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June 7, 2019

British Columbia Public Interest Advocacy Centre
Suite 803 470 Granville Street
Vancouver, B.C.
V6C 1V5

Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

Re: FortisBC Energy Inc. (FEI)

Project No. 1598988

Application for a Certificate of Public Convenience and Necessity for the Inland Gas Upgrade Project (the Application)

Response to the British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre *et al.* (BCOAPO) Information Request (IR) No. 2

On December 17, 2018, FEI filed the Application referenced above. In accordance with British Columbia Utilities Commission Order G-79-19 setting out a further Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCOAPO IR No. 2.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Doug Slater

Attachments

cc (email only): Commission Secretary
Registered Parties

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for the Inland Gas Upgrade (IGU) Project (the Application)	Submission Date: June 7, 2019
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1 **1.0 Reference: Exhibit B-2, BCUC IR 1.1.1 Table and BCUC IR 1.3.1**

2 The referenced table indicates that the subject transmission laterals range in age from
3 approximately 24 years to 62 years (since construction). The second referenced IR
4 response to the request:

5 **3.1 Please describe any assessments to prioritize the 29 Transmission Laterals**
6 **in order of risk level and provide the result of these assessments.**

7 The response reads (in part)

8 *Based on FEI's existing methods and the information available on the*
9 *Transmission Laterals, FEI's assessment is that there is not a material difference*
10 *in the integrity risk level of the laterals. All of the 29 Transmission Laterals are*
11 *subject to the same potential for rupture due to external corrosion that may go*
12 *undetected by FEI's current integrity management techniques. FEI's ability to*
13 *prioritize amongst the 29 Transmission Laterals based on risk level is limited*
14 *because the available condition information is comprised of limited quantities of*
15 *integrity digs and failure records (rather than in-line inspection), and this*
16 *information does not provide any indication of systemic issues on any particular*
17 *lateral. Given the information available, FEI's assessment is that it is appropriate*
18 *to implement the proposed scope of the IGU Project for all 29 Transmission*
19 *Laterals proactively over a reasonable planning horizon.*

20 1.1 Given the range in ages (24 years to 62 years) and the geographic locations of
21 the subject laterals, why does FEI consider that the minimum information
22 required to simply prioritize (i.e., just order the laterals in order of the rupture risk
23 they present) the rupture risks among the 29 laterals is not required to
24 substantiate its application which agglomerates all 29 laterals into one
25 application?
26

27 **Response:**

28 As the 29 Transmission Laterals are not capable of being in-line inspected, there is insufficient
29 data to quantify the risk of rupture in a manner that would materially distinguish the risk of
30 rupture amongst the laterals. Even if a more granular assessment of risk could be undertaken,
31 a reprioritization of the work for the IGU Project would not have a material benefit. FEI has
32 planned to proceed with the IGU Project as quickly as reasonably possible to address the risk of
33 rupture due to undetectable external corrosion. Prioritizing the work on one or more of the 29
34 Transmission Laterals compared to FEI's planned implementation of the IGU Project would not



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1 materially reduce the risk. Please refer to FEI's response to BCUC IR 2.36.1 for further
2 discussion of why FEI did not undertake a quantitative risk assessment for the IGU Project.

3
4

5
6 1.2 Does FEI agree that it could have, in the past, augmented "the available
7 condition information" by conducting more investigative digs, control digs, etc.?
8 That is, does not the available information largely depend on FEI's past efforts?

9
10

Response:

11 FEI could not have materially improved the condition information available by conducting more
12 investigative digs. Please refer to the response to BCUC IR 2.36.1.



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1 **2.0 Reference: Exhibit B-2, BCUC IR 1.4.2**

2 The referenced IR and response are reproduced below:

3 **4.2** *For each of the 29 Transmission Laterals, please identify any control digs*
4 *(i.e. digs where there has been no indication of potential corrosion from the*
5 *above-15 ground surveys).*

6 **Response:**

7 *FEI has not performed control digs on any of the 29 Transmission Laterals. FEI*
8 *does not consider that random control digs provide sufficient value as they are*
9 *not targeted to a specific site for the purposes of addressing any particular*
10 *integrity concern.*

11 2.1 Does FEI maintain that the sample information obtained from a random control
12 dig is of insufficient value generally or insufficient value for the purposes of the
13 instant application?

14 **Response:**

15 **Response:**
16 The value of a random control dig is insufficient generally to inform this Application. Please
17 refer to the response to BCUC IR 2.36.1.

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1 **3.0 Reference: Exhibit B-2, BCUC IR 1.6.6**

2 Regarding the quantitative risk assessment directed by the BC OGC in respect of the
3 TIMC project, FEI states:

4 **Response:**

5 *FEI is in the process of developing and conducting a quantitative risk*
6 *assessment of its transmission pipeline system as part of Phase 1 of the*
7 *development of its TIMC project CPCN application. FEI is currently working with*
8 *an external consultant on this assessment. The risk assessment is planned to*
9 *include estimation of probability of failure for each of the threats included in FEI's*
10 *integrity management program (external corrosion, third-party damage, stress*
11 *corrosion cracking, etc.) as well as potential location specific safety, security of*
12 *supply (outage), environmental, regulatory and reputation consequences for*
13 *each potential failure type (small leak, large leak, rupture). The risk assessment*
14 *will combine the calculated probability and consequence of failure to estimate*
15 *operational risk on a segment-by-segment basis (a segment being a section of*
16 *pipeline with common risk factors). The segment-by-segment risk estimates will*
17 *then be used for prioritization of data quality improvement, risk analysis*
18 *refinement and/or risk mitigation efforts.*

19 3.1 Given the scope, scale, and ratepayer impacts of the instant proposal, please
20 explain why FEI did not consider it appropriate to conduct a similar QRA in
21 support of this application.

22 **Response:**

23 FEI did not conduct a quantitative risk assessment of the 29 Transmission Laterals because it is
24 unnecessary for the IGU Project, and would have only served to delay the safety and reliability
25 benefits and increase the cost of the IGU Project for customers without changing the proposed
26 scope of work. Please refer to the response to BCUC IR 2.36.1.
27

28
29

30 3.2 Did FEI consider framing the instant application in phases?
31

32 **Response:**

33 Yes. As discussed in FEI's response to BCUC IR 1.2.2, FEI considered grouping the laterals
34 into smaller CPCN applications based on the preferred alternatives selected, but concluded that
35



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- 1 this would result in an inefficient review and execution of the Project for the reasons set out in
- 2 FEI's response to BCUC IR 1.2.1. Please also refer to FEI's response to BCUC IR 1.2.1, for a
- 3 discussion of why FEI applied for the IGU Project as a single project, and FEI's response to
- 4 BCUC IR 2.38.1 for a discussion of how the cost estimate and other elements of the IGU Project
- 5 are more certain than the TPIP project, which the BCUC directed be conducted in phases.

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1 **4.0 Reference: Exhibit B-2, BCUC IR 1.7.1**

2 The referenced response states (in part):

3 *During the 2014-2019 PBR term, FEI did not incur Sustainment capital*
4 *expenditures on any transmission laterals to (1) retrofit the lateral to provide ILI*
5 *capability; (2) construct pressure regulating stations for the purpose of reducing*
6 *operating pressure in a pipeline for an extended period of time; or (3) replace the*
7 *lateral with new pipe. Neither has FEI included any of the capital activities on the*
8 *29 Transmission Laterals in its forecast of Sustainment capital expenditures in its*
9 *2020-2024 Multi-Year Rate Plan, which will be the relevant rate setting*
10 *framework during the time period that the IGU Project will be undertaken.*

11 4.1 In FEI's view, would retrofitting laterals to provide ILI capability, constructing
12 pressure regulating stations to reduce operating pressure, and replacing laterals
13 with new pipe qualify definitionally as "sustainment capital"?

14
15 **Response:**

16 The IGU Project is included in FEI's Major Projects, i.e. it requires separate approval from the
17 BCUC due to its cost exceeding the threshold for the requirement for a CPCN application.
18 Under FEI's regular capital, there are three groups of capital expenditures:

- 19 1) Growth capital, which consists of expenditures for the installation of new mains,
20 services, meters, and distribution system improvements to support customer additions;
- 21 2) Sustainment capital, which consists of expenditures for meter exchange programs,
22 replacements and upgrades to the distribution and transmission systems related to
23 safety, integrity and reliability, and expenditures for mains and service renewals and
24 alterations.
- 25 3) Other capital, which consist of expenditures for information systems, equipment
26 (including fleet vehicles) and facilities.

27 While the nature of the work in the IGU Project is the same as sustainment capital, because of
28 the quantum of the cost, it is not part of Regular Capital but rather is included in Major Projects.
29 Please also refer to FEI's response to BCOAPO IR 2.5.1.



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1 **5.0 Reference: Exhibit B-4, BCOAPO IR 1.4.1**

2 The referenced response reads (in part):

3 **Response:**

4 *There is no financial incentive for FEI to defer or not defer the IGU Project until*
5 *the end of the approved PBR plan. The cost of the IGU Project is well above the*
6 *materiality threshold of \$20 million approved by the BCUC for the current PBR*
7 *plan in Order G-120-15, and therefore the capital spending on the IGU Project is*
8 *excluded from the capital expenditure formula within FEI's current PBR plan.*

9 5.1 Does FEI agree that had all of the 29 lateral projects not been included in the
10 single IGU project (as structured by FEI), then at least some of the subject
11 project work may not have pierced the materiality threshold in the PBR plan?

12 **Response:**

13 When considered separately, work on some of the laterals would fall under the \$15 million
14 threshold for both the capital expenditures exclusion and the CPCN exemption approved by the
15 BCUC for the current 2014-2019 PBR Plan. FEI's responses to BCUC IR 1.2.1 to IR 1.2.3
16 describe FEI's rationale for combining the 29 Transmission Laterals in a single CPCN
17 application and the adverse implications to the IGU Project timing, scope and cost if they were
18 to be treated separately.

19 In this case, since the capital expenditures that are included in the IGU Project will be incurred
20 after 2019, the materiality threshold in the current PBR Plan is not relevant. If the BCUC were
21 to decline a CPCN for one or more of the laterals that are a part of the IGU Project, FEI would
22 request the BCUC approve the costs of the lateral(s) as part of FEI's sustainment capital
23 forecast recently filed as part of FEI's Multi-Year Rate Plan for 2020 through 2024.
24

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1 **6.0 Reference: Exhibit B-5, CEC IR 1.3.4**

2 The referenced IR and response are reproduced below:

3 **3.4 Please provide, and briefly summarize, a statistical risk assessment of the**
4 **potential for a rupture due to corrosion on the 29 Transmission Laterals.**

5 **Response:**

6 *As discussed in the response to BCUC IR 1.6.7, a quantitative risk assessment*
7 *was not considered necessary by FEI to justify or inform the IGU Project. FEI has*
8 *proposed the IGU Project on the basis of the identified potential for failure by*
9 *rupture due to corrosion on the 29 Transmission Laterals. FEI has also*
10 *considered inputs such as its legal and regulatory obligations, its assessment of*
11 *relevant hazards to its pipeline system, its understanding of industry practice, as*
12 *well as FEI's knowledge of evolving technology available for assessing and*
13 *managing pipeline condition. Please also refer to the response to BCUC IR*
14 *1.3.1.*

15 6.1 Would it have been possible for FEI to provide such a QRA in support of the
16 instant application had such an initiative been undertaken by FEI?

17
18 **Response:**

19 While it would have been possible to incur the costs and delay the filing of the application to
20 undertake a quantitative risk assessment, providing a quantitative risk assessment for the IGU
21 Project would not alter FEI's proposed scope of work. Please refer to the response to BCUC IR
22 2.36.1 for a discussion of why FEI did not undertake such an initiative.

23
24

25 6.2 Please explain fully why FEI believes that intervenors would not have found
26 value in a supporting QRA for the instant application, given the scope, scale, and
27 impacts of the proposal?
28

29
30 **Response:**

31 FEI did not believe that intervenors would support a quantitative risk assessment for the IGU
32 Project because such an assessment would have added costs to the project but would not have
33 changed FEI's proposed scope of work or implementation schedule. Please refer to the
34 response to BCUC IR 2.36.1.