



Diane Roy
Director, Regulatory Affairs

FortisBC Energy
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604) 576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
Email: diane.roy@fortisbc.com
www.fortisbc.com

Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

December 6, 2013

Via Email
Original via Mail

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

Attention: Ms. Erica M. Hamilton, Commission Secretary

Dear Ms. Hamilton:

Re: FortisBC Energy Inc. (FEI)

Application for Approval of a Multi-Year Performance Based Ratemaking (PBR) Plan for 2014 through 2018 (the Application)

Response to the British Columbia Utilities Commission (BCUC or the Commission) Information Request (IR) No. 2, Responses Related to the PBR Methodology

Filed as Response to FEI BCUC IR No. 3a

On June 10, 2013, FEI filed the Application as referenced above. FEI submitted its response to BCUC IR No. 2 on November 27, 2013, noting that the responses to BCUC IR No. 2 questions 242 series, 259.2, 296.4 through 296.5.1, 298.4 through 298.7, 305.1, 305.2, 306.1, 306.2, 307 series, 338.20, and 341.1 through 341.4 related to the PBR Methodology, and would be submitted with the PBR Methodology IRs.

In an effort to differentiate the IR responses relating to the PBR Methodology which are the subject of the oral portion of the hearing jointly for FEI and FortisBC Inc. (FBC) from those IR responses which relate to other matters for the written portion of the hearing individually for each of FEI and FBC, FEI will mark these IR responses as FEI BCUC IR No. 3a.

FEI respectfully submits these FEI BCUC IR No. 3a responses related to the PBR Methodology.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (e-mail only): Registered Parties



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1 **MULTI-YEAR PERFORMANCE BASED RATE-MAKING MECHANISM**

2 **FORECASTS FOR THE PBR PERIOD – DEMAND FORECAST**

3 **242.0 Reference: FORECASTS FOR THE PBR PERIOD**

4 **Exhibit B-1, Application, Tab C, Section 1.1, p. 86**

5 **PBR Annual Reviews – Energy Demand Forecast**

6 Fortis Energy Inc. (FEI) states in the Application that it “is expecting to experience a
7 slight increase in consumption over the PBR Period. FEI’s forecast of demand for
8 natural gas is based upon a methodology that is consistent with that used in prior years,
9 and provides a reasonable estimate of future natural gas demand for 2014.” (p. 86)

10 242.1 As it specifically relates to demand forecasting, please comment on whether it is
11 FEI’s opinion there are any incentive differences for achieving accurate forecasts
12 between Performance Based Ratemaking (PBR) and rate-of-return regulation.
13

14 **Response:**

15 The question appears to ask a general question about whether there are differences in the
16 incentives for achieving more accurate demand forecasts under PBR versus rate-of-return
17 regulation. FEI does not believe that this question can be answered in a general fashion, since
18 there are many possible PBR models and rate-of-return regulation also has many variants.
19 Rate-of-return (or cost-of-service) regulation may employ the same basic principles from one
20 jurisdiction to the next, but the application of those principles in practice may vary in a number of
21 ways. This question can only be answered by reference to a specific utility’s PBR model and
22 the specific application of cost-of-service ratemaking to that utility.

23 If the question is intended to apply to FEI’s 2014-2018 PBR proposal as compared to cost-of-
24 service regulation as it has been applied to FEI, then the response is that the incentive
25 differences pertaining to the accuracy of demand forecasts are substantially the same in both
26 cases, with very minor differences described below. The implications of demand variations and
27 the fact that there is very little incentive one way or the other with respect to demand forecast
28 variances was discussed previously in response to BCUC IR 1.21.4 (Exhibit B-11, p. 43-44).

29 For FEI’s residential and commercial classes the incentive to achieve an accurate forecast is
30 the same under PBR as under cost-of-service regulation because delivery revenues in these
31 classes are subject to a revenue decoupling mechanism called the Revenue Stabilization
32 Adjustment Mechanism (RSAM). The RSAM guarantees that the delivery revenues that are
33 ultimately collected from residential and commercial customers (either through delivery rates or
34 the RSAM rate rider) are based on the actual use per account in these customer classes and



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1 will be the same amount whether under PBR or cost of service ratemaking. Variances in
2 demand in these customer classes relate only to the customer additions forecast, which may go
3 either way, have offsetting costs associated with incremental revenue as described in Appendix
4 E5, and are subject to 50/50 earnings sharing whereas under cost-of-service 100% of the
5 differences would affect the ROE.

6 With respect to industrial revenue variances, FEI noted in the response to BCUC IR 1.21.4
7 (Exhibit B-11) that since industrial revenues will be reforecast annually under PBR (using the
8 customers' own assessments of gas use) that industrial revenue variances would be expected
9 to be one-time occurrences and could go in either direction. The response to BCUC IR 1.21.4
10 also noted that the earnings variances (or the potential incentive) arising from industrial revenue
11 differences would be smaller under the proposed PBR model than under cost-of-service
12 regulation because they would be subject to 50/50 earnings sharing while under cost-of-service
13 100% of the differences would affect the ROE, all else equal.

14 The annual frequency of demand reforecasting (residential, commercial and industrial) under
15 PBR will also tend to keep revenue variances smaller than under cost-of-service regulation,
16 since FEI has had a two-year RRA test period recently where demand forecasts for ratemaking
17 purposes would only occur on the same two-year cycle.

18 Therefore, the magnitude of any incentives implicit in demand forecasting variances is likely to
19 be smaller under PBR than under cost-of-service regulation; however, FEI does not believe this
20 is a material difference. Further, under PBR, the annual cycle of demand forecasting will likely
21 improve the accuracy of the demand forecast over cost-of service regulation.

22 Further FEI's methodology for demand forecasting has been in place since 2002 and has not
23 changed under PBR or Cost of Service in the period since.

24 Please also refer to the response to BCUC IR 3a.242.2.1.

25
26

27

28 242.1.1 With respect to forecasting customer demand, what impact, if any, will
29 the PBR process have on the approach that FEI takes on preparing
30 demand forecasts?

31

32 **Response:**

33 Assuming the approved treatment of demand and revenue forecasts under the PBR is the same
34 as FEI has proposed in the PBR application, there will be no differences in the forecasting
35 methodology under FEI's proposed PBR Plan compared to cost-of-service regulation. However,



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1 as noted in the response to BCUC IR 3a.242.1, there may be a different frequency of
2 forecasting for ratemaking purposes under PBR than under cost-of-service regulation. The PBR
3 proposal includes an annual forecasting process, while under cost-of-service regulation demand
4 forecasting for ratemaking purposes will only occur bi-annually (assuming the practice of two-
5 year RRA test periods was to continue.)

6
7

8

9 242.2 For the current test period, are there any performance incentives that will have
10 an impact on FEI's accuracy in forecasting customer demand and sales
11 revenue?

12

13 **Response:**

14 No, there are no performance incentives that will have an impact on FEI's accuracy in
15 forecasting customer demand and sales revenue.

16 FEI has one set of forecast methods that are built into the FIS forecast model. This model was
17 completed in 2002 and has been in use since then. Since that time FEI has been under both
18 Cost of Service and PBR mechanisms and the forecast methodologies have not changed. FEI
19 has one set of methodologies and uses them consistently regardless of the regulatory construct
20 in place. The inputs and forecast methods do not change so the accuracy is not expected to be
21 any different during the current test period than that achieved since 2002.

22
23

24

25 242.2.1 Does FEI believe that the PBR process should provide incentives for
26 achieving accurate demand forecast? For example, is a PBR
27 forecasting incentive that takes into account certain adjustments (e.g.
28 weather-related sales variations) a reasonable expectation for
29 ratepayers to have? Please discuss why.

30

31 **Response:**

32 No, FEI does not believe that the PBR process should provide incentives for achieving an
33 accurate demand forecast. There are two main reasons for this view.

34 First, the use of natural gas by customers is largely outside of FEI's control and the incentive
35 mechanisms in the PBR are focused on costs and areas of the business that are controllable.



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1 Customer gas use may change for various reasons, many of which are due to external
2 influences, such as new appliance efficiency standards or building code changes affecting
3 residential and commercial gas use, or business and economic conditions affecting industrial
4 gas use. The Company is focusing its efforts on increasing customer additions to the extent
5 that it can be controlled.

6 Secondly, FEI's forecasting methodology is appropriate and has been tested over the years in
7 RRAs and other regulatory proceedings. In addition, as stated in the response to BCUC IR
8 3a.242.1, residential and commercial delivery revenues (i.e. delivery margin), which comprise
9 more than 85 percent of total delivery revenues are already stabilized through the RSAM,
10 meaning delivery revenue recoveries from these classes is ultimately based on the actual gas
11 use by these customers. Even if the forecasting methods could be improved to generate a
12 more accurate use rate forecast for these classes, it would make no difference to how much
13 delivery margin would be collected. Gas use in the industrial classes is more tied to economic
14 conditions in general or business conditions in the particular industrial sector. FEI's proposal
15 under the PBR proposal to reforecast annually, and for industrial revenues to rely on the
16 industrial customers' own assessments of their gas usage for the coming year (via the Industrial
17 Survey, a methodology that has been in place for over a decade), is the appropriate means of
18 capturing the impact of economic conditions, sector business conditions or other factors
19 affecting industrial gas use on a timely basis.

20

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1 **259.0 Reference: FORECASTS FOR THE PBR PERIOD**

2 **Exhibit B-11, BCUC 1.127.4, p. 318**

3 **O&M per customer**

4 The table in the response to BCUC 1.127.4 shows that the O&M/ customer rose quickly
5 at the end of the last PBR period.

6 259.2 In the theory of PBR, a utility is incented to achieve efficiencies and cost savings
7 during a PBR period and those savings would be embedded for the benefit of
8 customers thereafter. Some critics claim that a utility will increase their costs at
9 the end of a PBR period to avoid seeing them embedded for the customers'
10 benefit. Please discuss this with respect to the 2008 and 2009 O&M.

11 **Response:**

12 The issue of efficiency investment timing during the PBR term and solutions for mitigating this
13 problem have been explained extensively in an undertaking regarding efficiency carry-over
14 mechanisms filed on September 20, 2013 (Exhibit B-16) and Appendix D-6 of the Application as
15 well as a number of related responses to FBC's and FEI's information requests (for instance
16 please refer to the response to FBC COPE IR 1.2.1 (Exhibit B-13).

17 In summary, PBR theory indicates that the motivational power of PBR incentives is dependent
18 on the timing of the efficiency gains and that the incentives pertaining to efficiency gains may
19 gradually reduce each year as the regulated firm moves toward the end of its PBR plan. The
20 theory also discusses efficiency carryover mechanisms, and in particular the rolling ECM, as a
21 solution for this problem as it provides a framework in which the incentive power of PBR will
22 remain the same for the entire PBR term.

23 The efficiency carry-over mechanism in FEI's 2004 PBR was not a rolling ECM and in addition
24 did not include an O&M expenditure component. Therefore as theory indicates, the incentive
25 power of the 2004 PBR plan for incremental O&M savings was decreased in the final years of
26 the plan. The response to FEI BCUC IR 2.259.1 (Exhibit B-24) addresses other reasons for the
27 decrease in FEI's incremental O&M savings in 2008 and 2009.

28 However, while the O&M savings decreased somewhat in 2008 and 2009 relative to FEI's PBR
29 formula O&M allowances, the actual O&M levels in those two years remained well below the
30 formula-based O&M levels. This meant that customers received the cumulative O&M
31 reductions of the productivity adjustment factors over the six-year period and significant
32 additional savings beyond those amounts as the starting point for O&M levels going into the
33 2010-2011 RRA.

34



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1 **FORECASTS FOR THE PBR PERIOD - CAPITAL**

2 **296.0 Reference: FORECASTS FOR THE PBR PERIOD**

3 **Exhibit B-1, Part C, Section 4.4.4, p. 218; Exhibit B-11, BCUC 1.143.1,**
4 **p. 361,**

5 **BCUC 1.152.2, p.378, BCUC 1.152.5, p.380**

6 **Historical Capital**

7 The table in BCUC 1.143.1 shows that total sustainment capital has risen from \$34.6
8 million in 2007 to \$75.1 million in 2013 Approved, for an increase of 117 percent in 6
9 years. Only Distribution System Reinforcements shows a reduced spending level while
10 Transmission System Reinforcements has the largest increase of 380 percent.

11 296.4 Is there a concern that FEI could revert back to a low cost reactive approach
12 during the PBR period and, if so, should base capital or some elements of base
13 capital be removed from the PBR formula? Please discuss.

14

15 **Response:**

16 No, FEI does not believe there should be a concern that FEI could or would revert back to a low
17 cost reactive approach during the PBR period. FEI has been working towards moving to a more
18 forward-looking approach to capital planning for a number of years, and with the initiation and
19 implementation of the LTSP in 2012/2013 has developed a longer-term view of the capital
20 expenditures required to ensure the ongoing safe and reliable delivery of natural gas to the
21 customers of FEI. As shown in Table C4-3, it is fully expected that base capital requirements
22 will continue to increase during the PBR period and into the future.

23

24

25

26

27 In response to BCUC 1.152.2 discussing the significant increase between 2010 and
28 2011 for Distribution Mains and Services expenditures, FEI states that “at least 37% of
29 the increase was due to third party requests which FEI cannot control.”

30 296.5 Should expenditures that FEI cannot control be included base capital or tracked
31 outside the PBR base capital through a CPCN or capital tracker of some sort?

32



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1 **Response:**

2 FEI believes that its proposed treatment for CPCNs under the PBR is appropriate – i.e. capital
3 projects over the \$5 million threshold will be treated outside of the PBR formula and will be
4 subject to a CPCN application. In contrast, capital projects under the \$5 million threshold
5 should remain as part of the PBR formula. With respect to the specific quote from BCUC IR
6 1.152.2 and the reference to Distribution Mains and Services capital projects arising from third
7 party requests, FEI believes capital spending within these categories should remain within the
8 PBR formula. Many of the third party-initiated projects are subject to customer contributions so
9 the net capital outlay is much smaller than the gross capital costs. Further, although some of
10 the work comes from third parties, opportunities remain to be efficient and manage the overall
11 portfolio of projects effectively even in these areas.

12
13

14

15 296.5.1 What should be the criteria for what is in base capital and what is in a
16 capital tracker or Certificate of Public Convenience and Necessity
17 (CPCN)?

18

19 **Response:**

20 It is frequently the case that PBR formulas are not able to appropriately accommodate all the
21 lumpy and capital-intensive projects that are common in the utility industry. As a solution to this
22 problem many regulators allow projects above a certain dollar threshold or that meet specified
23 criteria to be treated outside the PBR plans. The materiality threshold or the specified criteria
24 for treatment of projects outside of the PBR plan will vary from one PBR plan to the next based
25 on the particular circumstances of the utility and the PBR model adopted, as well as any rules or
26 guidelines that have been established by the regulator. For specific information regarding FEI's
27 CPCN criterion (materiality threshold) please refer to the response to the BCUC IR 3a.296.5.
28 As discussed in that response, FEI believes that the appropriate marker for capital projects to
29 be outside the PBR formula is projects with a materiality threshold of \$5 million, which is FEI's
30 currently-approved CPCN threshold. Projects that meet this threshold will be filed with the
31 Commission as CPCN applications for separate review and approval.

32



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1 **298.0 Reference: CAPITAL**

2 **Exhibit B-1, pp. 210-1, 221-3, 226, 250-3; Exhibit B-11, BCUC 1.153.1**

3 **Capital Expenditures-Sustainment Capital**

4 Table C4-4 indicates that actual expenditures for Transmission System Reinforcements
5 in 2012 and projected expenditures in 2013 are significantly greater than the
6 expenditures in 2010 and 2011, but also significantly less than approved amounts for
7 2012 and 2013. (Exhibit B-1, p. 210)

8 “The Transmission-related capital expenditures included in Table C4-4 above include
9 system capacity improvements to meet existing customer demand and forecast load,
10 and expenditures related to ensuring safety, reliability and integrity of the transmission
11 system, as well as to minimize the impact to the environment.

12 Between 2014 and 2018 projects that are forecast to cost greater than \$1 million and
13 that are included in the Transmission System Reinforcements line of Table D2-4 are
14 discussed below and have been organized based on common issues.” (Exhibit B-1, p.
15 221)

16 “Overall, sustainment capital expenditures are forecast to increase throughout the PBR
17 period, from approximately \$78 million in the base year 2013 to approximately \$82
18 million forecast in 2018. This represents, on average, an increase of approximately 1.1
19 percent annually throughout the RRA period. Major transmission pipeline projects
20 identified through the LTSP will be subject to further investigation by FEI’s Engineering
21 staff and potential projects will be filed separately as CPCNs.” (Exhibit B-1, p. 226)

22 “Over the next five years FEI is considering a number of major projects to ensure the
23 ongoing safety, integrity, and reliability of its gas system. Those projects will likely
24 exceed the \$5 million CPCN threshold, and therefore would be filed separately from this
25 Application. These projects are typically identified through either integrity concerns
26 being raised from a sustainment perspective, system improvements identified through
27 hydraulic analyses, or through capacity concerns being raised due to demand growth as
28 a result of specific customer additions. The following discusses those projects under
29 consideration over the next five years for which FEI anticipates CPCNs will be required.

30 Cost estimates have not been updated at this time for the projects identified below,..”
31 (Exhibit B-1, p. 250)

32 298.4 Are the reinforcements of the Transmission System that FEI anticipates will be
33 CPCN projects different in some fundamental ways, other than with respect to



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1 the estimated cost of each project, from the Transmission System
2 Reinforcements in Table C4-4? If yes, please explain with examples.

3
4 **Response:**

5 The CPCN projects referred to in Exhibit B-1 and the projects and programs included in Table
6 C4-4 are significantly different in respect to cost and the nature and scope of work. Both sets of
7 projects involve replacement, improvement or upgrading pipelines or equipment as required to
8 ensure ongoing safety, reliability and Code compliance of the natural gas delivery system.
9 However, the nature and the scope of the work introduce significant differences. For example,
10 the projects identified for CPCN involve contracting a number of skilled specialists as the
11 amount of work goes well beyond FEI's ongoing ability to design and execute. The CPCN
12 projects impact multiple stakeholders including municipalities and property owners, require
13 significant purchases of materials that have long lead times, require staging and storage areas,
14 may involve multiple work sites, and inconvenience to large numbers of the public.

15 Conversely, the transmission reinforcement projects identified in Table C4-4 are relatively small
16 and are usually completed using FEI resources or existing contractors; material requirements
17 are smaller and more readily available and the impact to the community is smaller.
18 Fundamentally, the work considered for the CPCN applications is not typical of that carried out
19 by FEI in its ongoing operations of the gas system.

20 As noted above, both types of work result in improved reliability and safety of the natural gas
21 delivery system but when the nature, magnitude and complexity of the work is considered, they
22 really are quite different in the planning and execution. Please also refer to the response to
23 BCUC IR 2.298.3 (Exhibit B-24).

24
25

26
27 298.5 Please generate a table covering the period 2010 through 2018 with the
28 headings shown in Tables C4-4 and C4-5 that includes Transmission System
29 Reinforcements and anticipated CPCN projects that are reinforcements of the
30 Transmission System. For the Transmission System Reinforcements, please
31 identify each project involving an expenditure of \$1 million or more, to the extent
32 possible, and include a total amount for smaller projects that are not so identified.
33 For the CPCN projects please use the most current timing and cost estimates
34 available. Include the requested information in a fully functional spreadsheet.

35



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1 **Response:**

2 Please refer to Attachment 298.5 for the fully functional electronic spreadsheet.

3
4

5

6 298.6 Please discuss the pros and cons of including all reinforcements of the
7 Transmission System in Base Capital for PBR, with the exception of very large
8 projects like KORP.

9

10 **Response:**

11 The pros and cons of including all transmission system reinforcements, except for very large
12 projects, in the formula-based capital for PBR are as follows:

13 Pros:

- 14 • PBR capital formulas are more comprehensive, with fewer projects falling outside the
15 formulas
- 16 • Potential reduced regulatory process resulting from fewer CPCN applications.

17

18 Cons:

- 19 • Increased possibility of PBR capital formulas being mis-calibrated. The PBR formulas
20 would now include larger projects (i.e. projects above \$5 million but not in the very large
21 category) which have more uncertainties with respect to cost and timing. Mis-calibration
22 of formulas would lead to a greater possibility of windfall gains or losses under the PBR.
- 23 • Reduced opportunity for stakeholder input and Commission oversight of relatively large
24 projects if they did not require a separate CPCN application.
- 25 • Creates a perverse incentive for the utility to de-prioritize other important capital projects
26 and instead continue to incur incremental maintenance O&M in order to allow larger
27 transmission projects to be accommodated under the PBR formula.

28

29 The cons significantly outweigh the pros, which is why PBR plans typically exclude significant
30 projects from the formula capital.

31

32



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1
2 298.7 Should some of the projects now identified as CPCNs be included in PBR Base
3 Capital?
4

5 **Response:**

6 No, the projects identified as CPCNs are all in excess of \$5 million and should not be part of
7 base capital. Since the majority of FEI's anticipated CPCN projects over the PBR Period are in
8 excess of \$20 million, it would not be possible to accommodate these within a PBR Formula.
9 Please refer to the responses to FEI BCUC IRs 1.10.1 through 1.10.3 (Exhibit B-11) for a
10 discussion of why CPCNs should be treated outside of the PBR formula.

11 In the context of the overall proposed PBR, FEI's proposed treatment of capital spending is
12 appropriate, including the delineation of capital spending to be included within the I-X formulas
13 from projects that are not. The \$5 million threshold for projects to be subject to CPCN
14 applications (and therefore outside the PBR capital formulas) continues to be appropriate. This
15 treatment of projects in excess of \$5 million is one of the factors, among others, that has
16 contributed to FEI proposing a productivity factor (i.e. X-factor) of 0.5% in the PBR I-X formulas,
17 which includes a significant stretch factor relative to the gas TFP study which yielded TFP
18 results in the range of -3.1% to -4.9% (Exhibit B-1-1, Appendix D2, page 11).

19



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1 **305.0 Reference: Capital EXPENDITURES**

2 **Exhibit B-1, p. 250**

3 **CPCNs**

4 305.1 Should all CPCN applications submitted under PBR include an assessment and
5 estimate of O&M savings or other capital expenditure savings?
6

7 **Response:**

8 Yes all CPCN applications, whether submitted during the PBR term or during a cost-of-service
9 RRA test period, should include a full assessment of the costs and benefits of the project. This
10 is a standard requirement in the Commission’s CPCN Application Guidelines (see BCUC 2010
11 CPCN Application Guidelines, Appendix A, Section 2 – Project Need, Alternatives and
12 Justification) that FEI will continue to comply with during the PBR term.

13 FEI wishes to note in the context of this question that not all CPCN projects produce future cost
14 savings. For example, projects that are necessitated by changes in safety standards or other
15 regulatory requirements may involve both capital and O&M cost increases.

16
17

18
19 305.2 How should savings identified by CPCN applications brought forward under PBR
20 be accounted for in the PBR formula?
21

22 **Response:**

23 The impact of CPCN projects and the “potential” savings or costs that may result from them are
24 already accounted for in the PBR formula through FEI’s proposed X-factor. As discussed in
25 B&V’s TFP studies, the electric and natural gas utility industry-wide productivity factors are well
26 into the negative zone while FEI’s and FBC’s proposed X-factor is a positive 0.5%. A
27 contributing factor to FEI and FBC being able to accept large implicit stretch factors is that the
28 capital costs of CPCN projects are not part of their PBR plans (i.e. not included in the I-X capital
29 formulas). Regarding the future costs or savings arising from CPCN projects FEI and FBC
30 provide the following comments:

- 31 • As discussed in the response to BCUC IR 2.305.1 not all CPCN projects generate future
32 savings. Indeed some CPCN projects involve both capital and/or O&M cost increases
33 which would tend to offset any savings that may be generated by other CPCN projects.



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- 1 • The large stretch factor implicit in FBC's and FEI's proposed X factor of 0.5% can be
2 taken to include any net savings or costs from CPCN projects undertaken. Therefore the
3 rates that are set using the O&M and capital formulas provide for any potential savings
4 that may derive from CPCN projects on an upfront basis with the benefits going to the
5 ratepayers.

6
7 Due to these reasons and to avoid complicated annual reviews during the PBR term, FEI and
8 FBC believe that it is appropriate to manage the future cost implications (negative or positive)
9 that may result from CPCN projects during the PBR term within the PBR formulas.

10



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1 **306.0 Reference: FORECASTS FOR THE PBR PERIOD – CAPITAL**

2 **Exhibit B-11, BCUC 1.148.2**

3 **Capital Forecast – Information Technology**

4 In response to BCUC 1.148.2, FEI states, “If capital spending on any capital category
5 that is subject to the formula is less than the formula driven amount, there is potential for
6 FEI and ratepayers to equally benefit if FEI generates earnings above the Commission’s
7 approved ROE. Any earnings above or below the Commission’s approved ROE will be
8 subject to the 50/50 ESM during the PBR. Variances in capital (and O&M) spending
9 from the formula-driven amount will also be included in the calculation of the Efficiency
10 Carryover Mechanism in the years following the PBR Period.” (p. 370)

11 306.1 Please confirm, or explain otherwise, that if the IT Capital set in the 2013 Base is
12 too high, meaning that the amount can’t be spent due to lack of business cases,
13 then both FEI and the Ratepayers will share in the over earnings.
14

15 **Response:**

16 It is a misnomer to identify a particular component of the 2013 Base capital as being “too high”,
17 or to single out a particular category of capital for different treatment. The main purpose behind
18 setting a base level for overall capital spending to carry forward in a capital spending formula is
19 to establish a suitable spending level that reflects reasonable spending requirements for capital
20 as a whole going forward. Savings from the base spending level (plus I-X escalations) reflect
21 savings that will be shared temporarily and then lead to lower future rates after rebasing occurs.

22 FEI refers to the response to BCUC IR 3a.306.2 below where it is confirmed that IT Capital is
23 expected to be above the 2013 Base level.
24
25

26
27 306.2 Please explain why there is no provision to simply reduce the following year’s IT
28 Capital budget to re-set the base if FEI can’t spend at the forecast base level.
29

30 **Response:**

31 With capital spending, particularly for IT projects which are typically discrete in nature, there
32 may be timing issues for project completions that lead to fluctuations in capital additions from
33 year to year. Under-spending in one year does not imply a permanent reduction that would be
34 carried to the subsequent years. This issue is evident in FEI’s IT Capital spending since, as



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1 stated in Section 4.6.4.7 of the Application, FEI expects that the 2013 IT capital expenditures
2 will exceed the 2013 approved amount and cover most of the unused capital from 2012.

3 In addition to the issue discussed above, the concept of re-setting the base as proposed in the
4 question is contrary to the general intent of establishing a PBR in the first place. The base levels
5 in the PBR capital formulas and the I-X escalation factors are intended to establish an
6 appropriate reference level of capital spending from which FEI will seek to find efficiencies for
7 the term of the PBR. If the base is to be reset because expenditures in a particular category,
8 such as IT capital, are under-spent in a particular year, this would diminish the incentive power
9 of the PBR Plan significantly and reduce the motivation to pursue efficiencies for the longer-term
10 benefit of customers.

11

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1 **307.0 Reference: FORECASTS FOR THE PBR PERIOD – CAPITAL**

2 **Exhibit B-11, BCUC 1.151.1**

3 **Business Technology – 2013 Project Portfolio Benefits**

4 In response to BCUC 1.151.1, FEI states, “The financial benefits shown will include both
5 O&M and capital components. The O&M and capital amounts included in the setting of
6 delivery rates for 2014 through 2018 will be calculated using the PBR formula, not using
7 the individual departments’ forecasts that have been included in Section C of the
8 Application. The forecasts of O&M and capital costs and any savings that have been
9 provided in Section C of the Application are for reference purposes only. FEI will be
10 managing the achievement of any savings or incremental costs on a Company-wide
11 basis as part of the overall challenge FEI has in meeting its O&M and capital targets
12 under PBR.” (p. 374)

13 307.1 Please confirm, or explain otherwise, that O&M and capital savings from IT
14 projects will be used to offset over spending by different Business Units to reach
15 the overall PBR targets.

16
17 **Response:**

18 Not confirmed. FEI’s IT Capital budget will be used to realize potential efficiency opportunities
19 as part of an integrated Company-wide effort. FEI will be focussed on finding efficiency
20 improvement opportunities during PBR, with all business units seeking to find efficiencies in the
21 context of their specific business requirement. IT solutions will be one of the cost-effective
22 options available to management to achieve any identified opportunities for efficiency, through
23 system integration, simplification and optimization.

24
25
26 307.2 Please confirm, or explain otherwise, that under-spent IT capital that can’t be
27 used because of lack of business cases can be used by other Business Units for
28 other types of capital spending.

29
30 **Response:**

31 FEI will have the flexibility under the PBR to deploy capital in the most effective fashion to
32 achieve overall efficiencies and meet the service quality requirements. Please refer to the
33 response to BCUC IR 3a.307.1.

34



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1 **338.0 Reference: BALANCED SCORECARD BENCHMARKING**
2 **Exhibit B-1, Section 3.1, Productivity Focus, pp. 11-13**
3 **Productivity Measures**

4 Productivity gains and efficiency review activities will continue in the future, similar to the path followed in 2012, with the emphasis on managing costs and working more efficiently and effectively.

5 (Exhibit B-1, p. 13)

6
7 338.20 Would measuring and reporting on specific productivity measures allow the
8 companies to monitor the effectiveness of its cost management and efficiency
9 improvements into the future?

10
11 **Response:**

12 FEI believes productivity improvements and their sustainment should be measured and tracked
13 at the highest and most beneficial level which is by the company's total O&M spending year-
14 over-year. This is in compliance with Commission Order G-44-12 which stated at page 40: The
15 Commission Panel further directs the FEU to file a Productivity Improvement Plan with their next
16 revenue requirements application. **The Productivity Improvement Plan may take the form of**
17 **a proposal for PBR** which places emphasis on both-short term activities as well as long term,
18 sustainable improvements. [emphasis added]

19 In addition to this response where a recap of FEI's position on the subject of productivity is
20 provided, FEI refers to the discussion on page 21 of Exhibit B-1 on the use of productivity
21 metrics in the utility industry to provide further context on FEI's position on use of productivity
22 metrics in the company.

23 In general, the research showed a wide disparity in the use of productivity metrics for
24 performance measurement in the utility industry with a wide range of metrics used. Additionally,
25 the research showed that "it is likely that most utilities are not measuring productivity across a
26 large portion of their activities and costs. The productivity metrics are generally not
27 benchmarked and regularly reported to regulators." The situation described summarizes the
28 challenges of determining what and how many metrics to use to measure performance in a
29 company. This challenge and disparity in choices is evidenced by the number of possible
30 different metrics suggested in the information requests received to date regarding the
31 company's Application.

32 FEI's use of productivity metrics is consistent with its industry peers. Some departments may
33 use metrics to manage performance while others do not. What is common amongst all
34 departments in FEI is that they are required to maintain or increase their outputs and activity



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1 levels while keeping cost increases to a minimum. To hold departments and managers
2 accountable for this, they are asked to identify and reflect productivity gains in their budgets.
3 Meeting budgets is an expectation of all departments and managers in the company. FEI
4 believes this approach to ensuring a productivity focus is sustained throughout the company
5 and will deliver the efficiencies that both the company and customers are looking for under the
6 proposed PBR Plan. The focus should not necessarily be on how the efficiencies are achieved
7 (i.e. monitored using metrics for different areas) and instead should be on ensuring that they are
8 achieved with the respective savings benefiting customers and the company.

9 In addition, regardless of whether the efficiencies realized are short-term or sustained over the
10 long-term, customers benefit in both scenarios under the proposed PBR Plan. There will be
11 situations where the savings are short-term and justified. For example, to realize possible
12 efficiencies, vacancies from staff turnover in the company are filled only after reviewing the
13 positions and determining how best to staff the vacant positions. As a result, there may be
14 some short-term savings in the delay in hiring. These actions taken by the company benefit
15 customers by delivering short-term savings and ensuring over the longer term resources are
16 managed effectively.

17 FEI's view is that the inclusion of a productivity improvement factor in FEI's PBR Plan provides
18 a comprehensive productivity measurement that will require each department to consider
19 continuous improvement, which is preferred to measurement of individual activity. Additionally,
20 the need for detailed productivity metrics is lessened by the fact that FEI has put forward a
21 realistic and appropriate 2013 Base O&M budget which reflects substantial productivity savings
22 relative to previous years and yet still ensures safety standards and other service requirements
23 are met.

24 FEI expects that the proposed 2013 Base O&M budget along with its proposed approach to
25 productivity measurement, which is consistent with that successfully used in the past approved
26 PBR Plan, will work to successfully deliver efficiencies and benefits for customers and the
27 Company.

28 Please also refer to the responses to FEI CEC IRs 1.1.1 and 1.1.5 (Exhibit B-8).

29

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1 **341.0 Reference: SERVICE QUALITY INDICATORS**

2 **Exhibit B-1, pp. 75-6, 214; Exhibit B-1-1, Appendix B2**

3 **Service Quality Indicators and System Leaks**

4 “Service Quality Indicators (SQIs) are used in the context of PBR to ensure that the
5 utility is encouraged to pursue efficiencies that do not sacrifice service quality.” (Exhibit
6 B-1, p.75)

7 341.1 In Table B6-9, the proposed SQIs that have Benchmarks all appear to be related
8 to direct contact between the utility and customers. Why do the proposed SQIs
9 not also include measures that reflect the condition of the gas delivery system,
10 which will impact safety, reliability and cost experienced by customers now and in
11 the future?

12
13 **Response:**

14 FEI’s proposed SQIs have been chosen to reflect a broad range of business processes that are
15 important elements of customer service. For the proposed PBR Plan, this ensures that service
16 quality and impact to the customer are not affected during the PBR period.

17 Maintaining the condition of the system according to existing codes and standards, while not
18 specifically linked to a proposed SQI, is the minimum expectation in terms of safety and
19 reliability of the gas system and is a non-discretionary obligation of FEI.

20 It is difficult to establish an appropriate overall SQI with respect to system condition other than a
21 system reliability index for which FEI is already at 99.999%. (The system reliability index
22 measures percent of time gas supply is available to customers excluding supply lost when gas
23 lines are damaged by third parties.)

24 In addition to the system reliability index measured internally, FEI’s Integrity Management
25 Program (IMP) is a fundamental component to our corporate commitment to safe and reliable
26 energy delivery to customers and is a regulated requirement (*Pipeline and Liquefied Natural
27 Gas Facility Regulation*, B.C. Reg. 281/2010, C. 7 and the Canadian Standards Association
28 standard for Oil and Gas Pipeline Systems CSA Z662-11). The IMP organizational framework
29 contains a number of measures of performance in developing plans to manage potential
30 hazards to our system, completion of preventive and monitoring activities, and hazard event and
31 incident occurrences. IMP measures, examples of which are provided below, contribute to a
32 complex overall view of system health:

- 33 • Above ground leaks;
- 34 • Below ground leaks;



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- 1 • OGC reportable events;
- 2 • System damages;
- 3 • Damages from natural hazards;
- 4 • Pipe condition (cathodic protection, in-line inspections, pipe and coating) ;
- 5 • Materials quality; and
- 6 • Gas quality.

7
8 While the above measures are important elements of the IMP and system health and
9 performance, there is no one indicator that would be appropriate as an SQI. All are in place
10 collectively to ensure FEI maintains the system.

11
12
13
14 341.2 Does FEI agree that maintaining its system in satisfactory condition should be an
15 objective of a PBR program?

16
17 **Response:**
18 Maintaining its system in satisfactory condition is interconnected with the objective of PBR to
19 maintain the utility's focus on maintaining safe, reliable natural gas service and customer
20 service quality, while creating efficiency incentives to continue with its productivity improvement
21 culture. However, maintaining the condition of the system in a satisfactory condition is
22 governed by codes and standards and is the minimum expectation of the customer in terms of
23 safety and reliability of the gas system. Please also refer to BCUC IR 3a.341.1.

24
25
26
27 341.3 What system condition-related SQIs did FEI consider, and why did it decide to
28 exclude them?

29
30 **Response:**
31 Please refer to the response to the BCUC IR 3a.341.1.



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341.4 What other possible system condition-related SQIs, and corresponding Benchmarks, can FEI identify?

Response:

Please refer to the response to the BCUC IR 3a.341.1.

Attachment 298.5

REFER TO LIVE SPREADSHEET MODEL

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