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Sent via eFile

FEI AND TIDAL ENERGY BIOMETHANE PURCHASE AGREEMENTS EXHIBIT A-9
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Mr. Doug Slater
Director, Regulatory Affairs
FortisBC Energy Inc.
16705 Fraser Highway
Surrey, BC V4N 0E8
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Re: FortisBC Energy Inc. – Application for Acceptance of Biomethane Purchase Agreements between FortisBC Energy Inc. and Tidal Energy Marketing Inc. – Project No. 1599040 – Staff Questions in Advance of Oral Submissions

Dear Mr. Slater:

Please find enclosed British Columbia Utilities Commission Staff Questions in advance of Oral Submissions on the above noted Application.

Sincerely,

Original signed by:

Patrick Wruck
Commission Secretary

/ad
Enclosure



FortisBC Energy Inc.
Filing of Biomethane Purchase Agreements between FortisBC Energy Inc.
and Tidal Energy Marketing Inc.

BCUC STAFF QUESTIONS NO. 1 TO FORTISBC ENERGY INC. IN ADVANCE OF ORAL SUBMISSIONS

A. REDUCING GREENHOUSE GAS EMISSIONS IN BRITISH COLUMBIA

**1.0 Reference: LOCATION OF PHYSICAL GREENHOUSE GAS EMISSION REDUCTION
Exhibit B-7, BCUC Panel IR 2.1, 2.1.1
Reducing Greenhouse Gas Emissions in British Columbia**

Part 5, section 18(1) of the *Clean Energy Act* (CEA) states:

In this section, "prescribed undertaking" means a project, program, contract or expenditure that is in a class of projects, programs, contracts or expenditures prescribed for the purpose of reducing greenhouse gas emissions in British Columbia [*emphasis added*].

In response to British Columbia Utilities Commission (BCUC) Panel IR 2.1, FortisBC Energy Inc. (FEI) states:

the emissions resulting from the combustion of RNG is not adding new carbon to the atmosphere and is, therefore, considered carbon neutral. The BC Best Practices Methodology for Quantifying Greenhouse Gas Emissions explains it this way:

The CO₂ released to the atmosphere during combustion of biomass is assumed to be the same quantity that had been absorbed from the atmosphere during plant growth. Because CO₂ absorption from plant growth and the emissions from combustion occur within a relatively short timeframe of one another (typically 100-200 years), there is no long-term change in atmospheric CO₂ levels. For this reason, biomass is often considered "carbon-neutral" and the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories specifies the separate reporting of CO₂ emissions from biomass combustion...

This is why carbon dioxide created by combustion of RNG derived from organic matter is not considered to be a net GHG emission – it does not add net-carbon to the atmosphere, but it makes use of existing carbon in the atmosphere.

Under the proposed BPAs, **the most significant reduction in greenhouse gases physically released into the atmosphere would occur in the vicinity of the RNG production** [*emphasis added*].

- 1.1 Would a reduction in Greenhouse Gas (GHG) emissions occur in the vicinity of RNG production in the absence of the proposed Biomethane Purchase Agreements (BPAs)? Please discuss.

- 1.2 Please explain how FEI's above statement aligns with 'reducing greenhouse gas emissions in **British Columbia**' [*emphasis added*] pursuant to section 18(1) of the CEA.
- 1.3 Please discuss whether FEI considers capturing atmospheric CO2 and reducing new emissions are equivalent under the CEA.
- 1.4 Please confirm whether the absorption of CO2 from plant growth, that FEI references, physically occurs in BC.
 - 1.4.1 If not confirmed, please explain how this process aligns with the CEA reference to 'reducing greenhouse gas emissions in **British Columbia**' [*emphasis added*].

In response to BCUC Panel IR 2.1, FEI states:

[A]s a result of substituting the RNG for conventional gas at the point of combustion... FEI has a contractual right to claim the benefit of that reduction...under the legislation in BC, FEI's customers - the end users - are able to claim a reduction in their GHG emissions in BC.

- 1.5 Please explain how FEI's statement that 'FEI's customers - the end users - are able to claim a reduction in their GHG emissions' is consistent with the CEA.

In response to BCUC Panel IR 2.1.1, FEI states:

FEI notes that it is not a requirement for a prescribed undertaking under the Clean Energy Act or the GGRR that any particular portion of the GHG reduction occur in a particular location. The reduction in GHG emissions resulting from the BPAs can be claimed in BC.

- 1.6 Please discuss how the CEA Part 5, Section 18(1) definition of prescribed undertaking being for the purpose of 'reducing greenhouse gas emissions in **British Columbia**' [*emphasis added*] aligns with FEI's position that there is not a requirement for any portion of the GHG reduction to occur in a particular location.
- 1.7 Please provide the references in the CEA or in the Greenhouse Gas Reduction Regulation (GGRR) which provide that GHG reduction does not need to occur within BC to meet the definition of a prescribed undertaking.

In response to BCUC Panel IR 2.1, FEI states:

The displacement of conventional natural gas by the injection of RNG... also avoids the emissions associated with gas production because the conventional natural gas remains in the ground at the point of production, including in locations such as British Columbia and Alberta.

- 1.8 Please discuss whether RNG production at the two facilities in the BPAs would take place without a BPA with FEI in-place.
- 1.9 Please discuss whether total natural gas production and production-related emissions in BC would be different if a party located outside of BC purchased RNG from the two projects in the proposed BPAs instead of FEI.

In response to BCUC Panel IR 2.1, FEI states:

As discussed on page 9 of the Application, the use of RNG in the NGT market will reduce GHG emissions at the end-use because customers seeking a GHG neutral transportation solution may switch to CNG or LNG in anticipation of electing to participate in FEI's RNG

program. For example, the switch to CNG from diesel in and of itself reduces GHGs by 10 – 30 percent. Switching to RNG from conventional CNG further reduces GHG emissions by approximately 75 percent. These reductions in GHG emissions will physically occur in BC.

- 1.10 Please confirm, or explain otherwise, that the reduction in physical greenhouse gas tailpipe emissions would be the same regardless of whether the transportation customer switched from diesel to RNG or from diesel to conventional natural gas.
- 1.11 Please discuss whether FEI is aware of any transportation customers in BC who only intend to switch to natural gas vehicles if renewable natural gas is available.

**2.0 Reference: REGULATORY FRAMEWORK FOR GREENHOUSE GAS EMISSION ACCOUNTING
Exhibit B-7, BCUC Panel IR 3.1
Greenhouse Gas Emission Accounting Practices**

In response to BCUC Panel IR 3.1, FEI states:

FEI may sell RNG to transportation customers, including bus fleets, waste haulers, and other fleet operators, who can claim the GHG reductions due to RNG as a credit under the BC-RLCFRA. FEI is able to register its RNG as an eligible fuel under section 6(6) of the BC-RLCFRA. Eligible fuels under the BC-RLCFRA can be produced within and outside of BC. For example, BC imports hydrogenation-derived renewable diesel from Neste Oil Singapore and ethanol from Future Fuels Ltd in Alberta. The carbon intensity of these fuels include both emissions reductions that have occurred during production and also that will occur at the end use. This demonstrates that the BC-RLCFRA recognizes emissions reductions that occur outside of BC.

...

FEI's public sector customers, such as universities, schools, or hospitals, may purchase RNG to meet their obligations under the Carbon Neutral Government program under the Climate Change Accountability Act (CCAA). This program uses the SMARTTool for GHG evaluation, which recognizes RNG as an eligible fuel. Public sector customers purchase RNG and account for the emissions reductions for reporting to the BC Government. There is no prohibition against using RNG from outside of BC, and the emissions are accounted for by the public sector facility at their end-use.

- 2.1 Please explain where the CEA allows for the *British Columbia Renewable & Low Carbon Fuel Requirements Regulation Act* (BC-RLCFRA) or *Climate Change Accountability Act* (CCAA) accounting methods as methods of reducing greenhouse gas emissions in BC.
 - 2.1.1 Please explain how these methods are suitable for accounting for GHG emissions in BC.
- 2.2 Please explain how the carbon intensity of specific RNG sources is calculated and where the GHG emissions are accounted for under the BC-RLCFRA and using SMARTTool under the CCAA.
- 2.3 Please explain how landfill gas emissions which are captured for processing into RNG instead of being released into the atmosphere would be accounted for using SMARTTool under the CCAA.

**3.0 Reference: MINISTRY OF ENERGY MINES AND PETROLEUM RESOURCES LETTER OF COMMENT
DATED FEBRUARY 4, 2020
Exhibit E-1
Ministry of Energy Mines and Petroleum Resources Position**

- 3.1 Please discuss how FEI interprets the Ministry of Energy Mines and Petroleum Resources letter of comment as supporting the Application as being in the public interest.
- 3.2 Please discuss how FEI interprets the Ministry of Energy Mines and Petroleum Resources letter of comment as supporting the Application being a prescribed undertaking.