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August 16, 2022

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Ms. Sara Hardgrave, Acting Commission Secretary

Dear Ms. Hardgrave:

Re: FortisBC Energy Inc. (FEI)

Project No. 1599211

Application for a Certificate of Public Convenience and Necessity (CPCN) for Approval of the Advanced Metering Infrastructure (AMI) Project (Application)

Response to the British Columbia Utilities Commission (BCUC) Information Request (IR) No. 4 on Evidentiary Update

On May 5, 2021, FEI filed the Application referenced above. In accordance with the regulatory timetable as amended in BCUC Order G-206-22 for the review of the Application, FEI respectfully submits the attached response to BCUC IR No. 4 on Evidentiary Update.

For convenience and efficiency, FEI has occasionally provided an internet address for referenced reports instead of attaching lengthy documents to its IR responses. FEI intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

FEI respectfully submits the attached response to BCUC IR No. 4 on Evidentiary Update.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments
cc (email only): Registered Parties

FortisBC Energy Inc. (FEI or the Company) Application for a Certificate of Public Convenience and Necessity (CPCN) for Approval of the Advanced Metering Infrastructure (AMI) Project (Application)	Submission Date: August 16, 2022
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1 **49.0 Reference: EVIDENTIARY UPDATE TO THE APPLICATION**

2 **Exhibit B-30 (Evidentiary Update), Section 1.1, pp. 3–4, Section 1.3,**
3 **pp. 5–6,**

4 **Appendix B, Table 6-1, p. 98**

5 **Labour Market Conditions and Total Cost Impact to the AMI Project**

6 On pages 3 and 4 of the Evidentiary Update, regarding the Baseline scenario, FEI states:

7 FEI currently completes its meter exchanges using both FEI’s internal labour and
8 contractors (i.e., approximately 40 to 45 percent is completed by contractors,
9 depending on the year). At the time of the original Application, the labour rates per
10 meter exchanges were similar between FEI’s internal labour and contractors; as
11 such, FEI assumed the same labour rates per meter exchanges at that time.
12 However, since filing the Application, FEI has experienced cost increases for work
13 performed by contractors. Based on current average contractor rates for meter
14 exchanges, the increase over the FEI internal labour rates (i.e., the assumption for
15 the contractor labour rate in the original Application) is approximately 109 percent
16 ...

17 49.1. Considering the 109 percent increase in contractor labour rates for meter
18 exchanges, please explain whether FEI considered adjusting the proportion of
19 meter exchanges to be completed by contractors, and consequently FEI’s internal
20 labour, for the AMI Project financial analysis. If not, please explain why not.

21 49.1.1 Please explain the pros and cons of reducing the proportion of meter
22 exchanges to be completed by contractors, and consequently increasing
23 the proportion to be completed by FEI’s internal labour, including the
24 impact on labour costs and the associated impact to the incremental
25 levelized delivery rate.

26
27 **Response:**

28 FEI notes that the preamble to this question relates to the Baseline scenario and AMR alternative
29 and consequently the proportion of internal and contractor workforces that complete FEI’s
30 sustainment meter exchange activities each year. The AMI Project financial analysis has different
31 workforce assumptions associated with the deployment of meters over three years that are not
32 related to the workforce assumptions set out in the Baseline or AMR scenarios as described in
33 the preamble. The AMI Project requires the hiring of a large temporary workforce to complete
34 these meter exchanges. Those considerations are addressed in the response to CEC IR4 13.1.

35 With respect to the Baseline scenario and AMR alternative where meters are exchanged as part
36 of FEI’s annual sustainment program, FEI continuously seeks to complete meter exchanges
37 efficiently and cost-effectively and has considered adjusting the proportional use of contractors



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1 and FEI's internal workforce. To provide context with respect to meter exchange work, FEI's
2 workforce strategy is to hire sufficient employees to maintain its emergency footprint and complete
3 its regular operating activities. In addition, FEI uses contractors to absorb the variability (peaks
4 and valleys) in the annual meter exchange activities.

5 This resourcing strategy is important to maintain cost-effective ongoing operations by ensuring
6 the capacity of resources available to complete work matches the required work to be completed
7 each year as presented within the Baseline scenario and AMR alternative within the financial
8 model. If FEI were to reduce the number of meter exchanges completed by contractors, it would
9 need to increase the size of its internal workforce. Consequently, in years where FEI has less
10 meter exchange work this could result in excess internal workforce to complete the required work
11 which would then result in increased operating idle time and the associated productivity loss.

12 Additionally, the collective agreement for FEI's internal workforce is set to expire in 2024, and
13 depending on the outcome of contract negotiations, this may impact the variance between
14 contractor and internal workforce rates.

15

16

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18 On pages 5 and 6 of the Evidentiary Update, FEI states:

19 The impact of the cost increases in the two categories of labour and materials
20 discussed above results in an increase of approximately \$92 million to the total
21 capital cost for the AMI Project (over the pre-deployment and deployment period
22 from 2021 to 2026), from \$638.4 million in the Application to \$730.8 million.

23 On page 98 of Appendix B to the Evidentiary Update, FEI provides Table 6-1, which shows
24 capital costs for the AMI solution of \$752.5 million for the pre-deployment and deployment
25 period in column 3 line 1.

26 49.2. Please reconcile the amount of \$730.8 million on page 6 of the Evidentiary Update
27 to the \$752.5 million in Table 6-1 in Appendix B to the Evidentiary Update. Please
28 provide any revisions to the Application, Tables or excel models as necessary.

29

30 **Response:**

31 The difference between the two amounts referenced in the IR is the incremental impact of the
32 new Measurement Canada (MC) dispensation policy of \$21.7 million, which is discussed in
33 Section 2 of the Evidentiary Update.

34 The \$730.8 million described in Section 1.3 (i.e., pages 5 and 6) of the Evidentiary Update is the
35 total capital costs for the AMI Project (pre-deployment and deployment period) which includes the
36 impact of the labour and material cost increases discussed in Sections 1.1 and 1.2 of the

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- 1 Evidentiary Update but does not include the impact to the total capital costs due to the new MC
 2 gas dispensation policy which was discussed in Section 2 of the Evidentiary Update.
- 3 The \$752.5 million reflected in Table 6-1 in Appendix B to the Evidentiary Update includes the
 4 impacts of the labour and material cost increases as well as the impact due to the new MC gas
 5 dispensation policy.
- 6 Please refer to Table 1 below which reconciles the \$730.8 million amount to the \$752.5 million
 7 amount with a breakdown of the impacts between the labor and material cost increases and the
 8 new MC gas dispensation policy.

9 **Table 1: Reconciliation of Total AMI Project Capital Costs (2021 – 2026)**

Line	Project Capital Costs (\$millions)	Pre-Deployment 2021 - 2023	Deployment 2024 - 2026	Total (2021-2026)
1	Original (As-Filed)	48.6	589.8	638.4
2	Incremental Impact due to Increasing Labour and Material Costs	58.1	34.3	92.4
3	Subtotal	\$ 106.7	\$ 624.1	\$ 730.8
4	Incremental Impact due to MC Dispensation Policy	21.7	-	21.7
5	Total Evidentiary Update	\$ 128.3	\$ 624.1	\$ 752.5

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1 **50.0 Reference: EVIDENTIARY UPDATE TO THE APPLICATION**

2 **Exhibit B-1 (Application), Section 3.1.1.2, p. 16; Exhibit B-30, Section**
3 **2, p. 6**

4 **Meter Exchange Dispensation**

5 On page 16 of the Application, FEI states:

6 Measurement Canada is a federal regulatory agency that establishes the
7 requirements for energy metering devices and installations in Canada.

8 On page 6 of the Evidentiary Update, FEI states:

9 With this Evidentiary Update, FEI is also providing information on a development
10 regarding Measurement Canada's (MC) policy for meter dispensation for gas
11 utilities. The Application as filed expected the Company would receive the approval
12 of MC, upon the BCUC's granting of a CPCN in respect of the Project, to dispense
13 with meter exchanges in 2022. This expectation was based on the existing policy
14 in place for electric utility deployments throughout Canada where utilities receive
15 dispensations from MC meter exchange requirements upon approval of a project.
16 [Footnote reference removed]

17 MC has now set out the policy for meter dispensation specifically with respect to
18 gas meters, adjusting the earlier practice adopted for electric utilities. In November
19 of 2021, MC provided notice that "the temporary permission is effective for the
20 specified implementation period." Since that notice, the MC policy for dispensation
21 has been fully developed and confirms that a gas utility is only able to apply for
22 meter dispensation for years in which mass meter deployment is to take place.

23 As, pursuant to this new policy, FEI must continue exchanging meters under its
24 MC compliance sampling program until the year of mass deployment, the benefit
25 contemplated in the Application of avoiding meter exchange costs in 2022 or 2023
26 will not be experienced. The loss of this benefit is now factored into the Evidentiary
27 Update financial analysis. [...]

28 50.1. Please discuss the frequency of changes to Measurement Canada's policy or
29 practice for meter dispensation for gas utilities.

30
31 **Response:**

32 FEI previously applied to Measurement Canada (MC) for dispensation in 2018 to support
33 development of the Application and was denied for the reason that no policy for mass deployment
34 of gas meters existed at the time. FEI then asked MC to consider gas utilities in the same policy
35 as electric utilities. Subsequently, MC developed the policy for gas meter dispensation in parallel
36 with the BCUC regulatory review of the Application. FEI received the new gas MC dispensation
37 policy document from MC in late July 2022.

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50.2. Please explain whether FEI examined any alternatives to address the new Measurement Canada gas meter exchange policy. If no, please explain why alternatives were not examined.

50.2.1 If yes, please provide the pros and cons of the alternatives considered, including the associated incremental levelized delivery rate impact of each. If the rate impact is not available, please explain why.

Response:

Utilities are legally required to exchange meters in certain circumstances. MC's new policy contemplates certain circumstances where a gas utility can, as an alternative to doing those meter exchanges, obtain dispensation from that requirement. As FEI's circumstances did not qualify for dispensation pursuant to the new policy, in the ordinary course FEI would simply need to proceed with the legally required meter changes. In 2022, in the absence of dispensation which would not have been available under the new policy even with an approved AMI Project, exchanges were done using diaphragm meters. However, as noted in the Evidentiary Update, as an alternative to using diaphragm meters in 2023, FEI plans to use advanced meters (with the radio off at the time of installation) for any required meter exchanges. There are current supply chain constraints to secure diaphragm meters, and use of advanced meters addresses these supply chain issues. It is efficient if the Application is approved and still the best available option even if the Application is not approved, with the radio remaining off.

Further on page 6 of the Evidentiary Update, FEI states:

Due to the rising costs and availability issues with diaphragm meters and as contemplated in the Application, FEI still plans to install advanced meters (with the radio turned off) instead of diaphragm meters beginning in 2023 as part of its compliance sampling program, and then return to the premises where this occurred during Project deployment in order to connect each meter to the network. ... In the event the BCUC does not approve the Application, FEI will leave the radio turned off within each meter and the meter will continue to be read manually.

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1 50.3. In the event that the BCUC grants a CPCN for the Project, please explain whether
2 FEI would consider turning on the radio when installing the advanced meters in
3 2023 rather than returning to these premises to turn on the radio.

4 50.3.1 Please discuss the pros and cons of this approach, including any cost
5 impacts as compared to the approach described in the preamble. Please
6 quantify any potential cost impacts and the associated impact to the
7 incremental levelized delivery rate.
8

9 **Response:**

10 As discussed in the response to BCUC IR1 15.4.1, FlexNet network coverage would need to be
11 available at the time of meter installation to allow for the commissioning of the communications
12 module in the advanced meters. Since the network installation will not be completed when most
13 meters are installed during 2023 sustainment activities as part of FEI's compliance sampling
14 program, a resource will be required to return to any previously installed advanced meters to
15 commission them after network coverage becomes available. Commissioning of the radio must
16 be conducted at the meter and cannot be completed remotely, nor can setup occur automatically
17 after the network becomes available.

18 For this reason, FEI is not considering turning the radios on during advanced meter installations
19 in 2023.

20 FEI notes that the incremental cost to return to commission each previously installed advanced
21 meter during mass deployment will be minimal as field employees will commission each meter at
22 the time another meter exchange appointment is completed at a premises in the same
23 neighbourhood.

24