17 December 2020

VIA E-FILING

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

Our File: 7400.213

Marija Tresoglavic
Acting Commission Secretary
BC Utilities Commission
6th Floor 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Ms. Tresoglavic,

Re: Pacific Northern Gas Ltd. - Application for a Certificate of Public Convenience and Necessity for the Salvus to Galloway Gas Line Upgrade Project
BCOAPO Information Request No. 1

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

Enclosed please find the BCOAPO's Information Request No. 1 with respect to the above-noted Application.

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

REQUESTOR NAME:	**BCOAPO *et al.***
INFORMATION REQUEST ROUND NO:	**#1**
TO:	**PNG (N.E.) Ltd.**
DATE:	**17 December, 2020**
APPLICATION NAME:	**CPCN for the Salvus to Galloway Gas Line Upgrade Project**

1.0 Reference: Exhibit B-1, page 2

The referenced page states:

> *The ongoing challenges have been heightened by the vintage of the original pipeline system and the accepted design and construction specifics for this pipeline segment when originally constructed in 1968. This resulted in a higher risk of physical damage and failure, complexity of maintenance and repair, and existing and resultant less than desirable conditions that "must be lived with". PNG has managed these conditions and outcomes as best possible in an environment with limited market opportunities for natural gas in the Prince Rupert area for 12 the past 30 years. The status quo, however, is no longer acceptable, resulting in the Project proposed herein.*

1.1 Please provide (i) the original cost of the pipeline when constructed and (ii) the current net book value of the assets.

2.0 Reference: Exhibit B-1, page 3 (and 24)

The referenced page states:

> *Following a 20-plus year period where PNG deferred certain maintenance and integrity management practices in order to operate within an economic circumstance void of significant industrial customers, PNG must now look to undertake projects and investment that allow for the significant repair and upgrade of aged assets in order to safeguard the integrity and safety of its pipeline system. This is of utmost priority for the Salvus to Galloway pipeline segment that has been identified as being susceptible to high hazard and risk associated with threats such as corrosion, mechanical damage, and geohazards.*

2.1 In PNG's view, if it hadn't "deferred certain maintenance and integrity management practices," would or could the remediating activities now proposed

in the instant case have been mitigated, in terms of cost and scope, to some extent? If not, please explain why not.

2.2 In general, if deferring maintenance and integrity practices does not increase the future cost of performing these activities later, then why wouldn't the utility defer them as a general practice?

2.3 In British Columbia, it is uncontroversial to assert that utilities such as PNG can expect to recover 100% of all prudently incurred expenses from ratepayers by order of the regulator and, in addition, get a return on and return of capital on those capital expenditures. Given that fact, please explain why, other than in circumstances where the utility is seeking large rate increases for other reasons and wishes to avoid compounding that increase with those relating to normal maintenance and integrity activities, a utility would defer those maintenance and integrity activities.

3.0 Reference: Exhibit B-1, pages 4-5

The referenced pages state:

> *Given the materiality of the potential revenues associated with these incremental RECAP volumes, PNG has given consideration to the expected impact on average delivery rates of the Project, both alone and in combination with potential incremental demand from RECAP at both 30 MMSCFD and 65 MMSCFD. On a standalone basis (without any RECAP revenues or costs), PNG anticipates that the Project will increase residential delivery rates for PNG-West customers by approximately 11% once fully implemented. However, under both the 30 MMSCFD and 65 MMSCFD RECAP scenarios the RECAP revenues are expected to more than offset the entire cost of service impact of the Project over the average initial 20-year term of the RECAP TSAs.*

3.1 Can PNG confirm that, barring anything untoward occurring, residential delivery rates are expected to decrease due to the RECAP revenues under both scenarios?

3.1.1 If not, please explain why not.

3.2 Please provide an estimate for each year of a 20-year initial term under this "smooth sailing" scenario an estimate of the net impact (costs and revenues) on residential rates in both (i) the 30 MMSCFD RECAP scenario, and (ii) the 65 MMSCFD RECAP scenario.

4.0 Reference: Exhibit B-1, page 21

The referenced page states:

> *In recognition of the condition of PNG's aging transmission system, PNG has made significant increases in its system betterment expenditures over the past 7 years. As an example of this, whereas in 2015 PNG spent $2.6 million on system betterment, this amount has increased to forecast amounts of $10.2 million and $13.0 million for 2020 and 2021, respectively.*

4.1 Please provide a brief description of the various "system betterment expenditures" made in each year between 2015 and the (proposed) 2021 inclusive.

4.2 Can PNG confirm that none of the earlier betterment spending will be made redundant (i.e., unnecessary in retrospect) due to the work included in the applied for proposal? That is, had PNG known (somehow) in 2015 and in subsequent years that the current proposal would be undertaken in 2020 and thereafter, would it have still made the same 2015-2019 betterment expenditures and why?

5.0 Reference: Exhibit B-1, page 22

The referenced page states:

> *In the first 20 years of operation, the Salvus to Galloway pipeline segment experienced at least 15 recorded significant repair or section replacement projects and it has been noted in previous reviews that (due to expected dents, corrosion, low depth of cover, and exposure concerns) future line relocation, upgrading, and lowering works should be anticipated. This was all prior to the first ILIs in the mid-1990s.*

5.1 In PNG's experience, is it typical or atypical for a pipeline to experience "15 recorded significant repair or section replacement projects" in its first twenty years of operation? If atypical, were there any concerns with respect to any initial construction issues – as opposed to geologic and environmental issues – that drove the frequency of repair/replacement projects?

6.0 Reference: Exhibit B-1, page 31 and page 34, Table 4-5

The first referenced page states:

> *As a result of the number of pipeline incidents related to rock slides, debris flow and other geohazards, PNG undertook geohazard-specific inventory and risk assessment studies across the Salvus to Galloway pipeline corridor through 2018-2019 to better understand the magnitude of geohazard risk along the*

corridor. The results of this work can be found in Appendix C, the BGC Engineering Inc. (BGC) 2019 Preliminary Geohazard Assessment, NPS 8 Mainline Pipeline from Salvus to Galloway Rapids report (BGC 2019 Report), and Appendix D, the BGC 2020 Development Support for Geohazard Mitigation Plan, NPS 8 Mainline Pipeline from Salvus to Galloway report (BGC 2020 Report), which have been filed in support of this Application on a confidential basis. These studies identified the prominent presence of geotechnical, hydrotechnical, rockslide, rock fall, avalanche, debris flow, debris slide, and glaciomarine landslide threats. These threats, in conjunction with the legacy pipeline condition, original construction methods, and documented incident event history informed an assignment of the industry accepted hazard indicator Probability of Failure (PoF) and relative hazard rating for each of the identified geohazard locations. Table 4-4 lists the values for PoF and hazard rating generally accepted industry wide and used by numerous pipeline operators in Canada and the United States. PoFs greater than 1x10-3 are typically considered to exceed acceptable risk tolerance.

6.1 Can PNG confirm that a probability of failure (PoF) "> 1 x 10-2" corresponds to a probability of failure greater than 1% over a specified time period?

6.1.1 If not, please explain what the specified PoF does mean.

6.2 Can PNG confirm that the PoFs it has stated are those generally accepted in the industry, correspond to actual probabilities of failures that have been experienced/observed in practice by the industry in general?

6.2.1 Do they correspond to actual probabilities or experiences in PNG's own operations in general (i.e. in the aggregate as opposed to specific to the Salvus to Galloway Gas Line)? If not, why not?

6.3 Is any use made of the sample variance (the second moment about the mean) to take into account that the PoFs used are not equal to actuals except on average?

6.4 Has PNG conducted any analyses that contemplate "fat tailed distributions" or "Black Swans" (as described by Nassim Nicholas Taleb in his 2007 book The Black Swan: The Impact of the Highly Improbable)?

6.4.1 If not, why not?

7.0 Reference: Exhibit B-1, page 73, Table 5-13 and Exhibit A-4, BCUC IR 1.14.0 series

7.1 Under the proposed scoring system, UA1 gets an overall score of 3.42 while the utility's preferred alternative, UA2 gets a score of 3.67. How robust is this ranking with respect to the subjective allocation of weights? In other words, how small of a shift in weightings would result in UA1 getting a higher score than UA2?