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February 10, 2020

VIA ELECTRONIC MAIL

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

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

Dear Sirs/Mesdames:

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

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

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

Yours truly,

OWEN BIRD LAW CORPORATION



Christopher P. Weafer

CPW/jj
cc: CEC
cc: FortisBC
cc: Registered Interveners

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**COMMERCIAL ENERGY CONSUMERS
ASSOCIATION OF BRITISH COLUMBIA**

FINAL SUBMISSIONS

**FortisBC Energy Inc. and FortisBC Inc. Multi-Year Rate Plan
Application for 2020 to 2024
Project No. 1598996**

February 10, 2018

Commercial Energy Consumers Association of British Columbia

FortisBC Energy Inc. and FortisBC Inc. Multi-Year Rate Plan Application for 2020 to 2024

Project No. 1598996

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**COMMERCIAL ENERGY CONSUMERS ASSOCIATION
OF BRITISH COLUMBIA**
FINAL SUBMISSIONS

**FortisBC Energy Inc. and FortisBC Inc. Multi-Year Rate Plan
Application for 2020 to 2024
Project No. 1598996**

The Commercial Energy Consumers Association of BC (the “**CEC**”) represents the interests of ratepayer consuming energy under Commercial Tariffs in applications before the BC Utilities Commission (“**BCUC**” or “**Commission**”).

FortisBC Energy Inc. (“**FEI**”) and FortisBC Inc. (“**FBC**”), (each a “**Utility**”, and collectively “**FortisBC**”, the “**Companies**” or the “**Utilities**”) apply to the Commission for approval of multi-year ratemaking plans (“**MRPs**”) (the “**Proposed MRPs**”) that provide the basis for FEI’s and FBC’s rates from 2020 to 2024 (the “**Application**”).

The CEC has participated in the proceeding and reviewed the evidence and provides the following Final Submissions for the Commission’s review and consideration.

I. SUMMARY POSITION AND RECOMMENDATIONS

1. The CEC submits that the Application is not in the public interest as proposed.
2. The CEC is of the view that the proposed Application provides for significant opportunities for the Utilities’ shareholders to be rewarded, over and above the fair return standard, at the expense of ratepayers, and does not have sufficient justification to warrant the addition of key elements such as the Targeted Incentives.
3. The CEC submits that the current Application has made very significant changes to the existing PBR which serve the Utility interests but are projected not to provide commensurate ratepayer benefits.
4. The CEC notes that the Commission PBR Decision referenced a certain lack of trust between the ratepayers and the Utility.¹
5. The CEC does not wish to diminish the sincere interest of the Utilities in protecting its customers.
6. The CEC notes that FortisBC states that a utility should strive to be efficient whether under cost of service regulation or performance-based regulation, and will continue to

¹ FEI Multiyear Performance Based Ratemaking Plan for 2014 Through 2018 (PBR Decision) page 13

seek efficiencies regardless of whether or not the Commission approves the Utilities' Application.²

7. The CEC is nonetheless of the view that Applications such as this one can serve to exacerbate the ratepayer concerns, with regard to 'a fair return for Utility shareholder' rather than alleviate them.
8. The theory of embedding 'incentives' into ratemaking encourages the Utilities to seek means to exceed their previously established a standard for a fair ROE, while hopefully benefitting customers as well. However, it also contributes to customer apprehension as to the fairness³ and value of the extraordinary returns when customers may already be paying for the investments used to create the benefits and or could be paying. When management activities are more opaque and the performance based ratemaking ("PBR") or MRP formulas are more complex, and changing components from term to term there is an opportunity for mistrust to develop.
9. The CEC recommends that the Commission deny the MRP portion of the Application and advise the Utilities that a formula-based application without the incentive mechanisms would be more likely to attract the Commission's approval.

II. INTRODUCTION

PBR AND PROPOSED MPR VS OTHER FORMULAIC RATEMAKING

10. The CEC participated in the last PBR proceeding, and in the various annual reviews, and has expressed concerns regarding the formula, the practices and the outcomes over the last several years.
11. In particular, the CEC is concerned that under the formulas the two Utilities are provided with complicated formulas and are essentially incented to work the system. The premise being that the benefits are 'shared'. From a ratepayer's perspective, the ratepayers are paying extra for specific identifiable management actions that should be seen as normal management responsibilities, the benefits from which should be provided to the ratepayers.
12. The CEC submits that the concept of 'sharing' the benefits is akin to acquiring a dollar from someone, returning 50 cents and naming it a sharing of benefits. A lot of the 'savings' that the Utilities make, from the CEC's perspective, are actually overpayments by the ratepayers.
13. Additionally, the CEC submits that it is very difficult to establish multi-component PBR terms that eliminate, from a ratepayer perspective, non-cost-effective results from improvement opportunities for the Utility.

² Exhibit B-16, CEC 2.51.1

³ Exhibit B-16, CEC 2.51.1

14. A key theory behind PBR and the proposed rate plans is that they ‘encourage utilities to become more efficient in their operations’.⁴
15. The CEC submits that there is no persuasive evidence to support FortisBC’s contention that incentives encourage a continued focus on efficient operations that should not already occur under prudent management. There is evidence that the opportunities are now much more limited, which the CEC submits would support not enabling an incentive mechanism because it could be a dysfunctional incentive⁵.
16. The CEC further submits that there is no persuasive evidence that the Companies’ operations have become more efficient from a cost benefit perspective.
17. To the contrary, the CEC is of the opinion that FortisBC’s focus has logically been on reducing costs so as to underspend the formula values and secure the incentive payment.
18. The CEC submits that without the opportunity for the Commission and ratepayers to vet spending and explore the cost benefit relationship it is difficult to ascertain whether or not any cost reduction is beneficial overall, or simply a result of an overly generous formula.
19. The CEC submits that the appropriate incentive should not be for underspending O&M or capital, but instead for spending wisely with consideration for the cost/benefit relationship.
20. The CEC submits that Utilities will likely be efficient in their operations if they are held to a challenging cost-effective spending bar, and permitted to benefit from efficiencies they find, or suffer consequences from inability to rise to the challenges.
21. Further, periodic comprehensive reviews should be able to ensure this is properly managed.
22. The CEC notes that BC Hydro’s recent testimony in the revenue requirements application (“**RRA**”) is that in addition to other budgeting constraints it was able to ‘absorb’ \$24 million in costs into its existing budgets⁶ to accommodate spending pressures, this was undertaken without PBR.
23. The CEC also notes significant efficiencies outlined in the recent BC Hydro Comprehensive Review Phase 1.
24. The CEC submits that where utilities are rigorously held by the regulator to contain spending and retain high levels of cost-effective service, they will do so.
25. The CEC is not opposed to formulaic ratemaking and notes that the Commission is entitled to establish formulas as an appropriate means of regulation.

⁴ FortisBC Final Argument page 8

⁵ Exhibit B-10, BCUC 1.13.2, Page 95, lines 9 to 17

⁶ BC Hydro RRA Transcript Volume 7 page 992-993

26. The CEC submits that a preferred form of regulation could be to establish formulas on a long-term basis for setting most of the Utilities controllable costs but hold the Utilities to a high ‘bar’ in the establishment of the cost-effectiveness presumption of prudence.
27. The Utilities could then ‘keep’ whatever they are able to achieve over and above the challenging formulas and the ratepaying customers should benefit from periodic rebasing of the ‘bar’ used for rate making to achieve cost-effective service performance.
28. The CEC does not believe there is a significant need for factors such as carry over mechanisms, X-Factors earnings sharing mechanisms, etc. In the CEC’s view, the PBR and MPR concepts serve to complicate the issue and open up non cost-effective opportunities for the Utility shareholder to benefit inappropriately.
29. Having long-term formulas which hold spending to a challenging cost-effective level over a significant period of time could eliminate the issue of deferring expenditures to inside and outside the term, or whether there is incentive at the end of the term to ‘invest in savings’ because the Utility will make the best ‘long term’ decision in determining how to make savings and when to defer investment. The CEC would support a long-term approach to formulas for controllable costs with regular rebasing points and believes this would be an efficient regulatory approach as well as an effective approach for giving the Utilities the opportunity to demonstrate prudent cost-effective management.
30. To the extent that the Utilities believe there are major projects which require additional funding, or have special characteristics that make the ratepayer interests inconsistent with the Utility interest in controlling spending, the Utility can present the project for review, by the Commission, in a manner similar to a business case. The CEC notes that utilities are not restricted by the BCUC from entering into long-term, multi-year contracts with suppliers under regulation, whether cost of service regulation or PBR.⁷ The CEC believes that projects such as the Targeted Incentives and Clean Growth Fund may qualify for additional financial return support under appropriate conditions.
31. Overall, the CEC recommends that the Commission carefully consider the costs, complications and risk of the system being ‘worked’ that are inherent in the current MRP, and weigh these against the likelihood of actually achieving incremental benefits from such a plan beyond those that could be achieved through prudent management and regulation than more complexly through shareholder incentives.

EVALUATION OF THE CURRENT PBR

32. In response to BCUC 1.8.4, FortisBC provided a table detailing actual and formula O&M numbers for each of the years covered by the previous PBR.⁸
33. For each of the years 2014 – 2018, FEI underspent the O&M formula in amounts ranging from \$699,000 (1.33%) to \$1,757,000 (3.28%).

⁷ Exhibit B-16, CEC 2.57.1

⁸ Exhibit B-10, BCUC 1.8.4

34. The CEC notes that these O&M “savings” have contributed to an enhanced ROE for the utilities for every year of the PBR term for both Utilities.
35. The result has been inappropriate payoff benefits to the Utilities for investments required to achieve the benefits making the cost of the benefits received by ratepayers excessive (for instance, deleting unneeded FTE positions and receiving ½ the net formula benefit for a number of years).

		2014	2015	2016	2017	2018	Average
FEI ROE	Actual	9.20%	9.19%	9.28%	9.04%	8.93%	9.13%
	Formula	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
	Higher (Lower) than formula	0.45%	0.44%	0.53%	0.29%	0.18%	0.38%

		2014	2015	2016	2017	2018	Average
FBC ROE	Actual	9.22%	9.26%	9.38%	9.31%	9.29%	9.29%
	Formula	9.15%	9.15%	9.15%	9.15%	9.15%	9.15%
	Higher (Lower) than formula	0.07%	0.11%	0.23%	0.16%	0.14%	0.14%

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36. FortisBC states it achieved total operational savings of approximately \$77 million for FEI and \$15 million for FBC.¹⁰
37. FortisBC provides its ROE variances before Earnings Sharing was returned to customers.

FEI	2014	2015	2016	2017	2018
Achieved before-sharing ROE	9.54%	9.51%	9.65%	9.25%	8.99%
Approved ROE	8.75%	8.75%	8.75%	8.75%	8.75%
Variance	0.79%	0.76%	0.90%	0.50%	0.24%

FBC	2014	2015	2016	2017	2018
Achieved before-sharing ROE	9.29%	9.35%	9.52%	9.41%	9.32%
Approved ROE	9.15%	9.15%	9.15%	9.15%	9.15%
Variance	0.14%	0.20%	0.37%	0.26%	0.17%

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38. The CEC submits that the above indicates the formula number was likely higher than needed.

⁹ Exhibit C7-5, page 7

¹⁰ FortisBC Final Argument, page 104

¹¹ Exhibit B-16, CEC 2.55.1

39. Also noted in Mr. Bell's evidence is that a PBR model comes with its own set of inherent problems. That is, if the wrong base is set for O&M or capital, or inappropriate I- or X-Factors are set which favour either party it can result in additional gains for that party over a longer period of time unless an off-ramp is tripped.¹²
40. The CEC has made various comments in the Annual Reviews regarding the PBR and its results which may be reviewed on the BCUC website. The CEC stands by these comments.
41. Key issues relate to transparency of cost/benefit relationship under PBR, including regular spending and that for major initiatives, negative impacts of capital deferrals, adequacy of forecasting¹³, rewarding the Utilities for basic prudent management, lack of project benefits accruing to ratepayers who fund the capital spending and increases in FTEs towards the end of a PBR¹⁴, among others.
42. Most importantly, the CEC notes that the Commission stated in its previous PBR Decision that:

“The Commission is not looking at this Application from a short-term viewpoint. We see an opportunity to make significant change over the long term with the way regulation is conducted in this jurisdiction and the way in which revenue requirements are determined.”¹⁵
43. The CEC submits that to the extent that the Commission expects to make long-term changes to regulation, it should ensure that the changes do not simply ‘always’ result in an enhanced ROE over and above that which is provided by the Commission under its ROE reviews.
44. The CEC submits that if the MRPs almost always result in enhanced ROEs, then the formulas are not sufficiently challenging.
45. The CEC submits that any PBR/MRP should have a very detailed review and justification that ensures that any ‘rewards’ are the result of truly exceptional management, and not from an imperfect or overly generous formula or base.
46. The CEC submits that one of the benefits of Cost of Service ratemaking is that rates and revenue requirements are rebased frequently. The Commission and ratepayers are entitled to conduct a detailed review of the expenditures approximately every two years. This approach should ensure that there are not inflated costs that benefit the Utility at the expense of ratepayers.
47. Under PBR/MRPs this review is both significantly limited and less frequent.

¹² Exhibit C7-5, page 6

¹³ FEI 2019 Annual Review, CEC Final Submission

¹⁴ FBC 2018 Annual Review, CEC Final Submission

¹⁵ PBR Decision page 13

48. When PBRs/MRPs are back-to-back, there is a greater opportunity for errors to proliferate.
49. The CEC recommends that the Commission carefully consider the risk of adding ongoing ROE enhancements as a result of the proposed MRP and deny the Application as proposed.

A. PROPOSED MULTIYEAR RATE PLAN DESIGN

50. Part Three of the FortisBC Final Argument addresses the design of the Proposed MRPs.
51. The CEC submits that the MRP proposed by the Utilities is not in the ratepayer interests, but instead provides a host of opportunities for the Utilities to spend additional monies in a manner that may or may not be cost-effective, while at the same time enhancing their own returns.
52. FortisBC states that for the upcoming year, FortisBC has no reason to believe its rates would be different under either cost of service or its Proposed MRP. For the remaining MRP term it expects that Cost of Service would be higher than formula amounts, but cannot forecast by how much.¹⁶
53. The CEC notes that excess formula may arise from a variety of areas including an inappropriate I-Factor, X-Factor, excessive base, unreasonable escalation for customer growth or any other formula miscalibration.
54. FortisBC states “Similar to the Current PBR Plans, FortisBC proposes the continuation of incentives designed to encourage a continued focus on efficient operations. FortisBC’s focus is not only on reducing costs, but on maximizing efficiency more broadly.”¹⁷
55. The CEC submits that the benefits of the proposed incentives are not very certain nor even necessarily real. The Proposed MRP may well result in a formula that provides for an excessive O&M allowance resulting in some inappropriate rewards related to underspending the formula – as was demonstrated in the previous PBR.
56. The CEC notes the following changes from the previous PBR that the CEC considers are largely to the benefit of the Utility, with no offsetting benefits to the ratepayers:
 - Establishing the X Factor at 0 instead of at 10%¹⁸;
 - Doubling the growth factor for average customers from 0.5 to 1;
 - Changing elements of the base O&M which could provide advantage to the Utility if costs to do not vary with customer growth and inflation;

¹⁶ Exhibit B-12, BCUC 2.161.3

¹⁷ Exhibit B-1, section 8.2, page C-157

¹⁸ Exhibit B-16, CEC 2.56.1

- Adding ‘targeted incentives’ which have only upside for the Utilities; and
 - Additional fund values that are paid for by ratepayers, contribute to the Utilities’ welfare and are not subject to cost/benefit analysis.
57. The CEC suggests that a productivity factor of zero means that the potential for underspending could be greater than in the past, resulting in more inappropriate incentive for FortisBC’s shareholder.
58. The CEC submits that, among other issues, the Proposed MRP:
- Provides for excess base O&M funding and includes items which should be flowed through;
 - Has costs inappropriately tied to customer growth, much of which do not vary directly with customers, and portions of which are fixed. Customer growth may not be necessary at all given the incorporate of the I-Factor;
 - Has inappropriately removed the 50% reduction in the growth factor;
 - Has an I-Factor which is incorrectly established;
 - Inappropriately establishes the X-Factor at 0;
 - Inappropriately provides additional basis points on the ROE for conducting activities for which the customer is or may already be paying;
 - Has ‘Earnings Sharings’ resulting in ratepayers paying the full cost of any activities, and then paying the Utility half of any benefit for a period of several years;
 - Is overly complicated;
 - Includes an unnecessary Earnings Carry Over mechanism; and
 - Removes the Exogenous Factor threshold leaving the Utility in the drivers’ seat of what to bring forward.
59. The CEC submits that the only genuinely likely outcome from the MRP formula is an increase in the return to FortisBC over and above the approved ROE, which result has been a consistent pattern for several years.
60. The CEC provides the following comments on each section of the rate plan.

III. OPERATIONS AND MANAGEMENT

61. The MRPs propose to recover both indexed-based O&M and forecast O&M.

62. Indexed based O&M represents the largest component of O&M and is determined by formula, based on the prior year formula amount and average customers for the year. The CEC notes that Index-based O&M which is rebased using 2018 actuals (with adjustments) is the only major element that would otherwise be prepared differently under Cost of Service.¹⁹
63. FortisBC states that the proposed indexed-based approach to O&M over the five-year term of the Proposed MRPs will continue to provide an incentive to FEI and FBC to find efficiencies.²⁰ The CEC is of the opinion that the formula-based approach to O&M in the past PBR overstated projected O&M expenses, allowing FortisBC to underspend the O&M numbers which resulted in unnecessary and inappropriately above the fair return standard incentive returns for the company.
64. The CEC submits that the O&M formula incents and rewards underspending. To the extent the Companies' formula relates to real prudent O&M requirements the underspending incentive can be at the expense of the benefits that would normally accrue from O&M expenditures and management decisions.
65. Forecast O&M is intended to accommodate expenditures that are not appropriate for the Index-based formula. Forecast O&M will be trued up to actuals each year.
66. The CEC finds that the Forecast O&M is likely acceptable.

B. INDEXED BASED O&M - FORMULA

67. FortisBC's 'indexed-based approach' represents a continuation of the formulaic approach to FEI's and FBC's controllable O&M.
68. The formula is proposed as follows:

$$OM_t = UCOM_{t-1} * (1 + I) * AC_t$$

Where:

- T is the test (or forecast) year.
- I is the inflation factor and is lagging by one-half year. The I-Factor is a composite including 45% BC CPI plus 55% BC-AWE. The half-year lag is accomplished by comparing the most current July to June period with twelve months prior July to June period.
- UCOM is the Unit Cost O&M.
- AC is the forecast of average number of customers.

¹⁹ Plus Growth Capital for FEI Exhibit B-7, CEC 1.2.1 and BCUC 2.161.3

²⁰ FortisBC Final Argument, page 42

69. For indexed-based O&M, each year the O&M expense will reflect the previous year's indexed-based O&M per customer amount, adjusted by inflation and then multiplied by a forecast of the Average Number of Customers.²¹
70. The CEC notes that the O&M formula used in the previous PBR included a Productivity Factor, otherwise known as an X-Factor.²²
71. The X-Factor had the effect of reducing the inflation factor in the formula, which in turn had the effect of reducing the O&M allowance generated by the formula.
72. The CEC submits that the X-Factor was an important factor in containing overstatement of the O&M expense number generated by the formula, thereby reducing the opportunity to underspend on O&M for inappropriate benefits, and thus managing the amount of incentive for FortisBC.
73. The CEC provides its views regarding the X-Factor below, under 'X-Factor, Zero Productivity Factor'.
74. The CEC provided an overview of issues with the formulaic O&M in its Final Submission in the 2014-2019 PBR.
75. The CEC submits that many of the same issues remain in that formula approach to O&M is subject to risk for overestimating O&M requirements.
76. In the event of over-estimation of O&M requirements the Utilities would be able to earn extra reward without necessarily achieving any sustainable cost reductions, much less an improvement in the cost/benefit relationship for O&M expenditures.
77. In the MRP this happens if any one of the following conditions are met:
 - The initial Unit Cost O&M \$ per customer value is too high;
 - The inflation factor is forecast too high overall to reflect the actual cost experience;
 - The AWE forecast is too high;
 - The proportion of AWE inflated expenses is too high relative to CPI inflated expenses;
 - Capital or other costs tracked outside the MRP creates O&M savings within the MRP formula;
 - The Utilities do not undertake all maintenance and operations to the standards that are presumed embedded in the base;

²¹ Exhibit B-1, page C-49

²² Exhibit B-16, CEC 2.56.1

- There are unaccounted for O&M savings carried forward from previous year projects;
- O&M cost reductions are carried into the ECM but do not last the full carry over period;
- O&M is not directly and linearly tied to customer growth on a one-to-one basis;
- There is ongoing productivity in the industry that is not reflected in the Zero productivity factor;
- O&M requirements are periodic and are temporarily reduced at times; and
- O&M improvement opportunities are taken as a result of regular management and rewarded to the shareholder instead of being passed on to the ratepayer.

78. FEI is now requesting an even larger figure of \$250 per customer,²³ for its Formula Base O&M²⁴ by adding back in Adjustments.

C. BASE O&M

79. FortisBC's 'Base O&M' represents the base for the application of the formula.

80. FortisBC states it is proposing a Base O&M that passes onto customers the savings achieved by FEI and FBC through the Current PBR Plans, and that will challenge FEI and FBC to do more with the same over the next five years.²⁵

81. FortisBC proposes to add "reasonable and appropriate adjustments to reflect FEI's and FBC's operating requirements at the outset of the Proposed MRPs."²⁶

82. The Utilities will calculate the O&M Base using the 2018 Actual expenditures as the starting point, then adjust by the following:

²³ FortisBC Final Argument page 78

²⁴ FortisBC Final Argument page 106

²⁵ FortisBC Final Argument, page 104

²⁶ FortisBC Final Argument, page 104

- Add back temporary O&M net savings included in the 2018 actual expenditures and adjust for the effect of proposed shared and corporate services studies on O&M;
- Multiply by the 2019 formula inflator as approved in the Annual Review for 2019 Delivery Rates¹²⁰;
- Adjust for approved 2019 exogenous factors, items held in deferral accounts in the Current PBR Plan that are now included in Base O&M, and items currently in O&M that will be recorded in a deferral account in the Proposed MRPs; and
- Add new incremental funding required for the term of the Proposed MRPs.

83. The CEC is of the opinion that adding \$10 million to the O&M Base for FEI and \$3.6 million for FBC is not “doing more with the same,” but is proposing to do more with more.

FEI

84. The following provides FEI’s proposed Adjustments.

Table C2-1: FEI 2019 Base O&M (\$ millions)¹²¹

2018 actual Base O&M	\$ 238.693
Add temporary savings	1.677
Corporate/Shared Services Studies Impact	<u>(0.455)</u>
Adjusted 2018 Base O&M	\$ 239.915
2019 Inflator	<u>1.02198</u>
2019 Base O&M before adjustments	<u>\$ 245.188</u>
<u>Adjustments:</u>	
Exogenous Factors:	
2019 Z factor (EHT net of MSP)	0.972
Deferrals:	
FAES overhead	0.786
BCUC levies	(2.778)
NGIF funding	(0.400)
Flow Through treatment:	
Integrity Digs	(2.600)
LNG Plant O&M	5.101
Total adjustments	<u>1.081</u>
New funding for MRP term	<u>\$ 10.416</u>
2019 Base O&M	<u>\$ 256.685</u>

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²⁷ Exhibit B-1, page C-19

85. The CEC submits that it is inappropriate to include certain of the ‘temporary savings’ and specified ‘Adjustments’ in a Unit Cost approach which is inflated by Growth, as they are not reasonably expected to grow with inflation and customer growth.
86. To the extent they are deemed to be legitimate by the Commission these could be flowed through as a single cost estimate and not subject to growth.
87. For example, with regard to Bad Debts, the Utilities state that:

‘Bad debt expense is difficult to forecast as it is affected by a number of factors including demand from customers which may be impacted by weather, changes in the price of natural gas commodity, success of collection management practices, and general economic conditions which may impact the ability of customers to pay.’²⁸
88. Additionally, they point out that 2018 bad debt expense was very low relative to the previous five years, being about \$0.9 million lower than average.²⁹
89. Given that such an expense does not necessarily grow with inflation and customers the CEC submits there is no basis for assuming it should be included in ‘base’ and grown according to a formula of inflation and customers.
90. In the CEC’s view the appropriate methodology would be to remove the cost of bad debt from the Base altogether (with a corresponding reduction to the unit cost), and adding the debt back as a flow through cost each year.
91. The CEC is of the opinion that the ‘bad debt’ expense is an example of the types of issues that arise in the type of formulas that are being proposed.
92. In addition to including items that do not inflate according to inflation and customer growth, there is a distinct disparity between the information that is available for the Utilities to present to generate benefits in their favour, and that which is available to the Commission and ratepayers.
93. The CEC considers that there may well be certain costs in the 2018 period that are higher than average, and should be removed from the base, but the ratepayers do not have ready access to such information. The CEC submits that it is very difficult for the Commission and ratepayers to identify such costs under the IR format and the nature of responses.
94. The CEC recommends that the Commission bear in mind the differences in the information and resources available to the Utility in generating an application and the ratepayers in responding when considering the requests embedded in this Application.
95. The CEC also does not support the Utility’s proposal for including an amount for the FAES overhead.

²⁸ Exhibit B-1, page C-20

²⁹ Exhibit B-1, page C-20

Table C2-2: FAES Overhead Recoveries

(\$ millions)	2014	2015	2016	2017	2018	2019 P
Budget O&M Overhead Recoveries	\$ 0.870	\$ 0.878	\$ 0.887	\$ 0.896	\$ 0.907	\$ 0.926
Actual O&M Overhead Recoveries	\$ 0.635	\$ 0.214	\$ 0.160	\$ 0.149	\$ 0.137	\$ 0.140
TESDA Overhead Allocation Deferral	\$ 0.235	\$ 0.663	\$ 0.727	\$ 0.746	\$ 0.770	\$ 0.786

96. FEI’s proposal is that assuming a credit of \$140,000, any recoveries higher or lower would be ‘shared with customers’ according to the sharing mechanism.³⁰ In this case, the CEC understands that higher recoveries would result in a benefit to the shareholder.
97. Regardless, the CEC submits that FAES overhead recoveries are also not directly related to customer growth and inflation and should reasonably remain in a deferral account.
98. The CEC agrees that BCUC levies³¹, and Integrity digs³² should be excluded from the Base Capital.
99. With regard to Natural Gas Innovation Fund (“**NGIF**”) funding, the CEC submits that this should be excluded for O&M base if the Commission approves any spending for the Clean Growth Innovation Fund in excess of the current NGIF funding of \$400,000.³³
100. To the extent that the Commission denies the Clean Growth Innovation Fund, the CEC recommends that if the NGIF funding is established at a particular level and will not escalate due to inflation or customer growth, it should still be removed from Base and placed in the Flow Through deferral account. To the extent that the funding is discretionary for management, the CEC accepts that it is reasonable to stay within the Base O&M.
101. The CEC notes that \$5.1 million has been added to FEI O&M Base for LNG Plant O&M.³⁴
102. The CEC notes FortisBC’s proposal to add additional LNG funding, and reallocate the funding between Base and Flow Through.
103. FEI states it will allocate to Base O&M the portion of the total O&M costs representing the fixed costs to operate the LNG plant, regardless of its use (for peak shaving storage,

³⁰ Exhibit B-10, BCUC 1.26.3

³¹ Exhibit B-10, BCUC 1.26.4

³² Exhibit B-10, BCUC 1.26.4

³³ Please see Clean Growth Innovation Fund – Alternatives

³⁴ Exhibit B-1, page C-19

or LNG production for sales). These costs are expected to be relatively stable over the term of the Proposed MRP.³⁵

104. The CEC considers that the increase in fixed costs is largely due to the expansion of the Tilbury LNG plant, and that this expansion was largely undertaken to facilitate LNG sales. The CEC submits that adding these costs to O&M Base places an unnecessary burden on ratepayers.

Table C2-4: FEI Allocation of 2018 Expenditures for LNG Facilities

Description / Facility	2018 Actuals (\$ millions)		
	Base	Flow Through	Total
Tilbury LNG Facility	\$ 2.134	\$ 6.401	\$ 8.535
Mt Hayes LNG Facility	\$ 2.767	\$ 0.145	\$ 2.913
Supporting Functions including management and engineering	\$ 1.390	\$ -	\$ 1.390
Total	\$ 6.291	\$ 6.547	\$ 12.838

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Table C2-5: FEI Proposed Allocation of 2018 Expenditures for LNG Facilities Reallocated

Description / Facility	Proposed Reallocation of 2018 Actuals (\$ millions)		
	Base	Flow Through	Total
Tilbury LNG Facility	\$ 5.449	\$ 3.086	\$ 8.535
Mt Hayes LNG Facility	\$ 2.629	\$ 0.284	\$ 2.912
Supporting Functions including management and engineering	\$ 1.391	\$ -	\$ 1.391
Total	\$ 9.469	\$ 3.370	\$ 12.838

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105. The CEC understands that reallocating costs to base O&M and reducing Flow Through would have the effect of providing increased formulaic funding for LNG, while diminishing the amount of ‘actual costs’ that are flowed through.
106. The CEC submits that this would appear to offer a potentially significant benefit to the Utilities if the costs do not increase each year beyond the formula.
107. The CEC further submits that it is inappropriate to allocate the ‘portion of the Total O&M costs representing the fixed costs to operate the LNG plant’³⁸ and have this figure inflated by customer growth.

³⁵ Exhibit B-1, page C-25

³⁶ Exhibit B-1, page C-26

³⁷ Exhibit B-1, page C-26

³⁸ Exhibit B-1, page C-25

- FEI will allocate to Base O&M the portion of the total O&M costs representing the fixed costs to operate the LNG plant, regardless of its use (for peak shaving storage, or LNG production for sales). These costs are expected to be relatively stable over the term of the Proposed MRP.
- FEI will allocate the remaining portion of total O&M costs as a flow through outside the Base O&M. These costs represent the variable costs for the production of LNG (liquefaction of natural gas, the dispensing of LNG and the handling and loading of tankers with LNG, etc.) where the costs fluctuate and are dependent on sales volumes. Accounting for these costs as flow-through recognizes that these costs are dependent on sales volumes which are difficult to forecast and expected to increase over time.

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108. The CEC submits that allocating fixed LNG costs to a unit measure to be grown with inflation and customer growth is fundamentally incorrect in that only variable costs related to customer growth should be subject to customer growth.
109. Furthermore, the CEC is of the view that as and if LNG sales increase those customers should be increasingly funding in rates the O&M fixed base and variable costs of O&M. The Utility should be focused on increasing sales. The formula proposed has inappropriate incentives.

Incremental Funding for FEI

110. FEI also requests ‘Incremental Funding’ in the amount of \$10.416 million to address the ‘significant changes in its operating environment’.⁴⁰
111. These changes include:

Table C2-7: FEI New Funding for the Term of Proposed MRP

Incremental to Base	\$ millions
Customer Expectations	\$ 1.360
Engagement	\$ 3.360
Indigenous Relations	\$ 0.888
System Operations, Integrity and Security	\$ 4.808
Total	\$ 10.416

³⁹ Exhibit B-1, page C-25

⁴⁰ Exhibit B-1, page C-19

112. The CEC will not provide a detailed discussion of all of the elements contained in the Incremental New Funding proposal as the CEC rejects the New Funding requests as being inappropriately added to a base to be inflated by growth as well as Inflation.
113. First, the CEC submits that it is not credible to consider that the Companies environment has changed so significantly in the last year that it was capably managing all its business activities and even underspending, but can now no longer function properly with the O&M base it was provided. Logically, to the extent that the Companies had similar circumstances last year, and avoided doing the appropriate activities to meet the current circumstances, including addressing customer expectations, engagement, indigenous relations, and system operations, then the Companies should not have received a benefit from underspending to deliver less than suitable service. That is, these activities should have been undertaken, certainly to the level of spending the entire formulaic O&M allowance, and possibly beyond if the benefits of the activities were available and should have been delivered.
114. In the CEC's view, if the Companies conducted all the activities appropriate to managing the business, including addressing and 'legitimately' achieved their O&M underspending benefit, then there should be no need for additional 'New Funding'. If they did not conduct these activities but the activities should have been done, then they should not have been rewarded.
115. The CEC suggests that the PBR formula should be considered to have failed in that it intended to provide for appropriate management, but resulted in the negative outcome of incenting the Utilities to defer important activities in order to earn a reward, with the expectation that these could be added back into base later on.
116. The CEC notes that the Utilities have been clear over the years that the management of the Utility should not be under close scrutiny during a PBR, and that their management of the Utility would be comprehensive.
117. In BCUC 1.26.5.1 they state:
- 'FEI disagrees with the premise that specific BCUC approval was required of O&M items or that FEI's O&M spending was strictly limited to the items in FEI's Base O&M. Rather, in the FEI 2014 PBR Decision, the BCUC approved a Base O&M that was then escalated by formula to provide an overall O&M funding envelope over the term of the Current PBR Plan. The premise of the Current PBR Plan is that FEI was free to work within the O&M spending envelope, and FEI has been managing its spending levels within that funding envelope to continue to deliver safe and efficient service while investing in the future health of the utility.'⁴¹ (emphasis added)
118. The CEC submits that under circumstances of reduced oversight it is incumbent upon the Utility to conduct all appropriate activities to manage the company, including its future health. It is inappropriate in the extreme for the Utility to defer necessary spending until such time as it can generate new 'benefit' opportunities for the shareholder under another Plan, while simultaneously benefitting from underspending.

⁴¹ Exhibit B-10, BCUC 1.26.5.1

119. Secondly, the CEC considers that there is no persuasive evidence that the adjustment proposals to be incorporated in base are directly related to ‘inflation’ and ‘customer growth’.
120. The CEC submits that the projects identified should not be inflated according to a formula.
121. At minimum, the project funding should be added as a Flow Through cost and trued up. The costs could also be decremented by the amount of O&M underspending in the last two years.
122. Thirdly, the CEC submits that many of the activities for which FEI deems it is in need of additional funding are activities that the company has been undertaking on its own behalf, and not at the expense of additional ratepayer funding.
123. The CEC notes that the size of the \$10 million request is such that it would or could be absorbed within the ‘cost times inflation times customer growth’ formulation with minimal impact on the overall formula funding. The Commission should be thoroughly convinced of the incremental needs and justification. The CEC does not find an adequate base of evidence that this is a significant discontinuous event change, warranting Z-Factor exceptional treatment, versus continuous adjustment being added on top of the formulas for continuous adjustment.
124. FEI states that it needs

‘..an incremental \$2 million in funding to raise awareness of the important role of natural gas and FEI’s infrastructure in supporting the transition to a lower carbon future’
125. This spending is distinguished from its ‘Connect to Gas’ project.
126. The CEC considers that FEI almost certainly already has the wherewithal to conduct the necessary communications activities within their general marketing and has, and should have been, promoting the ‘important role of natural gas’ and other activities as an existential requirement for many years.
127. Fourth, the CEC does not find metrics that will be reported and can be utilized to determine the cost/benefit of the spending, and ensure that there is measurable advantages directly related to the spending.
128. In the CEC’s view, the activities and benefits are vague and not adequately justified as being necessary and beneficial.
129. The CEC submits that specific projects such as the Natural Gas Use and Appliance Incentives could be brought forward independently for examination in the annual review rather than being incorporated into base O&M.

130. Finally, the CEC submits that FEI should not be seeking funding for individual projects which in the CEC's view has been part of the rationale for moving away from cost of service ratemaking in the first place.
131. To the extent that FEI wishes to fund individual projects such as the Climate Action Partners program, the actual costs could be flowed through.
132. The CEC submits that these additional funding requests are examples of a key issue of PBR which encourages the Utilities to 'work the system' at the expense of ratepayers.
133. To the extent that the Commission approves any additional funding, the CEC recommends that the Commission require independent reporting on the spending during the Annual Reviews to ensure it is not underspent and contributing to shareholder benefits.

FortisBC Inc.

134. The following are the adjustments to base proposed for FBC.

Table C2-14: FBC 2019 Base O&M⁴¹⁰

2018 actual Base O&M	\$ 53.839
Add temporary savings	0.500
Shared Services Studies Impact	0.338
Deduct 2018 actual FHI services direct charged to FBC	(1.023)
Deduct 2018 actual FI services direct charged to FBC	(1.615)
Adjusted 2018 Base O&M	\$ 52.039
2019 Inflation	1.02382
2019 Base O&M before adjustments	\$ 53.279
<u>Adjustments:</u>	
Exogenous Factors:	
2019 Z factor (EHT net of MSP)	0.240
2019 Z factor - MRS	1.540
Deferrals:	
Manual meter read	0.180
Flow Through treatment:	
AMI Project cost reductions	(1.161)
BCUC levies	(0.237)
2019 Normalized Forecast FHI Management Fee	3.374
FBC Costs included in FHI Corporate Services	(0.308)
Total adjustments	3.628
New funding for MRP term	\$ 0.763
2019 Base O&M	\$ 57.670

135. Total adjustments amount to \$3.628 million with an additional \$0.763 million requested for new funding.

136. The CEC does not oppose the addition of the Exogenous factors to Base O&M.

137. With regard to meter reading, the CEC notes that the BCUC has already approved the cessation of recording the net revenue and expenses in the deferral account. The CEC notes however that FBC proposes to record the revenues in Other Revenues and the costs in the base O&M.⁴²

⁴² Exhibit B-1, page C-46

138. The CEC submits that it is not appropriate to record the revenues in a Flow Through account which is not inflated, and the costs in the base O&M, which is inflated according to customer growth and inflation.
139. The CEC recommends that the Commission record the net revenues and costs in the Flow Through deferral account.
140. The CEC does not oppose Flow Through treatment for AMI project cost reductions and BCUC levies.
141. The CEC notes that FBC is requesting approval of the allocation methodology, rather than the forecast of corporate services cost because the actual costs and allocation percentages will vary each year.⁴³ However, FortisBC is also requesting that the new methodology should be incorporated into the 2019 Base O&M by taking the 2020 forecast FortisBC Inc./FortisBC Holdings (FI/FH) corporate services management fee and discounting it back to 2019.⁴⁴
142. The CEC is not opposed to the use of the Massachusetts Formula for allocating common corporate service costs and notes that it has been approved by KPMG.⁴⁵
143. However, the CEC submits that the variation in the actual costs and allocation percentages suggest that the costs could be afforded Flow Through treatment rather than being embedded into the O&M base.

Incremental Funding for FBC

144. FBC requests additional new funding for the following activities.

Table C2-15: FBC New Funding for the Term of Proposed MRP

Incremental to Base	\$ millions
Engagement	\$ 0.080
System Operations, Integrity and Safety	\$ 0.683
Total	\$ 0.763

⁴³ FortisBC Final Argument page 289

⁴⁴ FortisBC Final Argument page 289

⁴⁵ FortisBC Final Argument page 289

⁴⁶ Exhibit B-1, page C-47

145. The CEC reiterates its views expressed with regard to the FEI request for additional funding, which recommends that the Utility request funding independently for the projects.
146. The CEC recommends that if the New Funding is approved, then it should be flowed through, and specific reporting should be required during the annual reviews.
147. The CEC notes that the proposed increase in funding is well within the inflation customer growth factors proposed and that the Commission could well simply deny the amount and allow that it should be absorbed in the formula.

Unit Cost Approach

148. The Unit Cost O&M (“UCOM”) is a key element of the O&M formula.
149. The Unit Cost O&M is derived from the 2019 Base O&M for each Utility as discussed above. The base is then expressed as a function of the average number of customers for 2019.
150. The UCOM is then escalated using inflation during the term of the MRP and multiplied by the average number of customers, which may be considered the growth factor.
151. The Companies state that the 2019 UCOM should be equal to \$250/customer for FEI and \$416/customer for FBC.⁴⁷

Growth Factor

152. The Utilities propose to use average customers as the growth factor in the MRP formula.
153. FortisBC’s proposed approach to growth eliminates the 50 percent multiplier and lagged actual customer growth factor used in the Current PBR Plans.⁴⁸
154. In the Utilities’ view “the causal relationship between customer counts and utilities’ O&M expenditures is well-established and recognized by all utility practitioners. This is particularly true for utilities such as FEI with a large residential customer base.”⁴⁹
155. The CEC does not accept the Utilities’ arguments with regard to the appropriateness of the growth factor, and in particular the 100% multiplier resulting in a 1:1 inflation of the UCOM per customer.

⁴⁷ Exhibit B-1, page C-49

⁴⁸ FortisBC Final Argument, page 72

⁴⁹ Exhibit B-7, CEC 1.14.4

156. The CEC submits that calculating a UCOM and applying a 100% growth factor is inappropriate in that it is unlikely that the total cost per customer inflates directly with the number of customers, and may not even vary directly with inflation.
157. In CEC 1.6.9, the CEC inquired if the Utilities have costs for managing the Utilities which are fixed over time and/or are partially fixed.
158. The Utilities directed the CEC to BCUC 1.17.7 which discusses why the proposed index-based formulaic approach is reasonable and appropriate for determining allowed O&M funding for the proposed MRPs.⁵⁰
159. In BCUC 1.17.7 the Commission also asked if FortisBC agreed that there are fixed components to O&M costs that do not change based on the average number of customers.⁵¹
160. In response, the Utilities acknowledge that ‘in the short term, some of FortisBC’s costs are fixed and some are semi-variable’ but obfuscate the information in a lengthy discussion as to why the O&M funding per customer represents a reasonable proxy.
161. FortisBC also argues that the majority of fixed O&M costs are already accounted for since the O&M indexing formula applies to the average O&M unit cost which reflects the fixed costs.⁵²
162. The FortisBC argument flawed in that because the average O&M contains some fixed costs, it is somehow therefore appropriate to avoid the discussion of less than directly proportional multipliers for inflation and number of customers.

LINEAR RELATIONSHIP BETWEEN O&M AND AVERAGE NUMBER OF CUSTOMERS

163. The Utilities argue there is a ‘strong linear relationship between O&M and Average number of customers, and reference their response to BCUC 1.8.4.
164. In BCUC 1.8.4, FortisBC provides a comparison of the correlation between Average number of customers and Actual O&M spending (formula), versus the Average number of customers and Formula O&M.

⁵⁰ Exhibit B7, CEC 1.6.9

⁵¹ Exhibit B-10, BCUC 1.17.7

⁵² FortisBC Final Argument, page 78

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

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

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165. As pointed out by FortisBC, it is no surprise that formula-based O&M yields a strong linear relationship to customer numbers over the PBR period due to the nature of the PBR formula.⁵⁴
166. Although FortisBC argues that the correlation with actual O&M is also strong (0.95), the CEC notes that a strong ‘correlation’ says nothing about whether or not there may be a significant fixed cost component.
167. In their Final Argument, FortisBC states:
- ‘The correlation results, however, indicate that most of the variations in the O&M costs can be explained by the variations in the number of customers and that there is no need to adjust the unit cost index formulas.’⁵⁵
168. Additionally, in response to BCUC 2.165.1.1 FortisBC writes:
- ‘Further, the strong correlation values between actual O&M and capital expenditures and proposed growth factors indicated that proposed growth factors are appropriate cost drivers to be used in the formula.’
169. The CEC submits that correlation in the absence of a 1:1 relationship is not useful in providing support for the requested 1:1 growth relationship.
170. The CEC demonstrated in CEC 1.14.6 that a high correlation of 100% can be obtained with the inclusion a high fixed component and a low variable component.

⁵³ Exhibit B-10, BCUC 1.8.4

⁵⁴ Exhibit B-10, BCUC 1.17.7

⁵⁵ FortisBC Final Argument page 79

171. As noted in the Utilities' response to CEC 1.14.6:

'FortisBC agrees that a high correlation result can be obtained from a variety of engineered numbers. However, FortisBC has used actual results to produce its correlation coefficients. As explained in response to CEC 1.14.4, the first step before doing any correlation analysis is to establish a causal relation between the variables studied. Without this important first step, the correlation numbers are not indicative of anything in particular other than the two variables are correlated.'⁵⁶

172. The CEC agrees that there may be an element of a causal relationship between customers and cost but does not accept that it provides any form of justification for a 1:1 cost/customer growth plan.

173. Indeed, the CEC notes that the Utilities are basing their figures on evidence from a relationship using a 0.5 growth factor.

174. Overall, the CEC submits that the value of a correlation between customers and total spending may not be particularly valuable without deeper assessment and justification.

175. The CEC notes that the following relationship between O&M expenditures and average customers is a clear declining relationship and not a 1:1 relationship⁵⁷.

FEI Relationship of O&M to Customers			
Year	Customers	O&M	\$/customer
2013	945880	226690	239.66
2014	959196	224778	234.34
2015	968766	226568	233.87
2016	983807	225769	229.49
2017	997380	225786	226.38
2018	1016353	233067	229.32

176. The CEC encourages the Commission to be skeptical of a later year in a PBR process because of the Utility incentive to boost expenditures to help reset the base for a future proceeding. The CEC submits a relationship to customer growth and inflation is not supported in the evidence.

INCREMENTAL COSTS DO NOT VARY WITH INCREMENTAL CUSTOMERS

177. As noted in Mr. Bell's evidence, the average incremental cost per incremental customer for both Utilities varies widely ranging from \$147 in 2014 to \$958 in 2019 for FEI and from \$(111) in 2014 to \$1291 in 2019 for FBC.

⁵⁶ Exhibit B-7, CEC 1.14.6

⁵⁷ Exhibit B-1-1, Appendix A2-1

	2014	2015	2016	2017	2018	2019P
FEI <i>Average Number of Customers</i>	959,196	968,766	983,807	997,380	1,016,353	1,024,962
<i>Actual Formula O&M (\$000)</i>	\$ 223,970	\$ 225,380	\$ 225,930	\$ 232,500	\$ 238,690	\$ 246,940
<i>Incremental Customers</i>		\$ 9,570	\$ 15,041	\$ 13,573	\$ 18,973	\$ 8,609
<i>Incremental O&M</i>		\$ 1,410	\$ 550	\$ 6,570	\$ 6,190	\$ 8,250
<i>Incremental cost per Incremental customer</i>		\$ 147	\$ 37	\$ 484	\$ 326	\$ 958
FBC <i>Average Number of Customers</i>	129,525	131,016	132,480	134,246	137,300	138,649
<i>Actual Formula O&M (\$000)</i>	\$ 52,046	\$ 51,880	\$ 51,839	\$ 52,520	\$ 53,839	\$ 55,581
<i>Incremental Customers</i>		\$ 1,491	\$ 1,463	\$ 1,766	\$ 3,054	\$ 1,349
<i>Incremental O&M</i>		\$ (166)	\$ (41)	\$ 681	\$ 1,319	\$ 1,742
<i>Incremental cost per Incremental customer</i>		\$ (111)	\$ (28)	\$ 386	\$ 432	\$ 1,291

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178. The CEC submits that this is strong evidence that there is no significant justification for applying a 1:1 relationship of an average cost per customer.

UNIT COST VALUE IS TOO HIGH

179. Using the information provided in BCUC 1.8.4 and BCUC 2.165.2, the CEC has produced the following tables for FEI and FBC.

⁵⁸ Exhibit C7-5, page 10

FEI

CEC Table 1 FEI

FEI O&M actual vs formula						
	2014	2015	2016	2017	2018	2019 P
avg cust	959,196	968,766	983,807	997,380	1,016,353	1,024,962
actual O&M \$	\$ 223,967,000	\$ 225,380,000	\$ 225,925,000	\$ 232,503,000	\$ 238,693,000	\$ 246,939,000
O&M per cust \$	\$ 233.49	\$ 232.65	\$ 229.64	\$ 233.11	\$ 234.85	\$ 240.93
	2014	2015	2016	2017	2018	2019 P
avg cust	959,196	968,766	983,807	997,380	1,016,353	1,024,962
formula O&M \$	\$ 233,712,000	\$ 235,619,000	\$ 238,068,000	\$ 240,412,000	\$ 243,585,000	\$ 248,939,000
O&M per cust \$	\$ 243.65	\$ 243.22	\$ 241.99	\$ 241.04	\$ 239.67	\$ 242.88
actual/formula ratio	0.958	0.957	0.949	0.967	0.980	0.992
% underspent	4.17%	4.35%	5.10%	3.29%	2.01%	0.80%
\$ underspent	\$ 9,745,000	\$ 10,239,000	\$ 12,143,000	\$ 7,909,000	\$ 4,892,000	\$ 2,000,000
source: BCUC 1.8.4						

FBC

CEC Table 2 FBC

FBC O&M actual vs formula						
	2014	2015	2016	2017	2018	2019 P
avg cust	129,525	131,016	132,480	134,246	137,300	138,649
actual O&M \$	\$ 52,046,000	\$ 51,880,000	\$ 51,839,000	\$ 52,520,000	\$ 53,847,000	\$ 55,581,000
O&M per cust \$	\$ 401.82	\$ 395.98	\$ 391.30	\$ 391.22	\$ 392.18	\$ 400.88
	2014	2015	2016	2017	2018	2019 P
avg cust	129,525	131,016	132,480	134,246	137,300	138,649
formula O&M \$	\$ 52,745,000	\$ 52,984,000	\$ 53,596,000	\$ 54,071,000	\$ 54,776,000	\$ 56,081,000
O&M per cust \$	\$ 407.22	\$ 404.41	\$ 404.56	\$ 402.78	\$ 398.95	\$ 404.48
actual/formula ratio	0.987	0.979	0.967	0.971	0.983	0.991
% underspent	1.33%	2.08%	3.28%	2.87%	1.70%	0.89%
\$ underspent	\$ 699,000	\$ 1,104,000	\$ 1,757,000	\$ 1,551,000	\$ 929,000	\$ 500,000
source: BCUC 2.165.2						

180. For FortisBC the CEC notes that the O&M cost per customer over the PBR period remains fairly steady declining from \$233.49 in 2014 to \$229.64 in 2016, and returning to \$234.85 in 2018.
181. The CEC notes that the cost per customer is significantly increased in 2019, which is \$240.93.
182. For FBC, the CEC notes that the O&M cost per customer over the PBR period has declined from \$407/customer to \$398.95 per customer, slightly increasing in the last year, 2019P, to \$404.48.
183. The CEC submits that there is a significant increase in the cost per customer for both Utilities vis-a-vis both the 2018 and 2019 costs per customer.
184. The CEC submits that such increases are inconsistent with long-term formulaic ratemaking. As was suggested in the previous PBR, it is reasonable to expect that a cost of service period following a PBR is useful in ensuring that spending and costs do not deviate too much.

185. The CEC submits that the current process enables the addition of additional monies, but does not provide an adequate opportunity to examine whether or not the costs are as low as they can reasonably be. The CEC notes it is in the interests of the Utilities to raise their base O&M in the latter years if these are to be inflated in the future and allow for further underspending.

HISTORICAL UNDERSPENDING

186. The CEC also notes that the actual spending requirements have been consistently lower than the formula for both Utilities.
187. As shown in CEC Table 1, it is evident that for each of the years 2014 – 2018, FEI was able to underspend the O&M formula.
188. Underspending ranged from a low of \$4.892 million (2.01%) in 2018 to a high of \$12.143 million (5.1%) in 2016. The average underspend was \$8,985,600 or 3.78%.
189. As shown in CEC Table 2, it is evident that for each of the years 2014 to 2018, FBC was also able to underspend the O&M formula.
190. FortisBC underspent the O&M formula in amounts ranging from a low of \$699,000 (1.33%) in 2014 to a high of \$1,757,000 (3.28%) in 2016.
191. The CEC submits that the evidence is that the current formula and initial base provided more than adequate O&M spending envelopes for both Utilities.
192. The CEC does not believe that it would be appropriate to increase the base O&M per customer as proposed by the Companies.

JUSTIFICATION BASED ON INAPPROPRIATE COMPARISON TO PRE-PBR FIGURES.

193. The CEC also notes that FEI's justification for \$250/customer is largely based on comparisons to the 2013 levels and also mixing in evidence related to the Total O&M/customer evidence with the formulaic O&M/customer.⁵⁹

194. They state:

'For FEI, on an inflation adjusted basis, 2019 Total O&M per customer of \$285 is less than the 2013 Total O&M per customer of \$314; similarly, 2019 Formula Base O&M per customer of \$250 is less than the 2013 Actual Formula O&M per customer of \$286.'⁶⁰

195. The CEC submits that discussions regarding Total O&M can be misleading when evaluating the appropriate Formula O&M and further that it is inappropriate to compare the proposed O&M to 2013 instead of to more recent years of 2018 and 2019.

⁵⁹ FortisBC's Final Argument, page 106

⁶⁰ FortisBC Final Argument, page 106

196. For FEI 2018 Formula-based O&M Actual spending was \$238.7 million⁶¹ (nominal dollars) with 1,016,353 customers⁶² for an average actual formula spent per customer of \$234.86/customer (unadjusted for inflation). 2019 Formula-based O&M Actual spending was \$246.9 million with 1,016,353 customers for an average actual formula spent per customer of \$240.93.
197. FEI's request of \$250/customer represents a \$9 increase per customer above 2019, and a \$15/customer increase over 2018.
198. The CEC submits that the evidence is that even considering real dollars, O&M has undergone a decline, and the proposed increase of \$9 to \$10 per customer to \$250/customer represents a significant increase of approximately 4%.
199. Similarly, FBC's 2018 Formula-based O&M Actual spending was \$53.847 million⁶³ (nominal dollars) with 137,300 customers⁶⁴ for an average actual formula spent per customer of \$398.85/customer. 2019 Formula-based O&M Actual spending was \$55.581 million with 138,649 customers for an average actual formula spent per customer of \$400.88.
200. FortisBC's request for \$416/customer represents a \$15/customer increase over 2019, and a \$17/customer or nearly 4% increase over 2018.
201. The CEC notes that these are the equivalent to a 4% increase for both Utilities in their total base O&M.
202. The CEC submits that it is reasonable for the Commission to take a high-level view of the increase and find concerns with the total increase requested in the cost/customer and question whether the PBR has in fact resulted in long-term benefits or simply cost deferrals to be more than made up for in the Proposed MRP.

FIXED VS VARIABLE COSTS

203. The CEC is concerned that the proposed UCOM includes both fixed and variable costs, and is therefore not suitable to be inflated on a per customer basis.
204. FortisBC stated that "All of FortisBC's expenditures are related to and in support of providing safe and reliable service for our customers. All costs are variable in this sense, with total costs increasing as the number of customers served increase. This is consistent with the commonly expressed economic perspective that all costs are variable over the long run."⁶⁵

⁶¹ Exhibit B-1, page B-31

⁶² CEC Table 1

⁶³ Exhibit B-1, page B-31

⁶⁴ CEC Table 2

⁶⁵ Exhibit B-10, BCUC 1.17.7

205. The CEC does not agree that the concept of 'all costs are variable is applicable in the context of this proceeding.
206. The CEC submits that the term is five years, and that under a five-year MRP term the Companies are essentially only accountable for meeting variable costs.
207. There is therefore significant room in the semi-variable and fixed overhead costs for absorbing new customers without corresponding increases in costs and customer rates.
208. In fact, the existence of largely fixed costs is the rationale behind the economies of scale in monopoly services and utilities.
209. The CEC considers that it is likely that a reasonably large proportion of O&M expenses, such as many of those related to fixed assets, are well known and consistent over time and could be extracted from base O&M to avoid inflating these costs.
210. If not treated as a flow through, such costs could be even be inflated according to criteria other than customer growth.
211. The CEC notes that when FEI anticipates increased O&M expenses from its fixed investments, it proposed to remove it to outside of the index-based O&M.⁶⁶
212. By basing the O&M formula on a unit cost per customer, the company is combining highly predictable costs associated with fixed assets with more dynamic numbers associated with variable costs. The CEC contends these costs should not be combined for the purpose of earning incentives and that earning incentives as proposed are not justified.
213. The CEC submits that there is insufficient evidence that customer count provides an adequate proxy for the combination of customers and system capacity as there is only an indirect link as the business driver.

Fixed and Variable Costs Cannot Be Accurately Estimated

214. FortisBC also states that it cannot accurately estimate all fixed and variable costs.⁶⁷
215. The CEC submits that the statement that 'all costs are variable in the long run' is a red herring given the short-term nature of the MRP and should be disregarded by the Commission.
216. The CEC notes that both Utilities have recently undergone significant cost of service analyses which undertake to define costs at a very granular level.
217. The CEC submits that the Utilities are very capable of identifying variable, semi-variable, and fixed costs.

⁶⁶ Exhibit B-1, section 2.4.2.2.3, page C-22

⁶⁷ Exhibit B-10, BCUC 1.17.7

218. The CEC submits that the Utilities suggestion that they cannot do so is not credible.

100% MULTIPLIER FOR GROWTH FACTOR

219. The Utilities propose a 100% multiplier for its average customer growth factor.
220. The CEC notes that growth factor used in the previous PBRs was also customer growth which was reduced by 50%, so the implication is that there will be a 100% increase in the growth aspects of the formula.
221. FortisBC provides various pieces of evidence to argue that the 100% multiplier, instead of the 50% multiplier is appropriate.
222. The Utilities argue that (a 100% multiplier) is the approach taken in all but one other jurisdiction and reflects the fact that productivity from economies of scale is already taken into account in Base O&M and the productivity factor.⁶⁸ When combined with the statistical evidence that FortisBC’s O&M and FEI’s Growth capital expenditures are highly correlated with the growth factors, a 100 percent growth factor should be used in FortisBC’s Proposed MRPs.⁶⁹
223. The CEC notes that in this case the Utilities propose the productivity factor to be zero.
224. The CEC submits that the most important evidence is the past demonstrations that the Utilities have received more in the O&M formula than was required, resulting in benefits to the shareholder and increased ROE.

Table B2-2: FEI Formula O&M Savings from 2014 to 2019 (\$ millions)

Year	Actual (a)	Formula With 1.1% PIF (b)	Savings above the Formula (c= b-a)	Formula without 1.1% PIF (d)	Savings related to 1.10% PIF (e= d-b)	Total Savings to customer (f= 0.5*c + e)
2014 ⁴⁵	191.0	198.5	7.5	200.7	2.2	5.9
2015	225.4	235.6	10.2	240.4	4.8	9.9
2016	225.9	238.1	12.2	245.6	7.5	13.6
2017	232.5	240.4	7.9	250.7	10.3	14.3
2018	238.7	243.6	4.9	256.8	13.2	15.7
2019P	246.9	248.9	2.0	265.3	16.4	17.4
Total						\$76.8

⁶⁸ FortisBC Final Argument, page 72

⁶⁹ FortisBC Final Argument, page 81

⁷⁰ Exhibit B-1, page B-31

Table B2-3: FBC Formula O&M Savings from 2014 to 2019 (\$ millions)

Year	Actual (a)	Formula with 1.03% PIF (b)	Savings above the Formula (c = b – a)	Formula without 1.03% PIF (d)	Savings related to 1.03% PIF (e = d – b)	Total Savings to customer (f = 0.5*c + e)
2014	52.0	52.7	0.7	53.3	0.5	0.9
2015	51.9	53.0	1.1	54.1	1.1	1.6
2016	51.8	53.6	1.8	55.3	1.7	2.5
2017	52.5	54.1	1.6	56.3	2.3	3.0

⁴⁸ 2013 numbers include the Customer Service deferral related expenditures of approximately \$14.5 million. If this item is removed from calculations, the total O&M, total O&M per customer and actual formula O&M per customer in 2013 would decrease to \$281, \$297 and \$269 million dollars (adjusted to 2019 dollar) respectively.

⁴⁹ Sum of column e in Table B2-3.

- 225. The CEC submits that it is not credible to suggest that as of 2019 the environment for O&M expenditures has changed so dramatically that it warrants the equivalent of a 100% increase in the growth factor.
- 226. The CEC does not support the removal of the 50% multiplier and recommends that the Commission decrement any growth factor by at least 50% from a 100% proposal and only allow any growth factor if there is an appropriate X-Factor for productivity.

FORECAST APPROACH WITH TRUE-UP FOR CUSTOMER COUNT

- 227. FortisBC proposes to use a forecast of average number of customers as the growth Factor, which is later subject to a true-up in the following year to eliminate any forecast variances.⁷²
- 228. This is a change from the previous lagged approach with 50 percent multiplier of the growth factor.⁷³
- 229. The CEC does not support the O&M formula as proposed by the Utilities, but does not object to the removal of the lagged approach with appropriate true-up.
- 230. As noted in CEC’s Final Submissions in the previous PBR, the CEC submits that it is highly unlikely that the Utilities require both an inflationary multiplier and a growth multiplier.

⁷¹ Exhibit B-1 page B-32

⁷² Exhibit B-1, page C-49

⁷³ FortisBC Final Argument page 42

The evidence for this is found in an answer to CEC 1.10.5, which shows that non-labor costs (average \$130) are quite fixed over a considerable period of time, while there is some modest inflation in the labor costs (average \$127). There is significant evidence that over 50% of the costs are relatively fixed and need neither an inflation growth factor nor a customer growth factor for forecasting purposes.

FEI Gross O&M by Type with Variance from Average				
\$ in Millions				
Year	Non-Labour	% vary to Avg	Labor	% vary to Avg
2010	\$134	3.2%	\$103	-18.8%
2011	\$138	6.2%	\$108	-14.8%
2012	\$123	-5.3%	\$132	4.1%
2013	\$135	3.9%	\$130	2.5%
2014	\$119	-8.4%	\$138	8.9%
2015	\$126	-3.0%	\$134	5.7%
2016	\$131	0.9%	\$129	1.8%
2017	\$134	3.2%	\$125	-1.4%
2018	\$129	-0.7%	\$142	12.0%
Average	\$130		\$127	

231. FortisBC states that it proposes to true-up its forecast of growth factors to actual amounts in each test year for the previous years' forecasts in order to respond to concerns related to the impacts of forecast error in the previous PBR.
232. The true-up will return to or recover from customers any difference between forecast and actual customer growth.⁷⁴
233. The CEC accepts the proposed true-up as being reasonable.

Forecast O&M

234. Forecast O&M are items that are deemed to not fit well within the formula. These include:
 - Pension and OPEB expenses;
 - Insurance Premiums;
 - BCUC levies;
 - FEI Integrity Digs;
 - O&M to support the Companies' investments in clean growth future (NGT stations and tankers, variable LNG production, RNG, EV charging);

⁷⁴ FortisBC Final Argument, page 72

- Incremental costs to comply with various policies and standards;
- Depreciation and Amortization; and
- Property Taxes.

235. The costs will be forecast each year in the annual review and variances will be captured in the Flow Through deferral account.⁷⁵
236. The CEC accepts the proposal as reasonable.

OTHER REVENUE

237. The Companies will continue to forecast Other Revenues each year in the Annual Reviews.
238. Other revenue includes FEI's Southern Crossing Pipeline Third Party revenue, CNG and LNG Service Revenue and RNG Other Revenue which currently has deferral account treatment, and is proposed to continue under the MRP.
239. The CEC accepts this as reasonable.
240. FortisBC proposes to hold the risk of variances in other components of the other revenue to the account of the shareholder, as they 'typically are under a cost of service regime'.⁷⁶
241. The CEC does not object to variances in the other revenue being to the account of the shareholder unless it is demonstrated throughout the MRP that there are significant variances in favour of the Utility.

O&M Conclusions

242. FortisBC states that the proposed indexed-based approach to O&M over the five-year term of the Proposed MRPs will continue to provide an incentive to FEI and FBC to find efficiencies.⁷⁷
243. The CEC is of the view that the formula proposed will likely be overly generous.
244. The CEC submits that the above review can be considered to demonstrate that the use of the Average Number of customers with a 50% growth factor and an inflation factor minus a productivity X-Factor in the formula provided a higher formula value than was warranted.
245. The CEC submits that the important conclusions to be drawn are that:

⁷⁵ Exhibit B-1, page A-4

⁷⁶ Exhibit B-1 page C-114

⁷⁷ FortisBC Final Argument, page 42

- The 50% growth figure has been more than adequate for the Utilities in the past;
- There may well be a large fixed component to O&M which should not be inflated according to customer growth;
- O&M per customer has been shown to be declining over the PBR period; and should not be used as a figure to be inflated;
- The proposed \$250/customer and \$416/customer growth figures proposed for FEI and FBC respectively are likely overly generous; and
- It is likely that the Utilities are well-positioned to underspend the formula and achieve additional ROE without providing anything other than normal prudent utility management.

246. The CEC recommends that the Commission reject the use of UCOM and particularly the values for the UCOMs proposed by the Utilities.

I-Factor - Inflation

247. The Utilities outline their proposal for the development and use of the I-Factor in the Application at section 1.3.

248. The I-Factor is a composite including 45% BC CPI plus 55% BC-AWE which lags by one-half year.

249. The CEC notes that while average number of customers will be trued-up, there is no corresponding true up for overestimated inflation.

250. The CEC accepts that actual inflation measures can reasonably reflect what the price / cost pressures are across the economy and that this is a reasonable benchmark.

251. The CEC submits that doing other than recognizing real inflation could potentially be detrimental to ratepayer interests and overly generous to the Utilities, providing them a cushion against which to underspend to benefit the Utilities' shareholder. Any over-forecast can become embedded in the base and would compound through the term of the MRP.

252. Further the CEC submits that it is inappropriate to enable inflation on otherwise relatively stable non-labor costs. The CEC submits that an inflation factor without a substantial productivity factor would be quite inappropriate. The CEC recommends that the Commission deny this component of the MRP Application.

COMPOSITE

253. As in the current PBR plans, the Utilities propose to continue the use of the weighted composite I-Factor, relying on the following indexing:

- Labour indexed to Statistics Canada AWE:BC; and
 - Non-labour indexed to the All-items Index for CPI:BC.
254. FortisBC confirms that these are the same sources for inflation assessment as those approved in the current PBR.⁷⁸
255. As part of the Annual Reviews, FortisBC will update both the AWE:BC and the CPI:BC rates.
256. The CEC does not find significant evidence of superior options for indexing available and therefore does not object to the indexes proposed.
257. The Utilities propose a weighting of 55 percent labour and 45 percent non-labour, which is a composite index for FEI and FBC.⁷⁹
258. According to the Utilities this weighting continues to represent FEI and FBC's share of labour and non-labour costs.⁸⁰
259. The CEC disagrees with this statement for several reasons including:
- The percentages do not reflect actual historical percentages of the two Utilities;
 - Using the combined weighting provides a favourable variance for the Utility; and
 - Even using the combined, most recent information, the Utilities have 'rounded' it in favour of labour %, which typically has a higher inflation than non-labour.
260. In CEC 1.10.5, FortisBC provides historical percentages of the labour and non-labour for gross O&M.

⁷⁸ Exhibit B-7 CEC 1.10.1

⁷⁹ Exhibit B-10, 1.19.7

⁸⁰ FortisBC Final Argument, page 49

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FEI										
Labour	\$ 96	\$ 103	\$ 108	\$ 132	\$ 130	\$ 138	\$ 134	\$ 129	\$ 125	\$ 142
Non-Labour	123	134	138	123	135	119	126	131	134	129
Gross O&M	\$ 219	\$ 237	\$ 246	\$ 254	\$ 265	\$ 258	\$ 260	\$ 259	\$ 260	\$ 272
Labour	44%	43%	44%	52%	49%	54%	51%	50%	48%	52%
Non-Labour	56%	57%	56%	48%	51%	46%	49%	50%	52%	48%
FBC										
Labour	\$ 33	\$ 32	\$ 35	\$ 34	\$ 33	\$ 38	\$ 36	\$ 33	\$ 32	\$ 35
Non-Labour	13	14	18	20	23	22	22	23	24	23
Gross O&M	\$ 46	\$ 46	\$ 53	\$ 54	\$ 57	\$ 60	\$ 58	\$ 56	\$ 56	\$ 57
Labour %	71%	70%	65%	63%	59%	64%	62%	59%	57%	60%
Non-Labour %	29%	30%	35%	37%	41%	36%	38%	41%	43%	40%
Combined										
Labour	\$ 129	\$ 135	\$ 143	\$ 165	\$ 163	\$ 176	\$ 170	\$ 162	\$ 157	\$ 177
Non-Labour	136	148	156	142	158	141	148	153	158	152
Gross O&M	\$ 265	\$ 283	\$ 299	\$ 308	\$ 322	\$ 318	\$ 318	\$ 315	\$ 315	\$ 329
Labour %	49%	48%	48%	54%	51%	56%	53%	51%	50%	54%
Non-Labour %	51%	52%	52%	46%	49%	44%	47%	49%	50%	46%

261. For FEI, labour has not accounted for 55% of Gross O&M dating back to 2009, and was frequently significantly lower. The average over the last 10 years is 48.7%. The average over the last 5 years is 51%.
262. For FBC, the labour represents a significantly higher proportion.
263. The Utilities state that FortisBC changed its accounting for intercompany charging in 2018 to properly reflect charges as labour instead of non-labour so the pre-2018 labour/non-labour proportions are not suitable for use in the MRP formula.
264. The CEC submits that regardless of the transferring of costs between categories, the conclusions about the previously used tracking will still be maintained in the adjusted data. If the Utilities propose not to use some data, they should provide adjusted data and explain the issues, not reject the use of data that is not favourable.
265. The CEC notes that both Utilities experience an increase in labour charges rather than a trade-off of labour between the two. The CEC submits that this is somewhat confusing.
266. The CEC notes that the previous intercompany charging practices were deemed adequate for the previous PBR.
267. The CEC submits that it would be valuable to verify that the intercompany charging was altered for a specific and defensible reason.

268. The CEC recommends that the Commission consider the rationale and justification for the change in accounting treatment in its assessment.
269. The CEC submits that the Commission should also consider the appropriateness of using a single year (2018) as the baseline for a MRP instead of an average from the previous decade, or previous PBR period.
270. The CEC submits that in general an average is a superior methodology, and the previous PBR period likely represents a more appropriate baseline.
271. If the Commission determines that it is not appropriate to use historical information due to the change in accounting, it could be preferable for the Commission to consider changing the ratio for each year as a multi-year plan rolls forward.
272. With respect to using a combined weighting in the formula calculation instead of using separate factors for each Utility, FortisBC argues that the impact is ‘small’.

‘For FEI, the change to 52 percent labour/48 percent non labour would have decreased formula O&M for 2019 by 0.08 percent, or \$0.201 million. For FBC, the change to 60% labour/40 percent non-labour would have increased formula O&M for 2019 by 0.16 percent, or \$0.088 million’.⁸¹
273. The CEC notes that this represents an overall cost to the ratepayer of about \$113,000.
274. While the CEC recognizes that this is a relatively small figure, the CEC submits that the formulas should be based on the best available information, and that there is virtually no difficulty in establishing different rates for the different Utilities.
275. Finally, even using the combined 2018 ratios, and single 2018 year as the baseline the actual Labour percentage for 2018 is 54% and the Non-Labour percentage is 46%, not 55% and 45% as proposed.
276. The CEC submits that there is no reason for ‘rounding’ to 55% and 45%, and it appears the only reason is to create a benefit to the Utility.
277. Given that the CPI and AWE factors are significantly more complicated to get and utilize the CEC submits that there is no value in ‘simplicity’.
278. The CEC recommends that the Commission carefully consider the appropriateness of the Utilities’ change in accounting practices prior to deciding whether to rely on a single year of evidence, or whether to utilize an average over a particular period.
279. The CEC recommends that in the absence of strong evidence supporting the change in accounting and labour/non-labour proportions, the Commission should rely on a minimum 5-year average instead of the single 2018 year as the basis for the labour/non-labour percentages.

⁸¹ Exhibit B-7, CEC 1.10.5

280. The CEC notes that the combined average over the last five years is 52.8% labour, which is 2.2% lower than the 55% proposed by the Utilities.
281. With regard to using a combined value vs individual values, the CEC recommends that the Commission utilize separate rates for the Utilities based on their historical 5-year average during the PBR period.
282. Lastly, should the Commission select the combined 2018 figure as the basis for going forward, the CEC recommends that the Commission reject the Utilities' 'rounding' and utilize the 54% labour percentage and 46% non-labour percentage.

HALF YEAR LAG

283. The half-year lag occurs because the most current July to June period is compared with twelve months prior July to June period.⁸²
284. The CEC recognizes that the half-year lag is likely required as a result of information timing.

X-Factor – Zero Productivity Factor

285. As noted in FortisBC's Final Argument, most plans include a composite inflation factor consisting of both labour and non-labour price indexes and include an X-Factor value set at 0.3 percent, inclusive of any stretch factor.⁸³
286. FortisBC's proposal to not recommend an X-Factor value for its index-based formulas can be expressed as proposing an implied productivity factor of zero percent.⁸⁴
287. The Utilities argue that they should not be subject to a positive X-Factor because:

'...the X-Factor determinations by regulators in other jurisdictions supports a zero percent productivity factor as the rationale for a positive X-Factor or stretch factor in these other jurisdictions do not apply to FortisBC. FEI and FBC have both been under PBR plans for many years, and have been finding it increasingly difficult to find efficiencies under the 2014-2019 PBR plans, as well documented in the Annual Review. This means that there is no 'low hanging fruit' that would justify a stretch factor.'⁸⁵

⁸² FortisBC Final Submissions page 41

⁸³ FEI Final Argument page 26 See also Exhibit B-10, BCUC IR 1.13.2 for a discussion of the AUC to set an X-Factor of 0.3 percent.

⁸⁴ Exhibit B-10, BCUC 1.17.3

⁸⁵ FortisBC Final Argument page 49

288. In BCUC 1.17.4, the Utilities point out that ‘The Alberta utilities in their first generation PBR had significantly higher realize ROE’s than their approved ROE to the point that ...(they) triggered the off-ramp provisions.’⁸⁶
289. The CEC notes that the evidence demonstrates that both FEI and FBC achieved returns that exceeded the allowed rate of rate by 38 Bp and 14 Bp respectively under the PBR that included an X-Factor.⁸⁷

		2014	2015	2016	2017	2018	Average
FEI ROE	Actual	9.20%	9.19%	9.28%	9.04%	8.93%	9.13%
	Formula	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
	Higher (Lower) than formula	0.45%	0.44%	0.53%	0.29%	0.18%	0.38%

		2014	2015	2016	2017	2018	Average
FBC ROE	Actual	9.22%	9.26%	9.38%	9.31%	9.29%	9.29%
	Formula	9.15%	9.15%	9.15%	9.15%	9.15%	9.15%
	Higher (Lower) than formula	0.07%	0.11%	0.23%	0.16%	0.14%	0.14%

290. The CEC submits that the excess returns earned by the Utilities under the existing PBR are not supportive of FortisBC’s statements that an X-Factor is unsuitable, and suggest that the Utilities were able to manage well with the X-Factor in place.
291. Similarly, the evidence is that both Utilities were able to significantly underspend their O&M formula even with the X-Factor in place as discussed above in the O&M section.

⁸⁶ Exhibit B-10, BCUC 1.17.4

⁸⁷ Exhibit C7-5, page 7

		2014	2015	2016	2017	2018	Total
FEI O&M	Actual	193,644	226,568	225,769	225,786	235,878	1,107,645
	Formula	200,973	237,424	238,067	236,050	241,481	1,153,995
	Higher (Lower) than Formula	(7,329)	(10,856)	(12,298)	(10,264)	(5,603)	(46,350)
	%	-3.65%	-4.57%	-5.17%	-4.35%	-2.32%	-4.02%

Similarly, FBC experienced underspending in O&M. Over the five years, FBC spent \$6.6 million less than the formula.

		2014	2015	2016	2017	2018	Total
FBC O&M	Actual	50,616	48,921	47,063	47,189	48,566	242,355
	Formula	51,604	50,227	48,432	48,917	49,802	248,982
	Higher (Lower) than Formula	(988)	(1,306)	(1,369)	(1,728)	(1,236)	(6,627)
	%	-1.91%	-2.60%	-2.83%	-3.53%	-2.48%	-2.66%

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292. In the Final Submissions FortisBC also goes on to state:
- ‘The results of Concentric’s benchmarking study confirm that FEI and FBC are both efficient relative to their peers, again showing that no stretch factor is warranted.’
293. The CEC considers these statements to be indicative of the Utilities’ expectations regarding formulaic ratemaking, and the outcome of the earlier PBR.
294. That is, the Utilities appear to consider they are entitled to receive extra ROE for addressing ‘low hanging fruit’. The fact that it becomes ‘difficult’ appears to negate the need for a ‘stretch’ factor. It further implies that the appropriateness of a ‘stretch factor’ relates to being in an inefficient position relative to their peers.
295. In the CEC’s view, additional rewards should not be available for ‘low hanging fruit’ and the ‘low hanging fruit’ should really not exist under prudent management in the first place.
296. Both Utilities are entitled to receive the opportunity to earn a fair, just, and reasonable ROE under BCUC regulation, which is intended to replace the effects of competition, and assumes prudent management.
297. The presence of ‘low hanging fruit’ during the PBR would suggest that the ROE could have been decremented until such inefficiencies were eliminated.
298. An additional ‘reward’ should only be achievable if the Utilities truly ‘stretch’ beyond being in an ‘efficient position’ relative to their peers.

⁸⁸ Exhibit C7-5, page 8

IV. CAPITAL

D. BASE GROWTH CAPITAL

299. FEI and FBC have differing approaches to Controllable Capital Expenses.⁸⁹
300. For FEI, a unit cost approach is proposed for growth capital, while other regular capital will be undertaken according to a five year capital forecast. The Growth Capital formula is tied to forecast gross customer additions and the unit cost is inflation-indexed. Growth capital will be subject to true-up for actual customer additions.⁹⁰
301. FEI's actual experience with its growth capital has been as follows:

1 **Table C3-1: FEI Growth Capital Expenditures 2014-2018 (\$000s)¹⁴¹**

Growth Capital	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual
New Customer Mains	8,420	13,752	12,823	16,467	24,494
New Customer Services	24,675	30,064	31,246	39,149	53,993
New Customer Meters	1,583	1,960	3,430	3,927	4,397
System Improvements (DP)	2,439	5,723	2,953	3,566	4,433
CIAC	(3,757)	(2,805)	(2,505)	(2,770)	(2,529)
Total Growth (Net)	33,360	48,694	47,947	60,339	84,787
Gross Customer Additions	13,583	16,213	17,261	20,825	22,439
Growth Unit Cost (Net)	2,456	3,003	2,778	2,897	3,779

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Growth Capital	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual
New Customer Mains	8,690	6,517	7,260	7,103	7,706
New Customer Services	17,778	19,046	19,104	22,850	22,936
New Customer Meters	2,092	2,313	2,779	2,651	2,548
System Improvements (DP)	4,012	1,604	806	535	1,079
Subtotal Growth (Gross)	32,573	29,480	29,949	33,138	34,270
CIAC	(2,314)	(667)	(2,176)	(2,472)	(3,051)
Total Growth (Net)	30,260	28,813	27,773	30,666	31,219
Gross Customer Additions	13,094	15,762	7,693	12,206	10,926
Growth Unit Cost (Net)	2,311	1,828	3,610	2,656	2,857

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⁸⁹ Exhibit B-1, page A-4

⁹⁰ Exhibit B-1, page A-4

⁹¹ Exhibit B-1, Page C-58

⁹² Exhibit B-7, Page 80, CEC 1.23.1

302. The CEC finds that the variability of the capital expenditures and the customer additions is very significant as evidenced by a calculation of unit costs versus average unit costs for the two periods above:

FEI Growth Capital Expenditures 2014-2018					
Year	Growth	Additions	Cost/Add	Vary v Avg	% Vary
2009	\$30,260,000	13094	\$2,311	\$313	13.5%
2010	\$28,813,000	15762	\$1,828	\$796	43.5%
2011	\$27,773,000	7693	\$3,610	-\$987	-27.3%
2012	\$30,666,000	12206	\$2,512	\$111	4.4%
2013	\$31,219,000	10928	\$2,857	-\$233	-8.2%
2014	\$33,360,000	13583	\$2,456	\$527	21.4%
2015	\$48,694,000	16213	\$3,003	-\$21	-0.7%
2016	\$47,947,000	17261	\$2,778	\$205	7.4%
2017	\$60,339,000	20825	\$2,897	\$85	2.9%
2018	\$84,787,000	22439	\$3,779	-\$796	-21.1%

303. The CEC finds that annual variations of over 40% to 70% across a period equivalent to an MRP period do not represent an appropriate base for a formulaic approach to regulation and particularly one proposed with incentives attached.
304. For FBC, regular capital additions will be undertaken according to a five year capital forecast.⁹³
305. FBC propose simply to forecast its capital requirements as total regular capital.
306. The CEC has reviewed the actual and projected regular capital historical capital expenditures and finds considerable variability.

10 **Table C3-20: FBC Actual and Projected Regular Capital Expenditures, 2014-2019 (\$000s)**

	2014	2015	2016	2017	2018	2019P
Growth Capital	\$ 18,195	\$ 21,267	\$ 15,456	\$ 22,333	\$ 24,003	\$ 17,519
Sustainment Capital	41,158	27,301	25,645	29,367	28,616	33,227
Other Capital	8,408	8,183	9,307	13,882	11,942	15,225
Total Regular Capital	67,761	56,752	50,408	65,582	64,561	65,971

307. ¹¹ ⁹⁴The CEC does not support inclusion of the capital as a forecast against which formula underspending generates earnings.
308. The growth capital for FBC when analyzed against its average also shows considerable variability even in the 2020 to 2024 data forecast against connections.

⁹³ Exhibit B-1, page A-4

⁹⁴ Exhibit B-1, Page C-80

1 **Table C3-22: FBC Growth Capital Expenditures 2020-2024 (\$000s)**

	Average					
	2017-2019P	2020	2021	2022	2023	2024
Transmission Growth	\$ 1,572	\$ 5,172	\$ 2,063	\$ 2,740	\$ 5,195	\$ 1,086
Distribution Growth	1,232	3,716	1,876	1,807	1,899	1,921
New Connects	18,481	18,141	19,104	19,792	19,188	20,163
Total	\$ 21,285	\$ 27,029	\$ 23,042	\$ 24,339	\$ 26,283	\$ 23,170

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FBC Growth Capital Expenditures 2020-2024					
Year	Growth	Additions	Cost/Add	Vary v Avg	% Vary
Base Avg	\$21,285,000	18481	\$1,152	\$181	15.7%
2020	\$27,029,000	18141	\$1,490	-\$157	-10.6%
2021	\$23,042,000	19104	\$1,206	\$126	10.5%
2022	\$24,339,000	19792	\$1,230	\$103	8.4%
2023	\$26,283,000	19188	\$1,370	-\$37	-2.7%
2024	\$31,219,000	20163	\$1,548	-\$216	-13.9%

309. The CEC finds plus or minus 28% variability over the forecast to a metric of connections does not give rise to any confidence that this is a relevant context for determining benefits of underspending and putting incentives in place.

CAPITAL FORMULA

310. The FEI and FBC approach to capital regulation in rate setting under and MRP is summarized in the following section.

311. FEI is proposing to have a formulaic capital forecast against which it can earn additional return on its rate base investments based on underspending the formulas.

312. FBC is proposing to simply put forward its capital forecast.

⁹⁵ Exhibit B-1, page C-82

Item	2014-2019 Plans		Proposed Plans		Comparison of risk/rewards/incentives and ease of understanding	
	FEI	FBC	FEI	FBC		
Term	Six years (2014-2019)		Five years (2020-2024)		This change has no impact on the risks/rewards or incentives because for all practical matters the term of the Current PBR Plans were five years as well (Refer to Section C1.2).	
Formula	O&M	$OM_t = OM_{t-1} * [1 + (I-X)] * (1+G/2)$ G = Percentage growth in average number of customers		$OM_t = UCOM_{t-1} * (1 + I) * (G_t)$ G = Avg number of customers Customer growth forecast annually with true-up for actual in the following year(s).		The proposed changes (the elimination of 0.5 multiplier and the use of true-up) will improve the accuracy of the O&M formulas to estimate Utilities' needed O&M during the MRP term and as such improve the balance of risks and rewards for both utilities and customers (more accurate formula means less risk of windfall losses or surpluses which reduce the risk for all parties involved). FortisBC believes that the unit cost approach is more transparent than the O&M approach used for the Current PBR Plan as stakeholders can monitor the unit cost performance directly and therefore will improve the ease of understanding for all stakeholders.
	Capital	Allowed Cost $t = Cost_{t-1} * (1+I-X) * (1+G/2)$ Three categories: (i) Growth capital, (ii) sustainment capital (iii) other capital	Allowed Cost $t = Cost_{t-1} * (1+I-X) * (1+G/2)$ Three categories: (i) Growth capital, (ii) sustainment capital (iii) other capital	5 year forecast; Exception: Growth capital $GC_t = UCGC_{t-1} * (1+I) * G_t$ G = Gross customer additions Customer growth forecast annually with true-up for actual in the following year(s).	5 year forecast	FortisBC's assessment of the proposed changes to FEI's growth formula (the elimination of 0.5 multiplier, use of gross customer additions, and the use of true-up) is similar to the one provided for O&M formulas above (better accuracy, improve transparency and no impact on incentives to find efficiencies). The proposed forecast approach to capital expenditures will improve transparency and ease of understanding, as stakeholders are able to scrutinize the Companies' capital plan in more detail than what would have been possible under a formula approach. The forecast capital approach will better address the lumpy nature of capital investments and as such will be a more accurate representation of the Companies' actual capital requirements. Forecast capital is subject to the same level of incentives as formula capital. This is because similar to the formula approach any variance is shared through the earnings sharing mechanism.
		G = Service line additions for Growth capital, average number of customers for Sustainment and Other capital	G = Average number of customers			

313. The CEC does not accept FBC's approach of simply including its five year forecast of capital without any metrics to evaluate the potential control of the capital expenditures and their benefits. The CEC submits that the Commission should deny the FBC approach all together.

'87. Specifically, under FEI's inflation-indexed approach, each year, the Base Growth capital cost per Gross Customer Addition will be adjusted for inflation, and then multiplied by the forecast Gross Customer Additions. The forecast will be subject to a true-up for actual Gross Customer Additions to eliminate any impact of forecast variance.⁹⁶

88. The above reflects a unit cost approach to Growth capital whereby the formula is applied to FEI's Growth capital cost per Gross Customer Addition, rather than to the total Growth capital amount. This unit cost approach increases transparency of FEI's unit costs and facilitates a true up mechanism to eliminate any forecast errors in the growth factor. The unit cost approach is a matter of presentation, and does not change the resulting Growth capital amounts as compared to the approach taken under the Current PBR Plans.⁹⁷

FEI proposes to forecast Gross Customer Additions in each Annual Review, subject to a true-up in each subsequent year. This removes the 50 percent lagging growth factor approach used in the Current PBR Plans.⁹⁸

90. As indicated above, FEI is proposing to use Gross Customer Additions instead of service line additions for its Growth capital formula. Gross Customer Additions is the most reasonable growth factor as it is the primary cost driver of FEI's Growth capital expenditures and is an improvement

⁹⁶ FortisBC Final Argument, page 44

⁹⁷ FortisBC Final Argument, page 44

⁹⁸ FortisBC Final Argument, page 45

over the use of Service Line Additions under the Current PBR Plan given the shift in the market to more multi-family dwellings.⁹⁹

A gross customer addition is a new service to a new customer or customers.¹⁰⁰

Gross Customer Additions is also a superior growth factor than average number of customers. The primary cost driver for Growth capital is the addition of customers, not the average number of customers. The average number of customers includes customers that move in and move out of premises.¹⁰¹

314. The FEI proposal is to set the unit cost with a couple of upward adjustments for construction prices and for muster kit and materials.¹⁰²
315. The formula then is set up to inflate the base by the rate of inflation.¹⁰³
316. The CEC submits that it is inappropriate to make specific adjustments to a unit cost structure and then apply the full amount of inflation each year. Inflation rates essentially reflect all of the cost changes over time and should not augmented with specific additions.
317. When questioned with respect to whether or not the Utility has fixed costs, semi-fixed costs and variable costs analysis, which the CEC would want to see in order to know whether or not inflation should be applicable to the whole amount, FEI responds that it all costs are variable in the long term and that FEI does not have any such analysis.¹⁰⁴
318. The CEC finds this to be a completely inadequate answer if FEI is seeking support for a formula multiplied by inflation factors.
319. The FEI expects to earn a reward for underspending the formula allowance for capital derived from the formula approach.
320. The CEC submits that the approach evaluating performance with regard to capital investment based upon underspending is cost based and ignores the benefits being derived from the capital spending.
321. The approach to determining the reward is a calculation of the deferral of depreciation charges, interest expense, and income taxes applicable when there is more or less actual capital spending variance from the capital allowed by the formula.

⁹⁹ FortisBC Final Argument, page 45

¹⁰⁰ FortisBC Final Argument, page 45

¹⁰¹ FortisBC Final Argument, page 46

¹⁰² Exhibit B-1, Page C-61

¹⁰³ Exhibit B-1, Page C-59

¹⁰⁴ Exhibit B-7, Pages 85 & 86, CEC 1.25.2, 1.25.3, 1.25.4

Line	Particulars	Forecast	Actual	Difference	Reference
1	Capital Spending	\$ 100,000	\$ 95,000	(5,000)	
2	Mid-Year add to Rate Base	\$ 50,000	\$ 47,500		
3					
4	Depreciation Rate	3.0%	3.0%		No depreciation impact in first year
5	Depreciation Expense	3,000	2,850		however, included in this calculation
6					
7	Debt Ratio	60%	60%		
8	Interest Rate	5.5%	5.5%		
9	Interest Expense	1,650	1,568		Line 2 x Line 7 x Line 8
10					
11	Income Tax Rate	27.0%	27.0%		
12	Income Tax Expense	666	632		Complex calc, therefore estimate
13					
	Sum of Depreciation, Interest				
14	and Income Tax Expense	5,316	5,050	(266)	* Line 5 + Line 9 + Line 12

* Lower actual expenses than forecast, shown in the Difference column, will result in an increase to the earnings and, correspondingly, an increase in the achieved ROE.

322. Capital underspending under a formula can be caused by any of the following:
- The formula could be too generous in make up from the base and from the inflation factor being applied;
 - The underspending could be deferred timing of expenditures despite the addition of customers;
 - The underspending could be caused by additions of customers that can be serviced at a lower cost than other types of customer additions;
 - The underspending can be related to variability in timing for upgrade requirements which may be needed;
 - The underspending may be related to a change in the mix of mains, services and meters;
 - The underspending may deliver lesser benefits to customers than the amount of benefit that should be expected with the base formula unit cost; and
 - FEI may be getting systematically more efficient and cost effective at delivering service to new customers.
323. Most of these causes are of no value to ratepayers and are certainly not worthy of an incentive. If the last scenario was effectively proven there might be a case for providing an incentive.
324. The CEC submits that the formula proposed by FEI is deficient for the purpose of determining benefits realized and suggesting that they are in fact savings.
325. If the Commission intends to pursue a formula MRP as FEI has applied for then at a minimum the formula should only allow 50% of the inflation each year and/or the base should not be augmented to a higher level. Any formula should be set to seek an improvement in productivity, which FEI is not proposing.

326. The Commission should be cognizant of the impact the 2018 capital expenditures has on setting a base and particularly the incentive the Utility has to ensure that it has a significant impact. The effect is to show growth in cost per addition in the past as significantly higher than is warranted by the other data by approximately 50%, underscoring the CEC view of the formula.

CAPITAL FORECAST

327. Part Six discusses how FEI and FBC's forecast approach to Regular capital addresses the challenges with capital under the 2014-2019 PBR Plans, and how the forecast of Regular capital is robust and reasonable.
328. The CEC submits that FEI and FBC capital expenditures should flow through and not be included in the formula-based process with incentives attached to underspending, without a better understanding of whether or not the Utility is actually becoming more efficient and cost effective. With the FEI and FBC proposals there is no way to know what is causing the underspending or overspending, because FEI and FBC do not have sufficient analytical capabilities to demonstrate the result.

CAPITAL EXCLUSION – MAJOR PROJECTS

329. FortisBC confirms that it will continue the practice of flowing through variances for Major Projects, which it states 'stems from the Utility's right under Section 59 of the *Utilities Commission Act* for rates to be set so that it has an opportunity to earn a fair return on its prudently invested capital.¹⁰⁵
330. The CEC agrees that it is appropriate for FortisBC to have the opportunity to earn a fair return on its prudently invested capital, but submits that the current design with Major Project exclusion provides an opportunity for the Utility to manipulate spending to the benefit of the Utility.
331. FortisBC states that FBC's regular capital expenditures are set on a cost of service basis, and there is no formula capital envelope to which the exclusion criteria might be applied.
332. FortisBC has proposed to retain the existing CPCN thresholds which were also determined in the Capital Exclusion Criteria proceeding for the term of the Proposed MRP. There is no difference in the criteria for inclusion of projects in Regular Capital expenditures under the Current PBR plan or the Proposed MRP.¹⁰⁶
333. FortisBC does not confirm that the list of Major Projects identified on pages C-107 and C-108 of the Application represent all of FBC's anticipated Major Projects for the Proposed MRP term.

¹⁰⁵ Exhibit B-17, ICG 2.3.5

¹⁰⁶ Exhibit B-17, ICG 2.3.2

334. FortisBC goes on to explain that the Major Projects are examples of projects that may arise during the term of the Proposed MRP, and that it is premature to identify or discuss projects that may not proceed, and they do not affect the approvals sought in the Application.¹⁰⁷
335. The CEC is of the view that Capital Exclusions are yet another difficulty with formulaic ratemaking, partly because of the arbitrary CPCN threshold.
336. The plans have different implications for cost recovery of expenditure variances however. In the Current PBR plan, variances within the 10% deadband remain outside of rate base until the termination of the plan, and the related depreciation interest and income tax variances flow through to customers.
337. Under the Proposed MRP, expenditure variances from plan are also outside of rate base until the termination of the plan, but the related depreciation along with interest and income tax volume variances flow to earned return and are included in the earnings sharing mechanism.¹⁰⁸
338. The CEC submits that the evidence supports a view that there are serious problems with having capital expenditures in the formulaic portion of the regulation and that flowing capital expenditures through is the best solution and the Utilities' proposals in the regard should be denied.

CAPITALIZED OVERHEAD

339. FEI is proposing to apply capitalized overhead rates of 16 percent of gross O&M to regular capital expenditures, which is an increase of 4 percent from its previous 12 percent.¹⁰⁹
340. This results in a decrease of approximately 0.4% in the year of implementation.
341. FBC is proposing to apply capitalized overhead rate of 15% of gross O&M to regular capital expenditures, which is the same rate as previously.¹¹⁰
342. The allocation of capitalized overhead for both Utilities was developed by KPMG and is supported by KPMG's 2018 Capitalized Overhead Study for each Utility.
343. The CEC accepts the KPMG studies and has no objection to the change in capitalized overhead for FEI.
344. The CEC expects that the capitalized overhead is appropriately adjusted out of the O&M expenditures to the extent it would otherwise appear in the O&M totals.

¹⁰⁷ Exhibit B-17, ICG 2.3.4

¹⁰⁸ Exhibit B-17, ICG 2.3.2

¹⁰⁹ Exhibit B-1, page A-20

¹¹⁰ Exhibit B-1, page A-20

CAPITAL DEADBAND

345. In the previous PBRs the Utilities included a capital deadband which excluded variances in excess of the deadband from rate base during the PBR term.¹¹¹ The Utilities propose to eliminate the deadband and state that:

‘While the deadband was effective in mitigating risk during the 2014-2019 PBR Plans, the dead band can be eliminated from the Proposed MRPs because FortisBC proposes a forecast approach for the majority of its capital to improve the accuracy of the allowed capital amounts.

The elimination of the dead band will improve ease of understanding, as this mechanism was a source of confusion in annual reviews. The elimination of this safeguard mechanism will also increase the risk/reward profile and incentive properties of the Proposed MRPs.’¹¹²

346. The CEC agrees that the capital deadband was a source of confusion in annual reviews.

347. In CEC 1.11.5, FortisBC states:

There is no incentive for the Utilities to overspend on Growth capital. Under the Current PBR Plans the Utilities assume the risk (Shared 50/50 with customers through the ESM) within the dead band so there is no incentive to overspend. Under the proposed MRPs, the Utilities have the same risk, but not bounded by a dead band and therefore increased.¹¹³

348. The Utilities also provide the approximate bill impacts occurring as a result of the deadband adjustments for both FEI and FBC in BCUC 1.13.6.

349. The CEC accepts the removal of the capital deadband as being reasonable.

V. TERM

350. FortisBC proposes a five-year term for the MRP, which is one year shorter than the 6-year term under the previous PBR.

351. Most plans in Canada are between 4 to 6 years.¹¹⁴

352. FBC states that ‘the purpose of a longer term performance plan is not to ensure adequate recovery of costs or to guarantee a particular return. It is to incent efficiency and result in better outcomes for ratepayers than that achieved under cost of service ratemaking’.¹¹⁵

353. The CEC notes that a significant loss to ratepayers is the delay in rebasing. Under cost of service customers receive the benefits of rebasing every two years, while under a five-year MRP this benefit is delayed by three years. Under MRP the Utilities benefit from an

¹¹¹ Exhibit B-1, page B-28

¹¹² FortisBC Final Argument, page 84

¹¹³ Exhibit B-7, CEC 1.11.5

¹¹⁴ FortisBC Final Argument, page 34

¹¹⁵ Exhibit B-16, CEC 2.54.1

extended period between rebasing while the customers lose the benefit of embedding the 'productivity savings'.

354. As noted in FortisBC's Final Submissions, the longer the plan's term, the higher the risk/reward potential.¹¹⁶
355. The CEC generally considers the five-year term to be too long, and submits that basing the term simply on most plans in other jurisdictions is not necessarily a strong rationale. The CEC further submits that given the risks to ratepayers in the Utilities' Application proposal, a term of 5 years would be inappropriate.
356. In FortisBC's submission, a five-year term leads to regulatory efficiencies by minimizing the frequency of comprehensive revenue requirements applications ("RRAs").¹¹⁷ FortisBC provides evidence of 'cost savings' due to regulatory efficiency on page B-39 of the Application. The average annual cost of regulation under the PBR period is lower than the average annual cost of regulation for the 2012-2013 Cost of Service period by approximately \$300,000 per year.¹¹⁸
357. In the CEC's view, this reduced cost in regulation under the previous PBR as compared to the 2012-2013 RRA does not justify the significant reduction in oversight by the Commission and the increased ROE that was realized by the Utilities. In fact, the data supports the fact that ratepayers have been significantly disadvantaged by the PBR process, when considering regulatory costs and the consequences of the regulation.
358. The CEC submits that a key, and significant purpose, of BCUC regulation is to keep the monopolistic attributes of the Utilities at bay through careful oversight by an independent body. Further, the expectation is that the revenue requirement will reflect the actual costs of service provision by a prudently operated Utility.
359. The CEC submits that diminishing the nature and frequency of oversight serves to diminish the value of regulation overall.
360. FortisBC also argues that reducing the frequency of rate cases through an MRP frees up the management of the Utility from focusing on the next rate case and instead provides focus on long-term objectives and innovations which benefit customers.¹¹⁹
361. The CEC does not accept this argument.
362. The CEC submits that preparing for proper regulation is a small task compared to existing in a competitive environment. Further, the time and effort that goes into creating 'new' and complicated proposals and justifying them, and then testing them, is significant.

¹¹⁶ FortisBC Final Argument, page 34

¹¹⁷ FortisBC Final Argument, page 38

¹¹⁸ Exhibit B-1, page B-39

¹¹⁹ FortisBC Final Argument, page 40

363. The CEC submits that it is important to note that the decoupling of revenues and costs contains an element of risk for ratepayers and the potential for misalignment should be limited.

‘As indicated in the AUC Decision, the appropriate balance for a PBR plan lies in ensuring the term is long enough to permit the company to achieve and capture efficiencies, but not so long that the company’s revenues become substantially out of sync with its costs or to create considerable gains or losses for stakeholders.’¹²⁰

364. The CEC notes that this largely a one-way risk, as the Utilities retain control of their spending and have the option of seeking changes, if they deem they have not had the opportunity to earn a fair return. Options for the ratepayer are limited to off-ramps.

365. As pointed out in CEC’s Final Argument for the PBR plan, issues with the five-year proposed term include:

- claimed 'benefits' of a longer term that may not be supportable;
- delayed rebasing; and
- increase in customer risk.

366. The CEC expects that by virtue of being in a five-year PBR term, the ratepayers will lose:

- openness and transparency for five years rather than two that would be found under cost of service regulation;
- a degree of prudence review of costs and revenues; and
- the benefit of more frequent rebasing.

367. The CEC expects that the ratepayer will be exposed to:

- Increased potential for miscalibration of the MPR plan and increased risk;
- Increased forecasting and estimating uncertainty and error;
- Increased risk to principles of fair return on capital and recovery of prudent costs; and
- Increased risk that the costs of the MPR plan will exceed any real benefits.

368. The CEC submits that simple, formulaic regulation based on an established cost of service with biannual reviews and rebasing can provide a superior alternative to a five-year term.

¹²⁰ CEC Final Submission 2014-2019 PBR page 17

369. The CEC recommends that the Commission reject FortisBC's MRP overall, including the proposed five-year term.

Continuous Formulaic Ratemaking

370. The CEC notes that the Utilities do not propose a Cost of Service 'reset' between rate plans for the reasons outlined in CEC 1.2.1, and further that the BCUC did not provide specific direction for FortisBC to file another PBR without a cost of service period in between.¹²¹
371. The CEC notes that certain plans' length in Alberta and Ontario are similar to FEI's and FBC's proposed five-year term, but for some electric utilities in Ontario, one year out of five relates to cost of service rebasing.¹²²
372. The CEC is of the view that the move from the previous PBR with one set of specifications, to a different MRP with an entirely new set of specifications, without a significant Cost of Service period should be viewed with caution.
373. As detailed in the CEC's previous Final Submission, the Alberta Utilities Commission noted:
- '... while it is a praiseworthy pursuit to want to avoid a disruption of frequent base rate cases, it is hard over the course of years to base rates on costs if you don't once in a while look at the costs.'¹²³
374. The CEC submits that it is not prudent to simply rely on the costs that were allocated from the previous formula and translate this to another formula. As noted in CEC 1.2.2, FEI and FBC typically have had cost of service periods between PBR plans, though they have also had plan extensions. These extensions resulted in a total term of 3 years for FEI's 1998 plan and five years for its 2004 plan. For FBC, the 2007 plan ended up being a total of four years. Its 1998 ended up being a total of 9 years.
375. The CEC notes that the total extensions were significantly shorter than the proposed 11 years that would be adopted if the MRP is approved.
376. The CEC further submits that plan extensions are not the same thing as changing plans without a cost of service review.
377. A plan extension requires the Utility to plan its spending more judiciously to accommodate costs that cannot be indefinitely deferred, while the move to an entirely new set of metrics and additional funding sets up whole new opportunities that are not properly established without a cost of service review.

¹²¹ Exhibit B-7, CEC 1.2.3

¹²² FortisBC Final Argument, page 34

¹²³ CEC Final Submission 2014-2019 PBR page 20

378. Indeed, the Utilities do not wish to continue with the current PBR.
379. The CEC submits that it would be prudent for a full review of costs to be developed prior to implementing another different formula for the MRP. The CEC submits that in the alternative, a formula based regulation of controllable costs for rate making without shareholder incentives could be an acceptable option.

VI. OFF-RAMPS

380. The Companies propose to retain the financial off-ramp provisions from the current PBR, whereby an off-ramp is triggered if earnings in any one year varies from the approved ROE by more +/- 200 basis points (post sharing) or if the earnings average more than +/- 150 basis points (post sharing) from the approved ROE for two consecutive years.¹²⁴
381. FortisBC states that the financial off-ramp provision included in the Current PBR Plans and in the Proposed MRPs is an automatic quantitative off-ramp, meaning that once the financial off-ramp is triggered, FortisBC expects that a review of the Proposed MRPs would take place to determine if elements of the Plans require change or whether the Plans are not operating as designed.¹²⁵
382. The CEC submits that the financial off-ramps do not provide adequate protection for ratepayers in the event that the earnings are less than the approved ROE.
383. The CEC expects that the Utilities would likely argue that they did not have the opportunity to earn a fair return, and seek some redress prior to reaching the off-ramp of 200 basis points; however, this opportunity would not be afforded to ratepayers in the event that the earnings average was above the threshold.
384. The CEC submits that the off-ramp provisions should be lowered to 100 or 150 basis points.

VII. Y-FACTOR – FLOW THROUGH

385. The CEC is of the view that the Flow Through deferral accounts have the advantage of recording actual costs (as opposed to charging ratepayers for formulaic spending that may not be actually undertaken) but can also fail to relate costs with revenues, meaning that the risk of reduced revenues is transferred to the ratepayer and there is limited incentive to create these benefits.
386. Further, the Commission and ratepayers lose review of these costs without any corresponding incentive for them to be kept to a minimum. To the extent that these are significant, there is a large loss of oversight for the Commission relative to cost of service ratemaking.

¹²⁴ Exhibit B-1, page C-12

¹²⁵ FortisBC Final Argument, page 88

387. Finally, where costs within a project are separated between O&M base and Flow Through there is a risk that the Utility can attach costs that are at risk of being higher than expected to the Flow Through account, while placing costs that may be deferred and/or not expected to inflate regularly with customers or inflation in the base O&M.
388. FortisBC has proposed adjustments to the flow-through treatment that it considers are generally consistent with the principles reflected in the Current PBR Plans. These are:
- ‘(a) uncontrollable costs be flowed-through to rates, FortisBC is proposing some components of O&M and capital be treated as flow-through, while moving some flow-through costs into the Base O&M that have now stabilized and become controllable.
 - (b) Consistent with the ESM, controllable depreciation, interest and income tax costs driven by Regular capital are proposed to be subject to earnings sharing which will increase the incentive to reduce these costs.
 - (c) Consistent with the principle that controllable costs should be subject to earning sharing, controllable components of Other Revenue that are not related to Clean Growth Initiatives are proposed to be subject to earnings sharing, which will increase the incentive to reduce these costs.’¹²⁶

Integrity Digs

389. FEI proposes to remove integrity digs from the base formula due to significant uncertainty and the potential for the IGU project to result in increases in O&M costs related to integrity digs.¹²⁷ As noted in the Application at page C-23, Table C2-3, integrity digs have increased from 62 in 2014 and are predicted to exceed 100 in 2019.
390. The CEC notes that the IGU project is a very significant capital project and has the potential to alter O&M costs significantly, including additional integrity digs commencing 2022.¹²⁸
391. The CEC submits that there should not be cost pressure on the Utility to reduce its integrity digs and supports Flow Through treatment and the removal of integrity digs from Base O&M.

LNG O&M Costs

392. FEI proposes to allocate the fixed costs to operate the LNG plant to Base O&M and the remaining variable portion as a flow through outside the Base O&M.¹²⁹
393. Additionally, FEI states that it will require incremental Base O&M funding to operate and maintain the LNG facilities safely and in compliance with relevant regulations and

¹²⁶ FortisBC Final Argument, page 88

¹²⁷ Exhibit B-1, page C-24

¹²⁸ Exhibit B-1, page C-24

¹²⁹ Exhibit B-1, page C-25

permit requirements. The incremental funding also reflects increased plant size of the Tilbury expansion.¹³⁰

394. As noted in the CEC discussion on Base O&M, the CEC does not support the inclusion of fixed costs in the O&M base, if that base is being inflated and multiplied by customer growth at 100% each.
395. Similarly, the CEC does not support the inclusions of ‘incremental funding’ for the Tilbury expansion into O&M base. The CEC submits that there is no rationale for inflating the funding for Tilbury by customer growth.
396. The CEC submits that all LNG costs should remain outside the formula and be provided with Flow Through Treatment which records actuals and returns any additional costs or savings to ratepayers.

Power Supply Costs

397. FBC will continue to flow variances in power supply costs through the Flow-through deferral account.¹³¹
398. The CEC submits that a flow through of power supply costs is appropriate.

VIII. Z-FACTOR – EXOGENOUS CRITERIA

399. FortisBC proposes to continue with the exogenous criteria as previously approved by the BCUC in the current PBR, but without the materiality threshold.¹³²
400. The 2014 PBR Decision defined the materiality threshold at 0.5% of each company’s 2013 Base, which was calculated to be \$1.140 million for FEI and \$0.301 million for FBC.¹³³
401. In FortisBC’s opinion, FortisBC should have the ability to bring forward any exogenous factor for discussion and review at Annual Reviews, for the Commission to determine the appropriate treatment of costs or savings.¹³⁴
402. The CEC submits that it is not appropriate to remove the materiality threshold, which serves to ensure that the company addresses normal operating costs within its formulaic spending.

¹³⁰ Exhibit B-1, page C-26

¹³¹ Exhibit B-1, page A-4

¹³² FortisBC Final Argument, page 98

¹³³ Exhibit B-1, page C-116

¹³⁴ Exhibit B-1, page C-116

403. The CEC submits that 0.5% of each company's base is not onerous, and provides some level of comfort that formulaic ratemaking provides an appropriate breadth for costs as well as benefit, such that the Utilities are not able to simply receive beneficial reductions without having to bargain for all the costs that may not be predicted.
404. The CEC submits that not having a materiality threshold is somewhat contrary to the intent of PBR/MRP, which should reduce the opportunity for the Companies to request additional funding from ratepayers in exchange for the freedom to manage costs and seek additional rewards.
405. Additionally, the CEC notes that under formulaic ratemaking as proposed by the Utilities, ratepayers do not have access to detailed accounting and are discouraged from thorough project analysis in the Annual Reviews. Accordingly, customers are not afforded the opportunity to identify all potential exogenous savings and have those removed from any Earnings Sharing Mechanism.
406. The CEC recommends that the Commission require the Utilities to institute the 0.5% or higher materiality threshold in their Exogenous Factor treatment.

IX. EARNINGS SHARING MECHANISM

407. FortisBC proposes a 50:50 basis Earnings Sharing Mechanism (“**ESM**”) between customers and the Companies for earnings above and below the allowed ROE.¹³⁵
408. The concept is similar to that under the current PBR but will be calculated slightly differently, which will increase the ‘scope’ of the calculation.¹³⁶ This will result in more earnings being subject to the ESM.

While the BCUC in its 2014 PBR Decision referred to “gains or losses relative to the approved ROE”, the Decision in fact muted this calculation by incorporating into the 2014-2019 PBR Plans the flow-through of all depreciation, interest and tax related to capital expenditures, which reduced the scope of costs included in the ESM. The 2014-2019 PBR Plans also included the dead band as a safeguard mechanism which limited the ESM to 10 percent of capital variances each year and 15 percent of capital variances on a two-year cumulative basis. These elements had the effect of complicating the ESM calculation and diminishing its incentive properties’.¹³⁷

409. The CEC provided its views on Earnings Sharing Mechanisms in its Final Submissions on the 2014-2019 PBR.
410. The CEC stands by these submissions and submits they are equally relevant in this proceeding.

¹³⁵ Exhibit B-1, page A-4

¹³⁶ FortisBC Final Argument, page 83

¹³⁷ FortisBC Final Argument, page 83

411. The CEC submits that a 50:50 ESM is unfair to ratepayers in that they can pay 100% of the cost of any efficiency improvement and then provide 50% of the benefits to the shareholder over a considerable period of time, making the payoff to the Utility shareholder for certain savings extraordinarily non-cost effective.
412. The CEC submits that this is not a ‘good deal’ from the ratepayers’ perspective.
413. The CEC notes that the Utilities have not entered into any contracts with arrangements which allow for the contractor to earn half of any savings made under the contract. Indeed, the new Compugen contract will not have a sharing of savings at all.¹³⁸
414. The CEC submits that to the extent that the Commission wishes to include a ‘sharing mechanism’ to benefit the shareholder, it should be considerably lower than 50%.

X. EFFICIENCY CARRY OVER MECHANISM

415. FortisBC proposes an Efficiency Carry Over Mechanism (“**ECM**”) which is slightly modified from the ECM in the current PBR.
416. EMC would be in the form of an add-on to the approved ROE for two years after the end of the Plans’ term. The ROE add-on is equal to one half of the difference between the average achieved and authorized ROE, to a maximum of 50 basis points over the last two years of the Plans (providing the difference is positive).¹³⁹
417. The intent of the ECM is to strengthen incentives to control costs towards the end of the PBR term by ‘carrying over’ some of the rewards from successful cost control from one PBR term to the next one.¹⁴⁰
418. FBC argues that:

‘ECMs can also impact the strength of incentives, particularly during the last few years of the plans. FEI’s and FBC’s proposed MRPs include a limited ECM similar to the one used by Alberta utilities’.¹⁴¹

419. FortisBC also states that:

‘...the evaluation of the Companies’ performance in the Current PBR Plans indicate that annual savings above the formula peaked in the third year of the plans. The proposed approach to consider the performance in the last two years on the Proposed MRPs is based on this observation’.¹⁴²

¹³⁸ Exhibit B-16, CEC 2.57.2

¹³⁹ Exhibit B-1, page A-5

¹⁴⁰ FortisBC Final Argument, page 85

¹⁴¹ FortisBC Final Argument, page 34

¹⁴² Exhibit B-1, page C-12

420. The CEC notes that the ECM in the current PBR is a 5-year rolling carry-over, and therefore does not create a disincentive for underspending in the latter period. Rather, the CEC submits that the expectation of a future PBR incents the Utilities to increase spending to establish a higher base.
421. The CEC considers that there are too many moving parts and incentives included in the Proposed MRP for the plan to represent an appropriate methodology for ratemaking. The CEC submits that there should be transparent, quantitative understanding of the benefits to the ratepayers and any associated rewards provided to the Utilities.
422. The CEC submits that ECMs do not provide for such understanding.
423. The CEC is of the view that Efficiency Carry Over Mechanisms are not for the reasons outlined in its previous PBR Final Submissions at pages 125 to 150, which may be summarized as including the concepts that:
- The theory and rationale behind the ECM is incorrect and the rationale is inadequate;
 - There are numerous important issues with respect to incentives and deterrents; and
 - Benefits claimed are presumed rather than actual and incentive payments should not be extended.
424. Overall, the CEC submits that the Commission should not become involved with providing incentives and rewards, particularly large ones where there is no accountability or demonstration of permanent continuing savings benefits. Without accountability the Commission and interveners are subject to unwarranted rewards being obtained by the shareholder.
425. The CEC recommends that the Commission reject the ECM in this MRP.

XI. SERVICE QUALITY INDICATORS (“SQIs”)

426. SQIs are generally considered to be an important part of formulaic ratemaking and are intended to ensure that any achieved cost savings are not at the expense of reduced service quality.¹⁴³
427. As noted in Commission Decision G-139-14, SQIs are included in PBR ‘to help mitigate the potential of serious degradation of service levels.’¹⁴⁴
428. Overall, the CEC believes it is very difficult to develop appropriate metrics that address all the key service areas of a large utility and to effectively control for degradation of service in concert with the relevant costs. The timing between dysfunctional spending

¹⁴³ Exhibit B-1, page B-46

¹⁴⁴ Exhibit B-1-1, Appendix C-5-2, page 2

and system failures is not instantaneous or synchronized sufficiently to make the SQI process meaningful.

429. Additionally, the CEC considers that the SQIs that are utilized are an imperfect method to monitor the potential effects of cost saving measures on service levels, as there may be a considerable time lag between a lack of investment and the results recorded in the SQI.
430. Nevertheless, the CEC is of the opinion that SQIs can be a useful indicator of service level trends over time.
431. The CEC notes that the current PBR does not attach automatic penalties or rewards to missed metrics and that this format is also proposed for the Proposed MRP.
432. The CEC considers that not attaching automatic penalties is acceptable on the condition that appropriate review takes place in the Annual Reviews enabling the Commission to consider the option of penalties or off-ramps depending on circumstances.
433. FortisBC's proposed SQIs are based primarily on the current suite of SQIs for each Utility under the existing PBR, with limited adjustments.
434. The CEC notes that the SQIs utilize different levels for 'Benchmarks' and 'Thresholds', which was also the case under PBR.
435. The CEC has been concerned without penalties attached to a Threshold, there is not much difference between a Benchmark and a Threshold.
436. The CEC considers that the Benchmark figure should be considered as the appropriate target, with poorer than Benchmark performance being carefully scrutinized.
437. Since there are no 'automatic' penalties in any case, the CEC submits that the 'threshold' makes limited difference to the analysis.
438. In the Reasons for Decision accompanying Order 1 G-44-16, the Commission determined that it was appropriate to review FBC's service quality for a year in the following year's annual review. The Panel found that the most appropriate timing for determining if a serious degradation of service has occurred and if a financial penalty is warranted is during the following year's annual filing.¹⁴⁵
439. The CEC agrees that an annual review of service quality is appropriate. SQIs should be reviewed for past year performance and the continuing relevance of each SQI.

¹⁴⁵ Exhibit B-1-1, Appendix C-5-1, page 19

FEI

440. FEI proposes the following changes to the existing SQIs.

Table C7-1: Comparison of FEI Current and Proposed SQIs

Indicators with Benchmarks and Thresholds			Current		Proposed	
			Benchmark	Threshold	Benchmark	Threshold
Annual results	Safety	Emergency Response Time - Calls responded to within one hour	>= 97.7%	96.2%	>=97.7%	96.2%
Annual results	Safety	Telephone Service Factor (Emergency) - Calls answered in 30 seconds or less	>= 95%	92.8%	>=95%	92.8%
3 Year rolling average	Safety	All Injury Frequency Rate	<= 2.08	2.95	<= 2.08	2.95
Annual results	Safety	Public Contacts with Gas Lines	<= 16	16	<=8	12
Annual results	Responsiveness to Customer Needs	First Contact Resolution	>= 78%	74%	>=78%	74%
Annual results	Responsiveness to Customer Needs	Billing Index	<= 5	<=5	<=3	5
Annual results	Responsiveness to Customer Needs	Meter Reading Accuracy - Number of scheduled meter reads that were read	>= 95%	92%	>=95%	92%
Annual results	Responsiveness to Customer Needs	Telephone Service Factor (Non Emergency) - Calls answered in 30 seconds or less	>= 70%	68%	>=70%	68%
Annual results	Responsiveness to Customer Needs	Meter Exchange Appointment Activity	>=95%	93.8%	>=95%	93.8%

Informational Indicators

Annual results	Responsiveness to Customer Needs	Customer Satisfaction Index	n/a	n/a	n/a	n/a
Annual results	Responsiveness to Customer Needs	Average Speed of Answer (replaces Telephone Abandonment Rate)	n/a	n/a	n/a	n/a
Annual results	Reliability	Transmission Reportable Incidents	n/a	n/a	n/a	n/a
Annual results and 5 Year rolling average	Reliability	Leaks per KM of Distribution System Mains	n/a	n/a	n/a	n/a

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441. The CEC agrees with FEI’s proposals for change.

442. Public contact with Gas Lines will be reported as an Annual result rather than a three-year rolling average. The CEC submits that this is a sensible change and provides more clarity in the results.

443. FEI also proposes to reduce the Benchmark from 16 to 8 and the Threshold from 16 to 12.

444. The CEC submits these are positive changes and notes that the Utility considers the trend in improvement to be sustainable.¹⁴⁷

¹⁴⁶ FortisBC Final Argument page 207

¹⁴⁷ FortisBC Final Argument page 208

- 445. The Billing Index Benchmark is reduced from ≤ 5 to ≤ 3 to reflect recently improved performance, and maintaining the Threshold at ≤ 5 .
- 446. The CEC submits that this is a positive change as well, and provides a good target for the Utility. The CEC agrees that it is not necessary to change the threshold as performance has been quite strong and there appears to be no particular issue with this metric.
- 447. To the extent that the new Billing Index Benchmark is not met, the CEC considers that the Commission retains the option to review any concerns.
- 448. The Average Speed of Answer replaces the Telephone Abandonment rate.
- 449. The CEC agrees that the Telephone Abandonment Rate is difficult to interpret due to the variety of reasons for the call abandon that can be either positive or negative.¹⁴⁸
- 450. The Average Speed of Answer would appear to provide more useful information.

Table C7-4: FEI Average Speed of Answer (2014 – 2018) in seconds

Description	2014	2015	2016	2017	2018
Combined	34.05	36.70	39.62	33.97	35.23
Emergency	11.64	8.46	8.32	8.75	7.46
Non-Emergency	35.62	38.91	42.52	36.49	37.58

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- 451. FEI is also planning to review the Customer Satisfaction Index (“CSI”) scoring and methodology, but will continue to utilize the existing CSI measure and calculations while the review occurs.¹⁵⁰
- 452. The CEC accepts this proposal as reasonable and recommends that survey changes and results should be included in the annual reviews.

GHG Emissions

- 453. Although not formally an SQI, FEI has been reporting on Total GHG emissions during the Annual Review process.
- 454. FEI now proposes to discontinue reporting on total GHG emissions as part of the Proposed MRP, with the rationale that the emissions measure is very broad.¹⁵¹ Instead,

¹⁴⁸ Exhibit B-1, page C-150

¹⁴⁹ Exhibit B-1, page C-150

¹⁵⁰ Exhibit B-1-1 page 14

¹⁵¹ Exhibit B-1, C-150

FEI proposes to include the measure in the Targeted Incentives, and the measure will also be published annually in the new Sustainability Report.¹⁵²

455. The CEC agrees that the GHG emissions level is not needed. The CEC does not object to the removal of the GHG emissions reporting as part of the Annual Review, as long as the Sustainability Report is annually available

FortisBC Inc.

456. FortisBC provides the following proposed changes to FBC SQIs.

Table C7-5: Comparison of FBC Current and Proposed SQIs

Indicators with Benchmarks and Thresholds			Current		Proposed	
			Benchmark	Threshold	Benchmark	Threshold
Annual	Safety	Emergency Response Time - Calls responded to within two hours	>= 93%	90.6%	>=93%	90.6%
3 Year	Safety	All Injury Frequency Rate	<=1.64	2.39	<=1.64	2.39
Annual	Responsiveness to Customer Needs	First Contact Resolution	>= 78%	72%	>=78%	74%
Annual	Responsiveness to Customer Needs	Billing Index	<= 5	<=5	<=3	5
Annual	Responsiveness to Customer Needs	Meter Reading Accuracy - Number of scheduled meter reads that were read	>= 97%	94%	>=98%	95%
Annual	Responsiveness to Customer Needs	Telephone Service Factor - Calls answered in 30 seconds or less	>= 70%	68%	>=70%	68%
Annual	Reliability	System Average Interruption Duration Index - Normalized	<= 2.22	2.62	TBD	TBD
Annual	Reliability	System Average Interruption Frequency Index - Normalized	<= 1.64	2.50	TBD	TBD
Informational Indicators						
Annual results	Responsiveness to Customer Needs	Customer Satisfaction Index	n/a	n/a	n/a	n/a
Annual results	Responsiveness to Customer Needs	Average Speed of Answer (replaces Telephone Abandonment Rate)	n/a	n/a	n/a	n/a
Annual results	Reliability	Generator Forced Outage Rate	n/a	n/a	n/a	n/a
Annual results	Reliability	Interconnection Utilization	n/a	n/a	n/a	n/a

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457. The CEC has reviewed the changes to FBC’s SQIs and is supportive in that the First Contact Resolution, Billing Index, and Meter Reading Accuracy are set to achieve better performance.

458. FBC also proposes to modify the SAIDI and SAIFI SQIs such that the results are reported on an Annual Basis.

¹⁵² Exhibit B-1, page C-150

¹⁵³ FortisBC Final Argument page 213

- 459. The CEC supports the move to annual reporting.
- 460. Because the Outage Management System (“**OMS**”) has different data tracking than previously used, FBC will provide a proposed Benchmark and Threshold once the 2019 Actual results are available.
- 461. The CEC is satisfied with the proposed changes to the SQIs,

XII. CLEAN GROWTH INNOVATION FUND

- 462. FortisBC is proposing the creation of a ‘Clean Growth Innovation Fund’ (the “**Fund**”) which is intended to fund future innovation activities for FortisBC.
- 463. The Fund will be over \$25 million over the 5 year term of the MRP and would be funded by ratepayers. This includes \$4.9 million for FEI annually and \$0.5 million for FBC annually.¹⁵⁴
- 464. The Utilities request approval to collect a charge of \$0.40 and \$030 for FEI and FBC respectively, which will be placed in a deferral account.¹⁵⁵ The Companies propose to use a basic charge rate rider instead of a volumetric rate rider so that all customers contribute to the Fund equally.¹⁵⁶
- 465. The CEC submits that the Commission may want to look at a volumetric base for innovation, such as GHG emissions reductions, and avoid placing considerable cost on smaller customers and relieve larger customers of the costs.
- 466. The features of the Fund are identified as follows:

¹⁵⁴ Exhibit B-1, page C-128-129

¹⁵⁵ FortisBC Final Argument, page 97

¹⁵⁶ Exhibit B-1, page C-120

Table A1-5: Features of the Clean Growth Innovation Fund

Feature	Description
Responsive to climate policy	<ul style="list-style-type: none"> • Focuses on innovative activities that reduce greenhouse gas (GHG) emissions.
Responsive to customer expectations	<ul style="list-style-type: none"> • Focuses on bringing forward cost-effective energy solutions which reduce customer emissions.
Clear focus for innovative activities	<ul style="list-style-type: none"> • Complementary and incremental to current activities. • Both pre-commercial and commercial stages of commercialization. • Span entire utility value chain (supply, transmission & distribution, and end uses).
Predictable funding	<ul style="list-style-type: none"> • Monthly charge of \$0.40 for FEI's and \$0.30 for FBC's customers. Annually, \$4.9 million for FEI and \$0.5 million for FBC.
Robust framework	<ul style="list-style-type: none"> • Three stages to develop projects (identification, evaluation and selection and execution). • Senior management oversight and external advisory group. • Reporting in Annual Review process. • Unspent funds will be recorded in a deferral account and carried forward for the remaining term of the Proposed MRPs.

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Purpose of the Fund

467. The Fund is intended to accelerate the pace of clean energy innovation, to achieve performance breakthroughs and cost reductions, and to provide cost effective, safe and reliable solutions for our customers. The Fund will assist FortisBC in addressing the expectation to reduce emissions and support the transition to a lower carbon economy while maximizing the use of its energy delivery systems for the benefit of its customers.¹⁵⁸
468. FortisBC also links the need for the Fund to the risk of slow customer addition growth and a decline in the average use per customer despite low commodity rates¹⁵⁹, plus changes in the operating environment which makes the adoption of natural gas increasingly more challenging.¹⁶⁰
469. The CEC accepts that FEI is subject to ongoing government plans and initiatives that may constrain the ability for FEI to attract customers in the long term.
470. The CEC does not accept that there is likely to be significant degradation in customer additions over the proposed 5-year term of the MRP.

¹⁵⁷ Exhibit B-1, page A-12

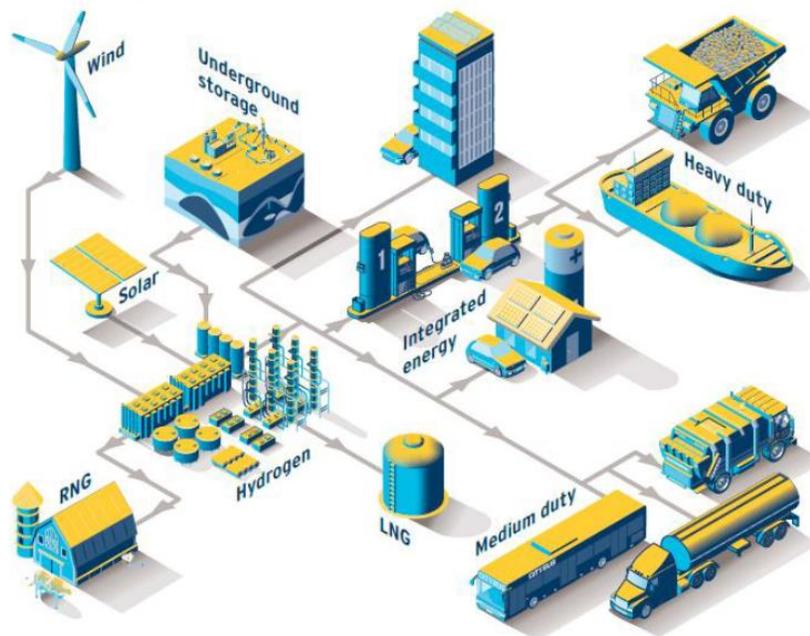
¹⁵⁸ Exhibit B-1, page C-128

¹⁵⁹ Exhibit B-10, BCUC 1.13.10

¹⁶⁰ Exhibit B-10, BCUC 1.13.11.1

- 471. The CEC is generally in favour of innovation projects to improve efficiency and reduce emissions.
- 472. The CEC supports the objectives of the Fund as stated, particularly in the areas of improving performance, reducing costs and cost effectiveness. The CEC particularly supports the maximization of the use of the energy delivery systems, as reliable cost effective supply of natural gas and electricity is crucial to commercial energy consumers.
- 473. Additionally, the CEC believes that it is important that the Utilities work to establish their role 'in helping British Columbians move to a low carbon, renewable energy future....with climate and economic solutions in the buildings, transportation [and industrial] sectors'.¹⁶¹

Figure C6-1: FortisBC's Clean Growth Pathway to 2050



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- 474. The CEC submits that establishing these roles are beneficial to ratepayers and the Utilities alike in securing their future and customer base.
- 475. FortisBC believes that gas - as an energy carrier - will continue to be a critical component of a decarbonized energy system in British Columbia. Gas infrastructure in the province is a multi-billion dollar asset that provides reliable, safe, affordable and high-quality energy services to British Columbians. This infrastructure is designed to serve difficult-to-decarbonize end-uses such as building and industrial heating and heavy-duty freight.¹⁶³

¹⁶¹ Exhibit B-1, page C-128

¹⁶² Exhibit B-1, page C-128

¹⁶³ Exhibit B-1-1. Appendix A5, Clean Growth Pathway to 2050. Page 5

476. The CEC submits that natural gas service is vitally important to many, and particularly to commercial energy consumers, and that programs such as the Fund should pursue projects that will ensure ongoing, reliable access to reasonably priced natural gas for the Utilities’ customers.
477. The CEC is concerned that ratepayers are wholly responsible for the cost of the ‘innovative solutions’ which may have the potential to benefit many parties.

Proposed Projects

478. FortisBC provides the following Forecast of expenditures for 2020, however they anticipate that they will need ‘flexibility’ to allocate funds from one investment area to another.¹⁶⁴

Table C6-2: Forecast Clean Growth Expenditures in 2020

Stage of Value Chain	Investment Area
Supply	Blending Hydrogen
	Renewable Natural Gas
	Digital Natural Gas Feedstock
Transmission & Distribution	Fugitive Emissions Reduction
	Carbon capture
Energy Use	Natural Gas for Transportation
	Hydrogen for Transportation
	Electric Vehicles and Charging Stations
	End Use Technologies
Supply, T&D & End Use	Natural Gas Innovation Fund

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Funding

479. The Companies propose that the Fund be funded by customers amounting to approximately \$4.9 million for FEI and approximately \$0.5 million FBC annually.¹⁶⁶
480. FortisBC states that determine the proposed size of the Fund’s annual revenues, the Companies performed a bottom-up totaling of the internal funding requests received for innovation activities.¹⁶⁷

¹⁶⁴ Exhibit B-1, page C-142

¹⁶⁵ Exhibit B-1, page C-142

¹⁶⁶ Exhibit B-1, page C-145

¹⁶⁷ Exhibit B-6, BCSEA 1.22.1

481. FortisBC stated that the size of the Fund's annual revenues will be sufficient to make a meaningful contribution to the advancement of low carbon, renewable energy, and that FortisBC expects that its funding will be augmented by additional funding from government, non-government organizations, other utilities and/or businesses.¹⁶⁸
482. The CEC accepts that the proposed amount of annual funding for the Fund is reasonable, provided that projects selected for funding are expected to provide a direct, quantifiable benefit to ratepayers.
483. The CEC supports the pursuit of additional funding from other sources to increase the impact of the Fund's activities.

Rate Design

484. The Companies propose to use a basic charge rate rider instead of a volumetric rate rider so that all customers contribute to the Fund equally. The basic charge rider for FEI and FBC equals \$0.40 and \$0.30 month respectively.¹⁶⁹
485. FortisBC states that the Fund follows cost causation principles when a cost is known to be caused by a certain customer group, directly assigning those costs to that group provides for the best allocation. FortisBC further states that Fund spending will span the entire Utility value chain and will provide cost-effective energy solutions to all customers, and it is reasonable to expect that all customers will tangibly benefit from this work.¹⁷⁰
486. The CEC agrees that a basic charge rate rider is an appropriate way to fund the Fund.
487. FortisBC stated that the proposed rate rider will not appear separately on each customer's bill and that adding a rate rider for the Fund to the fixed basic charges will produce greater transparency of costs and recoveries.¹⁷¹ FortisBC stated that as rate riders are shown separately within the tariff, a rate rider makes it clear to the BCUC, interveners, and customers that read the tariff exactly how much each customer is contributing, even if the rate rider is not shown separately on a customer's bill.¹⁷²
488. The CEC submits that to have transparency with regard to costs, the rate rider for the Fund should be shown separately on each customer's bill.
489. The CEC is of the view that since ratepayers will be funding, through the rate rider, the Fund, the Fund should focus on projects that will directly benefit ratepayers.

¹⁶⁸ Exhibit B-6, BCSEA 1.22.2

¹⁶⁹ Exhibit B-1, page C-145

¹⁷⁰ Exhibit B-10 BCUC 1.79.3

¹⁷¹ Exhibit B-10, BCUC 1.75.5

¹⁷² Exhibit B-12 BCUC 2.214.2

Alternatives

490. FEI already participates in a \$1.5 million Natural Gas Innovation Fund (“**NGIF**”).¹⁷³ As noted in Exhibit A2-1, this fund recently launched a \$1.5 million CleanTech Competition to advance cleantech solutions in three strategic focus areas – energy efficiency renewable gases (including renewable natural gas and hydrogen) and carbon capture.¹⁷⁴
491. The current provision of \$400 thousand for the NGIF would be removed from O&M¹⁷⁵ if the Fund is approved.
492. In response to a CEC 1.32.1 Fortis BC states that the companies have not received any specific direction from government or the BCUC that it must develop a Fund or equivalent.¹⁷⁶
493. Fortis BC states that the Fund is one of FortisBC’s strategic responses to specific climate policy direction from government, such as the CleanBC’s renewable gas content target of 15 percent by 2030, and that advancing clean growth innovation is a shared responsibility between utilities, regulators, and policy makers.¹⁷⁷
494. The CEC notes that this focus is very similar to that included in the NGIF.
495. The CEC submits that, absent direction from government, the regulator, or the energy consumers, there should be a compelling business case for the Fund and its activities, including a clear cost / benefit analysis, and that projects deliver a benefit to consumers.
496. The CEC points out that customers can already significantly reduce their emissions through the adoption of renewable natural gas,¹⁷⁸ and that FEI already receives adequate funding for its Biomethane service.
497. FortisBC stated that if approved, the Fund will allow the development of piloting and demonstration projects in various areas, including hydrogen injection, production of wood-based biomethane, and other renewable gas technologies which seek to lower emissions.¹⁷⁹
498. The CEC is of the opinion that pilot and demonstration projects can potentially be developed within larger joint projects such as with the NGIF, (in which FEI already participates), or in the private research and development sector, where most of the financial benefits may accrue.

¹⁷³ Exhibit B10, BCUC 1.71.1

¹⁷⁴ Exhibit A2-1, page 1

¹⁷⁵ Exhibit B-1, page C-22

¹⁷⁶ Exhibit B-7, CEC 1.32.1

¹⁷⁷ Exhibit B-7, CEC 1.32.1

¹⁷⁸ Exhibit B-7, CEC 1.33.1

¹⁷⁹ Exhibit B-10, BCUC 1.97.3

499. In BCUC 1.13.10 the Commission inquired if the *Greenhouse Gas Reduction Regulation* (“**GGRR**”) provisions of the *Clean Energy Act* are a form of incentive for FEI to develop innovative solutions.

500. FortisBC replied that:

‘Prescribed undertakings under the GGRR may in some, but not all cases, provide opportunities for FEI to pursue innovative solutions. However, the benefit to the utility is limited to recovery of the prescribed undertaking costs in revenue requirements, rather than being an incentive per se. Prescribed undertakings do not incent the utility to focus extraordinary efforts on the achievement of particular objectives by allocating resources to the areas of focus.’¹⁸⁰

501. The CEC finds it difficult to accept that the Utility statement that the ‘only benefit’ the Utility receives from developing innovative solutions is the recovery of the prescribed undertaking costs. The CEC submits that innovative solutions, particularly those related to demonstration projects and pilots have the potential to benefit many groups including shareholders, third party interests, and ratepayers. The CEC also anticipates that any capital investments would potentially become rate base additions and earn a fair return for the Utility investment.

502. The CEC notes that the Utilities and their shareholders benefit from projects that address their strategic and other challenges, including innovation projects.

Need for Cost Benefit

503. The CEC is concerned that the current ratepayers may not receive a direct and measurable benefit from the Fund, which provides various benefits but is largely tied up with the long-term health of the company.

504. The CEC submits that the FEI proposal does not contain adequate accountability for outcomes given the significant size of the expected five year cost.

505. FortisBC cites a national survey of electricity Utility customers and states that as almost 40 percent of the study’s respondents use natural gas as their primary heating fuel, the information collected likely approximates the beliefs and attitudes of both FortisBC natural gas and electricity customers. The Companies state that the research findings align with and support the FortisBC view that consumers want cleaner energy options and that they are willing to contribute to such initiatives.

506. The CEC is of the view that citing a survey indicating general, non-specific support for green initiatives is not an adequate substitute for consultation with the ratepayers who would be funding the proposed Fund. In particular, the CEC notes that while many customers support the option of renewable natural gas, there are far fewer customers who are actually willing to pay for the option.

¹⁸⁰ Exhibit B-10, BCUC 1.13.10

507. The CEC is of the view that the Fund must be focused on delivering a service to the public that is in all respects adequate, safe, efficient, just and reasonable.¹⁸¹ The CEC submits that the best way to do so is to ensure that projects funded by the Fund deliver clear and specific benefits to energy consumers.
508. The CEC recommends that an estimate of the cost / benefit be included in the selection process for each project, and that a cost / benefit analysis be performed at the conclusion of each project.
509. FortisBC states that it believes it is important to establish clear criteria for each initiative funded by the Fund, but also states that:
- ‘measuring the completion of initiatives by performance targets or key success indicators may be difficult, though it may be possible to measure leading indicators of success in terms of completing projects on time, on budget and within scope.’¹⁸²
510. In the Regulator Rationale For Ratepayer-Funded Electricity And Natural Gas Innovation paper (Appendix C6-1), Concentric states:
- “Given the relatively new nature of utility funded innovation, it is difficult to measure success, but Ofgem¹⁸³ programs appear at the forefront, with benefits for certain programs estimated in the 4.5-6.5 times funding level range. Capital investment theory stipulates that any investment with a positive return should be undertaken with risk and capital costs factored in. As long as estimated benefits continue to exceed funding levels, policymakers and regulators are serving the public interest.”¹⁸⁴
511. The CEC notes that it is possible, as in the case of Ofgem, to estimate the cost / benefit ratio for innovation projects.
512. The CEC submits that Utilities and regulators are serving the public interest as long as the benefits for innovation projects exceed funding levels.
513. Therefore, the CEC recommends that an estimate of cost / benefit be an integral part of the selection process for projects contemplated for the Fund, and that a cost / benefit analysis be performed on completion of each project.

Importance of Direct Benefit to Customers

514. FortisBC confirmed that it is in the best interest of the Utilities to pursue projects which address their strategic and other challenges.¹⁸⁵

¹⁸¹ Utilities Commission Act, Section 38(b)

¹⁸² Exhibit B-10 BCUC 1.80.1

¹⁸³ United Kingdom’s energy regulator, the Office of Gas and Electricity Markets

¹⁸⁴ Exhibit B-1-1, Appendix C6-1, page 6 “Regulator Rationale For Ratepayer-Funded Electricity And Natural Gas Innovation”, Concentric Energy Advisors, 2018

¹⁸⁵ Exhibit B-16, CEC 2.62.1

515. FortisBC stated that consumers of the Companies' energy products and services receive the direct benefits of innovation. Shareholders benefit indirectly and over the long term as the Utilities remain in existence and continue to thrive, allowing shareholders the opportunity to earn a fair return on their investment.¹⁸⁶
516. The CEC notes that the shareholder earns an attractive return on equity investments, including investments in innovation.
517. However, the CEC understands that the projects in the Fund would be entirely funded by ratepayers.
518. It follows therefore that the Utilities and their shareholders will benefit from Fund projects that are entirely funded by ratepayers.
519. The CEC submits that any expenditures by ratepayers to the Fund should have the direct potential to provide a direct benefit to current FortisBC ratepayers, and that these should be measurable against project costs.

Projects

520. FBC states that meeting CleanBC's 15 percent RNG target will require FortisBC to quickly advance innovation.¹⁸⁷
521. FBC also states that current RNG in FBC's system is 0.3 PJ, necessitating a 100-times scaling of RNG supply in the next 11 years.¹⁸⁸
522. FortisBC also seeks to expand BC's supply of clean energy. Wood and forest residues could significantly expand the amount of RNG supply in BC but, to unlock this potential, focused support for innovation from the public and private sectors will be needed. Of the total supply potential for RNG, wood has the largest share representing approximately 50 per cent of natural gas consumption in Canada. However, there are still important technological gaps and high costs associated with wood-based RNG production meaning that, to-date, there has been limited RNG production from wood.¹⁸⁹
523. The CEC supports making use of wood waste and forest residues, whether to make RNG or to produce energy by other methods.
524. The CEC notes that FortisBC is in the business of delivering RNG, not producing it at this time. It may well be that to accelerate the move to CleanGrowth innovations the Utilities may need to assist the supply chain for delivering RNG and other initiatives. Just as the Utility does with its DSM programs, the CEC supports these initiatives to the

¹⁸⁶ Exhibit B-12, BCUC 2.207.1

¹⁸⁷ Exhibit B-1, page C-132

¹⁸⁸ Exhibit B-1, page C-132

¹⁸⁹ Exhibit B-1-1 Appendix A-5 Clean Growth Pathway, page 17

extent that an appropriate balance is found between existing customer interests and the broader public and customer interests in the long terms.

525. The CEC is of the opinion that producers of RNG (or potential producers) will pursue projects that are profitable but may not pursue projects that could be useful in the broader context. Conversely, RNG project proponents will not proceed with projects that are not financially viable but which may be viable with some assistance. The CEC submits that Fund projects relating to RNG production be directly and demonstrably linked to outcomes that benefit ratepayers. The DSM parallel here is an appropriate form for assistance.
526. FortisBC states that it believes that hydrogen will be a key driver towards reducing BC's carbon emissions, not only as an alternative fuel to enable the decarbonization of heating, but as a means of storing renewable power (hydroelectric, solar and wind) and, through this, linking together the decarbonization of the building, industry and transport sectors. They believe in taking a system-wide perspective of hydrogen as a technology that further integrates the electric and gas systems by acting as a high capacity storage medium for carbon-free power generation and a carbon-free fuel for heat and transport.¹⁹⁰
527. FortisBC states that BC's gas infrastructure is equipped to handle decarbonization pathways that use drop-in fuels such as RNG and hydrogen, along with other key mitigation options like carbon capture and storage.¹⁹¹
528. FortisBC states that, for example, funding may be allocated to establish a test facility for blending hydrogen into natural gas pipelines. The benefit to customers of such an initiative would ultimately be the safe and economical reduction of emissions in the FEI pipeline system.¹⁹²
529. The CEC is supportive of the development of hydrogen technologies, particularly as a means of storing renewable power and for integrating energy systems.
530. However, the CEC has concerns for energy consumers with regard to the addition of hydrogen into natural gas pipelines, particularly in the case of commercial and industrial consumers of natural gas.
531. The CEC notes that, adding hydrogen to natural gas would likely have the consequence of higher consumption, resulting in higher cost for energy consumers, particularly commercial and industrial consumers.
532. Industrial and domestic burners may be adversely affected by the addition of hydrogen into a natural gas stream, and these effects would vary for each burner or engine. This may require modifications and corresponding expense. Further, the addition of hydrogen may cause increased NOx emissions.

¹⁹⁰ Exhibit B-1-1 Appendix A-5 Clean Growth Pathway, page 9

¹⁹¹ Exhibit B-1-1. Appendix A5, Clean Growth Pathway to 2050. Page 5

¹⁹² Exhibit B-10 BCUC 1.80.1

533. The CEC submits the above is an example of how a thorough cost benefit analysis of any proposed project under the Fund is of paramount importance and the benefits or detriments to energy consumers must be identified before projects are funded.
534. The CEC submits that FortisBC may want to consider the conversion of CO₂ and Hydrogen into synthetic natural gas. While the emerging technologies are not yet cost effective there may be some useful pilot projects to be considered.
535. FortisBC states it will use the following five Selection Criteria when selecting innovation proposals for funding from the Fund:
- i) Amount of co-funding secured (from applicant and third parties);
 - ii) Estimated CO₂e reduction in British Columbia;
 - iii) Estimated non-CO₂e emission reduction (NO_x, SO_x) in British Columbia;
 - iv) Estimation of energy cost reductions for customers; and
 - v) Relevant experience of the applicant project team.¹⁹³
536. The CEC recommends that an estimate of cost / benefit be an integral part of the selection process for projects contemplated for the Fund.
537. The CEC submits that projects supported by the Fund should directly link the outcomes of the projects to customer benefits, either now or down the road, and that those benefits are measured against the project costs.
538. The CEC respectfully suggests the following as representative of projects that would meet the selection criteria listed above and that would provide a direct return on investment to ratepayers:
- LNG tanker truck fueling technologies;
 - Marine bunkering;
 - Energy storage;
 - Production of hydrogen as energy storage or for fuel;
 - LNG or CNG technology for transit vehicles; and
 - EV charging infrastructure and speed.
539. FortisBC expects to report on the following items related to the Fund at the Annual Reviews, plus any other items as directed by the BCUC:
- Description and status of current projects;

¹⁹³ Exhibit B-12 BCUC 2.218.3

- New initiatives granted funding and current initiatives granted additional funding;
 - Completed project milestones; and
 - Project benefits (if successfully commercialized).
540. FortisBC states it is not possible to set annual performance targets at a portfolio level. Individual projects within the portfolio will have specific criteria they need to achieve.¹⁹⁴
541. The CEC recommends that annual reports at the Annual Reviews detail how funded projects are directly benefitting ratepayers, and that the annual reports include a cost benefit analysis for all projects.

XIII. TARGETED INCENTIVES

542. Part Nine of the Final Argument sets out FortisBC's proposed Targeted Incentives, which it considers will encourage the achievement of particular goals that will 'benefit customers' and 'are in the public interest'.
543. The calculation of the Targeted Incentive is as follows:
- $$\text{Targeted Incentive} = \text{Total Basis Points Achieved} \times \text{Equity Portion of Approved Rate Base.}^{195}$$
544. The CEC notes that the 'Targeted Incentives' only have upside potential for the Utilities and are proposed to be calculated outside of the Earnings Sharing Mechanism.¹⁹⁶
545. Further, the company stands to earn the entire incentive even if the targets are missed in certain years.¹⁹⁷
546. The CEC would be prepared to support Targeted Incentive Projects with the investment in Rate Base earning an extra BP return and amortized over the useful life of the initiative under the conditions that:
- i) the investment has some risk to the Utility shareholder if it does not succeed, such as loss of the additional BP incentive return or a mirror image negative BP return adjustment;
 - ii) the investment is made along with submission to the Commission on the project/program in the Annual Review process for confirmation of merits of continuing with the project/program;

¹⁹⁴ Exhibit B-10 BCUC 1.80.2

¹⁹⁵ Exhibit B-1, page C-158

¹⁹⁶ Exhibit B-1, page C-158

¹⁹⁷ Exhibit B-1, page C-158

- iii) cost benefit metrics are defined and measured quantitatively for all qualifying initiatives and the base line measures are adequately and properly captured;
- iv) the investment continues to be evaluated for its alignment to customer and public interests during the Annual Review process; and
- v) the Utilities are permitted to create new initiatives whenever they deem there is an appropriate opportunity, which again can be confirmed with the Commission in the Annual Review.

547. The CEC is of the view that such projects/programs may well be beyond the risk profile in which a normal prudent utility operation might engage and therefore may not be undertake or not undertaken as aggressively as may be warranted. The CEC views this criteria as a critical evaluation for the qualification of such undertakings.

548. The CEC is of the view that the natural gas utility in particular has strategic existential issues to face and work on and believes that the ratepayers would benefit from aligned interests and financial support for the Utilities in terms of additional BPs of return to the shareholder. The CEC would appreciate the opportunity to add its support in consultation processes as the Utilities progress.

Targeted Incentives			
Item	Applicable to	Opportunity	Proposed Incentive (equivalent basis points)
Growth in Renewable Gas	FEI	Incentive to exceed forecast renewable gas volumes	10 BPS
Growth in NGT	FEI	Incentive to exceed load growth forecast for transportation customers	10 BPS
GHG Emissions Reduction (Customer)	FEI	Incentive to exceed forecast natural gas conversion activity	5 BPS
GHG Emissions Reduction (Internal)	FEI	Incentive to reduce internal GHG emissions below targeted levels	5 BPS
Customer Engagement	FEI / FBC	Incentive to increase the adoption of digital service channels	5 BPS each
Growth in Electric Vehicle Transportation	FBC	Incentive to support the deployment of EV Charging infrastructure (subject to EV Inquiry)	5 BPS

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549. The Utilities state that the Targeted Incentives:

¹⁹⁸ FortisBC Final Argument page 244

Promote alignment in addressing challenges in the operating environment via:

- Growth in renewable gas;
- Growth in gas/electric transportation;
- GHG emissions reductions; and
- Enhancing customer engagement.¹⁹⁹

550. FortisBC provides Tables identifying the ‘positive benefits to customers’ which it states are well above the cost of incentives and are in the public interest.

FEI			
Opportunity	Benefits (End User, Ratepayer, and Societal) (BCUC IR 1.96.7)	Net Impact to Customers Benefits/(Costs) (BCUC IR 1.96.7)	Why Would FEI/FBC Pursue the Target? (BCUC IR 1.96.3)
Growth in Renewable Gas	<ul style="list-style-type: none"> ✓ Reduced emissions ✓ Avoidance of higher cost decarbonization alternatives (electrification) 	\$120.3 million	Aligned with climate policy, beneficial for customers and the utility, and is in the public interest.

¹⁹⁹ Exhibit B-1, page C-156

FEI			
Opportunity	Benefits (End User, Ratepayer, and Societal) (BCUC IR 1.96.7)	Net Impact to Customers Benefits/(Costs) (BCUC IR 1.96.7)	Why Would FEI/FBC Pursue the Target? (BCUC IR 1.96.3)
Growth in Natural Gas Transportation	<ul style="list-style-type: none"> ✓ Reduced emissions ✓ Positive impact on rates (via delivery margin) ✓ Reduced operating costs 	\$409.2 million	
GHG Emissions Reduction (Customer)	<ul style="list-style-type: none"> ✓ Reduced emissions ✓ Positive impact on rates (via delivery margin) ✓ Reduced operating costs 	\$247.8 million	
GHG Emissions Reduction (Internal)	<ul style="list-style-type: none"> ✓ Reduced emissions 	\$4.6 million	Aligned with climate policy, beneficial for customers, and is in the public interest.
Enhance Customer Engagement	<ul style="list-style-type: none"> ✓ Increased customer engagement and convenience 	N/A	Beneficial for customers.

FBC			
Opportunity	Benefits (End User, Ratepayer, and Societal) (BCUC IR 1.96.7)	Net Impact to Customers Benefits/(Costs) (BCUC IR 1.96.7)	Why Would FEI/FBC Pursue the Target? (BCUC IR 1.96.3)
Enhance Customer Engagement	<ul style="list-style-type: none"> ✓ Increased customer engagement and convenience 	N/A	Beneficial for customers.

FBC			
Opportunity	Benefits (End User, Ratepayer, and Societal) (BCUC IR 1.96.7)	Net Impact to Customers Benefits/(Costs) (BCUC IR 1.96.7)	Why Would FEI/FBC Pursue the Target? (BCUC IR 1.96.3)
Growth in Electric Vehicle Transportation	<ul style="list-style-type: none"> ✓ Reduced emissions ✓ Support Zero Emissions Vehicle Mandate 	N/A	Aligned with climate policy, beneficial for customers and the utility, and is in the public interest.
Power Supply Incentive	<ul style="list-style-type: none"> ✓ Further optimization of power supply costs 	\$31.7 million (low case) to \$84.1 million (high case)	Beneficial for customers and is aligned with a focus on cost efficiency.

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551. The benefits to customers are calculated to be in the order of about \$800 million for FEI ratepayers and \$32-\$85 million for FBC ratepayers.

552. The Utilities also note that:

‘Not only are the proposed Target Incentives designed to provide benefits to customers, but they are also designed to prepare the Utilities for future challenges and will incent improvements in dynamic efficiencies through investments in innovative solutions that can reduce the long-run average cost (unit cost) of the Companies over time.’²⁰¹

553. FortisBC argues that the achievement of the Targeted Incentive objectives will require effort on behalf of the Utilities along with necessary investments in O&M and capital.

554. They go on to state that:

‘The O&M and capital requirements will vary by incentive and project... Where pursuit of targets will be funded out of indexed-O&M or FEI’s Growth capital, the companies will have an incentive to manage their overall costs to within inflation. Where the pursuit of targets are funded out of costs that are forecast, the BCUC will have an opportunity to review any proposed spending’.²⁰²

555. The CEC is of the view that to the extent any of the Targeted incentives are funded from projected O&M and Growth Capital those formulas should have the corresponding reductions. The Commission should have review of all of the spending.

556. The CEC supports funding of Targeted Incentives under the conditions outlined above.

²⁰⁰ FortisBC Final Argument pages 245-247

²⁰¹ FortisBC Final Argument page 247

²⁰² FortisBC Final Argument page 254

557. In the CEC's view, the Utilities could appropriately receive additional ROE to conduct projects that are paid for by the ratepayer beyond those benefits it will likely already receive under formulaic ratemaking if approved, where there is a recognized additional risk profile the Utilities would not otherwise be expected to undertake in the ordinary course of business.
558. The CEC is not opposed to funding projects that result in ratepayer savings, or those deemed to be in the 'public interest' where the cost/benefits of the projects can be assessed as being positive. The CEC notes that such projects are often to be undertaken in the form of a Certificate of Public Convenience and Necessity ("CPCN") and or Expenditure Schedules for certain activities and projects. The DSM programs are a good parallel for the proposed Targeted Incentives because their treatment similarly aligns to customer and public interests.
559. The CEC submits that the Utilities have already identified projects that they deem to be appropriate and important to proceed, and these should be presented to the Commission for review and approval, with the necessary costs identified to complete the projects.
560. The CEC also notes that the projects identified are also important to the Utility in ensuring viability for their long-term future and/or in developing an efficient business structure.
561. The Utilities should presumably already be incented to conduct activities and projects that will preserve their well-being in the long term, but may well have a conflict between long term initiatives and higher risks versus stable ordinary shorter term utility operations.
562. To the extent the project costs are clearly beyond what may be anticipated under prudent management, the Commission can approve the costs and has rate riders and deferral accounts at its disposal to manage the costs as well as the option to provide additional BP returns for undertaking the appropriate risks.
563. To the extent that the project costs are not clearly beyond what may be anticipated under prudent management, the CEC recommends that the Commission deny the costs and require the projects to be undertaken under the approved revenue requirement.

Power Supply Incentive

564. FortisBC's proposed Power Supply Incentive is intended to create greater incentive for FBC to optimize FBC's largest single cost which requires significant effort and focus to manage.²⁰³ They note that it has had incentive opportunities in the past related to power supply.
565. The CEC submits that power supply to the FBC Utility is clearly in the ordinary course of its business.

²⁰³ FortisBC Final Argument page 263

566. The CEC submits that the corollary to this is that FBC will not be 'optimizing' its largest single cost unless it receives an incentive to do so and is leaving the equivalent of \$31.7 million to \$84.1 million 'on the table'.
567. The CEC submits that this is not an acceptable proposition, particularly when they propose to have only upside for the Utility.
568. The CEC submits that it is disingenuous to state that 'FBC is actively pursuing all opportunities presented in its most recent Annual Electric Contracting Plan ("AECP")' while at the same time concluding that they need to 'further align' the interests of the Company and the customer with a reward for doing better.²⁰⁴
569. The CEC submits that the importance of prudently managing 43% of the revenue requirements which is the single largest impacting customer rates,²⁰⁵ should ensure the interests of Company and ratepayers are 'aligned'.
570. The CEC submits that the Commission could disallow any 'incentive payments' for FBC's proposed Power Supply Incentive unless there is equivalent downside risk potential for the company and the initiatives are considered well beyond the normal utility prudent management requirements, which seems less likely in regard to power supply.
571. The CEC notes that BC Hydro's Powerex operates independently from BC Hydro and has been successful in generating benefits for BC Hydro ratepayers over the years.
572. The CEC submits that it could be appropriate for the Commission to deny the incentive and introduce greater scrutiny into FBC's management of its power supply.

XIV. FORECAST REVENUES AND MARGINS

573. Revenues are forecast each year for rate-setting purposes.
574. The Companies propose to continue to flow variances through the Flow Through deferral account.²⁰⁶
575. The CEC accepts the flow through of revenues as being appropriate.

XV. DEFERRAL ACCOUNTS

576. FEI and FBC are requesting the continuation of the existing Flow Through Deferral accounts for the term of the MRP.

²⁰⁴ FortisBC Final Argument page 265

²⁰⁵ FortisBC Final Argument page 265

²⁰⁶ Exhibit B-1, page A-4

577. Additionally, the Utilities are seeking the addition of three new deferral accounts, as discussed below.

Existing Deferral Accounts

578. Both Utilities have a variety of existing deferral accounts which are generally intended to be kept as currently established.

579. The Utilities propose certain changes to the Flow Through Deferral Account as discussed below.

Flow Through Deferral Account

580. Under the current PBR, costs such as depreciation expense, insurance premiums, income and property taxes, interest expense and certain non-formula O&M expenses are captured in the Flow Through Deferral Account.

581. Under the current MRP it is proposed that the Flow Through Deferral Account will continue to capture the annual variances between the approved and actual amounts for those costs and revenues which are included in rates on a forecast basis and do not have a separately approved deferral account.²⁰⁷

582. However, certain costs such as ‘controllable’ depreciation, interest and income tax driven by Regular capital are proposed to be subject to ‘Earnings Sharing’.

583. As identified in Table C4-1, Flow Through items are proposed to include:

<i>FEI</i>	<i>FBC</i>
Customer variances	Revenue variances
Industrial and all other revenue variances	Power supply variances net of PSI
All other O&M variances	All other O&M variances
Depreciation on Clean Growth Projects	Depreciation on Clean Growth Projects
Property Tax Variances	Property Tax Variances
Revenues from Clean Growth Projects	Revenues from Clean Growth Projects
Interest Rate Variance	Interest Rate Variance
Income Tax Rate Variances	Income Tax Rate Variances
Income Tax on Clean Growth Projects	Income Tax on Clean Growth Projects

²⁰⁷ Exhibit B-1, page C-119

584. In addition to Index-Based O&M variances, items subject to Earnings Sharing include:

<i>FEI</i>	<i>FBC</i>
Other depreciation variances	Other depreciation variances
Other interest variances	Other interest variances
Other Income tax variances	Other Income tax variances

585. In the Companies' view the proposed changes to the Flow-through deferral account will also increase the risks and rewards and therefore the incentives. This is because cost items such as depreciation expense that are currently subject to flow-through treatment will be subject to the earnings sharing mechanism.²⁰⁹

586. In the previous PBR Final Submission, FortisBC argued that including uncontrollable costs within the PBR formula could result in windfall gains or losses to either the companies or ratepayers²¹⁰.

587. The CEC stated in its previous PBR Final Submission that the Utilities likely have some control over items such as income taxes interest expense, and property taxes.²¹¹

588. The CEC is of the view that at this time the 'controllable' aspects of the proposed items are somewhat uncertain and should be carefully monitored and reviewed to ensure that windfall earnings are not included.

589. The CEC also considers that optimization of depreciation, other interest and income tax expense are part of competent and prudent management.

590. The CEC recommends that any earnings associated with the proposed items to be brought into Earnings Sharing should be reviewed at every annual review for justification as to why it should be included in the Earnings Sharing Mechanism.

591. The CEC recommends that unless there are demonstrable reasons for why the variances were controlled by the Utility for the benefit of the ratepayer, they should be disallowed.

New Deferral Accounts

BCUC Levies (FBC)

²⁰⁸ Exhibit B-1, page C-118

²⁰⁹ FortisBC Final Argument, page 32

²¹⁰ PBR Decision page 102

²¹¹ CEC PBR Final Submission pages 187-189

592. FBC is seeking approval of a rate-base²¹² deferral account to collect the annual variances between the actual BCUC levies incurred and the amount forecast in O&M expense. It will have an amortization period of 1 year commencing January 1, 2021.²¹³
593. This treatment aligns with the FEI treatment for BCUC levies, as approved through BCUC Order G-112-04. FBC also seeks approval to amortize this deferral account over one year, consistent with the FEI approved treatment.²¹⁴
594. The CEC has no objection to the establishment of this account.

MRP Incentives (FEI and FBC)

595. FEI and FBC seek approval to establish an MRP Incentives Account for each Utility to capture the amounts determined through the Earning Sharing Mechanism and the Targeted Incentives, except for the Power Supply Incentive.
596. The MRP Incentives Account is proposed to be a non-rate base deferral account attracting a Weighted Average Cost of Capital rate of return, with additions being recovered or returned over one year.²¹⁵ The deferral account will commence on January 1, 2021.²¹⁶
597. The CEC supports the ‘Targeted Incentives’ and therefore recommends support for the MRP Incentives account, provided it meets specific conditions of the nature the CEC has laid out.

Innovation Funding Account (FEI and FBC)

598. FortisBC requests approval of a deferral account to collect a charge of \$0.40 and \$0.30 per customer per month for FEI and FBC, respectively, which will fund the Companies’ annual innovation activities specifically including the Fund. The costs will be recovered through riders and any residual balance will be addressed at the end of the term of the proposed MRPs.²¹⁷ The proposed riders will amount to approximately \$4.9 million per year for FEI and \$0.5 million per year for FBC.
599. The CEC supports the Fund, provided it meets specific conditions of the nature the CEC has laid out such as ensuring direct benefits for ratepayers.

²¹² Exhibit B-1, page C-127

²¹³ Exhibit B-1, page C-127

²¹⁴ Exhibit B-1, page C-120

²¹⁵ FortisBC Final Argument, page 97

²¹⁶ Exhibit B-1, page C-127

²¹⁷ Exhibit B-1, page C-127

600. The CEC is of the view that should the Commission approve the Fund and the associated deferral account, any residual balance should be returned to ratepayers at the end of the MRP term, if approved.

XVI. ANNUAL REVIEWS

601. Through the Annual Review process, the BCUC determines FEI and FBC's rates for the upcoming year. The Annual Reviews are also where stakeholders can consider FortisBC's performance and activities, as well as understand the issues and challenges facing the Utilities.²¹⁸
602. The Utilities propose a five-year term for the PBR plans with Annual reviews to plan for the current year and review the results from the prior year.
603. In the Annual Review process the BCUC determines FEI and FBC's rates for the upcoming year.²¹⁹ FortisBC states that the Annual Reviews are where stakeholders can consider the Companies' performance and activities, as well as understand the issues and challenges facing the Utilities.²²⁰
604. Noting that the proposed term for the MRP period reduces the number of comprehensive RRAs which results in a loss of transparency for the ratepayer, the Utilities expect the loss of transparency will be mitigated with the annual review.
605. FortisBC also acknowledges the benefits of a comprehensive RRA.

'The primary benefits of comprehensive examinations of revenue requirements are transparency of costs and other aspects of a utility's operations for the regulator and stakeholders, and the assurance of an opportunity for the utility to recover prudently-incurred costs and a return of and on its capital.'²²¹

606. As noted in Commission Decision on the 2014-2018 PBR, the Commission found that
- 'a more extensive Annual Review process is necessary to build trust among all stakeholders and to ensure the PBR Plan functions as intended.'²²²
607. The CEC agrees that a comprehensive Annual Review is important in establishing greater trust between ratepayer groups and the Utilities.
608. FortisBC states that it considers the Annual Review process under the Current PBR Plans has been successful and the companies are proposing that it be continued under the proposed PBR Plans.²²³

²¹⁸ FortisBC Final Argument, page 102

²¹⁹ FortisBC Final Argument, page 102

²²⁰ FortisBC Final Argument, page 102

²²¹ Exhibit B-7, CEC IR 1.8.3

²²² FEI Multiyear Performance Based Ratemaking Plan for 2014 Through 2018 (PBR Decision) page 184

609. As under the Current PBR Plans, FortisBC expects the Annual Review regulatory process under the Proposed MRPs will include one round of IRs, a workshop, written submissions and a BCUC determination of rates.²²⁴
610. The Annual Review contains the following elements pursuant to the 2014-2019 PBR Decision.
- i) Evaluation of the operation of the PBR Plan in the past year(s) and identification by any party of any deficiencies/concerns with the operation of the PBR plan that have become apparent. Parties are expected to put forward recommendations with how to deal with such concerns.
 - ii) Review of the current year projections and the upcoming year's forecast including:
 - a. Customer growth, volumes and revenues;
 - b. Year-end and average customers, and other cost driver information including inflation;
 - c. Expenses (determined by the PBR formula plus flow-through items);
 - d. Capital expenditures (as determined by the PBR formula plus flow-through items);
 - e. Plant balances, deferral account balances and other rate base information and depreciation and amortization to be included in rates;
 - f. Projected earnings sharing for the current year and report on true-up to actual earnings sharing for the prior year; and
 - g. Any proposals for funding of incremental resources in support of customer service and load growth initiatives.
 - iii) Identification of any efficiency initiatives that the Companies have undertaken, or intend to undertake, that require a payback period extending beyond the PBR plan period and make recommendations to the Commission with respect to the treatment of such initiatives.
 - iv) Review of any exogenous events that the Company or stakeholders have identified that should be put forward to the Commission for decision as to their exclusion from the PBR plan. The review process should include recommendations as to how the exogenous events costs/revenues should be recovered from or credited to ratepayers (see Section 2.2.4 for details).
 - v) Review of the Companies' performance with respect to SQI's. Bring forward recommendations to the Commission where there have been a "sustained serious degradation" of service (see Section 2.3.3.2 for details).

²²³ FortisBC Final Argument, page 102

²²⁴ FortisBC Final Argument, page 102

- vi) Assess and make recommendations with respect to any SQIs that should be reviewed in future Annual Reviews. For example, stakeholders are to review the usefulness of continuing with the Billing Index and Meter Reading Accuracy SQIs.
 - vii) Assess and make recommendations to the Commission on the scope for future Annual Reviews.
611. Additionally, the Annual Reviews have included reporting on Major Initiatives.
612. The CEC submits that the annual reviews have not been sufficient to replace the transparency that is afforded by regular comprehensive Commission review.
613. The CEC submits that the Annual Review process has not been successful in that the reviews have constrained detailed review of whether or not the 'savings' were justified and adequate critique of the formula and process.
614. The CEC is of the view that there has been inadequate opportunity for ratepayers to assess and critique the PBR and its efficacy throughout the Annual Reviews and that this has resulted in the development of a new MRP without the benefit of careful scrutiny of the past PBR.
615. The CEC notes that Decision G-196-17 constrained comments on the current PBR plan and concerns for future PBR plans as being not within the scope of the PBR.
616. The CEC has made various comments throughout the Annual Reviews which it continues to support but submits that these comments tend to get 'lost' amongst the evidence when reviewing a new rate plan.
617. The CEC submits that any future MRP should include a separate and distinct process for reviewing the MRP, both mid-term and at the end of the term.
618. A significant end of term review prior to the introduction of a new rate plan would provide a dedicated opportunity for review of what is successful and not successful and could be incorporated into the development of a new MRP, or a decision to pursue a cost of service period.
619. The CEC notes that the Utilities originally requested a Mid Term review which was denied by the Commission.
620. The CEC submits that a Mid Term review would provide an appropriate arena for review of a MRP such that issues raised can be examined during the MRP on a going-forward basis.
621. The CEC submits that retrospective review of the MRP at the conclusion of the MRP, is overly time-consuming, difficult and inefficient in the context of a new MRP application.

622. The CEC recommends that the Commission incorporate a formal Mid-term review of the MRP with a view to determining whether or not the MRP is working as intended and providing commensurate benefits to ratepayers as may be being achieved by the Utilities.

XVII. SUPPORTING STUDIES

623. FortisBC seeks approval of five updated studies that will result in a more representative calculation of FEI's and FBC's revenue requirements for the term of the Proposed MRPs.²²⁵
624. The CEC submits that the Utilities have provided adequate evidence that the studies are consistent with industry practice and soundly conducted which is summarized in the FortisBC's Final Argument.
625. The CEC recommends that the Commission accept the studies as proposed by FortisBC.

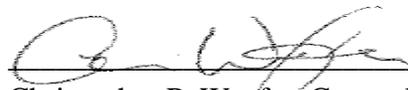
XVIII. CONCLUSION

626. The CEC submits that the Proposed MRP is not in the public interest and should be denied.
627. The CEC is in favour of certain aspects of the Proposed MRP which promote the health of the Companies, including the Targeted Incentive and Clean Growth Innovation Fund, but does not consider that they provide enough in the way of ratepayer accountability and benefits in the current proposals.
628. The CEC is concerned with the direct transition from one PBR to another MRP without adequate accountability for the basis for the costs to be inflated.
629. The CEC recommends that the Commission deny the current Application as proposed.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

David Craig

David Craig, Consultant for the Commercial Energy Consumers Association of British Columbia



Christopher P. Weaver, Counsel for the Commercial Energy Consumers Association of British Columbia

²²⁵ FortisBC Final Argument page 275