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September 25, 2018

Commercial Energy Consumers Association of British Columbia
c/o Owen Bird Law Corporation
P.O. Box 49130
Three Bentall Centre
2900 – 595 Burrard Street
Vancouver, BC
V7X 1J5

Attention: Mr. Christopher P. Weafer

Dear Mr. Weafer:

Re: FortisBC Inc. (FBC)
Project No. 1598967
Annual Review for 2019 Rates (the Application)
Response to the Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 1

On August 10, 2018, FBC filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-142-18 setting out the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to CEC IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

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1. **Reference: Exhibit B-2, page 5**

1.4.2 Initiatives Undertaken

The following are updates to the efficiency and cost savings examples discussed in last year's Annual Review and new opportunities initiated recently.

1. Sharing of Gas and Electric Contact Centre Staff

In 2018, FBC continued to leverage gas and electric contact centre staff to achieve three goals: to reduce operating costs, to maintain or improve service levels to customers, and to provide learning and development opportunities for staff.

In total, the integration of activities is forecast to produce annual savings for FBC of approximately \$0.300 million.⁴

⁴ This may fluctuate slightly year to year depending on the number of electric calls answered by representatives in Prince George.

- 1.1 Have FEI and FBC exhausted the opportunities related to sharing of gas and electric staff, or do the utilities consider that there may be more staff sharing opportunities that have yet to be explored? Please explain.

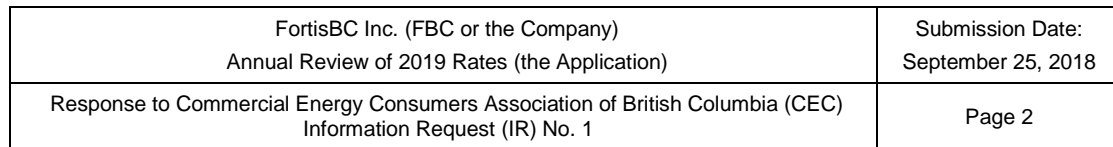
Response:

FBC believes that there may be more opportunities related to the sharing of gas and electric staff in the future as we continue to look to find efficiencies and to improve the service we provide to our customers. Future technology investments may be needed to drive further opportunities in this area.

- 1.2 If FEI and FBC believe that there may be more sharing opportunities available, please discuss where these opportunities may occur and quantify an estimate of the levels of savings that could be generated.

Response:

Since FEI and FBC have not identified specific opportunities, it is not possible to quantify them at this time. Please refer to the response to CEC IR 1.1.1.



2. Interactive Voice Response Enhancements

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1 **3. Reference: Exhibit B-2, page 6**

2 **3. SAP Integration**

SAP Integration is an initiative to integrate the FBC and FortisBC Energy Inc. (FEI) SAP systems, moving towards a common SAP platform for both companies. It primarily includes the integration of the Human Resources, Supply Chain, and Finance systems in SAP. The benefits will include a simplified support model, alignment of processes, simpler business processes (i.e. employee expense processing and single sign-on), reduced licensing costs and integrated payroll. Reduction in support costs will be achieved through reduced annual contractor costs because internal resources will be able to displace the contractor support due to the simplified support requirements.

The project is in progress, with completion expected in the third quarter of 2018. The total cost of the project remains on budget, estimated at \$4.5 million. Based on the number of employees between the two companies which is currently projected at approximately 77% FEI and 23% for FBC, approximately \$3.5 million of the implementation costs will be allocated to FEI with the remaining \$1.0 million to FBC. Total O&M savings for the project are expected to be approximately \$0.9 million annually, with \$0.6 million expected in FEI and \$0.3 million in FBC. The savings will start being realized in 2019.

3 3.1 Please confirm that ratepayers in FBC and FEI are paying for the full cost of the
4 SAP integration initiative.

5 **Response:**

6 Both the costs and the associated benefits and savings are flowed through to rates, subject to
7 any amounts that are captured by the earnings sharing mechanism in 2018 and 2019.
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11 3.2 Are there any other components of the SAP integration project that are planned
12 but have not been implemented yet?
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14 **Response:**

15 The Paperless Expense Management System (PEMS) module included in the SAP Integration
16 project has not yet been implemented. The PEMS module of the SAP Integration project was
17 forecast to cost approximately \$275 thousand of which approximately \$65 thousand would be
18 allocated to FBC based on using the number of employees per entity as a cost driver. The
19 PEMS module of the SAP Integration Project did not contribute to the originally estimated \$0.3
20 million of O&M savings allocated to FBC as originally identified as part of the SAP Integration
21

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Project. However, there are non-quantifiable benefits from implementing the PEMS module including efficiencies for all cardholders across the organization by reducing the current inefficient manual credit card and employee expense process. O&M savings could potentially be identified from the PEMS module if it is eventually implemented and if benefits are subsequently evaluated and quantified.

The reason for not implementing the PEMS module as part of the SAP Integration Project was that the optimal vendor selected to provide the service through a cloud computing solution could only do so by storing data in the US. The use of an off-premise server outside of Canada conflicts with the current BCUC data location restriction pursuant to Order G-161-15 which prohibits FEI employee data from being processed or stored outside of Canada. The system will be implemented once the data location restrictions are addressed or if the optimal vendor establishes a cost-effective, off-premise server within Canada. The integrated SAP system will make the eventual implementation of Paperless Expense Management more efficient.

3.2.1 If yes, please identify and provide the expected costs and savings from any future related projects.

Response:

Please refer to the response to CEC IR 1.3.2.

3.3 Please provide an estimate of the reduced support costs to be achieved through reduced annual costs via displacement with internal resources and the timing for achieving these savings.

Response:

Of the \$0.3 million of annual O&M savings for FBC, approximately \$0.1 million is associated with reduced contract support costs, not the displacement of internal resources as suggested in the IR. These savings are forecast to materialize beginning in 2019.

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1 **4. Reference: Exhibit B-2, page 6**

2 **4. *Advanced Distribution Management System***

3 This project implements an Outage Management System (OMS) and replaces the
4 existing Dispatch system with a Mobile Workforce Management System (MWM),
5 enabling the Company to improve its outage response through fault location prediction
6 using customer calls and AMI meter messages, as well as update outages from the field
7 using the MWM. Customers are provided with access to an outage map that is updated
8 automatically from the OMS. The project was completed in late 2017 with benefits
9 including streamlining of the manual outage management processes and the manual
10 dispatch processes, with estimated annual savings of \$0.2 million starting in 2018.

11 4.1 Is AMI information integral to the Advanced Distribution Management system?
12 Please explain.

13 **Response:**

14 AMI information is integral to the Advanced Distribution Management System (ADMS). The
15 ADMS implemented two new systems (OMS and MWFM) to support outage and workforce
16 management across the Electric organization.

17 OMS, which is a component of the ADMS, is integrated with the AMI network. The AMI network
18 allows OMS to monitor and evaluate outages in near real time. The OMS takes outage inputs
19 from AMI, or customer calls, and uses algorithms to apply that information to a distribution
20 model to predict fault location, prioritize restoration efforts, and provide information regarding
21 the extent of the outage.

22 4.2 If so, was the outage management system contemplated as a prospective
23 opportunity in the FBC AMI deployment? Please explain.

24 **Response:**

25 The OMS was identified as a future benefit in section 6.3 of the AMI CPCN application.

26 4.3 Please provide the capital costs and benefits of the Advanced Distribution
27 Management system.

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1 **Response:**

2 Please refer to the responses to BCUC IRs 1.5.1 and 1.5.2.

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6 4.4 Please provide further details of the costs and benefits for the Mobile Workforce
7 Management System.

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9 **Response:**

10 Please refer to the responses to BCUC IRs 1.5.1 and 1.5.2, as the MWFM is a component of
11 the ADMS system.

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1 **5. Reference: Exhibit B-2, page 6-7**

2 **5. Redesigning FortisBC Website**

FortisBC is redesigning its website (www.fortisbc.com) in order to meets its evolving business needs and the needs and expectations of its customers. Redesigning the website by changing the functionality to be more task oriented will enhance the service

provided to customers. Customers and other users (e.g. potential customers, contractors, businesses, media, government, etc.) usually visit the FortisBC website with a specific objective in mind. They seek answers to “How do I... ?” questions. Redesigning the website to be more customer centric with self-service options will make it easier for customers to quickly interact with the Company and find answers to their questions. Additionally, operational efficiencies will result from the use of a new content management technology platform and workflow functionality with content authoring and publishing becoming more streamlined. Estimated annual savings are forecast to be \$0.15 million shared between FEI and FBC. The project is currently underway with completion expected in 2019.

3 5.1 How often does FBC typically redesign its website and what is the cost of a
4 redesign?

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6 **Response:**

7 FBC does not have a typical timeframe within which it redesigns its website. FortisBC updates
8 its website as needed based on the functionality and technical requirements needed to ensure
9 the website meets customer expectations. FortisBC last redesigned its website in 2010 when
10 FBC and FEI became commonly known as FortisBC. The cost of a website redesign will vary
11 with the overall needs and objectives of the redesign. The estimated cost of the current website
12 redesign to be shared between FBC and FEI is \$1.4 million, with \$1.3 million for capital and
13 \$0.1 million for O&M.

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17 5.2 Please describe the new content management technology platform and how
18 workflow functionality with content authoring and publishing will become more
19 streamlined.

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21 **Response:**

22 To streamline content authoring and publishing, FortisBC will leverage the following content
23 management system (CMS) features of the new Sitefinity platform:

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1. Responsive design: The images and layout of the FortisBC website will automatically adjust to fit various screen sizes. This feature removes the need to build, update and support separate mobile specific versions of the website.
2. Content layout: Page layouts often require tweaking to accommodate new or updated content without compromising page esthetics. The current process is to put content into a table and adjust the table column widths to control how content is laid out. This method is time consuming, requires html knowledge, and creates non-responsive pages. With Sitefinity, there is greater flexibility and control – a content widget is dragged and dropped onto a page and a content layout layer is simply dropped on top to define how content is divided on a page (e.g. 50-50, 70-30, etc.).
3. Content approval workflow: Instead of manually emailing a PDF to content owners for approval, Sitefinity emails a link to the web page requiring review. An audit trail of the approval details and comments are captured in the CMS.
4. Scheduling content workflow: FBC will be able set to a future date and time to publish approved pages; FBC will no longer need to rely on a resource to be available to push a button at a specified time. Similarly, FBC will be able to pre-set a date to retire content thereby eliminating the need to track this task externally (e.g. via calendar reminders, Excel spreadsheets, relying on memory, etc.).
5. Shared content: In scenarios where FBC wants to repeat a subset of content on multiple pages of its website (e.g. promote a campaign or contest), FBC currently needs to keep track of these pages to ensure content is consistent, relevant, and accurate. Again, this is time consuming and prone to error. The shared content feature will allow FBC to maintain content in one place and reuse it in multiple locations.

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1 **6. Reference: Exhibit B-2, page 8**

In addition to the formula related pressures noted above, FBC has continued to experience other capital cost pressures in 2018 due to work that had been re-prioritized from previous years of the PBR term into 2018 and to manage unforeseen urgent and higher priority activities in 2018.

In response to the capital directives on page 14 of Order G-38-18, capital variances are detailed by year in Appendix B2.

FBC has sought to mitigate the impact of the above factors through a combination of seeking out efficiencies in capital spending and re-prioritizing projects for further evaluation. As reported in the 2017 annual review, FBC initiated 2018 projects earlier in the planning process. Projects and programs were prioritized in such a manner to allow for early engineering and design, procurement of equipment, and comprehensive pre-job planning. The pre-job planning phase enabled FBC to schedule work outside of flooding and fire season avoiding unnecessary costs. FBC also "bundled" some projects together to reduce logistical costs during the competitive bid process when outsourcing work. FBC continues to find efficiencies in the execution of condition assessment programs

FBC has been successful in mitigating some of the cost pressures through efficiencies and work prioritization. However, the cost pressures have exceeded the Company's ability to re-prioritize further work within the formula capital spending. As well, previous work that was delayed is now considered essential or mandatory work and cannot be deferred further. To mitigate this risk exposure, FBC has increased its sustainment activities in 2018. This, combined with growth capital pressures, has resulted in FBC forecasting its capital expenditures to be \$11.394 million above the formula for 2018, which is over the one-year capital dead band and the two-year cumulative 15 percent dead band.

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3 6.1 Please provide a brief discussion of the projects that have been reprioritized,
4 including when they were originally scheduled, when they need to be undertaken,
5 when they have been rescheduled for delivery if such rescheduling has occurred,
6 and why the need was able to be deferred.

7

8 **Response:**

9 Please refer to the responses to BCUC IR 1.7.3.1 and BCOAPO IR 1.31.1.

10 Section 2.7.2 of Appendix B2 describes when projects were originally scheduled and the
11 rescheduled year. The projects were able to be deferred because they were considered Flexible
12 in their originally scheduled year, but as time passed they increased in priority to Essential.

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6.2 Please provide an estimate of the savings that FBC was able to generate through early engineering and design.

Response:

FBC is unable to specifically quantify the savings from early engineering and design, as it is difficult to determine what the engineering and design costs would have been in the absence of the certainty afforded by the PBR framework, which allows the work to begin early. When design packages are completed earlier, work can be better scheduled around project risks such as contractor availability, and external influences such as flooding, forest fires, and winter seasons. As a result, safety and productivity are improved and the risk of additional and unforeseen costs are minimized. Early engineering and design may also allow work packages to be bundled resulting in construction costs savings, as described in the response to CEC IR 1.6.3.

6.3 Please provide an estimate of the savings that FBC was able to generate by bundling some projects to reduce logistical costs.

Response:

For the 2017 and 2018 Transmission Rehabilitation programs, FBC initiated early engineering and design in order to supply the Project Management Office with the “Issued for Construction Packages” which are used for the competitive bid process. FBC was then able to bundle some projects together and issue for bid. As a result, the overall savings in this program are estimated at \$115 thousand in 2017 and \$190 thousand in 2018. The projects that were “bundled” were transmission line rehabilitations of 37 and 44 Lines in 2017, and 25 and 49 Lines in 2018.

6.4 Will FBC be able to continue with these practices following PBR? Please explain why or why not.

Response:

FBC will be able to continue with some of these practices because the activities have been incorporated into internal asset and project management processes. FBC conducts project pre-planning in order to identify risks that would prevent the efficient execution of projects. During

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1 this process, long lead-time materials are identified and ordered and conceptual design is
2 completed. With this information FBC is better able to appropriately schedule and successfully
3 complete projects as forecasted.

4 Conversely, some practices (such as project bundling to achieve favourable contractual
5 agreements) are dependent on the long-term regulatory certainty of a multi-year rate setting
6 arrangement. If FBC were to operate in a different regulatory regime with a short-term test
7 period, then the ability to execute multi-year projects at a lower cost would not be achievable as
8 FBC would be unable to issue long-term contractual agreements.

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12 6.4.1. If yes, does FBC believe these practices will allow for continued savings
13 into the future? Please explain why or why not.
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15 **Response:**

16 Please refer to the response to CEC IR 1.6.4.
17

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1 **7. Reference: Exhibit B-2, pages 9 and 10**

To calculate the 2018 dead band adjustment, FBC notes that its actual 2017 capital exceeded the formula by approximately 8.63 percent, after the 2017 dead band adjustment. FBC is further expecting to exceed the 2018 formula by 24.01 percent as shown in Table 1-3. Therefore, the cumulative amount over the capital formula for calculating the two-year dead band adjustment is 32.64 percent. FBC must exclude from the Earnings Sharing calculation the greater of:

- The one-year capital dead band difference between the projected capital spending overage of 24.01 percent and the one year dead band limit of 10 percent, for a net adjustment of 14.01 percent; or
- The two-year capital dead band difference between the cumulative projected capital spending overage of 32.64 percent and the two year cumulative dead band limit of 15 percent, for a net adjustment of 17.64 percent.

Accordingly, FBC added 17.64 percent of its 2018 formula capital, or \$8.372 million⁷ to its opening plant in service for 2019 so that the two-year cumulative capital variance is within the two year dead band of 15 percent. FBC also reduced the cumulative capital expenditures utilized in the earning sharing mechanism by the same amount (\$8.372 million), such that the earnings sharing with customers is increased (see section 10 of the Application). In this way, there is no earnings sharing on the amount by which FBC exceeded the dead band.

FBC has also included a true-up to the 2017 dead band adjustment in this Application. In FBC's Annual Review for 2018 Rates FBC had projected a 2017 dead band adjustment of \$11.268 million that was added to 2018 opening plant balance for rate making purposes. The actual 2017 dead band adjustment is \$11.759⁸ million due to additional growth capital pressures beyond what was forecast. Consequently, FBC has increased the 2018 opening balance plant for this Application by the actual 2017 dead band adjustment of \$11.759 million. Both the 2017 Actual and the 2018 Projected dead band adjustments are included in rate base in calculating 2019 rates.

⁷ 2018 Actual expenditure of \$58.842 million - \$8.372 million = \$50.470 million. This results in a revised capital spending variance of 6.37% over one year and 15% over two years.

⁸ Section 10, Table 10-2, Line 28

Accordingly, FBC added 17.64 percent of its 2018 formula capital, or \$8.372 million⁷ to its opening plant in service for 2019 so that the two-year cumulative capital variance is within the two year dead band of 15 percent. FBC also reduced the cumulative capital expenditures utilized in the earning sharing mechanism by the same amount (\$8.372 million), such that the earnings sharing with customers is increased (see section 10 of the Application). In this way, there is no earnings sharing on the amount by which FBC exceeded the dead band.

7.1 Please confirm that 2017 excess capital spending over formula was 18.63 % prior to the 2017 dead band adjustment, and provide the calculations for these figures.

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Response:

Not confirmed. The 2017 capital spending over the formula, prior to the dead band adjustment, was 33.76 percent (\$15.799 million ÷ \$46.793 million), as shown in Table 1-3, reproduced below.

	2014			2015			2016		
	Actual	Formula	Variance	Actual	Formula	Variance	Actual	Formula	Variance
Formula Capital	\$ 42.665	\$ 42.193	\$ 0.472	\$ 44.791	\$ 42.384	\$ 2.408	\$ 45.838	\$ 42.874	\$ 2.964
Pension/OPEB	6.396	6.396	-	4.253	4.253	-	3.674	3.674	-
Total	\$ 49.061	\$ 48.589	\$ 0.472	\$ 49.043	\$ 46.637	\$ 2.408	\$ 49.512	\$ 46.548	\$ 2.964
Variance			0.97%			5.16%			6.37%

	2017			2018			Cumulative		
	Actual	Formula	Variance	Forecast	Formula	Variance	Actual	Formula	Variance
Formula Capital	\$ 59.053	\$ 43.254	\$ 15.799	\$ 55.212	\$ 43.818	\$ 11.394	\$ 247.558	\$ 214.523	\$ 33.035
Pension/OPEB	3.539	3.539	-	3.630	3.630	-	21.492	21.492	-
Total	\$ 62.592	\$ 46.793	\$ 15.799	\$ 58.842	\$ 47.448	\$ 11.394	\$ 269.050	\$ 236.015	\$ 33.035
Variance			33.76%			24.01%			14.00%

7.2 Please provide the formula amounts and the actual capital spending in 2018.

Response:

Please refer to the response to BCUC IR 1.7.4.

7.3 Please confirm that adding percentages derived from two different base numbers do not result in a meaningful number.

Response:

Not confirmed in the context of this calculation, which results from the PBR Decision. This issue was explored in response to BCOAPO IR 1.5.2 in FEI's Annual Review for 2018 Rates, and also BCOAPO IR 1.1.1 in FEI's Annual Review for 2017 Rates. As discussed in FEI's previous IR responses, FBC has calculated a "cumulative" two-year variance in accordance with the PBR Decision. Alternative calculations using the same base figure would result in an average variance, which would be contrary to the direction in the PBR Decision. FBC has copied the response to FEI BCOAPO IR 1.5.2 below.

5.2 FEI refers to a 17.74% adjustment based on a two year average. Please fully explain why the cumulative variance of 13.57% as reported in Table 1-4 is not used.

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Response:

The 17.74 percent¹ adjustment is not based on a two-year average, but is the cumulative two-year variance above the two-year dead band, as described on page 14 of the Application. The “cumulative” variance of 13.57 percent reported in Table 1-4 of the Application is the average of all variances for all years of the PBR term.

By using the cumulative two-year variance, FEI is following the approved capital dead band mechanism, which was discussed in FEI’s Annual Review for 2017 Rates at pages 10 through 13. The PBR Decision stated at page 175:

...the Commission Panel directs, in addition to the one year 10 percent dead-band previously approved, a two year cumulative 15 percent dead-band for all Fortis’ formulaic capital spending.

The Commission Panel did not approve a dead band that takes the average of all variances for all years of the PBR term, which is what the 13.57% represents.

FEI responded to a similar question regarding whether the calculation should be on a cumulative or average variance in the Annual Review for 2017 Rates. This response is provided below:

BCOAPO 1.1 Please provide the calculation of the 19.1% increase in capital identified in line. In the response, please fully explain why the proper calculation is not derived by summing the actual/projected capital and formula capital for 2015 and 2016 and then calculating the percentage on the cumulative amounts.

Response:

The cumulative 19.1% variance was calculated as the sum of the 2015 and 2016 variance percentages from Table 1-3 (9.88% + 9.22% = 19.1%). This calculation is in accord with the Commission’s direction, as referenced on page 11 of the Application, for a “two year **cumulative** 15 percent dead-band”. [Emphasis added.]

¹ 32.74 percent two-year cumulative variance less 15 percent two-year cumulative dead band.

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The alternative presented in the question would result in the calculation of an **average** variance for the two years of 9.54%,² and not a **cumulative** variance for the two years.

7.4 Please recalculate the total percentage over by adding the total spending over the 2 years, and dividing by the total formula over the two years.

Response:

The calculation requested is provided below. It does not result in the total percentage over the dead band, but rather a weighted average variance.

	2017			2018			Cumulative 2017 - 2018		
	Actual	Formula	Variance	Forecast	Formula	Variance	Actual	Formula	Variance
Formula Capital	\$ 59.053	\$ 43.254	\$ 15.799	\$ 55.212	\$ 43.818	\$ 11.394	\$ 114.265	\$ 87.072	\$ 27.193
Pension/OPEB	3.539	3.539	-	3.630	3.630	-	7.169	7.169	-
Total	\$ 62.592	\$ 46.793	\$ 15.799	\$ 58.842	\$ 47.448	\$ 11.394	\$ 121.434	\$ 94.241	\$ 27.193
Weighted Average of Variances			33.76%			24.01%			28.85%
Simple Average of Variances									28.89%

² From Table 1-3, $((157,903 + 163,157) - (143,705 + 149,390)) / (143,705 + 149,390)$.

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1 **8. Reference: Exhibit B-2, page 20 and page 114**

Table 3-1: Forecast 2019 DSM and Other Savings (GWh)

Line No.	Description	DSM	AMI	CIP	Rate-Driven	Total
1	Residential	(10)	8	(4)	(0)	(7)
2	Commercial	(21)			(0)	(21)
3	Wholesale	(2)			(0)	(2)
4	Industrial	(3)				(3)
5	Lighting	(3)				(3)
6	Irrigation	(0)				(0)
7	Net	(39)	8	(4)	(0)	(36)
8	Losses	(3)	(5)			(9)
9	Gross Load	(42)	2	(4)	(0)	(44)

12.4.1.1 2018 Demand Side Management (DSM) Expenditure Schedule

FBC filed its 2018 DSM Expenditure Schedule on November 15, 2017. Following a written public hearing the expenditure schedule was accepted by Order G-113-18 on June 15, 2018. FBC incurred \$0.073 million (\$0.054 million after tax) in external costs for the review of this application.

FBC seeks approval of a deferral account attracting a STI rate of return to capture these costs and proposes to amortize the costs over one year, in 2019.

8.1 Please confirm that FBC's DSM forecast savings are consistent with FBC's approved DSM plan.

Response:

Confirmed, FBC's forecast DSM savings are consistent with FBC's approved 2018 DSM Expenditures plan.

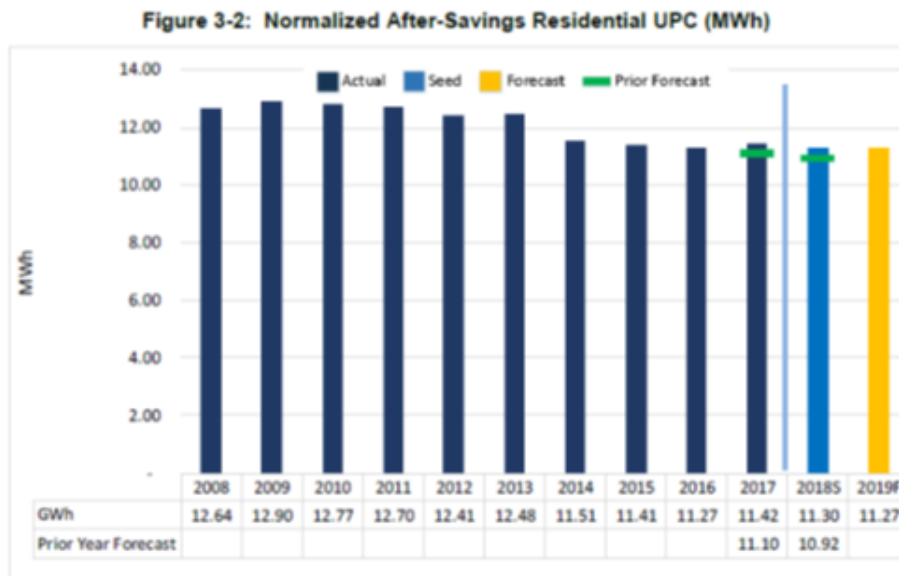
8.1.1 If not, please explain why not and identify any differences.

Response:

Please refer to the response to CEC IR 18.1.

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1 **9. Reference: Exhibit B-2, page 22**



2

3 9.1 Please provide FBC's views on why the normalized after savings UPC has been
4 declining since 2009 or 2010.

5

6 **Response:**

7 The decline in residential UPC in a given year is a result of many factors that may be both
8 compounding and offsetting. FBC cannot identify the factors with certainty that contributed to
9 the decline. FBC assumes the factors include, but may not be limited to, customer behaviour,
10 new technologies, and increased appliance efficiency. Further, part of the decline may be offset
11 by an increase in the number of appliances used in a home.

12

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15

16 9.2 Does FBC expect continued decline in UPC over the next several years, or is it
17 expected to taper off over the next five years. Please explain.

18

19 **Response:**

20 FBC expects that DSM and Other Savings will continue to contribute to reducing the residential
21 customer usage.

22

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1 **10. Reference: Exhibit B-2, page 23**



2

3 10.1 The after savings residential load has been increasing despite declining UPC and
4 increasing DSM savings. Does FBC expect to see continued load increases over
5 the next 5 years? Please explain.

6

7 **Response:**

8 The current FBC short term methods provide forecasts for the 2018 seed year and 2019
9 forecast year. FBC has not forecast what trends may or may not develop beyond that period.

10

11

12

13 10.2 Please provide FBC forecasts for the years 2008-2016 on or relevant to Figure 3-
14 3 actuals.

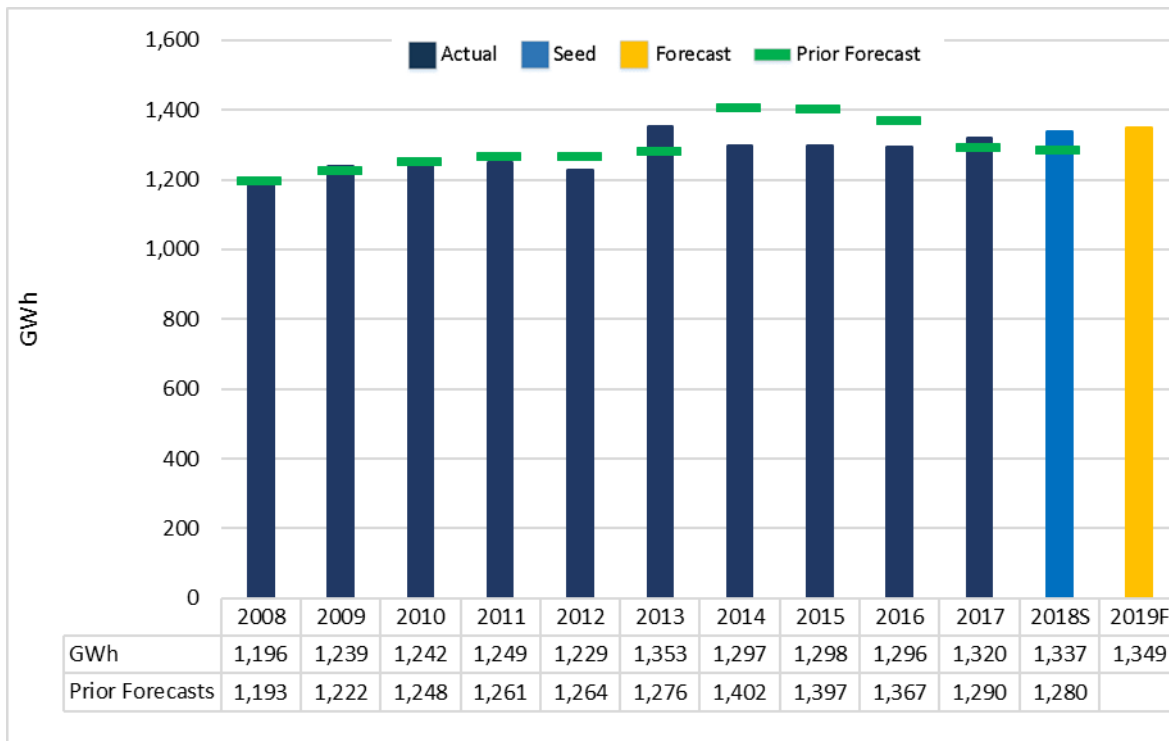
15

16 **Response:**

17 The following figure includes FBC previous forecast years 2008 – 2016.

1

Figure 1: Normalized After-Savings Residential Load (GWh)



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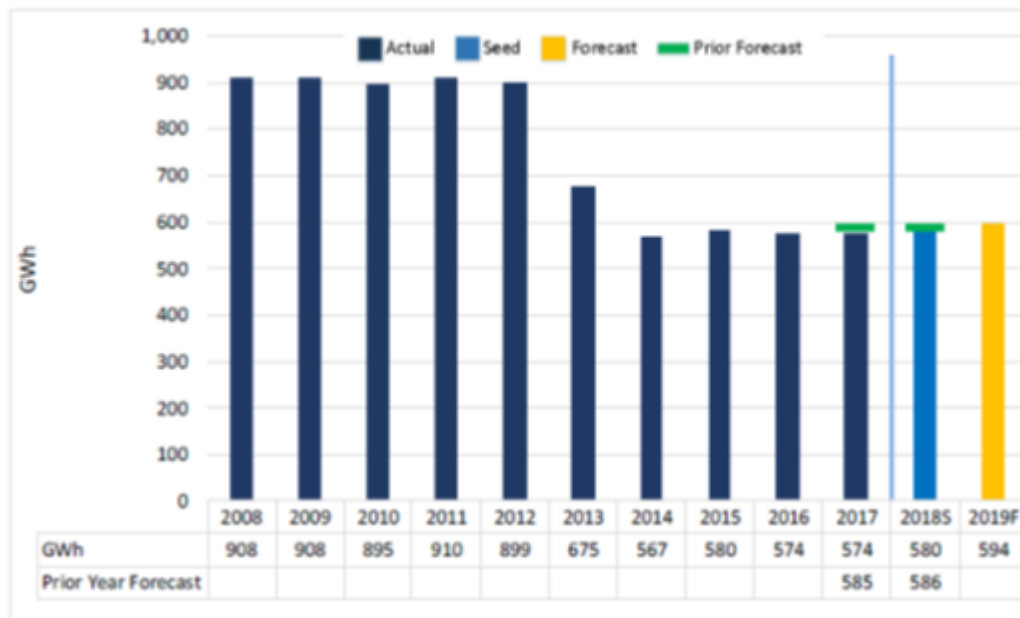
11. Reference: Exhibit B-2, page 24

3.5.3 Wholesale

FBC sells wholesale power to municipalities within its service territory that own and operate their own electrical distribution systems and to BC Hydro for service to certain of its customers. These wholesale customers' load composition is a combination of residential, commercial, industrial and street lighting.

Consistent with past practice, the wholesale class is forecast using survey information from each of the individual wholesale customers. FBC believes that the individual wholesale customers are best able to forecast their future load growth. All of the wholesale customers responded with their load forecast projections. As shown in Figure 3-5 below, after-savings wholesale energy is forecast to increase by 6 GWh in 2018S and 14 GWh in 2019F. The increase in 2019F is partially due to commercial developments within certain wholesale customer's territories.

Figure 3-5: Normalized After-Savings Wholesale Load (GWh)



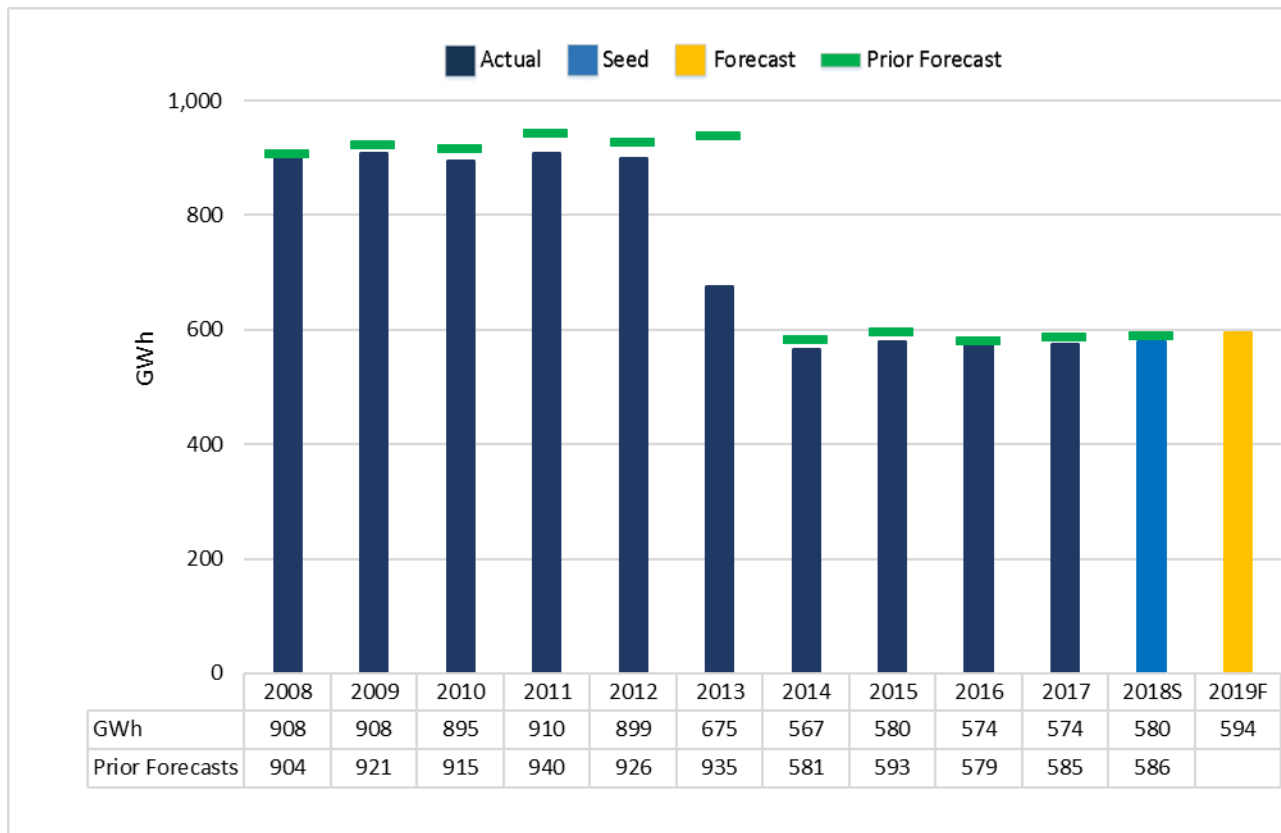
11.1 Please provide FBC forecasts on Figure 3-5 from the years 2008 – 2016 for each of the years shown in Figure 3-5.

Response:

The following figure includes FBC previous forecast years 2008 – 2016.

1

Figure 1: Normalized After-Savings Wholesale Load (GWh)



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11.2 How many individual wholesale customers does FBC have in each year for Figure 3-5?

Response:

10

The following table shows the count of wholesale customers for the period from 2008-2019.

Time	Wholesale Customers	Notes
2008 – March 2013	7	
April 2013 - 2019	6	Reduced by one customer due to acquisition of the assets of the City of Kelowna's electric utility by FBC on March, 30 of 2013.

11

12

13

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11.3 Please provide a brief description of the 'commercial developments' within certain wholesale customers' territories and identify if this is restricted to one customer's activities or more.

Response:

Please refer to the response to BCUC IR 1.17.1.

11.4 Please confirm that the Kelowna Electric System acquisition by FBC is what is responsible for the decline from 2012 to 2014 and provide estimates of the Kelowna load from 2008 to 2013.

Response:

Confirmed. The 2008 to 2013 normalized loads for the City of Kelowna are below. FBC purchased the assets of the City of Kelowna electric system on March 31, 2013; therefore, the 2013 value below is for the January 1 – March 31 period only.

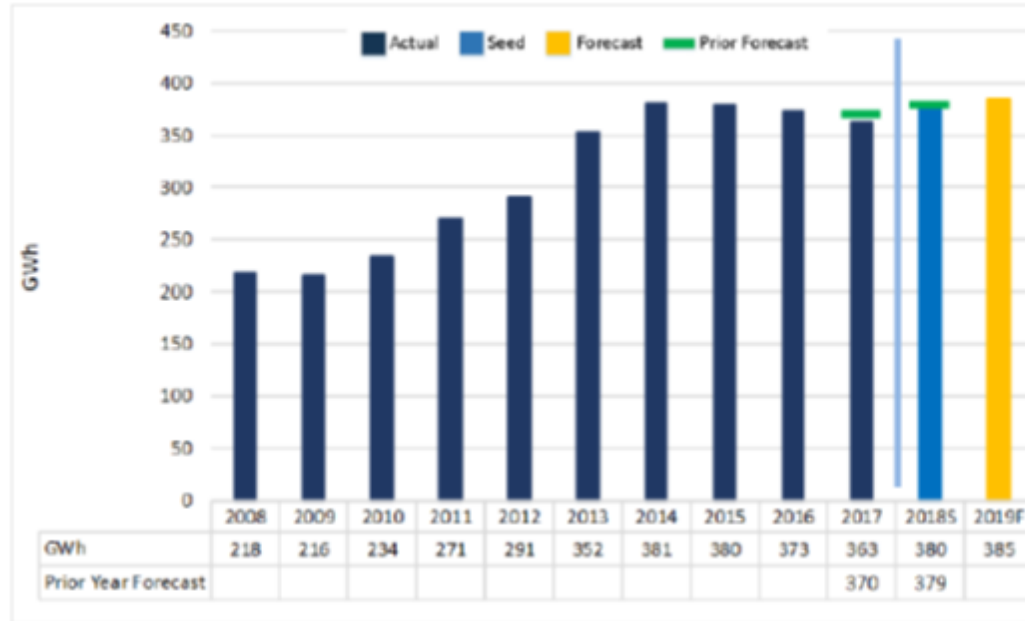
Normalized City of Kelowna (CoK) Loads from 2008 to 2013 (GWh)

	2008	2009	2010	2011	2012	2013
CoK Loads (GWh)	308	323	314	329	332	90

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1 **12. Reference: Exhibit B-2, page 25**

Figure 3-6: After-Savings Industrial Energy (GWh)



3.5.4 Industrial

Consistent with past practice, the industrial forecast is determined through a combination of customer load surveys and, when not available, escalation of the most recent annual loads by the corresponding provincial GDP growth rates for individual industries.

FBC sends all industrial customers a load survey that requests the customer's anticipated use for the next five years. A survey is used because individual industrial customers have the best understanding of what their future energy usage will be. This year FBC received a response from 86 percent (44 of 51) of the surveys sent out. The responding customers represent approximately 88 percent of the total industrial load.

As shown in Figure 3-6 below, after-savings industrial energy is forecast to increase by 17 GWh in 2018S. This increase is partially due to a new industrial customer added in January 2018 that increases the load by approximately 11 GWh per year. Industrial energy is forecast to increase by 5 GWh in 2019F compared to 2018S.

12.1 What response rate does FBC usually receive for its industrial surveys? Please provide quantification for the last three years if available.

Response:

The table below shows the response rate for the three-year period from 2017 to 2019. The average customer response rate over this period was 85 percent while the average energy response rate was slightly higher at 88 percent.

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Industrial Survey Response Rate

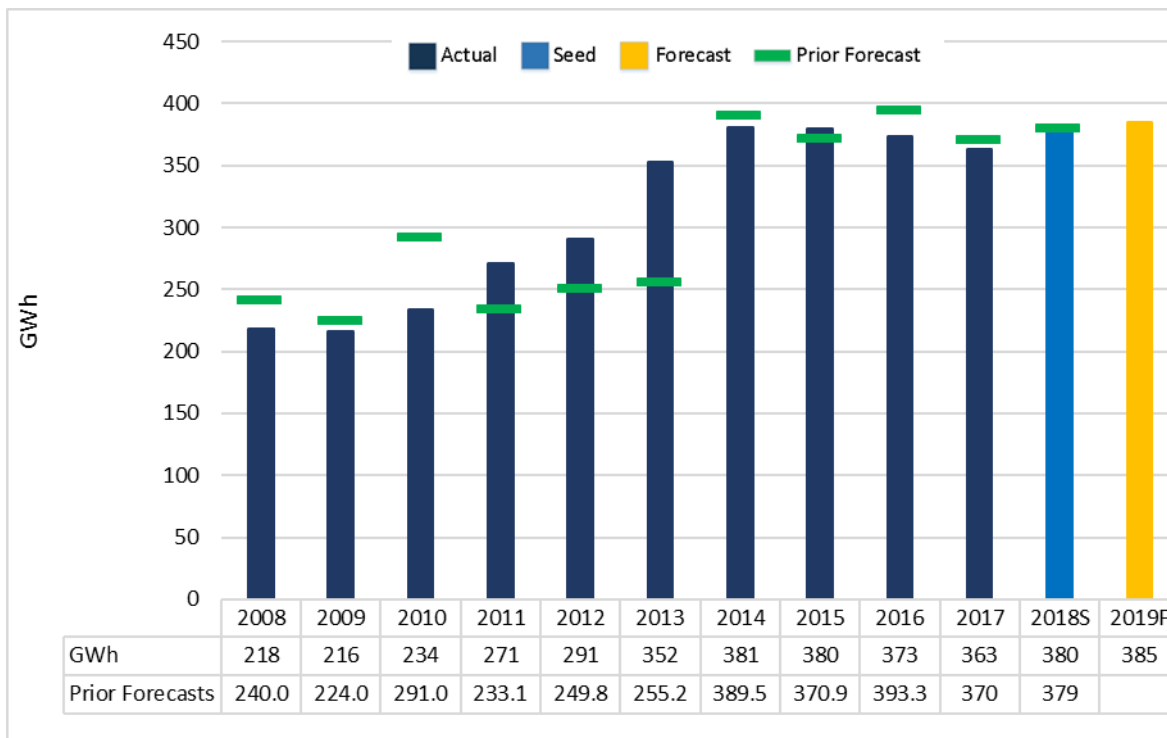
Annual Review	2017	2018	2019
Year survey conducted	2016	2017	2018
Survey response (% of customers responding)	88%	80%	86%
Average response rate	85%		
Survey response (% of energy)	88%	89%	88%
Average response rate	88%		

12.2 Please provide FBC forecasts relevant to Figure 3-6 from the years 2008 to 2016 for the years shown in Figure 3-6.

Response:

The following figure includes FBC previous forecast for the years 2008 – 2016.

Figure 1: After-Savings Industrial Energy (GWh)



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12.3 Please provide estimates of the loads in Figure 3-6 which are applicable to the customer base in the Kelowna electric system transferred to FBC as a result of the acquisition of that utility.

Response:

The combined loads for industrial customers previously served by the City of Kelowna (CoK) from 2014 to 2017 are shown below. The Industrial loads for 2013 are not available since the CoK had not been acquired by FBC until March 29, 2013 and the industrial customers were not absorbed into the FBC system until 2014, as billing was done by a third party contractor prior to this.

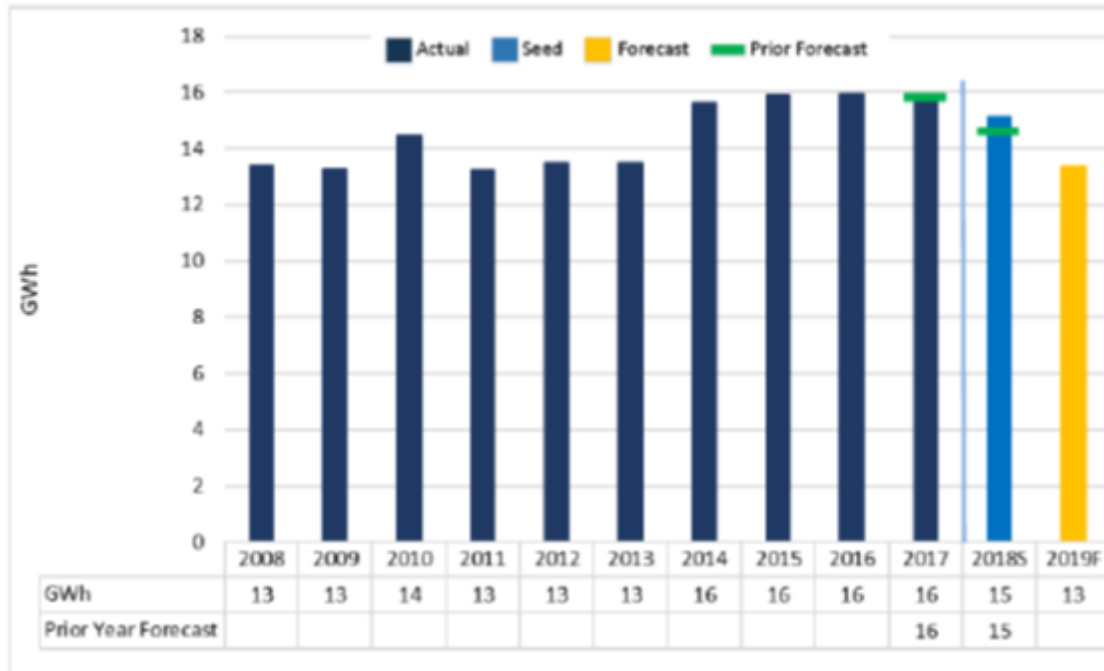
CoK Industrial Load 2014 to 2017 (GWh)

Year	2014	2015	2016	2017
CoK Industrial Load (GWh)	38	35	35	36

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1 **13. Reference: Exhibit B-2, page 26 and 27**

Figure 3-7: After-Savings Lighting Load (GWh)



2

3.5.5 Lighting

Consistent with past practice, FBC used a trend of the most recent five-year period to forecast load for this class. As shown in Figure 3-7 below, after-savings lighting energy is forecast to decrease by 2 GWh in 2019F compared to 2018S. Part of this reduction is due to the implementation of LED street lights which can reduce the amount of electricity needed for a single street light by 50 percent to 65 percent.

3

4 13.1 Please provide FBC's forecasts on Figure 3-7 from the years 2008-2016 for each
5 of the years in Figure 3-7.

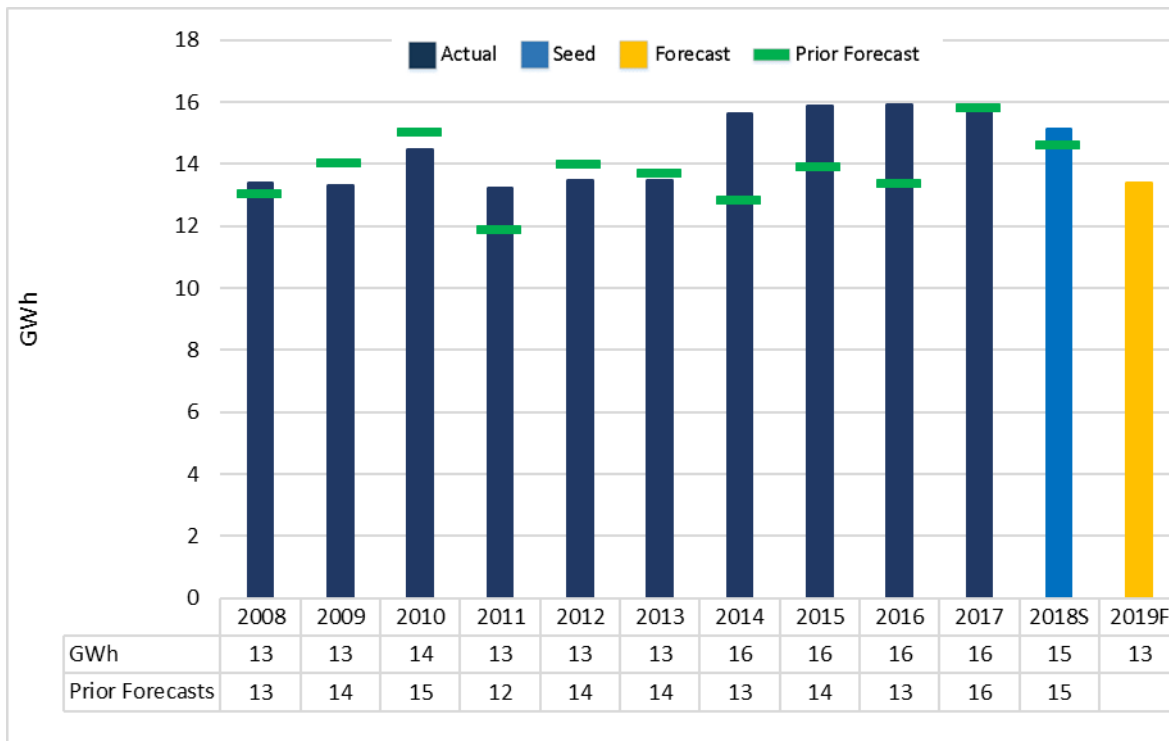
6

7 **Response:**

8 The following figure includes FBC previous forecast years 2008 – 2016.

1

Figure 1: After-Savings Lighting Load (GWh)



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6 13.2 Please provide an estimate of the lighting load acquired with the Kelowna electric
7 system, if any, from 2013 on to enable proper interpretation of this data.

8

9 **Response:**

10 FBC is unable to provide an estimate of the lighting loads acquired by the City of Kelowna (CoK)
11 after they were absorbed into the FBC billing system because of the large number of accounts.
12 The FBC load forecast is prepared for the service area as a whole, without any requirement for
13 regional breakdowns. As a result FBC does not track or aggregate customer data from the
14 previous CoK.

15

16

17

18 13.3 Does FBC expect that the decline will continue over the next several years, or
19 does FBC believe that it will taper off in the near future? Please explain and
20 provide quantification of any minimum threshold level that FBC expects to reach.

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1

2 **Response:**

3 FBC expects that DSM and Other Savings will continue to contribute to reducing the lighting
4 load. FBC has not determined if there is any minimum threshold that will be reached.

5

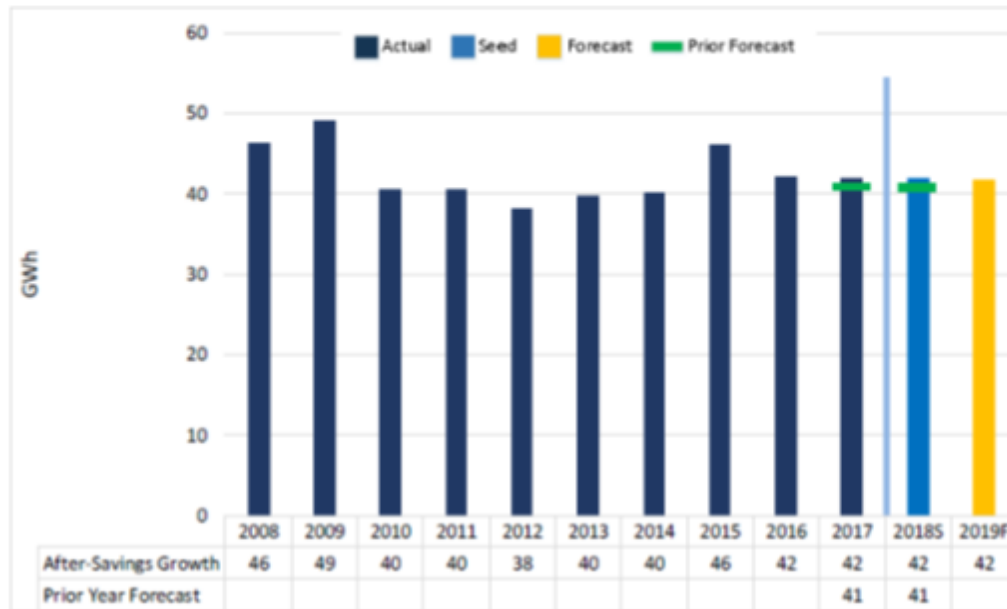
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1 **14. Reference: Exhibit B-2, page 27**

3.5.6 Irrigation

Consistent with past practice, FBC used an average of the most recent five-year period to forecast load for this class. As shown in Figure 3-8 below, after-savings irrigation energy is forecast to remain constant in 2019F.

Figure 3-8: After-Savings Irrigation Load (GWh)



2

3 14.1 What are the key factors that impact irrigation load?

4

5 **Response:**

6 Many factors impact the irrigation load including, but not limited to, crop types, size, agricultural
7 methods, precipitation, etc. FBC is unable to comment on which factors are key because the
8 required level of data granularity is not captured in the FBC billing system.

9

10

11

12 14.2 To what does FBC attribute the higher loads in 2008, 2009 and 2015? Please
13 explain.

14

15 **Response:**

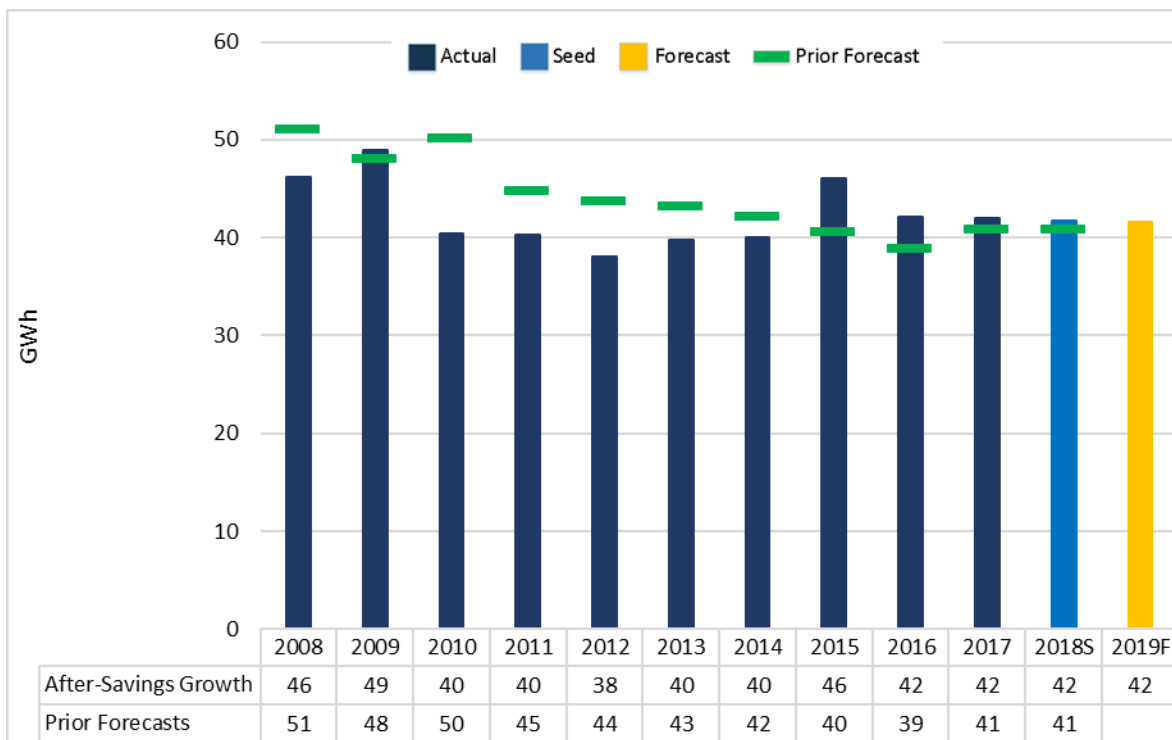
16 Please refer to the response to CEC IR 1.14.1.

14.3 Please provide FBC's previous forecasts from 2008-2016 for each of the years in Figure 3-8.

Response:

The following figure shows the FBC previous forecasts including 2008 – 2016.

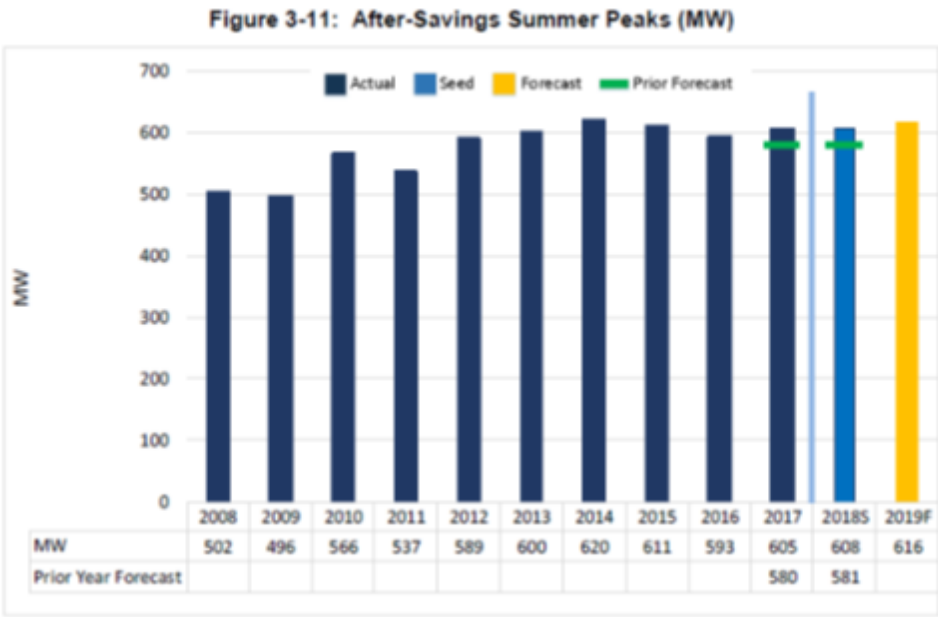
Figure 1: After-Savings Irrigation Load (GWh)



1 15. **Reference: Exhibit B-2 page 30**



2



3

4 15.1 How does FBC make use of its peak demand forecast in its revenue or other
5 forecasting? Please explain.

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1

2 **Response:**

3 FBC makes use of its peak demand forecast when forecasting Power Purchase Expense. FBC
4 ensures that it has included enough capacity resources and accounted for the costs associated
5 with those capacity resources to meet its peak demand forecast on an annual basis. FBC also
6 uses its peak demand forecast to help identify when system reinforcement projects may be
7 required.

8 FBC does not make use of its peak demand forecast when forecasting revenue as any demand
9 charges included in forecast revenue are estimated separately.

10

11

12

13 15.2 In what ways, if any, does the accuracy of the peak forecasts relate to the
14 success of PBR? Please explain.

15

16 **Response:**

17 The actual system peak is heavily dependent on the weather and therefore it is expected that
18 significant variances from forecast in system peak will occur in years with either much more mild
19 weather or colder weather than average. These weather related variances from forecast play a
20 significant role in Power Purchase expense. However, as Power Purchase expense variance
21 from forecast is captured in the Flow-through deferral account, there is no relationship to the
22 success of PBR Plan.

23

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1 **16. Reference: Exhibit B-2, page 34**

4.3 *PORTFOLIO OPTIMIZATION*

The primary objectives of FBC's power supply portfolio planning are to ensure that the Company has sufficient firm resources to meet expected load requirements, to ensure the availability of cost-effective reliable power for FBC's customers, to prudently manage exposure to the cost and availability of market power supplies, and to optimize the value of any surplus resources that are not needed to meet load requirements.

The Company currently has long-term, firm resources from which it can supply substantially all of its 2019 forecast annual energy and capacity requirements. The nature of FBC's contracted resources, in particular the BC Hydro PPA, provides the Company some flexibility to participate in the market when conditions are favourable to mitigate the cost of holding those firm resources. Furthermore, although FBC's load requirements are forecast to grow over time, the amount of capacity provided under the WAX CAPA is currently greater than FBC's capacity requirements in most months, and FBC sells the surplus capacity to mitigate power purchase expense. FBC has contracted to release a 50 MW block of capacity purchased under the WAX CAPA to BC Hydro under the Residual Capacity Agreement (RCA), which was approved by the Commission in Order G-161-14. The remaining surplus WAX CAPA will be sold to Powerex Corp. (Powerex) on a day-ahead basis, if and when it is not required to meet FBC load requirements. These sales are made under the Capacity and Energy Purchase and Sale Agreement (CEPSA) with Powerex dated February 17, 2015, and accepted by the Commission in Order E-10-15.

4.4 *FBC 2018/19 ANNUAL ELECTRIC CONTRACTING PLAN*

On March 23, 2018, FBC filed its 2018/19 Annual Electric Contracting Plan (AECPP) with the Commission. The purpose of the AECPP is to outline FBC's plan to meet its peak demand requirements and annual energy requirements for the operating year commencing October 1, 2018 and ending September 30, 2019, and to facilitate FBC's annual energy nomination under the PPA. FBC is required to take or pay for 75 percent of the PPA Nomination, regardless of whether it schedules the energy. The difference between the PPA Nomination and the 75 percent minimum take provides flexibility to displace PPA purchases with lower cost resources or to manage annual loads that are below forecast. Therefore, real-time opportunities to displace PPA purchases are restricted to a maximum of 25 percent of the PPA nominated

16.1 Does FBC generate long-term plans to minimize its power purchase expense?

Response:

Approximately every five years, FBC develops a long-term resource plan (LTERP) for meeting the forecast peak demand and energy requirements of customers with demand-side and supply-side resources over the 20-year planning horizon. The most recently filed 2016 LTERP contained a planning horizon from 2016 to 2035. One of the objectives of the 2016 LTERP was to ensure cost-effective, secure and reliable power for customers.

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16.1.1 If yes, are longer-term plans approved by the Commission, and if so, under what processes are these plans reviewed?

Response:

FBC's long term resource plans are subject to acceptance by the Commission. The long term resource plan does not grant approval for any action by FBC. The acquisition of a long term resource would require Commission approval by way of a CPCN application under section 45 of the UCA, or acceptance of an Energy Supply Contract (ESC) under section 71 of the UCA. When deciding whether to issue a CPCN or to accept an ESC, the Commission must consider among other things the most recent long term resource plan filed by the Company.

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1 **17. Reference: Exhibit B-2, page 35**

4.5 REVIEW OF 2018 POWER PURCHASE EXPENSE

As shown in Table 4-2 below, FBC's 2018 gross load (after taking into account DSM and other customer savings) is expected to be 87 GWh above the 2018 Approved value, while PPE is projected to be below the 2018 Approved value by \$2.824 million. The reduction in 2018 projected power purchase expense is primarily due to additional market purchases used to displace BC Hydro PPA energy and capacity purchases at a lower total cost.

Table 4-2: 2018 Power Purchase Expense (\$ millions)

Line No.	Description	Approved 2018	Projected 2018	Difference
1	Brilliant	\$ 39.632	\$ 39.620	\$ (0.012)
2	BC Hydro PPA	44.906	38.623	(6.283)
3	Waneta Expansion	37.437	37.797	0.360
4	Market and Contracted Purchases	10.951	14.923	3.972
5	Independent Power Producers	0.080	0.081	0.002
6	Self-Generators	0.066	0.028	(0.038)
7	CPA Balancing Pool	-	(0.826)	(0.826)
8	Special and Accounting Adjustments	-	0.002	0.002
9	Total	<u>\$ 133.071</u>	<u>\$ 130.247</u>	<u>\$ (2.824)</u>
10				
11	Gross Load (GWh)	3,485	3,573	87

17.1 Please provide the approved and projected GWh and the GWh difference associated with each purchase.

Response:

Please refer to the response to BCOAPO IR 1.12.1.

17.2 Does FBC maximize its market purchases or can FBC displace more of the BC Hydro PPA energy and capacity at a lower total cost in the future? Please explain and provide reasons for why it could or could not.

Response:

FBC is planning to maximize the use of market and contracted purchases to displace BC Hydro energy and capacity. A \$1.0 million reduction to BC Hydro PPA expense is included in the 2018 Projected figures for July through December, to account for additional market opportunities for the remainder of 2018. Actual market savings may be more or less than the projected \$1.0

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million and will ultimately depend upon system and market conditions, which FBC will continue to monitor.

17.3 Are there other opportunities for FBC to displace more costly purchases with less costly purchases? Please explain.

Response:

FBC is actively pursuing all available opportunities to increase market savings in each year.

17.2.1 If yes, what plans does FBC have to minimize the purchase costs over the next three years.

Response:

FBC's plan to minimize power purchase costs over the next three years is contained within its Annual Electric Contracting Plan (AECp). The AECp is filed on a confidential basis, with the exception of the Executive Summary, as it contains market sensitive information. FBC's 2018/19 AECp was accepted by BCUC Letter L-8-18³.

One of the main objectives of the AECp is cost minimization for FBC customers. The AECp includes a review of the market environment, load forecast, and available resources. Furthermore, the AECp provides the justification for FBC's Annual PPA Energy Nomination as well as FBC's proposed plan for entering into firm market contracts for the subsequent four operating years.

³ <https://www.ordersdecisions.bcuc.com/bcuc/orders/en/item/309536/index.do>

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1 18. Reference: Exhibit B-2, page 40 and 41

2 5. OTHER REVENUE

Table 5-1: Other Revenue (\$ millions)

Line No. Description	Approved 2018	Projected 2018	Forecast 2019
1 Apparatus and Facilities Rental	\$ 4.736	\$ 4.736	\$ 4.878
2 Contract Revenue	1.769	1.725	1.766
3 Transmission Access Revenue	1.170	1.170	1.230
4 Interest Income	0.016	0.016	0.016
5 Late Payment Charges	-	0.852	0.861
6 Connection Charges	0.368	0.550	0.376
7 Other Recoveries	0.356	0.560	0.142
8 Total	<u>\$ 8.416</u>	<u>\$ 9.609</u>	<u>\$ 9.268</u>

3 5.5 LATE PAYMENT CHARGES

FBC has historically not forecast late payment charges as part of its revenue requirement. When these charges were earned, they were flowed through to customers. Beginning with 2019, FBC is forecasting late payment charges as part of Other Revenue, based on an established history of late payment charges being incurred by utility customers paying invoices past their due date. The 2019 Forecast is based on an average of the 2016 and 2017 late payment charges earned. Variances from Approved will continue to be included in the flow-through of Other Revenue.

4 5.6 CONNECTION CHARGES

Connection charges are calculated based on the fees specified in FBC's rate schedules applied to new customer connections or current customer reconnections. The 2018 Projected connection charges are expected to be higher than 2018 Approved due to a higher number of year-to-date customer connections. The 2019 Forecast is lower than the 2018 Projected due to lower connections expected.

5 5.7 OTHER RECOVERIES

Other recoveries are primarily comprised of fees earned on the recovery of costs for miscellaneous services, such as street light maintenance charged to municipalities. The 2018 Approved and 2018 Projected also includes management fees earned on construction work for a third party that was completed throughout 2017 and 2018. The 2018 Projected is expected to be higher than 2018 Approved due to the timing of when work was completed. The 2019 Forecast does not include any additional management fees for this work as it is expected to be fully completed during 2018.

6

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18.1 What efforts, if any, does FBC undertake to increase its 'Other Revenues'?
Please explain and discuss whether any of these strategies have proven successful.

Response:

The majority (approximately 80 percent) of FBC's other revenues are from pole attachments, contract revenue, and wheeling, each of which has limitations on the extent to which the specific revenue item may be increased.

- For pole attachments, the primary service providers that would attach are telecommunication companies which already attach and which FBC already charges.
- Contract revenues are generally based on management agreements for third-party generating facilities and on occasion by performing system work for other utilities. Both of these revenue streams are dependent on the third parties' own requirements.
- Wheeling revenue is also generally based on agreement and on system design, so opportunities for charging other entities for transmission of their power is generally dependent on the third parties' own requirements.

The remaining items of significance in other revenue are late payment charges and connection charges, which are both based on tariff rates and customer behaviour or activity. For late payment charges, FBC would undertake activities to reduce, not to increase, this amount through billing reminders, promoting equal payment plan and online billing, and offering direct debit payments. Connection charges are largely based on customer growth or real estate activity and therefore FBC's ability to influence these amounts is limited.

18.2 Please provide the history of FBC's late payment actuals for the last five years.

Response:

FBC's late payment charge history, in \$ millions, is as follows:

- 2013 \$0.839
- 2014 \$1.060
- 2015 \$0.931
- 2016 \$0.811
- 2017 \$0.896

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18.3 Please provide FBC’s understanding of why there was a higher number of year-to-date customer connections than anticipated, and why this is not expected to continue.

Response:

Schedule 80 of the Electric Tariff outlines the charges for connections, which range from \$100 during normal working hours to \$339 during callout hours and \$673 to relocate existing service. As a result, there can be varying prices charged for connections. The forecast volume of connections is primarily based on expected customer growth, but will also be influenced by the movement of existing customers from one meter to another meter within the service territory.

The higher connection charges were attributable to higher than forecast customer growth, as indicated in section 3.4 of the 2018 Application that shows a 2018 Forecast of 136,602 customers compared to section 3.4 of the 2019 Application that shows a 2018 Update of 137,692 customers, as well as higher movement of customers from one residence to another. Although FBC expects customer growth to continue, the real estate market is beginning to slow and movement of existing customers from one meter to another meter within the service territory will also begin to slow.

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1 **19. Reference: Exhibit B-2, page 45**

Table 6-4: 2018 – 2019 Pension and OPEB Expense (\$ millions)

Line No.	Description	Approved 2018	Forecast 2019
1	O&M	\$ 2.659	\$ 1.692
2	Capital	3.630	3.612
3	Total Pension & OPEB Expense	<u>\$ 6.289</u>	<u>\$ 5.304</u>

Overall, pension and OPEB expense for 2019 is forecast to be \$0.985 million lower than the amount approved for 2018. This decrease is primarily due to experience gains revealed in the triennial valuation of the OPEB plan and higher than expected return on assets, partially offset by a decrease in the discount rate.

2

3 19.1 What are 'experience gains'? Please explain and quantify.

4

5 **Response:**

6 The experience gains are primarily due to the 50 percent reduction in MSP premiums budgeted
7 by the BC provincial government in 2017 and effective on January 1, 2018. As a result of the
8 reduction in MSP Premiums for FBC OPEB plan members, the OPEB expense for 2019 has
9 been reduced by approximately \$0.512 million. The reduction in MSP premiums was not known
10 at the time of the actuarial valuation that supported the 2018 pension and OPEB expense.

11

12

13

14 19.2 Please explain how, if at all, this impacts the PBR calculations.

15

16 **Response:**

17 The lower 2019 pension and OPEB expense mainly results in an O&M saving, which is a flow-
18 though item outside of PBR formulaic O&M. Therefore, the decreases in pension and OPEB
19 expense are all returned to customers in 2019 rates.

20

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1 **20. Reference: Exhibit B-2, page 46**

Table 6-5 below compares 2014 through 2019 net AMI savings to the net savings forecast in the AMI CPCN application.

Table 6-5: AMI Costs and Savings (\$ millions)

Line No.	2014-2017			2018			2019	
	Actual	Approved	CPCN ⁽¹⁾	Projected	Approved	CPCN ⁽¹⁾	Forecast	CPCN ⁽¹⁾
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
4 AMI Costs	\$ 5,202	\$ 5,814	\$ 6,792	\$ 2,015	\$ 2,015	\$ 1,900	\$ 2,055	\$ 1,951
5 AMI Savings	(7,137)	(7,688)	(10,439)	(3,153)	(3,153)	(4,424)	(3,216)	(4,244)
6 Net AMI Costs/(Savings)	\$ (1,935)	\$ (1,874)	\$ (3,647)	\$ (1,139)	\$ (1,139)	\$ (2,464)	\$ (1,161)	\$ (2,293)
7								
8	⁽¹⁾ CPCN estimates adjusted to include reclassification of software from capital pursuant to Order G-13-14							

As reported previously, AMI-related costs and savings from 2014 to 2017 lag those estimated in the AMI CPCN primarily due to delayed project timing following an extensive CPCN review process and the Commission's directive to file for approval of an opt-out program prior to meter installation. The AMI project was substantially completed during 2016, such that 2017 was the first year of fully realized costs and savings for the AMI project.

As shown in Table 6-5 above, the 2018 Projected costs are approximately as forecast in the CPCN application.

As also shown in Table 6-5 above, the 2018 forecast savings of \$3.153 million are approximately \$1.271 million lower than the CPCN forecast of \$4.424 million. This variance is driven by meter reading, Measurement Canada compliance savings, and other smaller factors as explained below.

2

3 20.1 Please provide the AMI NPV given the lower than anticipated savings.

4

5 **Response:**

6 All else equal, the Net Present Value benefit of the project from the CPCN application would be
7 reduced by approximately \$3.519 million (calculated as a \$4.169 million net savings shortfall
8 between 2014-2019, less the \$0.650 Measurement Canada savings reduction in 2017 and 2018
9 due to increasing forecast non-AMI compliance costs as described in the response to BCOAPO
10 IR 1.16.1). This reduces the NPV benefit from \$33.463 million (as calculated by the
11 Commission in its Decision accompanying Order C-7-13 approving the AMI project) to \$29.963
12 million. These reduced savings are primarily related to factors beyond the Company's ability to
13 control or forecast as listed in Section 6.3.3, including project startup delays and lower pre-AMI
14 manual meter reading costs than forecast.

15

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1 **21. Reference: Exhibit B-2, page 47**

6.3.3.2 Measurement Canada Compliance

One of the benefits of replacing the majority of the meter fleet with AMI meters was a reduction in Measurement Canada compliance costs. As with meter reading, forecasting these savings required a forecast of the cost of meter exchanges that would have been required in the absence of AMI. The CPCN application forecast that 2018 would be the peak year in terms of the number of electromechanical and non-AMI digital meter replacements due to the Measurement Canada SS-06 regulation (in the absence of AMI). These non-AMI compliance costs were estimated to be \$0.400 million higher than the forecast of Measurement Canada cost for 2018. This \$0.400 million avoided cost does not result in a reduction to 2019 O&M costs, but will still result in lower rates for customers than in the absence of AMI.

2

3 21.1 Please explain why the \$0.4 million in avoided costs, which are identified by FEI
4 as being 'non-AMI', do not result in a reduction to the 2019 O&M costs.

5

6 **Response:**

7 Please refer to the response to BCOAPO IR 1.16.1.

8

9

10

11 21.2 Will the avoided costs result in a reduction in O&M or other costs in any other
12 year? Please explain why or why not.

13

14 **Response:**

15 The avoided costs have already resulted in reductions to O&M – Measurement Canada
16 compliance costs are near zero as forecast in the AMI CPCN application. It is the estimated
17 \$0.400 million in additional savings that were forecast to increase in 2018 based on the forecast
18 non-AMI costs that will not result a reduction to 2019 or future year O&M costs. However, in the
19 absence of AMI, FBC would have incurred these costs. Thus, they are considered an avoided
20 cost benefit of the AMI project.

21

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1 **22. Reference: Exhibit B-2, page 49**

6.3.4.3 2018 Compliance Audit

FBC's triennial MRS audit will conclude in August 2018. Notification of the audit was received on April 24, 2018, and the scope of the audit covers all of FBC's registered functions which include both Critical Infrastructure Protection (CIP) and Operations and Planning (O&P) standards. The formal audit with the Western Electricity Coordinating Council (WECC) auditors was conducted over a two-week period from July 23 to August 3, consisting of a one week off-site data review and a one week on-site visit to conduct interviews, clarify outstanding questions and visit specific Facilities. Preparation and submission of evidence was required several months in advance of the two-week formal audit period. A total of 22 standards will be assessed and evidence submitted to WECC. FBC anticipates receiving a draft report of the audit assessment and findings in September 2018. In Order G-139-14 the Commission confirmed that as a non-recurring expenditure, MRS audits should not be included in Base O&M²¹.

The Company continues to work towards maintaining MRS compliance and forecasts the costs related to the 2018 audit to be \$0.350 million.

2

3 22.1 Please confirm that it is the actual costs that will flow through to ratepayers, and
4 not the estimate.

5

6 **Response:**

7 Confirmed. The difference between the forecast and actual cost is included in the Flow-through
8 deferral account. See Table 12-4, Line 12, and Table 6-6 for the Approved and Projected MRS
9 Incremental O&M Expenses, including the compliance audit.

10

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1 **23. Reference: Exhibit B-2, pages 49 and 50**

2 **6.3.5 Annual Inspection Costs for Upper Bonnington Old Units**

The Upper Bonnington (UBO) Old Units Refurbishment project commenced in 2017. UBO Unit 3 was refurbished in 2017, the refurbishment of Unit 4 is proceeding in 2018; Unit 1 is planned for 2019 and Unit 2 for 2020. The Company will not carry out the annual inspections on the units while out of service for refurbishment. This results in an estimated savings of \$0.040 million per unit.

The O&M reduction related to the annual unit inspections is a one-time reduction to O&M Expense in the year that a unit is refurbished. A unit will once again undergo annual inspections following refurbishment. Therefore, the level of Base O&M expenditures is not impacted on an

ongoing basis. For this reason, the O&M reduction is outside of the formula O&M amount. Because these are avoided costs, there will not be a future true-up of this value.

3
4 23.1 Please confirm that if the O&M reduction is outside of the formula O&M amount,
5 then the savings accrue entirely to the ratepayer.
6

7 **Response:**

8 Confirmed. The avoided cost of the annual inspection is shown in Section 11, Schedule 20,
9 Line 29 as a reduction to O&M Expense.

10
11
12
13 23.1.1 If not confirmed, please explain why not.
14

15 **Response:**

16 Please refer to the response to CEC IR 1.23.1.
17
18
19
20

21 23.2 Please confirm or otherwise explain that as the costs are 'avoided costs' they are
22 essentially estimates, and have no 'actual saved value' to which they could be
23 trued up.
24

25 **Response:**

26 Confirmed.

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23.3 Did FortisBC anticipate these savings in the PBR process?

Response:

FBC did not address the temporary reduction in inspection costs for the Old Units in the PBR Application. The Forecast O&M component was included in the PBR Plan as a mechanism by which costs or savings incremental to the Base O&M Expense can be addressed.

FBC identified in the Business Case for the UBO Old Units Refurbishment project filed in the Annual Review for 2017 Rates that "O&M Expense would be reduced by approximately \$0.040 million in each year during construction (escalated by inflation annually) as a result of the elimination of the annual unit inspection while each unit is undergoing the life extension work."⁴ The Company notes that the O&M reductions in the Annual Review materials for 2018 and 2019 had not been escalated for inflation and has provided the correct calculations below, based on the PBR escalation factors for O&M. The table shows that the O&M reduction should have been \$0.041 million in each of 2018 and 2019.

FBC will adjust the 2019 O&M reduction by \$0.002 million to \$0.042 million to recognize the escalation omitted in the 2018 and 2019 original calculations. The correction will be included in the Evidentiary Update to be filed on September 25, 2018.

Line No.	Year	2017	2018	2019	Cumulative
1	O&M Net Inflation Factor	100.886%	101.304%	102.376%	
2					
3			(\$ millions)		
4	Inspection Costs, Escalated	(0.040)	(0.041)	(0.041)	(0.122)
5	Inspection Costs, Annual Reviews	(0.040)	(0.040)	(0.040)	(0.120)

23.3.1. If yes, please provide the evidence where FortisBC provided its estimates of savings and the impact on ratepayers.

Response:

Please refer to the response to CEC IR 1.23.3.

⁴ FBC Annual Review for 2017 Rates, Appendix D, page 23.

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23.3.2. If no, please explain why not.

Response:

At the time of filing the PBR Application, the amount and timing of the O&M savings for the annual inspections was not known. Further, at that time, FBC intended to seek approval for the UBO Old Units Refurbishment project (UBO Project) by way of a CPCN application, and the timing of the CPCN Application was not certain.

In the PBR Decision (page 175) accompanying Order G-139-14, the Commission stated:

To the extent that a project results in a reduction of maintenance expenditures, the utility will have the opportunity to underspend its maintenance spending envelope. The Panel recommends that, if capital associated with a particular CPCN is excluded from the formula, the CPCN review of that project should include an assessment by the Commission of any potential impact of the project on O&M. If appropriate, an adjustment to the formula based O&M spending envelope should then be made.

As directed by Order G-80-16, FBC sought approval for the UBO Project in FBC's Annual Review for 2017 Rates instead of through a CPCN application as intended. As stated in the response to CEC IR 1.23.3, the Forecast O&M component in the PBR Plan mechanism provides a mechanism to recognize incremental O&M costs and savings as they occur. Given the costs of the UBO Project were approved to be forecast outside of O&M, FBC considered it consistent with the recommendation of the Commission above that the one-time reduction in maintenance costs be credited to customers as FBC has proposed.

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1 **24. Reference: Exhibit B-2, page 53 and page 8**

7.2 2019 REGULAR CAPITAL EXPENDITURES

Under the PBR Plan, FBC's regular capital expenditures are primarily determined by formula, with the addition of a number of items that are forecast outside the formula on an annual basis. In 2019, the formula capital is \$44.859 million, representing a 2.376 percent increase from 2018, entirely due to the formula drivers. Regular capital expenditures forecast outside the formula are \$7.771 million, representing a 96.984 percent increase from 2018, primarily due to higher incremental capital expenditures for MRS and AMI sustainment capital. Overall, regular capital expenditures are forecast to increase from 2018 to 2019 by 10.190 percent. The components of 2018 regular capital expenditures are shown in Table 7-1 below.

FBC is projecting that capital expenditures will be above the formula in 2018.

1.4.3.1 Capital Spending Results

FBC's capital spending has been above the formula amount in each year of the PBR term to date, and this trend is expected to continue. Table 1-3 below shows the capital spending from 2014 to 2018.

Table 1-3: Capital Expenditures 2014 to 2018 (\$ millions)

	2014			2015			2016		
	Actual	Formula	Variance	Actual	Formula	Variance	Actual	Formula	Variance
Formula Capital	\$ 42,985	\$ 42,193	\$ 0.472	\$ 44,791	\$ 42,394	\$ 2,408	\$ 45,838	\$ 42,574	\$ 2,964
Pension/OP&B	6,396	6,396	-	4,253	4,253	-	3,674	3,674	-
Total	\$ 49,381	\$ 48,589	\$ 0.472	\$ 49,043	\$ 46,637	\$ 2,408	\$ 49,512	\$ 46,248	\$ 2,964
Variance			0.97%			5.16%			6.37%

	2017			2018			Cumulative		
	Actual	Formula	Variance	Forecast	Formula	Variance	Actual	Formula	Variance
Formula Capital	\$ 59,053	\$ 43,254	\$ 15,799	\$ 55,212	\$ 43,818	\$ 11,394	\$ 247,558	\$ 214,523	\$ 33,035
Pension/OP&B	3,539	3,539	-	3,630	3,630	-	21,492	21,492	-
Total	\$ 62,592	\$ 46,793	\$ 15,799	\$ 58,842	\$ 47,448	\$ 11,394	\$ 269,050	\$ 236,015	\$ 33,035
Variance			33.78%			24.01%			14.00%

24.1 FBC states that it expects the spending above formula to continue. Does FBC have an estimate as to the likely variance for 2019?

Response:

Please refer to the response to BCUC IR 1.7.8.

24.1.1 If yes, please provide.

Response:

Please refer to the response to BCUC IR 1.7.8.

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24.1.2 If no, please explain why not.

Response:

Please refer to the response to BCUC IR 1.7.8.

24.2 Please identify any projects that have been deferred from other years and will be undertaken this year, and provide the estimated costs.

Response:

Please refer to the response to BCUC IR 1.7.3.1.

24.3 Please provide, for each project, an estimate of whether or not the costs are higher, lower, or the same as if they were undertaken earlier.

Response:

Please refer to the response to BCUC IR 1.7.9 describing the cost escalation for the re-prioritized projects.

24.3.1 If they are expected to have higher or lower costs, please provide quantification.

Response:

Please refer to the response to BCUC IR 1.7.9.

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24.3.2 Please identify and provide quantification for any benefits related to each project that may have been deferred as a result of the project deferrals.

Response:

FBC interprets the question as requesting FBC to provide examples of foregone benefits associated with reprioritizing scheduled work into future years. Examples of these include:

- delays in improvements to business processes or efficiency; and
- delays in reducing system risk and the potential occurrence of failures by not replacing equipment earlier.

FBC confirms that only projects that were flexible in 2014 to 2017 were reprioritized to subsequent years as explained in section 2.7.2 of Exhibit B-2, and thus does not consider that there was a material increase in system risk as a result of reprioritizing the work to the following year. Improved business processes and efficiency associated with the SAP integration project were deferred by one year by shifting the project initiation to 2017. FBC is unable to quantify the impacts of deferring the projects, as the consequential additional costs were not specifically tracked.

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1 **25. Reference: Exhibit B-2, page 105 and 106**

12.2.2 MSP Premium Reduction

On December 27, 2017, the provincial government announced the reduction of MSP premiums by 50 percent, effective January 1, 2018, and in the February 2018 provincial budget further announced the elimination of MSP premiums by January 1, 2020.

The MSP premium reduction meets the exogenous factor criteria identified above.

- The savings are attributable entirely to the provincial government's reduction in MSP premiums, which is an event outside the control of a prudently operated utility.
- The savings, which are described in sections 6.3.7 and 7.2.2, are directly and solely attributable to the exogenous event. The premium reduction, implemented in 2018, reduces benefits costs that were included in the 2013 base O&M expense and base capital used to determine costs under the PBR formula.
- This exogenous event, which occurred in 2018, could not have been foreseen at the time the base O&M expense and base capital were set.
- The savings are prudently incurred; MSP premiums are set by provincial legislation.
- The savings are forecast at \$0.350 million in 2018 and 2019, which exceeds the materiality threshold of \$0.301 million. The O&M portion of the premium reduction is forecast to be \$0.168 million in each year, with the remaining \$0.182 million in capital.

The actual reductions will vary depending on the number of employees for whom FBC pays the MSP premium in 2018 and 2019. Variances between the amounts forecast and actual reductions will be returned to or recovered from customers in future years.

25.1 Are the savings of \$0.35 million forecast for each of 2018 and 2019, or for the years together?

Response:

The forecast savings of \$0.35 million (O&M and capital portions) are for each of the years, 2018 and 2019, and not cumulative.

25.2 When will the variances for 2018 be returned to or recovered from ratepayers?

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1 **Response:**

2 The forecast reduction in MSP premium for 2018 is being returned to ratepayers in 2019 rates.

3 Additionally, any variance between the forecast reduction and the actual reduction for 2018 will
4 be returned to or recovered from customers in 2020 as part of the true-up to the Flow-through
5 deferral account.

6

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1 **26. Reference: Exhibit B-2, page 108**

FBC is currently in the process of assessing its arrangements that qualify as operating leases which will need to be recorded as assets and liabilities on the balance sheet for external financial reporting purposes unless they are determined to be immaterial. FBC's assessments to date have identified its agreements to rent muster stations and office space to be recognized as right-of-use assets and lease liabilities, although the analysis of other agreements will continue throughout 2018. FBC's conclusions on the recognition of its leases under the new standard are subject to final review by the Company's external auditors and could be affected by certain utility industry interpretative issues which remain outstanding.

While FBC's analysis to date does not suggest it is necessary to change how FBC recognizes its lease arrangements for regulatory purposes in its 2019 Annual Review, the final assessments and conclusions could result in timing differences between how FBC recognizes leases for rate-setting purposes and how it is necessary to recognize the leases for external accounting purposes. Since future revenues are reasonably expected to permit recovery or refund of any lease timing differences arising from the implementation of ASC 842 over the term of the lease arrangements in future revenue requirements, FBC would recognize any such timing differences as either a regulatory asset or liability for external financial reporting purposes. As such, for the 2019 Annual Review, FBC has not reflected right-of-use assets, lease liabilities or deferral accounts resulting from the implementation of ASC 842 in its financial schedules.

2
3 26.1 When does FBC expect that it will have a final determination regarding the
4 recognition of leases?

5
6 **Response:**

7 FBC expects to have a final determination of the recognition of leases under ASC 842 in time
8 for the required implementation effective January 1, 2019. FBC's implementation of the new
9 lease standard is still subject to industry application and auditor review. At this time, the
10 implementation of ASC 842 is not expected to affect customer rates or result in changes to the
11 FBC Annual Review of 2019 Rates.

12
13
14
15 26.2 Approximately what threshold would count as being 'immaterial'?

16
17 **Response:**

18 While the implementation of the new lease standard will continue to be assessed throughout
19 2018, the quantitative thresholds to determine if a right-of-use asset and liability will be recorded
20 on the balance sheet are currently estimated as total payments over the term of any lease

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1 agreement equal to or above \$50 thousand. Any lease agreement with aggregate payments
2 over the term that total under \$50 thousand will be considered as immaterial in this context.
3 This threshold is still subject to change based on industry application and auditor review. The
4 implementation of ASC 842 is not expected to affect customer rates or result in any changes to
5 the FBC Annual Review of 2019 Rates, even if an arrangement qualifies as a lease under ASC
6 842 and is in excess of the \$50 thousand threshold.

7

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1 27. **Reference: Exhibit B-2, page 108**

12.3.1.2 Cloud Computing

FBC is requesting approval of a one-year variance from US GAAP to capitalize cloud computing implementation costs in 2019, consistent with a new accounting standard expected to be effective in 2020.

FBC continues to pursue IS solutions that better meet customer expectations, make business processes more efficient and replace end of life existing IS platforms with cost effective solutions. While these opportunities are initially identified by FBC, the form in which the solution is offered, either through traditional on-premise software or through cloud computing, is not known until discussions occur with the external vendor. An increasing number of IS solutions are being offered in the form of off-premise cloud computing services. Cloud computing includes Software as a Service (SaaS), whereby an entity runs applications from the cloud service provider on a subscription basis, and Infrastructure as a Service (IaaS), whereby an entity procures a subscription for managed infrastructure services, such as servers, from a central provider. Cloud computing services replace traditional on-premise hardware and software that are recognized as capital expenditures for financial statement and regulatory purposes.

changing and that utilities are having to respond to modern customer expectations and evolutions in technology. The resolution also stated that "the existing regulatory accounting rules may be interpreted, if appropriate, to allow for utilities to capitalize cloud-based software". NARUC encouraged State regulators to consider similar regulatory accounting treatment for cloud computing solutions as it would for on-premise solutions, which would be paid out of a utility's capital budget.

While the new *ASU 350-40* supports the capitalization of initial external vendor cloud computing implementation costs and can be applied retroactively, it is not expected to become effective until 2020. FBC therefore requests approval to adopt the new guidance for rate-setting purposes beginning in 2019. There are a number of benefits of this approach:

- The proposed approach of capitalizing cloud computing implementation costs during 2019 would be consistent with the new *ASU 350-40* that will become effective in 2020.
- The proposed approach would avoid a one-year change in capitalization policies and the associated potential volatility in O&M and capital.
- The proposed approach would remove that uncertainty regarding the treatment of IS implementation costs created by the existing guidance.
- The proposed approach keeps FBC's O&M and capital funding envelopes consistent with the 2013 Base O&M and capital amounts for the final year of the PBR term, which were based on the assumption that IS implementation costs would be capitalized.

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FBC is therefore requesting approval for a one-year variance from US GAAP for 2019 to recognize initial cloud computing implementation costs as capital expenditures within the PBR capital formula. This treatment is consistent with the new ASU 350-40 which becomes effective in 2020 and is consistent with how on-premise computer hardware and software costs have traditionally been recognized for regulatory purposes.

27.1 Please identify and quantify any ratepayer or shareholder impacts that could occur as a result of the one year variance from US GAAP for 2019.

Response:

Please refer to the responses to BCUC IRs 1.31.1 and 1.31.5.

27.2 Please provide the relevant provisions of US GAAP and the new ASU 350-40 which give rise to this issue.

Response:

ASU 2018-15, which was finalized on August 29, 2018, made the following relevant changes to Topic 350-40, paragraph-30-5:

An entity shall apply the General Subsection of this Section as though the hosting arrangement that is a service contract were an internal-use computer software project to determine when implementation costs of a hosting arrangement that is a service contract are and are not capitalized.

This ASU removes the requirement for FBC to request a variance from GAAP as the new guidance permits FBC to capitalize vendor implementation costs for cloud computing arrangements.

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1 **28. Reference: Exhibit B-2, page 112 and 114**

Item	Consideration	Regulatory Proceeding Costs
III.	Identify any alternate treatments that were considered, including an overview of what the accounting treatment would be in the absence of approval of the request to establish a regulatory account, and explain why these alternate treatments may not be appropriate.	In the absence of deferral accounts for regulatory proceedings, the costs of regulatory proceedings would have to be forecast as an O&M expense (outside of the PBR formula O&M since regulatory proceeding costs are not included in Base O&M Expense) and trued up annually by way of the Flow-Through deferral account. FBC considers this to be a more cumbersome and less efficient means of accounting for regulatory proceeding costs. It is accepted regulatory practice to defer the costs of regulatory applications for review and recovery following the regulatory review of the application itself. Review and recovery after the completion of the regulatory process allows for more transparency as the history of the costs is simpler to track and report on.

2 **12.4.1.2 Rate Design and Rates for Electric Vehicle (EV) Direct Current Fast Charging Service Application**

On March 16, 2018 FBC filed an application for approval of a new rate schedule for EV Charging Service at FBC-owned EV charging stations. By Order G-9-18 the Commission approved interim rates for the charging service and adjourned the proceeding. FBC expects the proceeding to resume following the conclusion of the BCUC Inquiry into the Regulation of Electric Vehicle Charging Service.

FBC is seeking approval of a deferral account attracting a STI rate of return to capture the external costs of this application, estimated at \$0.060 million (\$0.44 million after tax). FBC will propose the disposition of this account in a future application.

3
4 28.1 Does FBC expect the costs of the proceeding to increase beyond the \$0.060
5 million, or does this represent the total cost expected? Please explain.
6

7 **Response:**

8 Please refer to the response to BCUC IR 1.32.2.

9
10
11
12 29.1.1 If FBC expects that the costs may increase beyond the \$0.060 million,
13 please provide quantification of the expected future increases.
14

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1 **Response:**

2 Please refer to the response to BCUC IR 1.32.2.

3

4

5

6 28.2 When does FBC expect to propose disposition of this account?

7

8 **Response:**

9 FBC anticipates that the review of its application will resume following a decision in Phase 1 of
10 the BCUC Inquiry into the Regulation of Electric Vehicle Charging Service and that it will
11 propose the disposition of the account in its 2020 rate setting process.

12

13

14

15 28.3 Please provide a description of the types of costs that are included as the
16 'external costs of this application'.

17

18 **Response:**

19 FBC includes in its regulatory proceeding deferral accounts the following, as applicable to the
20 proceeding: the Commission's direct costs, participant assistance cost awards, notice
21 publication costs, consulting and expert fees, external legal counsel fees, courier and
22 miscellaneous administrative costs.

23

24

25

26 28.4 Does FBC expect that the application will benefit ratepayers? Please explain why
27 or why not.

28

29 **Response:**

30 Utility load growth from EVs can benefit all ratepayers by providing societal benefits and
31 reducing utilities' average cost of service. FBC's proposed rate to recover the capital and
32 operating costs of its EV charging station service as filed in the application is based on the cost
33 of service of stations, net of contributions in aid of construction received from other parties. It is
34 likely that in early years of operation, costs will exceed revenues and could result in small
35 deficits based on the conventional components of cost of service analysis. However, as the

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demand grows over the coming years, the service may generate a net financial benefit to general ratepayers over time. Given the potential for low carbon fuel credits, this could occur in the early years.⁵ Further, incorporating more EVs into the grid can increase electricity sales and overall grid reliability, lowering the average cost of electricity per kWh, and reducing retail electricity prices for all ratepayers. Finally, incorporating EVs into the grid provides other non-financial societal benefits such as better air quality and health, economic development and other environmental benefits.

28.5 Please explain and quantify the ratepayer benefits anticipated for these costs.

Response:

As discussed in response to CEC IR 1.28.4, the potential for ratepayer benefits anticipated for these costs depends on how demand grows over time. In addition, it is difficult to quantify the potential for low carbon fuel credits at this time to quantify the total net benefits to FBC's ratepayers.

However, FBC conducted a sensitivity review with different demand growth over time to compare the forecast cost of service with the revenue stream at proposed rates.⁶ Using the proposed rate of \$9/half hour and demand growth at 30 percent per year, a net benefit of \$0.094 million⁷ over the 10 year evaluation period is anticipated based on the levelized cost of service analysis.

28.6 Please confirm that the after-tax impact of the \$0.060 million costs for this application are \$0.04 million after tax and not \$0.44 million after tax.

Response:

Please refer to the response to BCUC IR 1.33.2.1.

⁵ EV Inquiry, Exhibit C12-2, page 20, lines 13-18.

⁶ FBC EV DCFC Service Application, Page 22, Section 3.4.6, Figure 3-1.

⁷ Low carbon fuel credits have not been included in this calculation, and as a result, there is the potential for this to be higher.

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1 **29. Reference: Exhibit B-2, page 115**

FBC is forecasting a 2019 revenue surplus of \$5.759 million (\$4.204 million after tax) as shown in the financial schedules.³² FBC seeks approval to add the forecast 2019 revenue surplus to the 2018 Revenue Deficiency account and re-name the account the 2018 – 2019 Revenue Surplus account. The following table summarizes the 2018 and projected 2019 additions to the deferral account and the projected 2019 ending balance of \$3.550 million (credit). FBC will propose the amortization of this account in a future application in order to mitigate future rate increases.

Table 12-2: 2018 – 2019 Revenue Surplus Deferral Account

Line No.	Description	
1	2018 Revenue Deficiency (G-131-18)	\$ 0.654
2	2019 Projected Revenue Surplus	(4.204)
3	Total Revenue Surplus to be returned in future years	<u>\$ (3.550)</u>

FBC also requests approval to apply a WACD rate of return to this account, effective January 1, 2019. Since the 2018 revenue deficiency is not being amortized at this time, a WACD rate of return is consistent with the treatment of FBC's other multi-year deferral accounts.

2

3 29.1 When does FBC expect to return the revenue surplus to ratepayers? Please
4 provide a year if FBC has a view on when it expects to be appropriate to return
5 the revenue surplus.

6

7 **Response:**

8 The purpose of deferring the net revenue surplus is to avoid a rate decrease in 2019 followed by
9 a larger rate increase in 2020. At this time, FBC expects to begin amortizing the revenue
10 surplus account in order to mitigate rate increases beginning in 2020. Whether the account will
11 be fully amortized in 2020 will depend on the entirety of the revenue requirements in 2020 and
12 possibly future years. Please also refer to the response to BCMEU IR 1.1.1.

13

14

15

16 29.2 Please explain why this surplus should not be returned to customers at this time,
17 and quantify the rate impact that returning this surplus would have.

18

19 **Response:**

20 Please refer to the response to BCMEU IR 1.1.1.

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29.3 Please quantify the impact to the ratepayers of deferring a return of the projected revenue surplus by 1 year, 2 years and 3 years.

Response:

Please refer to the response to BCMEU IR 1.1.1.

29.4 2019 is the final year of the PBR. Does FBC expect to return to cost of service in 2020? Please discuss.

Response:

With the success of its past PBR Plans, FortisBC will be bringing forward another PBR application, incorporating the core elements that are fundamental to the success of a PBR Plan, such as incenting the utility to capture efficiencies and promoting regulatory efficiency. FortisBC will be proposing options for consideration to address the capital formula related pressures that the Company has been challenged with in recent years.

29.5 If FBC expects to return to cost of service ratemaking, how is this likely to impact the return of the revenue surplus to ratepayers, if at all. Please explain.

Response:

The form of regulation is not a consideration in the return of the revenue surplus to ratepayers. The revenue surplus is expected to be partially or completely amortized in 2020, depending on the rate increase and the need for rate mitigation.

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1 **30. Reference: Exhibit B-2, page 115**

2 ***12.4.1.3 BC Hydro Waneta 2017 Transaction***

BC Hydro filed an application on October 30, 2017 to acquire the remaining two-thirds interest in the Waneta Dam and associated assets. The Waneta 2017 Transaction involved issues of importance to FBC's future expenses and customer rates. The Company incurred external legal costs of \$0.124 million (\$0.091 million after tax) for its participation in this proceeding.

FBC is seeking approval of a deferral account attracting a STI return to capture the costs of participation and proposes to amortize the costs over one year, in 2019.

2

3 30.1 Please identify the company that had developed the Waneta 2017 Transaction
4 with Teck before Hydro exercised its option to acquire the remaining 2/3rd
5 interest in the Waneta Dam.

6

7 **Response:**

8 The entity was FBC's parent company, Fortis Inc., which is an unregulated investor-owned
9 company.

10

11

12

13 30.2 Please briefly elaborate on the issues of importance to FBC's future expenses
14 and customer rates.

15

16 **Response:**

17 Please refer to the response to BCUC IR 1.33.1.

18

19

20

21 30.3 Please briefly explain why external legal costs were required for this application.

22

23 **Response:**

24 FBC engaged external legal counsel as the Company does not have internal counsel with
25 litigation expertise.

26

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1 **31. Reference: Exhibit B-2, page 117, 118 and 119**

In accordance with the method set out in the table above, the calculation of the 2018 projected Flow-through amount of \$10.534 million credit is shown in Table 12-4 below. To calculate the amount to be distributed to customers, FBC has also included an adjustment for the difference between the projected ending 2017 deferral account credit balance of \$7.102 million embedded in 2018 rates and the actual ending 2017 deferral account credit balance of \$9.356 million, a credit difference of \$2.254 million. FBC notes that the financing return on this account is

2

included in the aggregate financing of deferral accounts financed at the STI rate at Section 11, Schedule 12, Line 33.

Table 12-4: 2018 Flow-through Deferral Account Additions (\$ millions)

Line No.	Description	Approved 2018	Projected 2018	Variance
1	Revenue	\$ (356.340)	\$ (366.184)	\$ (9.844)
2				
3	Power Purchase Expense	133.071	130.247	(2.824)
4				
5	Wheeling	5.171	5.281	0.110
6				
7	Water Fees	10.208	10.287	0.079
8				
9	O&M Tracked Outside of Formula			
10	Insurance Premiums	1.265	1.246	(0.019)
11	Advanced Metering Infrastructure Project	(1.139)	(1.139)	-
12	Mandatory Reliability Standards Incremental O&M	1.070	1.040	(0.030)
13	Upper Bonnington Unit 3 Annual Inspection	(0.040)	(0.040)	-
14	MSP Premium Reduction	-	(0.168)	(0.168)
15				
16	Property Tax	16.684	16.143	(0.541)
17				
18	Depreciation and Amortization	52.667	52.995	0.328
19				
20	Other Revenue	(8.416)	(9.609)	(1.193)
21				
22	Interest Expense	40.059	40.059	-
23				
24	Income Tax	9.633	13.225	3.592
25				
26	Working Capital Adjustment for AMI			(0.024)
27				
28	2018 After-Tax Flow-Through Addition to Deferral Account			(10.534)
29				
30	2017 Ending Deferral Account Balance True-Up			\$ (2.254)
31	2019 After-Tax Amortization			\$ (12.788)

3

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The true-up of \$2.254 million between the projected ending 2017 Flow-Through deferral account balance embedded in 2018 rates and the actual ending 2017 deferral account balance is primarily the net result of higher sales revenue net of power purchase expense due to weather-related increases in load, in addition to higher savings on market purchases of power. Similarly, an adjustment to include the difference between the projected and final actual amounts for 2018 subject to flow-through treatment will be recorded in the deferral account in 2019 and amortized in 2020 rates.

1

2 31.1 Please identify when the full amount of the Flow Through Deferral Account will be
3 distributed to customers.

4

5 **Response:**

6 The full amount of the 2018 Projected Flow-through amount plus the true-up to the 2017 amount
7 is being amortized in 2019 (see Section 11, Schedule 12, Line 5). The true-up, if any, to the
8 2018 Flow-through will not be known until year-end 2018 and will be amortized into rates in
9 2020.

10

11

12

13 31.2 Please identify and quantify the STI rate and the annual financing amounts for
14 this account.

15

16 **Response:**

17 The interest rate applied to FBC's STI-financed deferral accounts is 3.55 percent in 2018 and
18 4.12 percent in 2019 as set out in Table 8-1. Financing costs for the Flow-through deferral
19 account are included in the total for all deferral accounts financed at STI, as shown at Schedule
20 12, Line 33. Financing cost for 2018 on the mid-year balance of \$11.072 million (credit) is
21 \$0.393 million (credit) and on the 2019 mid-year balance of \$6.394 million (credit) is \$0.263
22 million (credit).

23

24

25

26 31.3 Please explain why these amounts are not being returned to customers by
27 adjustments to 2019 rates.

28

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1 **Response:**

2 The entirety of the 2018 Projected and 2017 true-up Flow-through amounts are being amortized
3 in 2019 (see Section 11, Schedule 12, Line 5). In total, forecast 2019 revenue at existing rates
4 results in a revenue surplus of \$5.759 million over the sum of revenue requirements, including
5 amortization of the Flow-through deferral account. FBC does not attribute the surplus to any
6 specific source or cost account. Please also refer to the response to BCMEU IR 1.1.1.

7

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1 **32. Reference: Exhibit B-2, page 129**

Table 13-10: Historical Telephone Abandon Rates

Description	2009	2010	2011	2012	2013	2014	2015	2016	2017	June 2018 YTD
Annual Results	2.2%	1.9%	1.7%	1.9%	2.0%	12.4%	2.7%	3.9%	4.7%	5.0%
Benchmark	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Threshold	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

In August of 2016, FortisBC implemented a new feature where customers can retain their place in the telephone queue by entering their phone number and requesting a call back. As soon as it is their turn in line, the system dials the recorded number and connects the customer with a Customer Service Representative (CSR).

In Appendix A to Order G-8-17, the Commission Panel directed FBC to include in its Annual Review for 2018 Rates a discussion of the impact, if any, that the new call back option has had on the Telephone Abandon Rate Service Quality Indicator and to discuss whether there are other measures, such as "Time Until Call Back is Received," which may provide additional value to FBC's existing informational indicators. Below, FBC provides an update to the information provided in the Annual Review for 2018 Rates.

In 2017, the new call back option was selected approximately 3,556 times, representing approximately three percent of the customers who called each month. In 2018 to the end of June, the new call back option has been selected approximately 1,629 times, representing approximately three percent of the customers who called each month year-to-date. It is not possible to distinguish between the average wait-time for customers utilizing the call back feature from the wait time of those not using the feature. The measurement of "Time Until Call Back is Received" is therefore not available. As described above, there are many other reasons a call may be abandoned other than waiting time, the most frequent being the use of avoidance messages on the IVR during outages. Since the number and size of outages are variable from

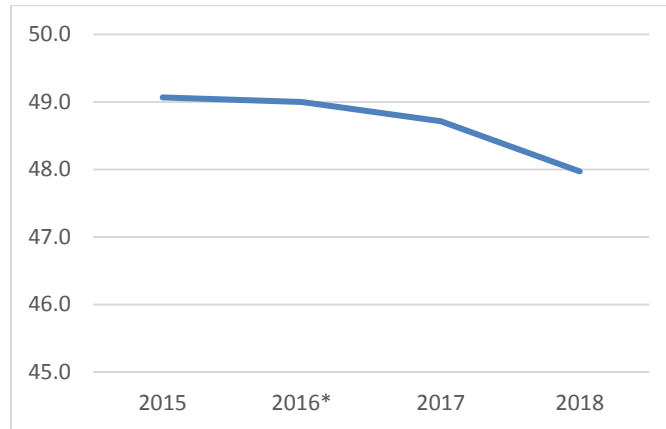
year to year, it is impossible to determine the impact that the call-back feature alone had on the abandon rate.

32.1 Please provide a numeric and graphic distribution of FBC's average wait times for the last three years.

Response:

The information requested is set out in the chart and table below.

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	In seconds
2015	49.1
2016	49.0
2017	48.7
2018	48.0

32.2 Did the purchase of the new feature include any analysis of how it was expected to impact customer wait times?

Response:

For clarity, the new feature did not require an additional purchase as it was a standard feature within the Contact Centre package. The call back feature was not expected to impact customer wait times. Instead, it allows customers to avoid waiting on hold by receiving a call back when it is their turn in line.

33.2.1 If yes, please provide.

Response:

Please refer to the response to CEC IR 1.32.2.

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32.3 Are there any other metrics which FBC collects which enables it to determine how long customers are typically waiting to speak to a customer service representative?

Response:

FBC believes the best indicator of customer wait times is the Telephone Service Factor (TSF) as it measures the experience of the majority of customers. The other metric that relates to customer wait times is the Average Speed of Answer (ASA), which measures the average amount of time customers wait for their call to be picked up by a representative.

33.3.1 If yes, please provide and provide the last three years' data.

Response:

Please see the chart below for FBC's Historical Telephone Service Factor (TSF):

Description	2015	2016	2017	August 2018 YTD
Annual Results	71%	70%	70%	72%
Benchmark	70%	70%	70%	70%
Threshold	68%	68%	68%	68%

Please also refer to the response to CEC IR 1.32.1 for historical average speed of answer (ASA).