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March 2, 2018

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

Attention: Mr. Christopher P. Weafer

Dear Mr. Weafer:

**Re: FortisBC Energy Inc. (FEI)**

**Project No. 1598915**

**Application for Approval of Operating Terms between the City of Surrey and FEI  
(the Application)**

**Response to the Commercial Energy Consumers Association of British  
Columbia (CEC) Information Request (IR) No. 2**

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On May 18, 2017, FEI filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-201-17 setting out the amended Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to CEC IR No. 2.

If further information is required, please contact Ilva Bevacqua at 604-592-7664.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Diane Roy

Attachments

cc (email only): Commission Secretary  
Registered Parties

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Terms for an Operating Agreement between the City of Surrey and FEI (the Application)	Submission Date: March 2, 2018
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1   **13.   Reference:   Exhibit B2-8-1, BCUC 1.6.4 and 1.6.4 and 1.6.4**

FEI is of the opinion that Relocation Costs should exclude the costs of any upgrading and/or betterment “*beyond that which is required to comply with applicable Laws or sound engineering practices*”, which we understand means that essentially all costs of upgrading and/or betterment are burdened on the party requesting a change to the other party's facilities. Only if the upgrading and/or betterment is not required by the very broad and discretionary term “sound engineering practices” would they be excluded. Surrey has submitted information requests to FEI seeking clarification of what if any costs would be excluded by FEI's preferred caveat.

On pages 5 and 6 of the FEI application for approval of terms for an operating agreement with City of Surrey (FEI Application), it states:

Changes to City [City of Surrey] bylaws in 2016 have increased the frequency of instances where Surrey is requesting FEI to apply for permits and pay fees. In circumstances where FEI crews are deployed to install gas services (as opposed to FEI's contractors), the City is requiring FEI to pay traffic obstruction fees. In circumstances where FEI has retained contractors to perform work, the City is requiring FEI's contractors to pay permit fees for FEI's gas installation activities. FEI is of the view that it is not required to pay fees or obtain permits under the 1957 Agreement.

The City and FEI agree that FEI must adhere to the CSA Z662 code/standard for FEI's pipelines in the city. However, the City is of the opinion that if FEI has infrastructure that is not in compliance with CSA Z662 and the City requests that FEI alter a portion of said infrastructure to accommodate municipal work, the City should not be burdened with FEI's incremental cost to

bring its facilities into compliance with CSA Z662. FEI's costs to alter its facilities, as requested, should be Relocation Costs, and its incremental costs above and beyond that to comply with the applicable standard should not be. Likewise, CSA Z662 has frequently changed in the past 10 years and as this standard continues to change it is not Surrey's responsibility to reimburse FEI for its costs to keep its infrastructure up to the standard.

2  
3           13.1   Please confirm that FEI's proposal would exclude the costs of increasing the size  
4                   of a pipeline unless there was an applicable legal requirement or sound  
5                   engineering reason.  
6

7   **Response:**

8   Confirmed. As noted in the response to Surrey-FEI IR 1.3.1, for pipeline relocations requested  
9   by Surrey, “avoidable improvements” not required by legal or compliance obligations, such as  
10   increasing the size/capacity of a pipeline, would be excluded from the relocation costs  
11   recoverable from Surrey (based on apportionment if applicable) and paid for by FEI.



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13.2 Please provide a list of the types of changes that are normally included in upgrades or betterments as a result of complying with applicable laws, and standards such as CSA Z662 or others

**Response:**

When FEI receives a request to move, relocate, or otherwise modify its system, exposing the pipe obligates FEI to bring that pipe into compliance with current laws, codes, and standards. Applicable laws, codes, and standards can result in the need for various changes, the most common of which include:

- Pipe material;
- Pipe wall thickness;
- Casings and pipe protection;
- Weld upgrades;
- Depth of cover and structural backfill; and
- Ground stabilization.

13.3 Please provide a list of the types of changes that are normally included in upgrades or betterments as a result of complying with 'sound engineering practices'.

**Response:**

On relocation requests, upgrades or betterments (avoidable improvements) that are above and beyond those required under applicable laws and sound engineering practices (e.g., FEI takes the opportunity to increase the pipe size, capacity, or otherwise improve the facilities) will not be charged by FEI to the municipality. Some of the more common changes that would fall under sound engineering practices could include:

- Pipe material change (steel to PE) which typically reduces costs compared to steel for steel;
- Removal or upgraded replacement of obsolete fittings; and

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- 1       • Site specific pipeline or main protection.

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- 5           13.4   Please confirm that ‘sound engineering practices’ are subject to ongoing change  
6                   as are the codes and standards.

7

8       **Response:**

9       Confirmed.

10

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- 13           13.5   Who is the arbiter of what constitutes ‘sound engineering practice’? Please  
14                   explain.

15

16       **Response:**

17       If the parties’ respective engineers and other professionals cannot agree on what constitutes  
18       sound engineering practice in a particular circumstance or in respect of particular situations,  
19       either party may refer the matter to dispute resolution in accordance with Section 17 of FEI’s  
20       Proposed Operating Terms.

21

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- 24           13.6   How does FEI normally comply with the types of ‘sound engineering practices’  
25                   being referred to when there are no relocations or other activities requiring  
26                   disruption to the facilities? Please explain and differentiate the types of situations  
27                   in which FEI would initiate construction in order to comply with ‘sound  
28                   engineering practices’ and those in which FEI would not initiate construction in  
29                   order to do so.

30

31       **Response:**

32       In most cases, FEI is only required to upgrade its facilities to comply with laws, codes,  
33       standards, and sound engineering practices at the time when an existing asset is disrupted as a  
34       result of relocations or other activities.



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1 Examples of disruptions where FEI would not otherwise have initiated construction to make  
2 changes to its assets, whether to comply with laws, codes, and standards or for sound  
3 engineering practices include:

- 4 • Third party driven relocations;
- 5 • Changes in land use; and
- 6 • Capacity improvements.

7  
8 Examples of situations where FEI may initiate changes to its assets that could include, but are  
9 not limited to, bringing facilities into compliance with current standards, codes and sound  
10 engineering practices include:

- 11 • Identified safety or reliability issues;
- 12 • Replacement of assets based on condition; and
- 13 • Inability to properly maintain or inspect assets.

14  
15 Where there is no perceived risk to the safety and reliability of the system and where no other  
16 disruption has caused the existing assets to be disturbed, FEI is not required to initiate  
17 construction to comply with laws, codes, standards, or sound engineering practice.

18  
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20  
21 13.7 How do people using the roadways and other impacted sites in the City of Surrey  
22 benefit from the betterments and upgrades that would typically be included in  
23 FEI's compliance with applicable Laws and sound engineering practices? Please  
24 discuss.

25  
26 **Response:**

27 The benefits to Surrey are not the rationale behind this provision. Rather, the rationale is  
28 fairness to FEI and its customers. In this case, fairness is based on cost causation. The only  
29 reason it is necessary for FEI to incur the cost to upgrade the facilities in these scenarios at all  
30 is because the City's work has caused them to be disturbed. FEI and its customers would not  
31 incur any costs but for the City's relocation request.

32 That said, to address the question, there are benefits to the residents of Surrey. The applicable  
33 laws and sound engineering practices that FEI complies with in the installation of its assets are  
34 to ensure the ongoing safe and reliable operation of the natural gas system. As a result, the  
35 people using the roadways and other impacted sites in the City of Surrey benefit from a safer



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1 more reliable system. FEI works with municipalities to proactively identify future requirements  
2 for upgrades to the gas system at a given location such that work can be coordinated and  
3 completed in conjunction with other City work or projects underway which reduces costs, by  
4 avoiding redeployment of FEI crews and resources, cutting new pavement, excavation, traffic  
5 management, and site restoration.

6  
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9 13.7.1 Would FEI always conduct the work to achieve those same benefits if  
10 the relocation or other event did not occasion the work? Please explain.

11

12 **Response:**

13 No, the work would not be required unless there is an event which triggered the disruption of the  
14 facilities in question. The work is being driven by the request to relocate or other event, and “but  
15 for” that request/event would not otherwise have occurred. Hence, the costs are being caused  
16 by Surrey’s request to relocate.

17

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19

20 13.8 How does FEI benefit from the betterments and upgrades that are associated  
21 with compliance with applicable laws and sound engineering practice? Please  
22 explain and provide quantification of any benefits to the reasonably available, if  
23 applicable.

24

25 **Response:**

26 The rationale for FEI’s proposal is based on cost causation, not an assessment of benefits. The  
27 City’s relocation requests can prompt the need to bring portions of the system affected by the  
28 relocation request into compliance with applicable laws and standards that would otherwise not  
29 be required. In general, any work required which accelerates replacement of infrastructure  
30 which is still used and useful, not fully depreciated, or not scheduled for replacement, has the  
31 potential to impose unanticipated or unplanned costs on FEI, increase workload, increase  
32 scheduling requirements for resources and redeployment of resources, and ultimately increases  
33 the cost to serve customers.

34 In terms of benefits, work associated with compliance to applicable laws and sound engineering  
35 practice benefits FEI, FEI customers, municipalities, and the public generally to the extent that  
36 the work improves safety. Because there are far too many variables to consider and



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1 circumstances that would differ, it is not possible to quantify the benefits of safety, reliability, or  
2 avoided future costs of work associated with compliance.

3  
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6 13.9 Please confirm that ratepayers benefit from the betterments and upgrades  
7 associated with FEI's compliance with applicable laws and 'sound engineering'  
8 practices.

9

10 **Response:**

11 Please refer to the response to CEC-FEI IR 1.13.8.

12

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1    **14. Reference: Exhibit B-2-8-1, BCUC 1.4.4.1 Attachment 2, pp 50 and 52**

50. Accordingly, it would be appropriate to have a 16-year sliding scale to more accurately reflect the mutual benefits derived from the partnership between carriers

and municipalities, without placing undue limitations on either party to plan future investments. Under this sliding scale, the City is primarily responsible for relocation costs in the first five years, following which its responsibility linearly diminishes to zero by the end of the 16<sup>th</sup> year.

2

52. Accordingly, wording of Section 25 of the MAA between the City and Bell Canada will read as follows:

In the case of a Municipality-initiated requirement to relocate a Company facility, the following schedule is to be used to allocate costs directly attributable to such relocation. These costs include, but are not limited to, depreciation, betterment and salvage costs.

Year(s) After Installation of Equipment	Percentage of Relocation Costs Paid by Municipality
1	100%
2	100%
3	100%
4	90%
5	80%
6	70%
7	65%
8	60%
9	55%
10	45%
11	40%
12	35%
13	30%

Year(s) After Installation of Equipment	Percentage of Relocation Costs Paid by Municipality
14	20%
15	10%
16	5%
17 onwards	0%

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14.1 Please provide FEI's views, with explanations, as to the appropriateness of a schedule related to cost allocation similar to the above schedule included in the Municipal Access Agreement between the City of Hamilton and Bell Canada.





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1 **Response:**

2 FEI has addressed the Bell Canada approach on pages 13 and 14 of its Rebuttal Evidence  
3 (Exhibit B1-12).

4 The CRTC is applying that approach to rapidly depreciating telecom assets. The CRTC's logic,  
5 applied to long-lived gas assets, would suggest a much slower decline from 100 percent in  
6 terms of the proportion recoverable from the City for FEI's assets. As noted in the response to  
7 Surrey-FEI IR 1.3.3, were it not for third party requests to relocate, much of FEI's system would  
8 not have to be replaced for a very long time. As noted in the response to Surrey-FEI IR 2.7.1,  
9 the most recent depreciation study estimates the financial end of life of distribution mains at 64  
10 years and 65 years for transmission pipelines. However, as stated in the response to Surrey-  
11 FEI IR 1.3.3, the financial end of life is shorter than the actual useful life of the assets. When  
12 properly protected and maintained, and in the absence of external influences that would  
13 accelerate the deterioration of pipe condition, metal pipes can physically last significantly longer  
14 than the financial end of service life. Indeed, FEI has pipe in the ground dating back to the  
15 1920s which continues to remain in use serving customers, now approaching one hundred  
16 years old. Based on industry experience and condition assessments done to date, it is  
17 expected that PE piping will be similarly long-lived.

18 FEI believes that its proposed approach, which does not decline over time, is fair in the context  
19 of very long-lived gas assets.

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1    **15.    Reference:    Exhibit B-1-12 page 14 and Exhibit B1-5, CEC 1.10.5**

Second, FEI has described in responses to IRs that its assets have a much longer life. As noted in the response to Surrey-FEI IR 1.3.3, were it not for third party requests to relocate, much of FEI's system would not have to be replaced for a very long time. The most recent depreciation study estimates the financial end of life of distribution mains at 64 years and 65 years for transmission pipelines, but the financial end of life is shorter than the actual useful life of the assets. The financial life is shortened by the fact that there are many relocation requests. FEI explained that the life would be much longer if third parties were not requesting relocations. The CRTC's logic, applied to the long-lived pipeline assets would suggest a much slower decline from 100 percent in terms of the proportion recoverable from the City for FEI's assets.

Also, there is a proviso in the CRTC's allocation that should be noted for the sake of completeness:

Consistent with Previous Commission determinations, where costs directly attributable to a Municipality-initiated requirement to relocate a Company facility are incurred as a direct result of work undertaken by or on behalf of the Municipality for beautification, aesthetics, or other similar purposes, such costs are to be entirely borne by the Municipality. These costs include, but are not limited to, the depreciation, betterment and salvage costs. (Decision, para. 52)

- 10.5    Would it be appropriate for FEI to modify its request for reimbursement based on the expected time frame under which the beneficial upgrades would be required absent the relocation request? Please explain why or why not.

**Response:**

FEI does not replace its facilities based on a definitive formula or financial depreciation. Many factors influence the future projection of an asset's fitness for use including material type, soil conditions, pipe coating, cathodic protection and ongoing maintenance. Using continual monitoring programs, FEI projects asset longevity segment by segment. It is possible that facilities could last indefinitely.

- 15.1    Is it a reasonable principle to consider that older assets are more appropriately subject to betterments and upgrades on Fortis' own initiative than are newer assets? Please explain why or why not.

**Response:**

No. Although it may seem counterintuitive, it is not reasonable to make this assumption. FEI does not undertake asset replacement/upgrade on its own initiative based on age. Instances where FEI does initiate asset replacement/upgrade occur only when there is a safety, integrity, or reliability issue that is identified and must be addressed. As stated in the response to CEC-FEI IR 1.10.5 noted above, many factors influence an asset's condition such as pipe material type, soil conditions, pipe coating, cathodic protection, and ongoing maintenance. In addition, other important factors can include third party disturbance and land use changes. As such, newer assets can be equally likely to be subject to upgrades as could older assets, based on these and other contributing factors.

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15.1.1 If yes, would FEI consider it reasonable to adjust the percentage of relocation costs paid by the municipality based on the remaining life of the asset or time before repair, such that the municipality pays a larger portion of upgrades and betterments for assets with a longer remaining asset life than those with a shorter remaining asset life? Please explain.

**Response:**

The response to CEC-FEI 2.15.1 was no. The age of an asset is not the driving factor in determining an asset's remaining useful life. As such, FEI believes it is not appropriate to use a depreciated formula to determine the allocation of relocation costs.

15.2 If the Commission were to approve a schedule similar to that provided in the City of Hamilton Bell Canada MAA, please provide FEI's views as to what criterion the declination should be based upon (ie. years since installation, remaining asset life or other qualification).

**Response:**

Please refer to the response to CEC-FEI IR 2.14.1.

15.2.1 If the Commission were to approve a schedule with a changing contribution based upon the identified criterion, please provide the schedule FEI would deem to be appropriate.

**Response:**

Please refer to the response to CEC-FEI IR 2.14.1. FEI does not consider a schedule of contribution based upon depreciated financial life of an asset to be appropriate.



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1   **16. Reference: Exhibit B1-11, page 15 and Exhibit B1-5, CEC 1.3.2**

3.2 Please provide order of magnitude costs for relocation of Gas Mains and High Pressure Pipelines.

**Response:**

Gas Main relocations have been a regular occurring activity each year in the City of Surrey. For the past six years costs have averaged approximately \$400 thousand per year.

High Pressure Pipelines relocations have been less frequent and with higher costs and variability in annual spending. For the past six years costs have averaged approximately \$500 thousand per year.

It is important for the Operating Agreement to retain cost discipline on Surrey when it requests relocations. FEI believes that allocating a greater portion of the costs of relocation to FEI than what has been proposed by FEI would materially erode benefits to FEI under the Proposed Operating Agreement. Certainly, it would be very harmful to FEI and its customers if the relocation allocation adopted by the Commission were to allow, for instance the City to insist on a relocation that may cost FEI a significant amount when the City could work around FEI's pipeline at a fraction of the cost.

2

3           16.1 How does FEI's proposed agreement provide a 'cost discipline' to FEI? Please  
4 address the costs for Gas Mains as well as for High Pressure Pipelines.

5

6   **Response:**

7 Unlike other operating agreements, FEI's Proposed Operating Agreement Terms contains a  
8 robust framework of checks and balances with respect to all relocation work to manage each  
9 party's respective costs. These include detailed cost estimates and approvals prior to  
10 commencement of the work, job site change controls (prior notification of cost change), and  
11 improved details on invoices. In addition, for High Pressure Pipelines FEI has proposed cost  
12 sharing which itself creates cost discipline for both FEI and the City of Surrey.

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16           16.2 Would both parties have a cost discipline if there was a pre-established threshold  
17 on every project such that the City would pay 100% of the relocation costs up to  
18 a certain level, and the parties would share the costs (excluding FEI discretionary  
19 improvements) above that level? Please comment.

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1 **Response:**

2 Yes, such a structure may provide cost discipline for both parties, but it would be dependent on  
3 the threshold and cost allocation or sharing arrangement. Moving away from 100 percent  
4 allocation to the requesting party presents an opportunity in which a relocation request could be  
5 made with the intention of shifting costs to the other party.

6 Since the City has the right under the Proposed Operating Terms to request a relocation, a  
7 requirement to share in costs provides critical discipline to ensure that the City acts in a  
8 reasonable manner when making such requests.

9 FEI's Proposed Operating Terms do provide other means of cost discipline when FEI estimates  
10 and undertakes the work at the request of the City, as well as a right to proceed to dispute  
11 resolution. In addition, Surrey has the option of completing some of the required work  
12 themselves through their own crews or contractors if Surrey felt they could execute that work at  
13 lower cost or to meet scheduling requirements or for other reasons.

14

15

16

17 16.3 Would a pre-established threshold based on the lowest cost alternative option be  
18 a potentially feasible option for providing cost discipline fairly to both parties?  
19 Please explain why or why not.

20

21 **Response:**

22 Yes, a pre-established threshold based on the lowest cost alternative option could be feasible;  
23 however, as noted in the response to CEC-FEI IR 2.16.2, it would be dependent on the cost  
24 allocation or sharing arrangement such that it provides appropriate cost discipline.

25

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29 16.4 If FEI considered such a threshold to be a reasonable compromise, what  
30 threshold would FEI deem to be appropriate? Please explain.

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32 **Response:**

33 FEI cannot comment on what it may consider a reasonable threshold because that would be  
34 completely dependent on the cost allocation or sharing arrangement such a threshold would be



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1 coupled with in order to maintain appropriate cost discipline on the City. Please also refer to the  
2 responses to CEC-FEIs 2.16.2 and 2.16.3.

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6 16.5 Please confirm or otherwise explain that total cost-effectiveness for projects is a  
7 valid and important principle for gas ratepayers.

8

9 **Response:**

10 Confirmed. Total cost-effectiveness for projects is a valid and important principle in general for  
11 all parties (i.e. FEI, all gas ratepayers, gas ratepayers in Surrey, the City of Surrey, and Surrey  
12 taxpayers). FEI's desire is to ensure that only efficient relocations will be made, which is  
13 challenged if the requesting party does not bear an appropriate portion of the costs of the  
14 relocation.

15 For this reason, FEI believes it is imperative to retain cost discipline on the parties. The cost  
16 discipline on Surrey is that it will bear costs associated with relocation requests. The cost  
17 discipline on FEI in performing the work is through the estimating, execution, and invoicing  
18 process which Surrey would review and approve. Further, Surrey has the option of completing  
19 some of the required work themselves through their own crews or contractors if Surrey felt they  
20 could execute that work at lower cost or to meet scheduling requirements or for other reasons.  
21 FEI's proposal, therefore, ensures a level of cost discipline remains on both parties with respect  
22 to relocation requests.

23

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27 16.6 Please confirm or otherwise explain that total cost-effectiveness for projects is a  
28 valid and important principle for municipal taxpayers.

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30 **Response:**

31 Please refer to the response to CEC-FEI IR 2.16.5.

32

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1    **17. Reference: Exhibit B1-5, CEC 1.10.3 and Exhibit B1-12, page 9**

10.3 To the extent that the applicable laws might require FEI to upgrade its facilities at some point regardless of the relocation, would FEI consider it appropriate to exclude the value of such incremental costs? Please explain why or why not.

**Response:**

FEI is unclear of what is meant by the question. The provisions of the Proposed Operating Agreement are only triggered in the case of a request to relocate facilities. FEI's position is that if a legal requirement to upgrade is triggered by a requested relocation that occurs prior to the end of the service life of the asset, then the cost would be paid by the requestor (Surrey) in the case of Gas Mains and shared 50-50 for High Pressure Pipelines.

Surrey's Consolidated Columns:	FEI's Response:
(1) 105 Avenue Road Extension (2) The City is planning to construct a new road across FEI High Pressure Pipeline in the 10500 block of 105 Avenue near 140 Street. The existing High Pressure Pipeline has been located and is not in conflict with the City's project, nor does the pipeline need to be relocated or altered as a result of the City's project. Furthermore, the City has proven to FEI that there is sufficient depth of cover to comply with CSA Z662 for a road across the pipeline.  FEI has requested the City expose the pipeline such that FEI can inspect the pipeline for dents, damages and defects as well as complete maintenance inspections of the joints as the standards for welding in 1957 when the pipeline was installed are different from current standards. FEI's request is for the City to pay the costs to expose the pipeline and 100% of FEI's estimated cost of \$323,175 to inspect and maintain the pipe, none of which is required to accommodate the City's road project. (3) \$323,175 (4) \$0 (5) \$323,175	<ul style="list-style-type: none"> <li>• This crossing is in SROW and the required work is driven by a change in land use. In other words, what was installed in a farmer's field in 1957 does not necessarily meet the load and stress requirements today for underneath a new Highway.</li> <li>• Going forward based on FEI's Proposed Operating Terms, in a project with similar circumstances, FEI would bill Surrey for the actual Relocation Costs involved. This is because "but for" the City's project to change the land use and construct a new road, FEI's pipe would not need to be inspected and maintained. As a result, the costs incurred to inspect, maintain, and ensure the pipeline is compliant with codes/applicable Laws in these changing land use circumstances are driven by Surrey's new road project, and Surrey would be responsible for the costs.</li> </ul>

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FEI notes that under its proposed Operating Terms, FEI would charge the City based on the 'but for' situation. The CEC would like to understand how the 'but for' comes into play when work needs to be accomplished in the future, but not necessarily at the time of the request. The CEC uses the following examples to clarify its question.

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Example 1: FEI is aware of an upgrade to a Gas Main that would be required by law at a cost of \$100,000 but the upgrade need only be undertaken in the event that FEI in some way disrupts or replaces its existing pipelines and not as part of regular or special maintenance. If the City of Surrey requests a relocation, FEI must conduct the upgrade.

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Example 2: FEI is aware of an upgrade that is required by law at a cost of \$100,000 that must be undertaken as part of regular or special maintenance and it must be completed within 5 years. If the City of Surrey requests a relocation in 3 years and it is cost-effective for FEI to undertake the required upgrade at that time.

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17.1 Please confirm that under Example 1 FEI would charge the City the entire cost of the upgrade.



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**Response:**

High Pressure Pipelines and Gas Mains can remain undisturbed for decades, without any mandatory requirement to unearth them and bring them up to current standards.

If:

- FEI is not required by law to upgrade a pipe unless the land or pipe is disturbed; and
- FEI has no maintenance or repair scheduled for that pipe in the foreseeable future, and
- the City requires the pipe to be relocated;

Then:

- The cost of relocating the pipe will be a Relocation Cost recoverable from the City in accordance with the applicable allocation based on type of pipe, which, in the case of Gas Mains, would represent 100 percent of those costs.

As such, FEI confirms that in the case of Example 1, FEI would charge Surrey the entire cost of the Gas Main upgrade required in accordance with applicable laws, codes, and standards, and sound engineering practices, according to the proposed allocation.

17.2 Under Example 2 would the ‘but for’ situation mean that FEI charged the City for the entire cost, even though the upgrade would likely be required within 2 years in any event?

**Response:**

Regarding Example 2:

If:

- FEI is required by law to upgrade a pipe; and
- The upgrade must be performed by a legally imposed deadline and without a triggering event;
- Whether or not FEI has the upgrade work scheduled already; and
- The City requires the pipe to be relocated earlier than FEI intended to perform the work;

Then:





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- 1           • Provided the relocation simply accelerates the work FEI would have performed in any  
2           event at a later date and there is no negative impacts to FEI customers, then the cost of  
3           doing so would NOT be a Relocation Cost recoverable from the City.

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5           However, if the relocation in Example 2 negatively impacts FEI customers or requires additional  
6           work beyond acceleration of the schedule and which would not have otherwise been required by  
7           FEI, any negative cost consequences for FEI customers or the costs associated with additional  
8           work would be a Relocation Cost that would be recoverable from Surrey in accordance with the  
9           applicable allocation based on type of pipe (Gas Main vs. High Pressure Pipeline).

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13           17.3    Would it be appropriate for FEI, in Example 2, to deduct the costs of the upgrade  
14           it would have had to undertake in any event from the charges it recovers from the  
15           City of Surrey? Please explain why or why not.

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17           **Response:**

18           Please refer to the response to CEC-FEI IR 2.17.2.

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1 **18. Reference: Exhibit B2-8-1, City of Surrey Response to BCUC 1.6.4 and BCUC**  
2 **1.6.4**

This example illustrates that FEI's opinion is that there are no objective rules, codes, standards, and that is up to their engineering group to decide what is required apparently on a case-by-case

basis. In this case, it would likely cost in excess of \$1 million to do the work necessary to comply with the requirements stated in FEI's Pipeline Crossing Permit.

Secondly, FEI states the minimum depth of cover within "the road allowance", not just the travelled road, "shall be 1200mm" which is in direct contradiction to the example above on 173A Street, even though both project correspondence occurred within one week of each other and from the same FEI Right-of-Way Department. FEI staff do not appear to be aware of what codes/standards apply to their own pipelines, and if they are aware then they are not consistent as to what the applicable depth of cover requirements are nor are they aware as to what should be done with existing pipelines that are non-conforming. This inconsistency is not acceptable, particularly when the potential High Pressure Pipeline alteration/relocations cost in excess of \$1 million for each pipeline and have the ability to induce significant delay costs on the City's projects.

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4 18.1 Please comment on the City of Surrey's charge that FEI does not appear to be  
5 aware of what codes/standards apply to its pipelines, that they are simply up to  
6 the engineering group and that the regulations are not consistently applied in any  
7 event.

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9 **Response:**

10 FEI disagrees with the premise of the question and Surrey's assertion. FEI is fully aware of all  
11 applicable laws, codes, and standards that apply to FEI's pipelines. FEI also notes that these  
12 codes and standards are minimum requirements. As such, FEI's engineering group assesses  
13 each pipeline and crossing on an individual basis to ensure the integrity of the pipeline is  
14 maintained. Other factors, such as soil conditions, loading, and pipeline attributes are factors in  
15 determining what modifications may be required. For example, in some cases a lower depth of  
16 cover is allowable under CSA Z662, provided that adequate protection and load distribution can  
17 be achieved.

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21 18.2 Does FEI believe that its proposed Operating Agreement will prevent issues such  
22 as the above occurring between FEI and the City of Surrey? Please explain why  
23 or why not.

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1    **Response:**

2    FEI believes its Proposed Operating Agreement Terms will reduce disagreements between the  
3    parties and establish parameters for the performance of work within the City. While it is  
4    impossible to prevent all disputes, or anticipate every issue which may arise, the proposed FEI  
5    Operating Agreement Terms incorporate certainty into the parties' interactions and provides a  
6    framework to manage processes and procedures, including to mitigate disputes.

7    Specifically:

- 8           • Where a party is required to reimburse the other party for work, procedures have been  
9           included to provide estimates (in "sufficient detail to enable the party...to assess the  
10          reasonableness of the estimate", which includes description of the main tasks to be  
11          performed and their costs) and detailed invoicing; and
- 12          • When disputes do arise, the dispute resolution process applies a stepped approach,  
13          which requires internal escalation to senior management and mediation prior to referral  
14          to the British Columbia Utilities Commission, Oil and Gas Commission, or arbitration.

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16    Each project must be reviewed individually and based on the facts and circumstances at that  
17    time, with the estimate process creating the opportunity for the parties to more thoroughly  
18    review a project, its requirements, and the cost impacts.

19    In addition, differing outcomes are not necessarily attributable to the lack of objective standards  
20    or inconsistent application of laws or policies. Every project has multiple decision points,  
21    including options to be selected, all to achieve the desired outcome. Mobilization of work crews  
22    (own work force vs. contractors), project schedule (including overtime), bulk purchasing,  
23    availability of materials, exchange rates, shipping costs/duties, ability to coordinate work with  
24    third parties, etc. can all influence scope and direction of work, work methodology, scheduling,  
25    and cost, and be time or project specific. Further, either party, at its own discretion, may waive  
26    full recovery of costs or not claim 100 percent of all recoverable costs in any instance without  
27    creating any obligation to do so for other projects in the future.

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