KITSELAS GEOTHERMAL INC.

August 13, 2019

Patrick Wruck
Commission Secretary
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Subject: British Columbia Utilities Commission ("BCUC") Project No. 1598998 Indigenous Utilities Regulation Inquiry
Kitselas Geothermal Inc. ("KGI") Information Requests for Interveners

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Dear Mr. Wruck,

Please find enclosed Kitselas Geothermal Inc.'s Information Requests for the following interveners:

1. British Columbia Hydro Power and Authority; and
2. FortisBC Group of Companies.

We welcome responses and dialogue amongst interveners so that, in the event there is the opportunity or interest, we can draft our responses collaboratively and collectively offer the BCUC a position on the issues in question. We want to extend an invitation to affected parties to meet and discuss positions and ways forward. We hope to dialogue with parties prior to the September 27, 2019 deadline for intervener submissions and the December 4, 2019 deadline for participant comments on the draft report.

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

Warm Regards,

Tim Thompson
Director
Kitselas Geothermal Inc.

British Columbia Utilities Commission
Indigenous Utilities Regulation Inquiry

Information Request for BC Hydro and Power Authority and
FortisBC Group of Companies from Kitselas Geothermal Inc.

August 13, 2019

KITSELAS GEOTHERMAL INC.

"First Nations turn Opportunity into Economy"

"The Solution is already there – it's a matter of will."
-- Edison Bolton, Kitselas First Nation

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Information Requests: BC Hydro

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Inquiry Terms of Reference
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There are a number of advantages to retaining the *UCA* as the principal regulatory framework for the regulation of all Public Utilities in British Columbia

On page 2, lines 20-25, BC Hydro states:

> In our view, public interest concerns include such things as: 1) the consideration of higher costs for the remaining customers of an existing Public Utility caused by the stranding of assets and/or the erosion of customer base where a new Public Utility is seeking to build infrastructure or otherwise provide services where another utility already operates, 2) maintaining reliability standards where a new Public Utility interconnects to the BC Hydro system, and 3) providing for rates, terms and conditions that reflect the nature of the service purchased by Public Utilities.

On page 8, line 20-23

> It also promotes the appropriate allocation of costs and the efficient development of utility infrastructure between Public Utilities, thereby reducing the risk that one or more of a Public Utility's infrastructure assets becomes impaired or no longer used and useful (stranded asset risk). This is particularly relevant to BC Hydro.

1.1 Would BC Hydro agree or disagree that, as Indigenous Nations acquire control over their traditional lands as governing entities, the Commission is required to consider the Indigenous government's policy objectives, in addition to those of the Government of British Columbia?

1.2 The use of different regulatory bodies could potentially improve BC Hydro's assets. If the regional infrastructure is improved by the use of different regulatory bodies, then BC Hydro's assets could be utilized more efficiently, and increase grid reliability, thereby keeping with BC Hydro's underlying mandate. If BC Hydro's assets are not impaired and the infrastructure and reliability of the grid system overall is improved, please explain how BC Hydro's opinion about the use of different regulatory bodies would change.

2.0 Reference: Exhibit C2-2, Section 3, p. 4, lines 16-20
BC Hydro's Mandate and Obligations
Exhibit C2-2, Section 5.1, p. 7, lines 22-23
What is the *Utilities Commission Act* and what does it cover?

On page 4, BC Hydro states:

> …articulated the Province's energy objectives to include ensuring that BC Hydro's ratepayers (customers) receive the benefits of the heritage assets, and ensuring that BC Hydro's rates remain among the most competitive of rates charged by public utilities in North America.

On page 7, line 22-23, BC Hydro states:

> As well, the UCA requires, in certain circumstances, the Commission to consider a number of government policy objectives, which are set out in Section 2 of the CEA and are referred to as "British Columbia's Energy Objectives".

2.1 Why does increased supply infer sub scale – export markets?

2.2 If, as BC Hydro suggests on p. 4 line 20 "rates remain among the most competitive of rates charged by public utilities in North America", increased internal supply does not preclude realization of this benefit?

2.3 Can BC Hydro articulate why it has excluded from its discussion of public interest the benefits that would accrue from lower prices that could be available to ratepayers of new Public Utilities?

2.4 Can BC Hydro provide a more detailed explanation of how they arrive at the conclusion that higher costs for the remaining customers would result from the erosion of their customer base? Please articulate all underlying assumptions, numerical or otherwise.

2.5 Can BC Hydro provide a fulsome definition of what they consider to be in the public interest?

2.6 Can BC Hydro provide a perspective on the marginal cost (dollar value) of 1 MWh, generated by their dams?

3.0 Reference: Exhibit C2-2, Section 5.2, p. 9, lines 12-19
There are a number of advantages to retaining the *UCA* as the principal regulatory framework for the regulation of all Public Utilities in British Columbia

On page 9, lines 12-19, BC Hydro states:

> Another example is asset impairment or stranded asset risk. If a Public Utility customer of BC Hydro's falls under the jurisdiction of a different regulator and/or a different regulatory framework, the possibility exists that it could receive regulatory approval to construct electrical utility equipment that could impair the value of existing BC Hydro assets or render those assets stranded (not used and useful). Under both examples, both BC Hydro and the Public Utility customer are

exposed to higher regulatory/legal risk, resulting in higher regulatory/legal costs and increased cost recovery risk.

3.1 Can BC Hydro articulate why it has not addressed the potential benefits that substituting for, or replacing of BC Hydro's hydro equipment could bring to potential customers?

3.2 Could BC Hydro support its assertion that simple asset replacement leads to higher regulatory costs and risks? It is not clear to us that this necessarily follows.

4.0 Reference Exhibit C2-2, Section, 5.2, pp. 9-10, lines 24-26, 1-9
There are a number of advantages to retaining the *UCA* as the principal regulatory framework for the regulation of all Public Utilities in British Columbia

On pages 9-10, lines 24-29, 1-9

> Examples of the types of questions that BC Hydro believes the Commission may explore when considering a possible exemption from Public Utility regulation include:
>
> a) Is the Public Utility operating in a competitive market? (i.e. are there alternative suppliers and products available to customers, or are there significant barriers to alternative suppliers);
> b) To what extent does the Public Utility operate for the benefit, including the <u>financial benefit</u>, of all of its customers; and
> c) What accountability does the Public Utility have to its customers? (i.e. is there an opportunity for all customers to raise and have concerns about the cost and provision of services addressed through a fair process under an arbiter that has oversight and/or governance responsibilities for all of its customers). (emphasis added)

4.1 One question that is not addressed in this section is the costs or benefits to the environment. Does BC Hydro consider the costs or benefits to the environment an important factor to consider with regards to regulation exemptions for Public Utilities?

5.0 Reference: Exhibit C2-2, Section 7, p. 13, lines 9-11
BC Hydro comments on the Independent Utility Regulation Report requisitioned and submitted by Commission Staff

On page 13, lines 9-11, BC Hydro states:

> In the case of BC Hydro, our Open Access Transmission Tariff (OATT) provides power sellers and wholesale customers, such as electric utilities and power marketers, with access to BC Hydro's transmission system…

5.1 Could BC Hydro clarify exactly how much power was transmitted across their transmission system for each of the last 10 years, and then, as a subset, identify the total amount of power transmitted under the OATT?

6.0 Reference: Exhibit C2-2, Section 7.1, pp. 13-14, lines 18-19 and 8-14
BC Hydro has adopted some of the utility industry changes noted in the Utility Regulation Report
Exhibit C2-2, Section 8, p. 15, lines 19-20
Conclusion

On page 13-14, lines 18-19 and 8-14, BC Hydro states:

> Retail access is not available to BC Hydro's load customers.
>
> The Government has also commented that retail access may expose BC Hydro ratepayers to the cost of stranded assets, the cost of which would be borne by a smaller rate base and has directed the Commission to not set rates that would result in direct or indirect provision of unbundled transmission service to retail customers in British Columbia unless BC Hydro brings forward an application to do so. BC Hydro has no plans to advance retail access at this time.

On page 15, BC Hydro states:

> BC Hydro, as the largest Public Utility in British Columbia, provides low cost, high reliability electricity to British Columbians in fulfillment of British Columbia's Energy Objectives under the CEA and in light of its Public Utility obligations.

6.1 In the event of a positive outcome that improves infrastructure and thereby improves the reliability for the Provincial grid, lower the costs of electricity and the concerns BC Hydro has no longer exist, would BC Hydro advance retail access in those instances, i.e. in areas of grid instability or where BC Hydro is unable to serve customers.

7.0 Reference: Exhibit C2-2, Section 7.1, pp. 13-14, lines 23-2
BC Hydro has adopted some of the utility industry changes noted in the Utility Regulation Report

On page 13-14, lines 23-2, BC Hydro states:

> In a surplus situation, allowing retail access increases the amount of surplus energy that BC Hydro must export, possibly at a loss, increasing costs borne by ratepayers who do not or cannot opt for retail access...

7.1 Could BC Hydro clarify exactly how much power was exported by them from BC for each of the last 10 years and also how much revenue BC Hydro earned from these exports, in each year?

7.2 Could BC Hydro please provide a prospective electricity supply/demand balance for the first year in which the Site C dam is to come online and disclose all relevant assumptions?

8.0 Reference: Exhibit C2-2, Section 4, p. 6, lines 8-9
What is a Public Utility and why is regulation necessary?
Exhibit C2-2, Section 5.1, p. 9, line 20
There are a number of advantages to retaining the *UCA* as the principal regulatory framework for the regulation of all Public Utilities in British Columbia

On page 6, lines 8-9, BC Hydro states:

> It is BC Hydro's view that a Public Utility should be regulated if it is a monopoly and/or it is in the public interest to regulate.

On page 9, line 20, BC Hydro states:

> … the UCA offers consistency in the treatment of Public Utilities…

8.1 Could BC Hydro please indicate why the decision to build the Site C dam did not come before the BCUC ?

9.0 Reference: Exhibit A-18-1, pp. 1-2, reference 8.0
Exhibit C6-3, pp. 11-2
Exhibit C6-3, page 5-7
Exhibit C6-3, pp. 16, 19-20, 25

On page 1 of the BCUC Information Request No. 1, the BCUC cites Kitselas Geothermal Inc.'s written submission as follows:

> …the only way for IUs to be economically viable is to access markets outside of their traditional lands. Electricity production depends on scale, and in almost every instance, no Indigenous bands have the critical mass to self-supply at economically competitive rates.
>
> As such, successful reconciliation becomes linked with market success.
>
> Given that many First Nations can create IUs with scale generating assets, the only barrier to success becomes retail market access – which is currently restricted.
>
> Therefore, retail market access equivalent to that enjoyed by BC Hydro is a requirement for IUs. If a geothermal electricity facility became a reality and was

> owned by BC Hydro, its output would undoubtedly enjoy retail market access. IU owned geothermal facilities should enjoy the same retail market access rights.[1]

On page 2 of the BCUC Information Request No. 1, the BCUC asks the following of BC Hydro:

> 8.1 Please confirm, or explain otherwise, that the prohibition on retail access does not affect the ability of a power producer owned wholly or partly by an Indigenous Nation to access BC Hydro's transmission system for the purposes of selling power to an entity (based in BC or otherwise) **that is not currently a retail customer of BC Hydro or another public utility in BC.** (emphasis added)
>
> > 8.1.1 Please briefly explain the requirements for a prospective greenfield power producer, owned wholly or partly by an Indigenous Nation, that may wish to connect and access BC Hydro's transmission system for the purposes of moving power within BC or to other transmission systems.
> >
> > > 8.1.1.1 Please also outline any factors that BC Hydro must assess before granting a greenfield IPP access to the transmission system.

On pages 5 to 7 of KGI's submission, KGI provided examples of how partial retail access for generation projects, including Indigenous Utilities and their prospective customers, can improve overall energy security and environmental performance by providing distributed generation and alternatives to reliance on single transmission corridors. KGI also provided examples of how Indigenous Utilities can assist in solving regional energy challenges (such as the one precipitated by the expansion of the LNG industry in the North West BC).

Further, on pages 11-12 of KGI's submission, KGI argued that market access should not be restricted by arbitrary provisions of an access tariff, such as the Open Access Transmission Tariff (OATT) and Indigenous Utilities should not be subject to artificial production caps. KGI proposed that Indigenous Utilities should have energy market access equivalent to that enjoyed by BC Hydro, and for the BC Government to establish an electricity market access program, for Indigenous Utilities that allows for regional difference.[2]

In the BC government Retail Access document, retail access is defined as "the ability for customers to secure electricity from the market via a third-party provider rather than its local utility."[3]

9.1 KGI wants to expand on the BCUC's question in reference 8.1. In its submission, KGI provided examples as to how geothermal energy projects, including those of

[1] Exhibit C6-3, p. 11.
[2] *Ibid*, p. 25.
[3] https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/electricity/iepr/iepr_retail_access.pdf

Indigenous Utilities, can have a broader socio-enviro-economic impact on the energy market, if these utilities are allowed to have market access.[4]

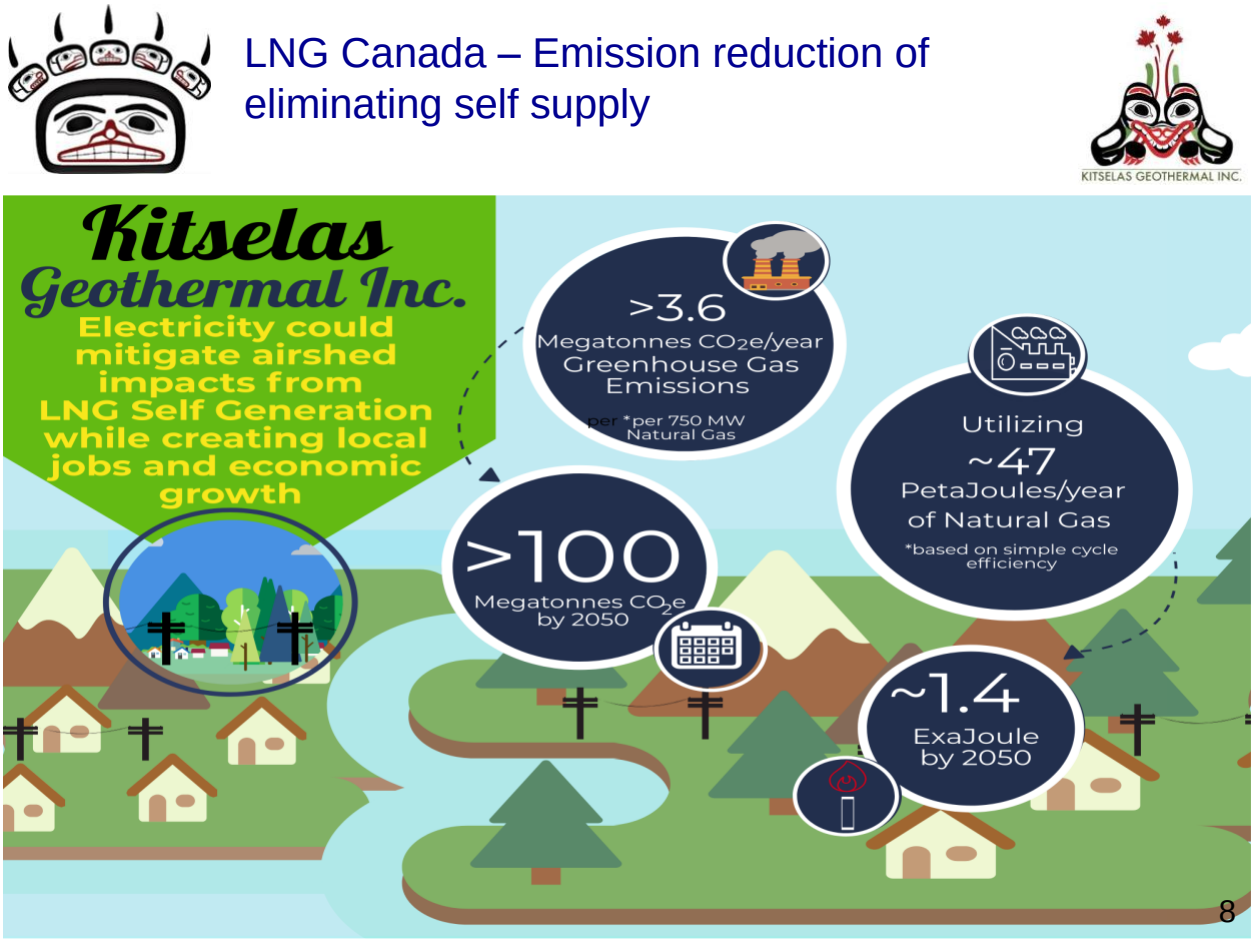

Figure 1. LNG Canada – Electricity Needs

In Figure 1 above, the electricity required by the customer may far exceed what a geothermal project may provide. However, a geothermal project may be able to provide some of the electricity supply with base-load service, for example, high reliability.

Figure 2 below is an example of a geothermal energy project that could benefit from partial retail access.

At this moment in time, if an industrial customer is using BC Hydro as an electricity supplier, and BC Hydro is not meeting their entire electricity needs, it is our understanding that the customer cannot use a third party electricity supplier to meet the balance of, or part of their energy needs. A third party has to either supply all the electricity needs of the customer or none, outside of any customer self-generation (behind the fence). There are no

[4] Exhibit C6-3, p. 16.

negative externalities that KGI is aware of allowing for partial retail access in the example we have provided.

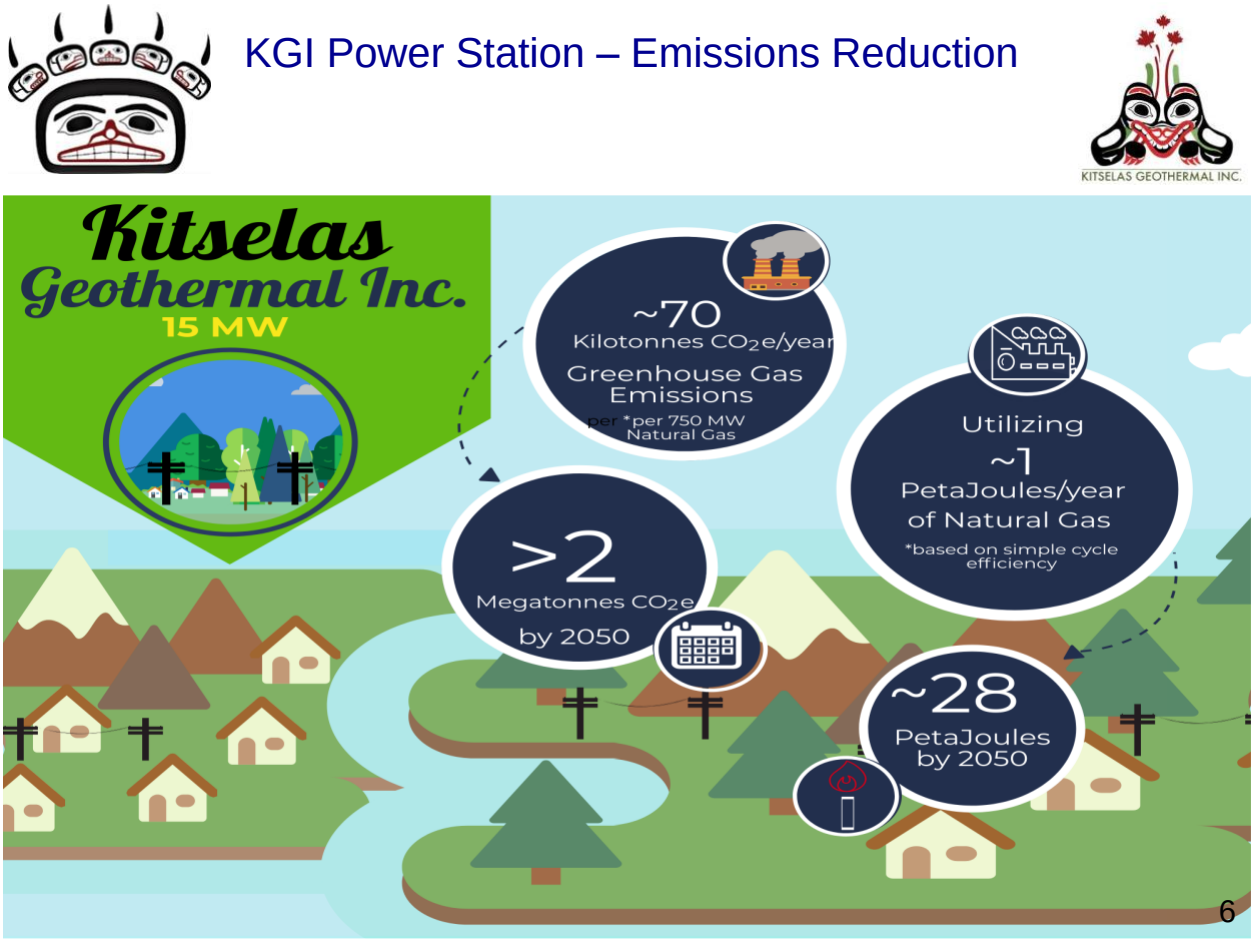

Figure 2. KGI 15 MW Electricity Plant

KGI would like to know how BC Hydro would consider the potential benefits of partial retail access? Specifically, in the event that a regional area or customer has an electricity demand, but the load is significantly higher than what the Indigenous Utility can provide, would there be a provision for partial retail access that would allow the Indigenous Utility to provide some of the supply as opposed to the requirement to provide 100% (or none) of the supply? Please explain.

Information Requests: FortisBC Group of Companies

1.0 Reference: Exhibit C4-2, Section 4.3, pp. 10-11
Approach to Indigenous Utility Regulation Can Be Usefully Considered in Relation to Five Groupings

On pages 10-11, FortisBC states that for Grouping 3 and 4,

> the "rational for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates."

Grouping	Description	FortisBC Position	Rationale
3	Public utility with controlling interest owned by an "indigenous nation"; serving one or more customers who don't have a say in the governance of the "indigenous nation"[16]	Regulated by BCUC. Nature of regulation depends on other factors typically considered by the BCUC.	The rationale for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates. The nature of regulation (i.e. whether light-handed or not) should depend on the extent of consumer vulnerability and proportionality of regulatory burden.[17]
4	Public utility with non-controlling interest owned by an "indigenous nation"; serving one or more customers who don't have a say in the governance of the "indigenous nation".[18]	Regulated by BCUC. Nature of regulation depends on other factors typically considered by the BCUC.	The rationale for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates. Necessary to avoid gaming. An investor owned public utility should not be able to avoid regulation by the BCUC, simply by granting a non-controlling interest to an "indigenous nation".

1.1 Could FortisBC provide a justification for making this conclusion for those customers who do not have a say in the governance of the "Indigenous Nation"? Alternately phrased, "Why does Indigenous control automatically suggest that non-Indigenous customers will not have meaningful recourse in the event of inadequate service or excessive rates?"

1.2 Further, the conclusion that FortisBC has drawn seems to suggest that non-

Indigenous customers have different interests than the Indigenous customers.

It could be argued that the interests of the Indigenous customers are exactly aligned with the non-Indigenous customers. If it is agreed that the Indigenous customer recourse is an effective process, then the Indigenous resolution of inadequate service or excessive rate issues would, by extension, equally serve those who FortisBC suggest do not have meaningful recourse.

Could FortisBC both respond to the above questions, and also, if required, please define any salient differences between Indigenous and non-Indigenous customers being contemplated in Groupings 3 and 4.

2.0 Reference: Exhibit C4-2, Section 4.3, pp. 10-11
Approach to Indigenous Utility Regulation Can Be Usefully Considered in Relation to Five Groupings
Exhibit C4-2, Section 4.5, p. 17
Small "Indigenous Utilities" May Merit Light-handed Regulation Similar to Other Small Utilities

On page 17, FortisBC states:

> At the other end of the spectrum is "light-handed" regulation, which could involve as little BCUC intervention as inquiring only upon customer complaint.

2.1 Would FortisBC agree or disagree that the nature of BCUC regulation, related to Groupings 3-5, would be "light handed" if retail access were granted to alternative suppliers? Please assume that alternate suppliers could provide adequate service, as defined by their potential customers.

2.2 Similarly, would FortisBC agree or disagree, related to Groupings 3-5, that the nature of BCUC regulation would be "light handed" in the event that customers were offered a price cap equal to or below that offered by the incumbent supplier(s) to that market?

Grouping	Description	FortisBC Position	Rationale
3	Public utility with controlling interest owned by an "indigenous nation"; serving one or more customers who don't have a say in the governance of the "indigenous nation"[16]	Regulated by BCUC. Nature of regulation depends on other factors typically considered by the BCUC.	The rationale for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates. The nature of regulation (i.e. whether light-handed or not) should depend on the extent of consumer vulnerability and proportionality of regulatory burden.[17]
4	Public utility with non-controlling interest owned by an "indigenous nation"; serving one or more customers who don't have a say in the governance of the "indigenous nation".[18]	Regulated by BCUC. Nature of regulation depends on other factors typically considered by the BCUC.	The rationale for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates. Necessary to avoid gaming. An investor owned public utility should not be able to avoid regulation by the BCUC, simply by granting a non-controlling interest to an "indigenous nation".
5	Public utility owned either by "indigenous nation", other non-Indigenous investors, or both; "indigenous nation" is contracted operator;	The owner is a public utility, regulated by the BCUC. A contractor may or may not be a public utility regulated by the BCUC. Nature of regulation depends on other factors typically considered by the BCUC.	A contractor may or may not be a public utility regulated by the BCUC, depending on the extent of delegation of the owner's rights and obligations. The rationale for an exclusion akin to municipalities is absent. Some customers would have no meaningful recourse in the event of inadequate service or excessive rates.

3.0 Reference: Exhibit C4-2, Section 4.7, pp. 18-19
Additional Considerations Relevant to the Regulatory Framework

On page 18-19, FortisBC states, the following:

> There is also a cost associated with staffing a new regulatory agency. Based on the approach taken with tribunals like the BCUC and BC Ferry Commission, those costs end up being allocated out to the entities subject to regulation. The allocated

costs are, in turn, recovered from energy consumers through regulated rates. There are cost advantages to having a single regulator of public utilities, particularly for small utilities. Most of the BCUC's costs (approximately $13 million in 2017/18) are allocated to the largest utilities – BC Hydro and FortisBC.

While not a perfect comparison, the costs of the Ferry Commission (which only regulates BC Ferries) provide an indication of the potential costs involved in establishing a small regulatory agency to handle the regulation of "indigenous utilities". Its budget is $892,250 for FY 2020 (i.e., April 1, 2019 to March 31, 2020). Costs of that magnitude may be very difficult for customers of a handful of small "indigenous utilities" to absorb.

3.1 KGI thanks FortisBC for providing a costs comparison between different regulatory agencies. While not a perfect example, it assists in thinking about other considerations for regulating Indigenous Utilities with a separate body other than the BCUC.

Could FortisBC detail the costs allocated to each of BC Hydro, FortisBC and other utilities (in aggregate) for the past 5 years? We have included a chart which may be helpful.

BCUC Costs per Utility					
	2018/2019	2017/2018	2016/2017	2015/2016	2014/2015
BC Hydro					
FortisBC					
Other Utilities (in aggregate)					