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November 1, 2019

B.C. Sustainable Energy Association
c/o William J. Andrews, Barrister & Solicitor
1958 Parkside Lane
North Vancouver, B.C.
V7G 1X5

Attention: Mr. William J. Andrews

Dear Mr. Andrews:

Re: FortisBC Energy Inc. (FEI)

Filling of Biomethane Purchase Agreements between FEI and Tidal Energy Marketing Inc. (Tidal Energy) (the Application)

Response to the B.C. Sustainable Energy Association and Sierra Club of British Columbia (BCSEA) Information Request (IR) No. 1

On June 3, 2019, FEI filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-213-19 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCSEA IR No. 1.

If further information is required, please contact Scott Gramm, Manager, Renewable Natural Gas, at (604) 576-7242.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Doug Slater

Attachments

cc (email only): Commission Secretary
Registered Parties

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1 **1.0 Topic: Prescribed Undertakings**

2 **Reference: Exhibit B-1, Application, Section 7.1, The BPAs are**
3 **Prescribed Undertakings; Exhibit A-3, BCUC IR 1.1**

4 “On March 22, 2017, the Province of BC deposited LGIC OIC 161/2017 under BC Reg.
5 114/2017 (OIC 161) approving an amendment to the GGRR, a copy of which is provided
6 in Appendix D. Section 2 (3.7) and (3.8) of the GGRR as amended by OIC 161-2017
7 state:

8 (3.7) A public utility's undertaking that in the class defined in subsection (3.8) is a
9 prescribed undertaking for the purposes of section 18 of the Act.

10 (3.8) The public utility acquires renewable natural gas

11 (a) for which the public utility pays no more than \$30 per GJ, and

12 (b) that, subject to subsection (3.9), in a calendar year, does not exceed
13 5% of the total volume of natural gas provided by the public utility to its
14 non-bypass customers in 2015.

15 “The supply purchase prices in the both the Niagara BPA and the London BPA are
16 below the maximum acquisition price in section 2(3.8)(a) of the GGRR of \$30 per GJ.”
17 [underline added]

18 “The maximum volume of biomethane acquisition that would qualify under section
19 2(3.8)(b) of the GGRR is approximately 8,900,000 GJs. The current maximum supply
20 contracted by FEI including the recently filed BPA for the City of Vancouver, totals
21 899,250 GJs annually. The actual production for all biomethane projects in 2018 was
22 approximately 180,000 GJs. The combined total maximum supply from both the BPAs
23 will increase the contracted maximum to [redacted] GJs annually, which remains below
24 the prescribed amount for the GGRR.” [underline added]

25 In IR 1.1, the Commission asks FEI: “Please explain what, if any, physical requirement
26 FEI interprets to be in place in order to “acquire” renewable natural gas (RNG) as a
27 prescribed undertaking consistent with the Greenhouse Gas Reduction Regulation
28 Definition (GGRR).”

29 1.1 Further to BCUC IR 1.1, please explain why in FEI’s view the “public utility
30 acquires renewable natural gas” criterion in section 3.8 of the GGRR includes
31 FEI’s acquisition of renewable natural gas produced outside of British Columbia
32 and delivered notionally to the FEI system at Huntington.
33



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1 **Response:**

2 Please refer to the response to BCUC IR 1.1.1.

3
4

5

6 1.2 In relation to the “public utility acquires renewable natural gas” criterion in section
7 3.8 of the GRR, please discuss whether the notional delivery of RNG differs
8 from the notional delivery of conventional natural gas. Is notional delivery a
9 concept unique to RNG?

10

11 **Response:**

12 The notional delivery of conventional natural gas is analogous to the notional delivery of RNG.
13 Notional delivery of conventional natural gas molecules is part of supply transactions and
14 commercial arrangements generally. For example, when other parties, such as customers or
15 gas marketers bring their own supply to market hubs or interconnection points, all those natural
16 gas molecules (whether conventional or RNG) are intermingled and are interchangeable. The
17 actual gas molecules themselves are indistinguishable, not traceable, and exchangeable with all
18 the other the gas molecules on the system given the end-use customer is consuming gas
19 somewhere on the system, but not the molecules they or their marketers brought onto the
20 system for their use. This makes all exchanges of natural gas molecules, whether conventional
21 or RNG, notional based on delivery volumes injected versus volumes consumed by the end-use
22 customer.

23 Notional delivery of conventional natural gas or supply by displacement is also common with
24 storage agreements. FEI’s gas contracting portfolio includes re-delivery or exchange
25 agreements in-place with its contracted storage capacity at Mist (Oregon) and Jackson Prairie
26 (Washington). These agreements allow FEI to receive gas at Huntingdon and FEI will then
27 transfer (or notionally deliver) an equivalent amount of gas at the storage facility out of its
28 account. Please also refer to the response to BCUC IR 1.1.1.

29
30

31

32 1.3 With reference to FEI’s evidence that “The supply purchase prices in the both the
33 Niagara BPA and the London BPA are below the maximum acquisition price in
34 section 2(3.8)(a) of the GRR of \$30 per GJ,” are there any circumstances in
35 which FEI’s cost of renewable natural gas under the Niagara BPA or the London
36 BPA could exceed (a) the respective contract price or (b) the \$30/GJ maximum
37 acquisition price?



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Response:

The purchase price in each BPA (refer to clause 8 (c)) cannot exceed the maximum acquisition price, which is currently set at \$30/GJ in the GGRR. Therefore, FEI's cost of RNG under the BPAs will not exceed the maximum acquisition price of \$30/GJ in the GGRR, unless there is an increase to the maximum acquisition price in the GGRR or other legislation affecting the maximum acquisition price, or (in the absence of the GGRR) a BCUC decision that increases the maximum acquisition price.

1.3.1 Is there a need for a deferral account mechanism like the one approved by the Commission in Order G-235-19 regarding the City of Vancouver Biogas Purchase Agreement (COV BPA)?

Response:

No. The Tidal BPAs include a certain, fixed price which is below the GGRR threshold price.

1.4 With reference to the 5% criterion in GGRR s.2(3.8)(b) and FEI's evidence that "The combined total maximum supply from both the BPAs will increase the contracted maximum to [redacted] GJs annually, which remains below the prescribed amount for the GGRR," please provide a rough, non-confidential estimate of the percentage (e.g., with no decimal points) that FEI's total contracted annual biomethane supply, including the London BPA and the Niagara BPA, would contribute to the "total volume of natural gas provided by the public utility to its non-bypass customers in 2015."

Response:

FEI estimates that its total RNG supply with the London BPA and Niagara BPA will be approximately 17 percent of the 5 percent GGRR criterion.

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1 **2.0 Topic: Out of Province RNG**
2 **Reference: Exhibit B-1, Application, Section 2, Out of Province RNG**
3 **is Necessary to Meet Supply Objectives; FortisBC 2020-2024 MRP**
4 **Proceeding, Exhibit B-10, FortisBC Response to BCUC IR 1.94.3, pdf**
5 **p.565**

6 In the Application, FEI states:

7 “FEI continues to advance RNG supply projects within BC. Currently, FEI holds
8 an active prospect list of over 15 RNG projects within BC representing over one
9 Petajoule (PJ) of incremental annual RNG supply. However, given the growing
10 demand and increased policy pressure to increase RNG supply significantly over
11 a relatively short time horizon, FEI believes that RNG supply obtained from out-
12 of-province projects will need to make up part of the supply mix. Demonstrating
13 the viability of supply from outside of BC will provide further opportunity to grow
14 the program and reach the CleanBC target of 15 percent renewable gas. This
15 section will provide additional background on the current RNG prospect potential
16 and policy environment.”

17 In its response to BCUC IR 1.74.3 in the proceeding regarding FortisBC’s Application for
18 Approval of a Multi-Year Rate Plan for 2020 through 2024, FEI states:

19 “FEI believes that it will need to source RNG from outside the province to achieve
20 the 15 percent renewable gas policy goal by 2030. RNG sourced from outside of
21 BC is both an expedient and an effective way to help reach the provincial
22 government target. From a time-to-market perspective, there are shovel-ready
23 projects in jurisdictions like Ontario that present an opportunity for BC and FEI’s
24 customers.”

25 2.1 Does FEI have policy support from the Provincial Government for including out-
26 of-province supplies of biomethane within the RNG portfolio?
27

28 **Response:**

29 The Provincial Government is supportive of the growth and development of FEI’s RNG program
30 and out-of-province supply is necessary to achieve the targets in the CleanBC plan. FEI
31 believes that, provided the environmental benefits for the out-of-province RNG are realized in
32 British Columbia, the Provincial Government would support the inclusion of out-of-province RNG
33 within FEI’s RNG portfolio. With the Tidal BPAs, FEI has secured the rights to the
34 environmental attributes and benefits which will contribute toward the Provincial Government’s
35 GHG reduction targets in BC.

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1
2 2.2 Please comment on whether Commission acceptance of the London BPA and
3 the Niagara BPA would delay FEI's acquisition of incremental sources of
4 renewable natural gas produced within British Columbia.

5
6 **Response:**

7 The acceptance of the London BPA and Niagara BPA will not impede or delay the pursuit of
8 RNG opportunities within British Columbia. FEI sees BC-based projects as critical to achieving
9 its goals and ultimately reaching the 15 percent Renewable Gas content target within its
10 portfolio as published in the CleanBC plan. As such, FEI will continue to pursue all known and
11 potential opportunities within BC.

12

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1 **3.0 Topic: Timing of Decision**

2 **Reference: Exhibit B-1, Application, p.2**

3 In the Application, dated June 3, 2019, FEI states:

4 “If practicable, FEI respectfully requests that the BCUC accept the BPAs for filing
5 prior to August 1, 2019, so that FEI can begin purchasing the biomethane under
6 the London BPA when the [redacted] project first begins injecting biomethane
7 onto the system.”

8 3.1 What are the current considerations regarding the timing of a decision by the
9 Commission and the impact, if any, on acquisition of biomethane under the
10 BPAs?

11
12 **Response:**

13 Demand from customers for RNG currently exceeds available supply. As a result, FEI has
14 suspended new applications to RNG subscription programs for residential and commercial
15 customers, and has curtailed RNG supply to interruptible and long-term agreement RNG
16 customers. In order to continue to meet growing customer demand for RNG, FEI believes that
17 time is of the essence. Tidal expects to have RNG available in 2019 and FEI is confident that it
18 will be able to allocate the additional RNG purchased to customers as soon as it becomes
19 available.

20 There may also be negative impacts on the RNG suppliers who may either lose potential
21 revenue or incur additional cost related to storing RNG. The upstream suppliers and Tidal may
22 also incur other costs associated with the delay in an ability to sell RNG (such as additional
23 interest costs).

24 Finally, FEI may suffer a loss of credibility with respect to other future potential suppliers due to
25 a delay. This could result in fewer RNG supply opportunities for FEI in the future.

26

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1 **5.0 Topic: Contractual Structure**

2 **Reference: Exhibit B-1, Application, pp.2-3**

3 Regarding the Niagara BPA, FEI states:

4 “Tidal Energy, a wholly owned subsidiary of Enbridge Inc., has entered into an
5 exclusive agreement to purchase all the RNG produced from a project located at
6 a privately-owned landfill site in Niagara Falls, Ontario (ON). Tidal Energy will
7 buy and market all RNG from an entity entitled [redacted]. ...

8 [Redacted] plans to construct, own and operate a facility capable of upgrading
9 the LFG to RNG and injecting it into the Enbridge Gas distribution system in
10 Niagara Falls, ON. ...

11 Tidal Energy will inject the RNG into the Enbridge Gas distribution system, and
12 then deliver it to the FEI system by displacement at the Huntingdon
13 interconnection point from Westcoast.”

14 Regarding the London BPA, FEI states:

15 “After the construction and installation of the biogas upgrader and
16 interconnection station, [redacted] will inject the RNG into the Enbridge Gas
17 distribution system in London, ON and transport it to the [redacted] trading hub
18 where it will be purchased by [redacted]. [Redacted] will then deliver the RNG to
19 the FEI System at the Huntingdon interconnection point from Westcoast.”

20 5.1 Without disclosing confidential information, please discuss the similarities and
21 differences in the contractual mechanisms associated with the Niagara BPA and
22 the London BPA.

23
24 **Response:**

25 The BPAs share many similarities from a contractual perspective.

26 FEI has contracted with Tidal Energy (a gas marketer), who in turn has contracted RNG supply
27 from two RNG producing projects. The RNG will be injected into the existing natural gas system
28 in Ontario and Tidal will deliver the RNG to FEI at Huntingdon over a twenty-year period. FEI
29 used an existing standard form of agreement called the GasEDI for both agreements.

30 FEI has secured the environmental attributes for the RNG from Tidal along with an ability to
31 audit these projects. Tidal is required to demonstrate the carbon intensity of the RNG through
32 reporting and Tidal has specifically allowed FEI to apply for registration under the BC RLCFRA¹.

¹ Renewable and Low Carbon Fuel Requirements Act (RLCFRA).



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1 This will allow FEI to obtain fuel codes from the BC Government which will in turn give FEI's
2 customers the ability to purchase low-carbon fuel from FEI directly.

3 In the event of default, for example due to a failure to meet minimum supply requirements, Tidal
4 is required to make a payment equal to the value of the unsupplied RNG.

5 The BPAs differ in the nature of the origin of RNG. One is a landfill while the other is an organic
6 digester. The price and volumes differ between the two projects. Finally, although the
7 contractual carbon intensity figure is the same, FEI expects the carbon intensity to be lower for
8 the digester project (depending on the feedstock received).

9
10

11

12 5.2 Regarding the London BPA, why is the name of entity that will purchase the RNG
13 at the trading hub and deliver it to the FEI System redacted? Is it Tidal Energy
14 that will perform this function?

15

16 **Response:**

17 Tidal requested that FEI redact its upstream partner's name to limit the disclosure of Tidal's
18 partnership arrangements. Tidal will work with a utility that will accept the injected RNG into its
19 existing natural gas system.

20

21

22

23 5.3 Regarding the RNG to be delivered to FEI under the London BPA, why is the
24 RNG purchased at a trading hub and not at the point where it is injected into the
25 Enbridge Gas distribution system?

26

27 **Response:**

28 Enbridge Gas distribution will deliver the RNG to Tidal at the trading hub. Delivery of RNG to
29 the trading hub reflects that Enbridge Gas Distribution has existing tariffs in place to move the
30 RNG across their system to the delivery, whereas Tidal does not.

31

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1 **7.0 Topic: Reporting to the BC-RLCFRA**

2 **Reference: Exhibit B-1, Application, p.6**

3 **“Low Carbon Fuel: FEI has secured the ability to report directly to the Government**
4 **of BC Greenhouse Gas Reduction Renewable and Low Carbon Fuel Requirements**
5 **Regulation** (BC-RLCFRA). This provides the benefit of creating value to FEI customers
6 who may be eligible to use RNG as a low carbon fuel compliant with the BC Low Carbon
7 Fuel Standard. This is a concept new to these BPAs that takes into account the growing
8 demand from customers who can participate in the BC-RLCFRA. FEI also expects to
9 add this concept to future in-province BPAs.” [underline in the original, bold added]

10 7.1 Please explain how FEI has secured the ability to report directly to the BC-
11 RLCFRA. Does this apply to the RNG program generally, or is it limited to the
12 Niagara BPA and London BPA?

13
14 **Response:**

15 FEI has secured the ability to report directly under the BC-RLCFRA² by including a clause in the
16 BPAs that specifically assigns FEI that right. FEI intends to include this concept in all future
17 RNG agreements.

18 FEI sees the ability to report directly to the BC-RLCFRA as a benefit for its customers. As part
19 of the BC-RLCFRA process, the lifecycle carbon intensity of the fuel is identified and approved,
20 allowing FEI to transfer the emissions reductions to its customers. The current wording of the
21 BC-RLCFRA requires the owners of the supply to apply for fuel codes and have them approved
22 on a regular basis (typically each year). This means that FEI suppliers would be required to
23 apply for fuel codes or FEI would be required to get permission to apply on behalf of the
24 suppliers regularly. FEI believes that securing the right to apply directly to the BC-RLCFRA for
25 each of its individual projects, without getting specific permission from each of its suppliers on a
26 recurring basis, provides greater efficiency and flexibility to pool and sell RNG from one or more
27 fuel code to its customers.

² Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act.

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1 **8.0 Topic: RFEOI**

2 **Reference: Exhibit B-1, Application, Section 2, FEI'S Request For**
3 **Expressions Of Interest Identified Significant Opportunity For Out Of**
4 **Province RNG Supply; Appendix B, RFEOI Summary of Results, p.3**
5 **(pdf p.62)**

6 “To identify new RNG supply opportunities, FEI issued a Request for Expression of
7 Interest (RFEOI), which opened to the market on June 29, 2018 and closed on July 30,
8 2018. An RFEOI package was distributed to over 160 contacts representing
9 approximately 120 organizations. FEI also held two online information webinars on July
10 10 and 13, 2018 to increase the level of participant understanding for the process.

11 FEI received a total of 33 responses. Those responses were initially screened down to a
12 total of 24 representing a total volume of about 4.4 PJs. A summary of these responses
13 by region and price was developed and is included in Appendix B. Of the total
14 respondents, 17 of the 24 were from out-of-province and about ninety percent (3.9 PJs)
15 of the total volume was from outside of BC.”

16 For the 24 screened responses to the RFEOI the average cost was \$24/ GJ.

17 8.1 Were the London and Niagara projects within the 24 screened responses to the
18 RFEOI?

19
20 **Response:**

21 The London project was within the 24 screened responses to the RFEOI whereas the Niagara
22 project was received just in advance of the RFEOI period, so it is in addition to the 24
23 responses.

24
25

26
27 8.2 What factors did FEI take into account in weighing the screened responses and
28 selecting the London and Niagara projects for negotiation of biomethane
29 purchase agreements? To what extent did FEI consider whether RNG would be
30 produced in-province or out-of-province? To what extent did FEI consider
31 whether notional delivery to the FEI system was available? Was cost a
32 determinative factor?

33
34 **Response:**

35 FEI evaluated projects based on volume, speed to market, price per GJ of RNG, location,
36 technology, and carbon intensity. When ranking the projects FEI considered RNG producers



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1 within BC more favorably than those out of the province. However, FEI recognized that in order
2 to achieve the CleanBC plan target of 15 percent Renewable Gas by 2030, RNG in BC and out-
3 of-province must be pursued and was therefore, considered. FEI also recognized that some of
4 the out of province opportunities could potentially provide RNG sooner than projects within
5 British Columbia.

6 FEI fully evaluated whether notional delivery was available, including associated costs, which is
7 discussed in the response to BCUC IR 1.1.1.

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1 **9.0 Topic: RNG Supply and Demand**

2 **Reference: Exhibit B-1, Application, Section 3, Benefits of Proposed**
3 **Projects**

4 “There are large NGT customers that wish to participate in the RNG program that are
5 “on hold” until FEI can bring on more RNG supply.”

6 9.1 Can FEI provide any non-confidential insight into whether the anticipated
7 demand for RNG exceeds the contracted RNG supply (including the Niagara
8 BPA and the London BPA)?

9
10 **Response:**

11 FEI expects that the demand for RNG will exceed contracted RNG supply, even after the
12 approval of the BPAs. Please refer to response to CEC IR 1.11.1 which discusses the potential
13 incremental demand from FEI’s larger customers approaching 3,000 TJs.

14



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1 **10.0 Topic: Renewable Natural Gas Program**

2 **Reference: Exhibit B-1, Application**

3 10.1 Please confirm, or otherwise explain, that the RNG to be acquired by FEI under
4 the London BPA and the Niagara BPA will be marketed exclusively through FEI's
5 Renewable Natural Gas program.

6

7 **Response:**

8 At this time, the RNG purchased under the Tidal BPAs will be made available for purchase by
9 FEI customers under the RNG program.