC identified the need for these various incremental O&M expenditures before it filed the Application in late 2018, please provide a description of which new expenditures described in sections 2.4.2.3 and 2.5.2.3 have been or will be commenced in 2019, notwithstanding the fact that Formula O&M for 2019 as already been fixed. Please include an estimate of total new employees or other resources that have been or will be acquired in 2019, the timing of that activity, and an estimate of the total incremental cost that will be incurred in 2019.
- 6.4 If the response to 4.3 is that none or only a small portion of the proposed incremental resources have been or will be acquired in 2019, please explain why FortisBC has not implemented these new or expanded programs in 2019, 2018, or earlier, if they in fact are required.

## 7.0 FEI Growth Capital Proposed Base Unit Cost

Reference: Table C3-3, p. C-61

**The referenced table, together with the explanations that follow in section 3.3.1.3.2, show FortisBC's calculation of the proposed Base Unit cost for FEI Growth Capital. The table appears to show and propose an increase in unit cost, relative to the 2016-2018 average, of about 15%.**

- 7.1 The average growth capital unit cost per customer addition of \$3,325 shown as the average for the 2016-2018 period appears to reflect annual average inflation-adjusted unit costs of \$3,857 in 2018, but only \$3,038 and \$2,980 in 2017 and 2016, respectively. What is FortisBC's understanding of the reasons for the significant (approximately 28%) increase in inflation-adjusted unit costs from 2016/2017 to 2018?
- 7.2 Please explain FortisBC's rationale for using the three-year average value, rather than, for example, a 2016/17 average or the 2018 value.
- 7.3 Where variances arise between the forecast Growth Capital Unit Cost, escalated for inflation, and actual unit costs, so that actual growth capital varies from the formula result even if the annual forecast of gross customer additions is correct, please confirm that the resulting variance between actual and forecast growth capital will be corrected for rate purposes in the subsequent year (on a forecast or actual basis), by restating plant in service to the actual value, but that for the year in which the variance occurs the impact of the variance on return, depreciation, debt cost, and income taxes will be shared between FortisBC and customers through the earnings sharing mechanism. If not confirmed, please explain why not, and provide a detailed explanation of how such variances will be treated for rate-making purposes, including a numerical example.

## **8.0 FEI Sustainment and Other Capital Forecasts; FBC Regular Capital Forecasts**

**Reference: Section 3.3.2 (FEI) and 3.4.1 (FBC).**

**In the referenced sections FortisBC sets out its 2020-2024 forecasts for the referenced categories of capital investments, together with descriptions of the various projects and categories of investments that it expects to undertake. At page C-76, line 71, in relation to FEI Sustainment and Other Capital, FortisBC says:**

**Accordingly, the timing, scope, and cost of the individual projects and programs within the overall Sustainment and Other Capital forecasts included in rates are subject to change, and FEI may identify different projects and programs that need to be added over the term of the Proposed MRP.**

**At page C-77, in relation to FEI, and subsequently in similar terms in relation to FBC, FortisBC indicates that, “should FEI deem necessary” it will file an updated 2023-24 forecast in 2022 and ask for approval of the changes.**

- 8.1 Please confirm that, for rate-making purposes, all variances between forecast and actual capital expenditures in the FEI Sustainment and Other categories, and all FBC Regular Capital categories, will be corrected in the subsequent year (on a forecast or actual basis) by restating plant in service to the actual value, but that for the year in which the variance occurs the impact of the variance on return, depreciation, debt cost, and income taxes will be shared between FortisBC and customers through the earnings sharing mechanism. If not confirmed, please explain why not, and provide a detailed explanation of how such variances will be treated for rate-making purposes, including a numerical example.
- 8.2 If the response to 8.1 is “confirmed”, what is the purpose, and the value to customers and FortisBC, of proposing 5-year forecasts of capital expenditures in these categories, as opposed to, for example, providing forecasts for each year as part of the annual review process?
- 8.3 Does FortisBC agree that the main impact of providing forecasts on a more frequent basis would be to reduce the annual variances that are subject to the ESM? Why or why not?

## 9.0 Major Projects Capital for FEI and FBC

**Reference: Section 3.3.3 (FEI) and section 3.4.2 (FBC)**

**In the referenced sections of the Application FortisBC describes various Major Projects that it anticipates will be undertaken by FEI and FBC over the proposed MRP term, without providing details of cost, detailed timing of the investments or their current approval status.**

- 9.1 Please provide an explanation of how capital-related costs for Major Projects for FEI and FBC will be accounted for in the rate-making process under the Proposed MRP. For example, will capital additions associated with on-going Major Projects be forecast annually as part of the Annual Review process? If not, how and when will those costs be recovered in rates? If so, how will variances between forecast and actual Major Project capital expenditures be treated for rate-making purposes, e.g. through a flow-through mechanism, the ESM, or through a mechanism that assigns responsibility for those impacts to shareholders?

## 10.0 Capital Planning Process; Impact of Capital Investments on O&M expenses

Reference: Section 3.2 at page C-52.

In the referenced section FortisBC describes its Capital Planning Process and the Asset Investment Planning (AIP) process that it is in the process of implementing. Figure C3-1 is a diagrammatic representation of the AIP process, and in the box labelled “Financial” it appears that two of the criteria that are relevant to the planning process are “Cost Avoidance – O&M” and “Cost Savings – O&M”.

- 10.1 Has FortisBC estimated the O&M Avoidance and O&M Cost Savings benefits associated with any of forecast FEI Growth Capital, FEI Sustainment and Other Capital, FBC Regular Capital, or Major Project Capital for FEI and FBC? If not, why not? If so, please provide the estimates for each year and category of capital investments, in as much detail as possible and with totals provided by utility, year and category of investment.
- 10.2 Please explain how, if at all, FortisBC has incorporated the expected impact of forecast capital investments by FEI and FBC, including both Regular and Major Projects capital, on required O&M expenditures over the term of the Proposed MRP, and how those expected impacts have been reflected in the O&M forecasting mechanism described in the Application.
- 10.3 If the response to 10.2 is that the O&M formulas and various capital forecasts have been developed independently and do not affect one another, please explain why that is a reasonable conclusion, given that the Company’s capital planning process explicitly takes O&M impacts into account in optimizing capital expenditures.