

October 14, 2019

VIA E-FILING

Patrick Wruck
Commission Secretary
BC Utilities Commission
6th Floor 900 Howe Street
Vancouver, BC V6Z 2N3



Reply to: Leigha Worth
ED@bcpiac.org
Ph: 604-687-3034
Our File: 7310.220

Dear Mr. Wruck,

**Re: FortisBC Energy Inc. Certificate of Public Convenience and Necessity Application
for the Inland Gas Upgrade Project ~ Project No. 1598988
BCOAPO's Final Argument**

We represent the BC Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, Tenant Resource and Advisory Centre, and Together Against Poverty Society, known collectively in FortisBC Energy (FEI) regulatory processes as "BCOAPO et al." ("BCOAPO").

Enclosed please find the BCOAPO's Final Argument with respect to the above-noted matter.

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

Sincerely,
BC PUBLIC INTEREST ADVOCACY CENTRE

Original on file signed by:

Leigha Worth
Executive Director | General Counsel

Encl.

**BC OLD AGE PENSIONERS' ORGANIZATION, ACTIVE SUPPORT AGAINST POVERTY,
COUNCIL OF SENIOR CITIZENS' ORGANIZATIONS OF BC,
DISABILITY ALLIANCE BC, TENANT RESOURCE AND ADVISORY CENTRE,
AND TOGETHER AGAINST POVERTY SOCIETY ("BCOAPO")**

**FortisBC Energy Inc. Certificate of Public Convenience and Necessity Application
for the Inland Gas Upgrade Project ~ Project No. 1598988**

Intervener Final Argument

October 14, 2019

Please be advised that we provide the following final argument regarding the above-noted application on behalf of our client groups known in this and other regulatory processes as BCOAPO or BCOAPO *et al.* The constituent groups of BCOAPO participate in a wide variety of regulatory processes to represent the interests of low and fixed income energy consumers within BC and more specifically in this process, the interests of FortisBC Energy's low and fixed income residential natural gas ratepayers who may be impacted by a decision regarding the utility's application for a Certificate of Public Convenience and Necessity (CPCN) for its Inland Gas Upgrade (IGU) Project.

INTRODUCTION

On December 17, 2018, FEI filed with the BC Utilities Commission its Application for a Certificate of Public Convenience and Necessity (CPCN) for approval of its Inland Gas Upgrade (IGU) Project pursuant to sections 45 and 46 of the *Utilities Commission Act (UCA)*. This filing presents FEI's preferred means to address the potential of a rupture in its system due to points of corrosion on its transmission laterals not capable of being in-line inspected in the province's interior, asserting that it represents "the most cost-effective integrity management solution"¹. In its initial filing, the utility estimated the capital cost of this project to be a not unsubstantial \$363.895M.

On January 10, 2019, the BCUC, set the matter for hearing and one week later the Panel issued Order G-11-19 establishing a preliminary regulatory schedule that included two rounds of information requests and a possible procedural conference to determine further process. On July 10th, FEU made a presentation at that procedural conference, after which interveners were invited to ask questions. However, given the nature of the information presented and the size of the

¹ Exhibit B-1, page 1.

financial investment represented by the IGU, counsel for both the Commercial Energy Consumers and BCOAPO indicated that they would like the opportunity to review the information further and consult with their experts before submitting written questions, if the Panel so ordered. The next day, the Panel issued Order G-153-19, establishing a further regulatory process that included a third set of Information Requests, a possible Streamlined Review Process (SRP), and final written argument. After the third round of IR's, the SRP was cancelled and the regulatory process moved directly to final written argument.

OVERVIEW OF THE CPCN

FEI is concerned about the potential for rupture on 29 of its transmission pipeline laterals located in the interior. This grouping of 410 kilometers of transmission pressure pipe presents a challenge because the ability of the Modified External Direct Assessment protocol to detect active corrosion in areas where cathodic protection shielding is occurring and they are not compatible with In-Line Inspection. As a result, FEI has come to the conclusion that it is necessary to act to alleviate this risk through the implementation of its Recommended Solution.

FEI listed 7 possible alternatives it had examined to address this risk:

1. Status Quo: Modified External Corrosion Direct Assessment (Modified ECDA);
2. Pipeline exposure and re-coat (PLE);
3. Hydrostatic testing program (HSTP);
4. Pressure regulating station (PRS);
5. In-line inspection (ILI);
6. Pipeline replacement (PLR); and
7. Robotic Inspection (ROB).²

Of those 7, FEI determined that only 3 were feasible: PRS, ILI, and PLR. Using these three alternatives, FEI completed a line by line assessment, choosing the alternative it determined was best suited for each.

² Exhibit B-1, page 6.

Table 1-1: Preferred Alternatives for Each Lateral

| Line/ Loop ID No. | Line/Loop Full Name | Line Length (km) | Preferred Alternative |
|-------------------|--------------------------------|------------------|-----------------------------|
| 1 | Mackenzie Lateral 168 | 28.6 | In-line Inspection |
| 2 | Mackenzie Loop 168 | 14.2 | In-line Inspection |
| 3 | BC Forest Products Lateral 168 | 0.5 | Pipeline Replacement |
| 4 | Prince George 3 Lateral 219 | 5.3 | Pressure Regulating Station |
| 5 | Northwood Pulp Lateral 168 | 6.0 | Pressure Regulating Station |
| 6 | Northwood Pulp Loop 219 | 5.8 | Pressure Regulating Station |
| 7 | Prince George 1 Lateral 168 | 4.7 | In-line Inspection |
| 8 | Prince George Pulp Lateral 168 | 1.0 | Pressure Regulating Station |
| 9 | Husky Oil Lateral 168 | 1.1 | Pressure Regulating Station |
| 10 | Prince George 2 Lateral 219 | 8.6 | Pressure Regulating Station |
| 11 | Cariboo Pulp Lateral 168 | 1.3 | Pipeline Replacement |
| 12.1 | Williams Lake Loop 1 168 | 3.4 | Pressure Regulating Station |
| 12.2 | Williams Lake Loop 2 168 | 2.5 | Pressure Regulating Station |
| 13.1 | Kamloops 1 Lateral 168 | 3.6 | Pipeline Replacement |
| 13.2 | Kamloops 1 Loop 168 | 3.1 | Pipeline Replacement |
| 14 | Salmon Arm Loop 168 | 44.9 | In-line Inspection |
| 15 | Salmon Arm 3 Lateral 168 | 0.8 | Pipeline Replacement |
| 16 | Coldstream Lateral 219 | 1.8 | Pressure Regulating Station |
| 17 | Coldstream Loop 168 | 3.8 | Pressure Regulating Station |
| 18 | Kelowna 1 Loop 219 | 2.1 | Pressure Regulating Station |
| 19 | Celgar Lateral 168 | 5.8 | Pressure Regulating Station |
| 20 | Castlegar Nelson 168 | 37.4 | Pressure Regulating Station |
| 21 | Trail Lateral 168 | 4.2 | Pressure Regulating Station |
| 22.1 | Fording Lateral 219 | 34.5 | In-line Inspection |
| 22.2 | Fording Lateral 168 | 45.1 | In-line Inspection |
| 23 | Elkview Lateral 168 | 1.6 | Pressure Regulating Station |
| 24 | Cranbrook Lateral 168 | 34.0 | In-line Inspection |
| 25 | Cranbrook Loop 219 | 34.0 | In-line Inspection |
| 26 | Cranbrook Kimberley Loop 219 | 4.0 | In-line Inspection |
| 27 | Cranbrook Kimberley Loop 273 | 9.4 | In-line Inspection |
| 28 | Kimberley Lateral 168 | 20.6 | In-line Inspection |
| 29 | Skookumchuck Lateral 219 | 35.9 | In-line Inspection |

LEGISLATIVE CONSIDERATIONS

According to section 45(1) of the Utilities Commission Act (UCA), “a person must not begin the construction or operation of a public utility plant or system, or an extension of either, without first obtaining from the commission a certificate that public convenience and necessity require or will require the construction or operation.” Pursuant to section 45(8) of the UCA, the Commission must not approve an application for a CPCN, “unless it determines that the privilege, concession or franchise proposed is necessary for the public convenience and properly conserves the public interest.”

Under section 46(3.1) of the UCA in deciding whether to issue a CPCN applied for by a public utility other than the authority, the BCUC must consider the following:

- a) the applicable of British Columbia's energy objectives,
- b) the most recent long-term resource plan filed by the public utility under section 44.1, if any, and
- c) the extent to which the application for the certificate is consistent with the applicable requirements under sections 6 and 19 of the Clean Energy Act.

GENERAL SUBMISSIONS

BCOAPO notes that this application for a very expensive preventative project is highly technical and that the only expert evidence on the record is that submitted by the Applicant. However, this lack of competing expert evidence does not mean that the IGU project is uncontroversial. For example, per Ex B-10, BCUC IR 2.37.1-37.4, there appears to be expert disagreement as to whether use of the <30% SMYS rule of thumb is adequate mitigation to protect against rupture protection due to corrosion³.

While participation in utility regulation can be a highly technical practice, this lack of consensus on even more highly technical matters presents a particular challenge for BCOAPO. As interveners, we lack the in-house knowledge necessary to evaluate FEI's submissions on certain points to then take a position on behalf of our clients. This work is certainly not beyond our abilities, but it would take significant time and effort to do and that work is unlikely to be cost effective given the fact that we are certain this Panel will receive advice from Staff on all material technical issues like the one listed above whether they are addressed by Interveners or not. As a result, Counsel and the Expert Consultant for BCOAPO have opted to focus their submissions on those aspects of the application that do engage our respective expertises rather than attempting to expend significant resources to research and formulate positions on those highly technical issues.

Our client groups fully accept the need for utilities to remain compliant with applicable standards (like those set by the OGAA, BCOGC, and CSA), both regulatory and legal, consistent with accepted or industry best practices. BCOAPO does not disagree with the Utility's evidence that it cannot reliably determine the extent of external corrosion on the 29 subject pipelines and that such external corrosion (in addition to other possible contributing factors) may lead to a pipeline rupture if undiagnosed and/or unattended. It goes without saying that the damage, danger, and

³ Exhibit B-10, BCUC IRs 2.37.1 through 2.37.4.

service disruption associated with pipeline ruptures is not something our clients wish to risk. In addition, our clients accept that, given the very serious risk to public safety that such a rupture represents⁴ and the material consequences in terms of service impacts of a rupture⁵, it is important that the risks be mitigated in a timely fashion.

As noted above, FEI has proposed 3 different remediation responses: in-line inspection (ILI), pressure regulating station (PRS), and pipeline replacement (PLR). For each pipeline, FEI evaluated each of these possibilities according to a weighting criterion outlined in Exhibit B-2, BCUC IR 1.18.1:

Integrity and Asset Management Capabilities were given the highest weighting of 45 percent because the alternative selected must be able to meet the Project's objectives. That is, Integrity and Asset Management Capabilities is the most important criterion to meet the Project's objective.

Financial scoring was the second most important criteria and was assigned a 35 percent weighting so that the alternative selected minimizes the overall Project cost and thereby reduces the rate impact to customers.

Project Execution & Lifecycle Operation was assigned a 20 percent weighting as it does not directly impact achieving the Project's objectives, but it is still an important criterion from a Project construction and operations perspective. That is, the alternative selected should, in general, have the lowest execution risks and the lifecycle cost must still be a factor in determining an alternative's feasibility.

BCOAPO does not take any position on this weighting methodology, in particular as the evidence on the record does indicate that the criterion chosen resulted in the election to propose the lowest cost alternative that would meet code in all but one instance⁶

5.0 Reference: Exhibit B-1, Section 4, Description 1 and Evaluation of Alternatives

⁴ Exhibit B-5, CEC IR 1.3.2

⁵ Exhibit B-5, CEC 1.3.2.1

⁶ Exhibit B-4, BCOAPO IR 1.5.1

For the subject 29 transmission pipeline laterals, can FEI confirm that had it chosen – in each case – the lowest cost alternative that would “meet code” the overall cost of the project would not be significantly lower?

Response:

FEI confirms that in all cases but one, the lowest cost alternative was selected. In that one case (the Elkview Lateral 168), FEI selected the PRS alternative which had a \$46 thousand higher PV of its revenue requirement over the 66-year analysis period compared to PLR. Please refer to the responses to BCUC IRs 1.18.4 and 1.18.5 for discussion of FEI’s rationale for choosing PRS for this lateral.

In all cases, FEI selected the most appropriate alternative based on the following evaluation criteria: Integrity and Asset Management Capability, Project Execution and Lifecycle Operation, and Financial. Please refer to Section 4.3 of the Application for a full description of the evaluation methodology.

BCOAPO is pleased to note that the evidentiary record does not appear to flag any issues of management practices with respect to the Environmental Overview Assessment process⁷, or consultations – to date – with Indigenous, landowner, or industrial stakeholders.⁸ Given the scope of the proposed project, this is good news but it is premature to assume these issues will not arise. BCOAPO notes that even FEI appears to acknowledge, it is possible that new issues will arise once “site specific details” are known⁹. Indeed, it would be imprudent to assume they will not.

We note that there does not appear to be any concerns on record with respect to possible negative impacts on vulnerable plant and wildlife populations¹⁰ although we do urge FEI to, in this or any other project, remain open to feedback and modification of its plans to address any such concerns as they arise.

Our clients are in a difficult position. Given the considerations listed above and their desire to have FEI continue to operate a safe and reliable natural gas delivery system, they do not oppose

⁷ Exhibit B-10, BCUC IR 2.50.1

⁸ Exhibit B-10, BCUC IR’s 2.51.3.2, 2.60.1, and 2.53.1

⁹ Exhibit B-10, BCUC IR 2.60.1

¹⁰ Exhibit B-5, CEC IR’s 1.29 through 1-29.3

FEI's intention to address the issues identified by the IGU but instead, we make the following relevant additional submissions on this Application on their behalf.

ADDITIONAL SUBMISSIONS

In response to BCOAPO IR 1.1.6, FEI indicated that the conditions that it has cited as the root cause of this Application were first identified 13 years ago, per Ex B-4:

1.6 Prior to the instant application, did FEI specifically mention the need to address transmission pipe lateral integrity in any previous filing to the BCUC? If so, please provide details.

Response:

This response also addresses BCOAPO IR 1.1.7 and 1.1.8. FEI mentioned the need to address the transmission pipe lateral integrity or the IGU Project in the following previous filings to the BCUC.

The TPIP 2005 Activities Report, submitted April 13, 2006, stated:

While the [ECDA] process is believed to improve the level of safety with respect to external corrosion, Terasen Gas recognizes that there are limitations inherent within the ECDA assessment methodology. Electrical surveys used to measure levels of cathodic protection and coating quality are not able to detect areas that may be shielded from cathodic protection and are also unsuitable for the evaluation of cased pipeline segments. Due to these limitations, in-line inspection may be warranted in [the] future for some assets that are not currently retrofitted for ILI.1.

Based on this response, BCOAPO is forced to conclude that the nature of the problem FEI purports to address with the IGU CPCN, if not the full extent of it, was known by FEI and its predecessor, Terasen Gas Inc. since at least 2005. However, we must also then note that purposeful action to address the problem was not initiated until mid-2017:

1.3 On what (starting) date did FEI begin incurring costs for the subject project?

Response:

FEI began incurring costs in July 2017¹¹.

This does not mean that BCOAPO is now complaining that FEI's predecessor Terasen should have immediately sprung into action back in 2005 but customer groups like BCOAPO cannot help but to raise a suspicious eyebrow when ten full years later, while FEI started a six year PBR plan, no spending was planned or undertaken on the shareholder's account to address the problem. Spending was undertaken: just not to the shareholder's account.

In our IR's, we explored many issues, one of which explored the nature of the planned spend for this project. In BCOAPO 2.4.1, FEI admitted that IGU spending is of the same nature as Sustainment Capital was under the PBR plan but, because of the quantum, they felt it was not covered under PBR sustainment capital:

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

The referenced response states (in part):

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

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

Response:

¹¹ Exhibit B-4, BCOAPO IR 1.1.3

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

- 1) Growth capital, which consists of expenditures for the installation of new mains services, meters, and distribution system improvements to support customer additions;
- 2) Sustainment capital, which consists of expenditures for meter exchange programs, replacements and upgrades to the distribution and transmission systems related to safety, integrity and reliability, and expenditures for mains and service renewals and alterations.
- 3) Other capital, which consist of expenditures for information systems, equipment (including fleet vehicles) and facilities. While the nature of the work in the IGU Project is the same as sustainment capital, because of the quantum of the cost, it is not part of Regular Capital but rather is included in Major Projects.

Please also refer to FEI's response to BCOAPO IR 2.5.1.

BCOAPO submits that the cost of any project depends on how it is defined, so the quantum of any one ask can be manipulated by how broad or narrow the utility defines its scope. Unfortunately, this creates an incentive for regulated utilities to group different activities into a single "project" so as to exceed a materiality threshold and hence recover all associated costs when, on their own, the individual components – which might be disparate – might not have qualified for additional cost recovery from ratepayers.

In this respect, BCOAPO notes that FEI has, in this process as it has in many others, maintained that there is no financial incentive to defer either a project or its associated costs out of PBR into a rebasing period¹²:

4.0 Reference: Exhibit A-4, BCUC IRs 7.1, 7.11, and 1 7.12, FEI's 2014-2019 PBR Plan

¹² Exhibit B-4, BCOAPO 1.4.1

4.1 In FEI's view, did FEI have a financial incentive to either (i) defer or (ii) not defer the bulk of the spending on or associated with the subject project until the end of the approved PBR plan? Please explain why or why not.

Response:

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

Only after the Application is approved by the BCUC, and the assets are constructed and placed into service, will the assets be added to rate base. As shown in Table 6-4 of the Application, the IGU Project will be completed and placed into service over a five-year period, from 2020 to 2024, which is after the current PBR plan has come to an end.

Further to this point, in a follow-up IR, FEI elaborated¹³:

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

The referenced response reads (in part):

Response:

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

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

¹³ Exhibit B-12, BCOAPO IR 2.5.1

Response:

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

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

BCOAPO further notes that while FEI asserts that action is required, the Utility was not only unable to assign any probabilistic estimate to a catastrophic rupture event associated with any of the subject pipelines, FEI was unable to even order and hence prioritize the pipelines in terms of the risk they posed to public safety and the environment. BCOAPO supports FEI's attempts to not only order the risks but also quantify them in the future¹⁴.

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

Response:

This response also addresses BCUC IRs 1.3.2, 1.3.3, 1.3.4, 1.3.6, 1.3.8 and 1.3.8.1, and CEC IR 1.2.1 and 1.3.1.

Based on FEI's existing methods and the information available on the 29 Transmission Laterals, FEI's assessment is that there is not a material difference in the integrity risk level of the laterals. All of the 29 Transmission Laterals are subject to the same potential for rupture due to external corrosion that may go undetected by FEI's current integrity

¹⁴ Exhibit B-2, BCUC IR 3.1

management techniques. FEI's ability to prioritize amongst the 29 Transmission Laterals based on risk level is limited because the available condition information is comprised of limited quantities of integrity digs and failure records (rather than in-line inspection), and this information does not provide any indication of BC Oil & Gas Commission Compliance Assurance Protocol – Integrity Management Program for Pipelines, April 2018, Version 1.9.

BCOAPO notes that the BC OGC required FEI to improve its risk assessment practices in 2017. FEI attached a letter from the BC OGC dated letter dated Nov 16, 2017 to its response to the BCUC IR2 Attachment 6.5:

“However, the Commission requires FortisBC to commit, develop and implement a risk management process for operating pipelines. This must be carried out to fully meet the requirements of the risk assessment non compliance and meet CSA Z662-15 Clause 3.4.”

BCOAPO notes, in this respect, that FEI is on track to meet [current] OGC expectations¹⁵.

Further, per B-10 BCUC 2.36.1 36.1:

Please elaborate on the direction from the BC OGC to develop a method to conduct quantitative risk assessments (QRA) for operating pipelines.

Response:

This response also addresses BCUC IRs 2.35.6, 2.35.10, 2.36.1.1, 2.36.2, and 2.36.3, and BCOAPO IRs 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.6.1, and 2.6.2.

FEI clarifies that its reference to a direction from the BC OGC to develop a method to conduct a quantitative risk assessment (QRA) is a reference to the BC OGC's direction to “develop and implement a segment-by-segment risk assessment process to determine the risk associated with its pipeline assets in BC”. See the BC OGC's letter to FEI dated November 16, 201, included as Attachment 6.5 to FEI's responses to BCUC IR No. 1.

As FEI already has a qualitative process to determine the risk associated with its pipeline assets, and because FEI has determined that the best approach to respond to the BC

¹⁵ Exhibit B-10, BCUC IR's 2 35.2 and 2.35.3.2

OGC's direction is to develop a QRA, FEI has sometimes referred to the BC OGC's direction as a direction to conduct a QRA. As discussed in FEI's response to BCUC IR 2.35.3, FEI's quarterly updates to the BC OGC have all referred the BC OGC to FEI's work towards a QRA.

As FEI stated in its response to BCUC IR 1.3.1 quoted above, the QRA is not required to justify the need for the IGU Project and, given FEI's limited condition assessment information on the Transmission Laterals due to lack of ILI data, FEI's ability to prioritize amongst the laterals is expected to remain limited. ...Random control digs do not provide FEI confidence that external corrosion features or other integrity issues are identified on pipelines generally or on the 29 Transmission Laterals. This is because the location of random control digs is randomly selected, and not targeted to a specific site for the purposes of addressing any particular integrity concern. A random control dig provides information on a small segment of a much longer pipeline and therefore provides no statistically significant information on the condition of the pipeline as a whole, because the factors that affect pipeline condition vary from segment to segment across the length of the pipeline.

In our view, the assertion FEI is making is not that random sampling would be cost prohibitive, but rather that random sampling would provide "no statistically significant information on the pipeline as a whole" because factors affecting it vary from segment to segment. However, BCOAPO submits that random sampling of a sufficiently large sample size (e.g., randomly chosen segments, statistical methods that control for variations in soil etc.) always provides statistically useful information but whether it is cost-effective or not is a separate question and one not addressed by FEI in this process.

And in respect of the cost of a random dig, it is not, from the record, unusually prohibitive¹⁶:

Please confirm that a random control dig would cost approximately the same as an 'integrity' dig.

Response:

¹⁶ Exhibit B-13, CEC IR's 2.36.1 and 2.36.1

Confirmed. FEI would expect both random control digs and integrity digs to cost approximately the same assuming similar variables such as local conditions (soil type, land slope, access constraints, etc.) and dig site location.

Finally, BCOAPO notes that while FEI submits that it does not have sufficient information to ordinarily rank the subject pipelines in terms of risk, it did little to try to acquire more information that might aid in this process prior to this application.¹⁷

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

Response:

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

As discussed in the response to BCUC IR 1.12.2, factors considered in 1 FEI's assessment of the value associated with ECDA digs, and in its implementation of Modified ECDA in general, include the following:

FEI's confidence in the degree of mitigation being achieved (i.e., effectiveness of the activity);

Availability of alternative methodologies;

FEI's understanding of industry practice; and

Financial considerations (e.g. cost, availability of resources).

CONCLUSION

BCOAPO's inability to go on the record supporting the IGU project is, as we have stated, not rooted in a lack of belief in the need for FEI to engage in activities designed to reduce the risk of

¹⁷ Exhibit B-2, BCUC IR's 4.2 and 4.3

rupture along the 29 lines identified in this Application. Instead, it is rooted in the difficulty we see in how FEI has proceeded, by failing to

1. address these issues in a timelier manner despite their having been identified over a decade ago;
2. failing to spend any monies to do so on the Shareholder's account; and
3. failing to do the work necessary to prioritize these projects before applying for a CPCN.

In our view, these three issues render our clients incapable of supporting this specific project and, while we do not oppose it, we trust that our work in identifying the issues we have listed above will alert Commission Staff and this Panel to our concerns so they might be addressed, whether in an approval or denial of this Application.

All of which is respectfully submitted.

Sincerely,
BC PUBLIC INTEREST ADVOCACY CENTRE

Original on file signed by:
Leigha Worth

Executive Director | General Counsel

Original on file signed by:
Irina Mis

Barrister & Solicitor