



Diane Roy
Vice President, Regulatory Affairs

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604) 576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
www.fortisbc.com

June 9, 2021

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Mr. Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

Re: FortisBC Energy Inc. (FEI)

Project No. 1599169

Application for Approval of Revised/Renewal Rates for Langford Compressed Natural Gas (CNG) Fueling Station under the Province's Greenhouse Gas Reduction (Clean Energy) Regulation (GGRR) in Langford, BC (Application)

Response to the British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2

On December 23, 2020, FEI filed the Application referenced above. In accordance with BCUC Order G-111-21 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCUC IR No. 2.

If further information is required, please contact Sarah Smith at (604) 592-7874.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 1

7.0 Reference: INTRODUCTION

Exhibit B-2, British Columbia Utilities Commission (BCUC) Information Request (IR) 1.1

ColdStar and GFL fueling agreements

In response to BCUC IR 1.1, Fortis Energy Inc. (FEI) stated:

The proposed rates are considered market competitive because CNG [Compressed Natural Gas] fueling station customers compare the rates with their competing transport fuel options, such as diesel fuel (based on diesel litre equivalent prices) when determining if the rates meet their market competitive requirements. At the time of writing, the average price per litre for diesel fuel in the Victoria area for the month of December 2020 was \$1.14. The proposed rates will allow ColdStar [ColdStar Solutions Inc.] and GFL [GFL Environmental Inc.] to fuel at the Langford Fueling Station at a competitive rate of approximately \$0.61 per diesel litre equivalent. With year-over-year decreasing vehicle capital incentives under the Greenhouse Gas Reduction Regulation (GGRR), NGT customers are seeking a competitive rate that provides a fuel savings that continues to support their ongoing and future investments in natural gas powered vehicles.

7.1 Please clarify how \$0.61 per diesel litre equivalent is considered market competitive when the average price per litre for diesel fuel is \$1.14. As part of the response, please provide a reconciliation of the \$0.61 per diesel litre equivalent with the \$1.14 average price per litre for diesel fuel. Please provide any assumptions used.

Response:

The proposed CNG rates for ColdStar and GFL are market competitive when compared to diesel fuel, which is the alternative fuel for Coldstar's and GFL's fleets. The proposed rates when compared to diesel prices offer a 45 percent fuel savings which is competitive enough to help offset the incremental cost of ColdStar and GFL's investment in their natural gas vehicles, resulting in a payback of the incremental cost for a natural gas vehicle of less than 2 years. This payback period is required to make the business case attractive for fleet customers, who typically operate on very thin profit margins. The GGRR incentives available to offset the incremental cost for a natural gas vehicle are declining every year, making the fuel savings an even more prominent factor in the business case for customers. Adopting natural gas technology, which is a fuel different from what is historically used by fleet customers (diesel), has a significant amount of perceived risk from a customer's perspective. The perceived risks arise from concerns about unknown operating and maintenance costs, fuel availability, driver acceptance, change management and resale value for natural gas trucks. Significant benefits to the customer in the form of fuel savings are needed to overcome the perceived risks associated with making a fuel switch.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 2

FEI's proposed rates are within the price range of other existing FEI-owned natural gas stations. The table below provides a reconciliation of the Base Rate (Capital Rate, O&M Rate and OH&M Rate) to the rate per diesel litre equivalent (DLE), and also shows the high and low ranges for FEI's other fueling stations. As discussed in the response to BCUC IR1 1.1, the Base Rate for FEI-owned stations ranges from \$3.250 per GJ to \$13.541 per GJ. As such, the proposed Base Rate of \$7.226 per GJ for the Langford CNG Fueling Station falls in the middle of this range. FEI notes that the estimated \$0.61 per DLE is based on the estimated costs calculated in December 2020.

	Low Range	ColdStar and GFL Rate	High Range
Base Rate (\$/GJ)	3.250	7.226	13.541
Gas Commodity and Delivery (\$/GJ)*	5.680	5.680	5.680
Carbon Tax (\$/GJ)*	2.235	2.235	2.235
Total (\$/GJ)	11.165	15.141	21.456
GST (\$/GJ)	0.558	0.757	1.07
Total (\$/GJ)	11.723	15.898	22.529
Total (\$/DLE)*	0.45	0.61	0.87

*conversion from GJ to DLE is 25.89 DLE/GJ

Below is a breakdown of the diesel price of \$1.14 per litre.

Diesel Rate	
Wholesale (rack) Price (\$/GJ)	17.010
Retail Margin (\$/GJ)	2.071
Total (\$/GJ)	19.081
Taxes (\$/GJ)	10.382
Total (\$/GJ)	29.463
Total (\$/DLE)*	1.14

* Conversion from GJ to DLE is 25.89 DLE/GJ. Breakdown based on Explanatory Notes for Margin Calculation from Natural Resource Canada [Monthly Average Retail Prices for Diesel in 2020 | Natural Resources Canada \(nrcan.gc.ca\)](https://www.nrcan.gc.ca/energy/11648)

The \$0.61 per diesel litre equivalent (DLE) is within the price range of FEI's existing CNG fueling stations and is competitive with diesel to offer an attractive business case for Coldstar and GFL to continue to make their investments in natural gas vehicles.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 3

7.2 Please provide a comparison of the rates proposed for ColdStar and GFL against the prices charged for CNG fueling service in North America at stations that are not operated by FEI.

Response:

The retail price for CNG fueling service is not publicly available; however, FEI has reached out to various Canadian utilities for an estimated price for CNG within their province. Based on FEI's correspondence with Canadian utilities, the prices for CNG are listed below. The Canadian provinces not listed in the table have limited or no CNG infrastructure and, therefore, are not included in the table. The reference for prices for CNG fueling service in the United States is identified in the table below.

Region/Country	Price of CNG (\$/ DLE in Cdn. Dollars)
Alberta	0.90
Ontario	0.45 - 0.65
Quebec	0.40 - 0.60
United States of America	0.79 ¹

Although it appears that the price for CNG fueling service proposed for the Langford Fueling Station (\$0.61/DLE) is in line with most of the prices shown in the table, comparing prices charged for CNG fueling service in other parts of North America with the price proposed for the Langford Fueling Station is not appropriate. Different jurisdictions have different regulations, taxes, incentives and business environments and, therefore, comparing the proposed rates for the Langford Fueling Station with other jurisdictions is not a reasonable approach to assessing the competitiveness of the Langford Fueling Station rate.

To compare ColdStar and GFL's CNG prices to the price of other CNG service, FEI recommends a comparison of CNG prices in BC which includes the CNG prices from FEI stations. As noted in the response to BCUC IR2 7.1, the estimated delivered price to ColdStar and GFL of \$0.61/DLE is within the range of \$0.45/DLE to \$0.87/DLE charged at other FEI CNG stations and is, therefore, competitive in relation to FEI's other CNG stations.

Currently, there is only one public CNG fueling station in BC and the price for CNG at that station is \$1.309 per kg or \$0.97 per DLE as of May 26, 2021. To use the only retail CNG fueling station not owned and operated by FEI as a benchmark to evaluate the degree of competitiveness of the Langford Fueling Station's price of CNG would not be an accurate representation of a competitive CNG price. This is because this is a sample size of one, and this

¹ \$2.47 USD/diesel gallon equivalent (DGE) - Source: Clean Cities Alternative Fuel Price Report: [Clean Cities Alternative Fuel Price Report, January 2021 \(energy.gov\)](#). To convert to Canadian dollar per diesel litre (\$2.47 USD/DGE divided by 3.79 litres per gallon multiplied by \$1.2072 USD to Canadian exchange rate ([Daily Exchange Rates Lookup - Bank of Canada](#)))

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 4

1 public station primarily serves the light duty segment which is different than the heavy/medium
2 duty market that FEI serves, where customers look for a competitive rate against diesel to justify
3 their investments in CNG trucks and some enter into firm volume and term commitments to
4 support CNG station construction and operating costs. In contrast, the business model for this
5 one public fueling station is a typical service station model, where customers are not obligated
6 to have contracts for fueling service and can pull up to the station and purchase fuel on
7 demand. The competitor fuel for the light duty segment served by this public fueling station is
8 gasoline, not diesel. For these reasons, the price for CNG at this public access CNG station is
9 not an appropriate comparator to the price of CNG at the Langford Fueling Station.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 5

8.0 Reference: APPROVALS SOUGHT

**Exhibit B-1, Application, Table 3, p. 6; Exhibit B-2, BCUC IR 6.3;
Exhibit A2-2, Table 1, p. 3, Table 2, p. 6**

Third party fueling agreements

In response to BCUC IR 6.3, FEI stated:

Upon further reflection, FEI acknowledges that charging new third-party agreement customers a rate that differs from existing third-party agreement customers at the Langford Fueling Station that receive the same fueling service, as initially proposed in Section 3.3 of the Application, could be considered unduly discriminatory or unduly preferential.

As a result, FEI now proposes that FEI would apply the existing third-party agreement rates to any new third-party agreements at the Langford Fueling Station as that is a more fair and reasonable approach for third-party customers receiving the same fueling service from the same fueling station.

Further, in future cases where the anchor customer's fueling rates differ from existing third-party agreement rates, FEI will use the same approach by applying the existing third-party agreement rates to all new third-party agreements at that same fueling station. This approach is also consistent with that which was proposed by FEI for the Vedder Abbotsford Fueling Station amendment application, approved by BCUC Order G-87-17 and the recent new third-party agreement approved by Order G-23-20 for the same station.

8.1 Please discuss whether there are any differences between the fueling service provided to ColdStar and GFL and the fueling service provided to other customers at the Langford Fueling Station. If so, please describe the differences.

Response:

Practically speaking, the fueling service provided to all customers is operationally the same at the Langford Fueling Station. All customers have access to the same fast-fill dispensing equipment; however, there is a distinction between ColdStar and GFL (anchor tenants) and third-party customers as discussed in the response to BCUC IR2 8.2.

8.2 Please discuss whether recovering less per gigajoule (GJ) toward the capital and operating costs of the Langford Fueling Station from ColdStar and GFL compared to other customers could be considered unduly discriminatory or unduly preferential. Why or why not?

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 6

Response:

Anchor Tenant/Customer:

During the initial term of the GGRR station, FEI considers an anchor customer or tenant to be a customer(s) that commits to a minimum contractual term and fueling volume upon which the station rates are calculated to meet the minimum cost recovery requirements to meet the definition of a prescribed undertaking under the GGRR. These customers “anchor” the station and, as explained in BCUC IR2 8.3, take on the financial risk of paying for their take-or-pay minimum amount of fueling volume for the duration of the initial term of the station, and establish the “base rates” for the station once approved by the BCUC.

Once the station base rates are established on a permanent basis, and if the station allows fueling access to other users, all customers (other than the anchor customer(s)) who execute fueling services agreements to access refueling service at the station are considered by FEI to be third-party customers of the station. These third-party customers agreements use the same base rates as are approved on a permanent basis for the station at the time of entering into the agreement. The base rates include the dispensing rate (Capital Rate, O&M Rate and OH&M Rate) of the anchor tenant(s) at that the station plus, if applicable, other charges such as the Spot Charge applicable to customers who fuel at the station without a minimum volume commitment and the Short-term Charge applicable to customers that do not commit to a minimum three-year term.

Once the initial term of the GGRR station has completed, as is the case of the Langford Fueling Station, the GGRR is silent with respect to any cost recovery requirements to establish base rates for stations constructed as prescribed undertakings for renewal periods beyond the initial term. As such, in this context, FEI considers that anchor tenant/customers also includes customers that execute new fueling agreements with firm term and volume commitments at the time of establishing renewal base rates for a station, because these anchor customer agreement(s) form the basis of calculating the renewal base rates for the station. FEI notes that the anchor customer(s) for a renewal term may differ from the anchor customer(s) who took on the financial risk from the initial term. In the case of the Langford Fueling Station, FEI has calculated the proposed base rates based on the volume and term commitments in the agreements negotiated with ColdStar and GFL.

Third-Party Customer:

FEI defines third-party customers as all other customers (other than the anchor customer(s)) who enter into agreements for refueling service at the station after the effective date of base rates approved by the BCUC. Third-party customer agreements (which may or may not include term or volume commitments) are not used to calculate and establish the base rates at the station as the third party customers execute fueling agreements after the establishment of the base rates based on anchor tenant(s)’ committed volumes.

During the initial term of the GGRR station, third-party customers have been subject to the base rates approved for the anchor tenant rates at the station at the time of entering into the

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 7

1 agreement plus, if applicable, the Spot Charge and/or the Short-Term Charge. When the
2 renewal base rates are established as described above using new fueling agreements from
3 anchor customers, any existing third-party customer(s) with or without firm term and volume
4 commitments, who already have agreements for refueling at the station, would continue to pay
5 the rates established in their agreement until expiry of that agreement or until they enter into a
6 new or amending agreement with FEI to pay the renewed base rates as those for the anchor
7 tenant(s) (e.g., of GFL and Cold Star in the case of the Langford Fueling Station) and pay Short-
8 term and Spot Charges as may be applicable.

9 Third-party customers can take either long-term or short-term service. Third-party customers
10 who enter into new fueling services agreements with firm term commitments (minimum 3 years)
11 for use of the station would be considered long-term third-party customers and would pay the
12 prevailing station rates at the time of entering into the agreement plus the Spot Charge if they
13 did not also agree to a firm volume commitment. Any third-party customer who enters into an
14 agreement for use of the station without providing a firm term commitment of at least three
15 years would be considered a short-term third-party customer, and would pay the prevailing
16 station rates at the time of entering into the agreement and all applicable additional charges,
17 such as the Spot Charge and/or Short-term Charge.

18 ***Rates for Anchor Customers vs. Third-Party Customers:***

19 In the response to BCUC IR1 6.3, FEI had acknowledged that charging new third-party
20 customers a rate that differs from existing third-party customers at the Langford Fueling Station
21 for receiving essentially the same fueling service could be considered unduly discriminatory or
22 unduly preferential. FEI also considers that its proposal in the response to BCUC IR1 6.3, to
23 apply existing third-party agreement rates to new third-party agreements could also be
24 considered unduly discriminatory or unduly preferential for the same refueling service. Upon
25 further consideration, FEI believes that the most fair, reasonable, and balanced approach is to
26 apply the “base dispensing rate” approved by the BCUC for ColdStar and GFL, plus Spot and/or
27 Short-term charges as applicable, on a permanent basis for the station in effect at the time the
28 third-party agreement is entered into. That third-party agreement and the rates therein would
29 remain in place until expiry of that agreement, unless subsequently amended or replaced by a
30 new agreement.

31 To reiterate, once the BCUC approves the anchor tenant rates for ColdStar and GFL on a
32 permanent basis for the Langford Fueling Station, that would establish the base rates for the
33 station as of the effective date for the five-year renewal term. FEI proposes that those base
34 rates would apply to all new third-party agreements executed after that effective date. Under
35 this approach, the base rates FEI would be charging new third-party customers would be the
36 same as ColdStar and GFL (the anchor customers) and FEI would not be recovering less per
37 GJ toward the capital and operating costs of the Langford Fueling Station from ColdStar and
38 GFL (the anchor customers) compared to other new third-party customers

39 Further, existing third-party agreements with customers at the station previously approved by
40 the BCUC on a permanent basis would remain at their existing rates for the remainder of the
41 term for these contracts, unless subsequently amended or replaced by a new agreement.
42 Recovery of less or more per GJ in the rates from existing third-party agreements that were

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 8

1 established under different permanent base rates approved for the station at the time of
2 executing the agreement, should not be considered to be unduly discriminatory or unduly
3 preferential by the BCUC. Such differences in rates are merely a result of timing differences.

4 As stated in the response to BCUC IR2 8.1, there is no operational difference in fueling service
5 between the anchor tenants and third-party customers at the Langford Fueling Station, in that
6 the customers are accessing the same fueling equipment at the station to obtain CNG refueling
7 service.

8 ***Basis of the Proposed Rates:***

9 The rates proposed in the Application are based on a negotiated price of CNG at the Langford
10 Fueling Station that was reasonable and acceptable both to FEI and to ColdStar and GFL. The
11 fact that the rate was the product of negotiation between sophisticated parties in a competitive
12 environment should provide comfort to the BCUC that the rate is just and reasonable. FEI's
13 CNG service offering for medium and heavy duty transportation customers is facing active
14 "competition" from available alternate fuel options, primarily diesel fuel, which exerts competitive
15 pressure upon the rate. The customer must consider the price and any perceived risks from
16 using CNG as compared to the alternative of using diesel fuel vehicles with which they have
17 more experience. In its negotiations with Cold Star and GFL, FEI has sought to maximize its
18 cost recovery, while ColdStar and GFL have sought a rate that is sufficiently competitive to
19 diesel to offset the higher cost and perceived risks associated with natural gas vehicles. The
20 parties have negotiated and reached a rate that is acceptable to all. FEI is confident that the
21 proposed rate maximizes the potential cost recovery from the station, while also being
22 reasonable for ColdStar and GFL so that they will continue to use the station and invest in
23 natural gas vehicles.

24 The BCUC has previously approved market competitive rates in situations where competitive
25 forces are present in the regulated market. A relatively common exception to the traditional full
26 cost of service rate model is the allowance for by-pass rates, which are negotiated and do not
27 specifically account for the entire cost of service delivery to the particular industrial customer.
28 The BCUC summarized the rationale for a negotiated bypass rate as follows:²

29 The Commission Panel considering the Inland Rate Design Application has
30 determined that negotiated rates for industrial customers are desirable for those
31 customers with a bypass option, with certain stipulations that are explained in this
32 letter. Therefore, the Commission wishes to provide you with its views in the
33 absence of complete reasons on the Rate Design Hearing to allow suitable
34 arrangement to be made for the upcoming gas year.

35 As you are aware, Sections 64 through 66 of the Utilities Commission Act ("The
36 Act") require that the rates Inland charges for utility service be just, reasonable
37 and not unduly discriminatory. However, just and reasonable rates must reflect

² Inland Natural Gas – Rate Design 1987 Rate Design Application, [Order No. G-80-87, December 11, 1987](#) - Appendix B: *Correspondence and Orders*, p. 3.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 9

1 actual circumstances. One of these circumstances occurs where, through the
2 existence of a competitive alternative, an existing customer may obtain its energy
3 needs at a lower price than the postage-stamp rate available on the Inland
4 system. The customer then has an incentive to leave Inland's system. In this
5 circumstance, the Commission believes that it is appropriate for that customer to
6 be able to obtain service at a lower rate to keep it on the system so long as it can
7 be established that, for the duration of that customer's stay on Inland's system,
8 the customer will at least be covering Inland's variable costs of serving that
9 customer and making a contribution towards the fixed costs of the system. The
10 Commission believes that such competitive rates are not unduly discriminatory or
11 preferential.

12 A synthesis of all the evidence before the Rate Design Panel makes it clear that
13 government policy makes the option of bypass a realistic possibility for some
14 major interested customers. The Commission accordingly concludes that this
15 bypass option must be viewed as a competitive alternative to service at Inland's
16 existing rates and that lower rates should be available to certain customers in
17 order to avoid their leaving the system.

18 The Commission further believes that the contribution a customer with a
19 competitive alternative makes towards Inland's overall costs can be maximized if
20 individual negotiations take place between Inland and these customers, rather
21 than the Commission attempting to pre-set rates which will keep these
22 customers on the system. Therefore, the Commission endorses the negotiation
23 process which has taken place with PGPP and Husky, and approves of Inland
24 negotiating with other customers who have competitive alternatives available to
25 them.

26 Obviously, the approval of such a process places a great deal of responsibility on
27 Inland to negotiate as prudently as possible to ensure that a customer is not kept
28 on the system at rates which are subsidized by other customers and that the
29 contribution from that customer is maximized. The Commission's role in
30 reviewing the negotiated rates is to ensure that Inland has met this obligation to
31 its other customers. ...

32 Applying the above to the present application, FEI has prudently negotiated rates for service at
33 the Langford Fueling Station to maximize the contribution from Coldstar and GFL while also
34 ensuring tha the rate is competitive enough with diesel fuel to ensure the customers continue to
35 use the station.

36 The BCUC has also approved competitive rates for service on Vancouver Island when natural
37 gas service was introduced in the 1990s following the construction of the Vancouver Island
38 Natural Gas Pipeline. In that circumstance, natural gas was in competition with lower cost fuel

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 10

sources such as heating oil. The natural gas rates were set by the BCUC to be competitive with the alternative fuels.

A more recent example is in the context of FEI's Biomethane Program. FEI's Biomethane Program is voluntary and customers must be willing to pay a premium over conventional natural gas. As such, FEI's biomethane service is essentially in competition with FEI's own conventional natural gas service. Based on the principle of maximizing cost recover, the BCUC approved the biomethane rates at a premium over conventional natural gas that was below the full cost of service. It was recognized that charging the full cost of service was resulting in too few customers and would not result in full cost recovery. Lowering the premium to attract customers was proven to attract more customers and has increased cost recovery.

As with the supply of biomethane, FEI's Langford Fueling Station is a prescribed undertaking. As such, FEI is essentially guaranteed cost recovery pursuant to section 18 of the *Clean Energy Act*. In this context, it is reasonable and appropriate for FEI to seek to maximize recovery of station costs from users of the station by negotiating competitive rates that ensures maximum cost recovery over a set term. As in the case of bypass rates, rates on Vancouver Island in the past, and FEI's current biomethane rates, the BCUC can and should approve FEI's proposed rates which are market competitive and will maximize cost recovery. The BCUC should take comfort in the fact that the rates were the product of a negotiation between sophisticated parties in a competitive environment and that FEI has prudently sought to maximize cost recovery over the set term.

8.3 Please discuss whether ColdStar and GFL take on more risks compared to other customers by committing to pay for a minimum annual quantity and a longer-term contract.

8.3.1 If so, please discuss whether the Spot Charge and Short-Term Charge adequately compensate for these risks. Why or why not?

Response:

ColdStar and GFL are subject to more risk as compared to third-party customers who have committed to a term shorter than five years and a lower volume commitment, or who take spot service. Both ColdStar and GFL have committed to a five-year term and an annual combined fueling volume of 21,000 GJs. Third-party customers are not required to commit to any amount of fuel or term. If ColdStar or GFL decide to terminate their agreement prior to the expiry of their term, they are required to provide a payment equal to their outstanding volume commitment multiplied by the dispensing rate (Capital Rate plus O&M Rate plus OH&M Rate) for the balance of their term. This ensures that FEI obtains the required cost recovery over the five-year term as established in the cost recovery financial model. By executing long-term agreements,

<p style="text-align: center;">FortisBC Energy Inc. (FEI or the Company)</p> <p style="text-align: center;">Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)</p>	<p>Submission Date: June 9, 2021</p>
<p style="text-align: center;">Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2</p>	<p style="text-align: center;">Page 11</p>

ColdStar and GFL take on the financial risk of paying for their committed amount of fuel over the term regardless of external unforeseen factors or events that may impact their business over that time frame. Many third-party customers mitigate this risk by executing short-term spot agreements with no volume or term commitment to minimize their financial risk. These customers are subject to additional charges, including the Spot Charge of \$1 per GJ (applicable to customers without a minimum volume commitment) and the Short-term Charge of \$1 per GJ (applicable to customers committing to less than a three-year term). These additional charges adequately increases the effective rate for these third-party customers who are unwilling to take the financial risk of committing to minimum volumes and term, paying a higher delivered rate for the short-term flexibility than customers who provide minimum volume and term commitments. Revenue recovered from the Spot Charge and Short-Term Charge all contribute to additional cost recovery for the station beyond the base dispensing rates approved for the station.

In the transportation business, transportation fuel cost accounts for a significant component of a customer's overall operating cost, so the incremental Short Term Charge and Spot Charge is impactful and acts as an incentive for customers to make longer-term firm commitments if their business circumstances allow. Further, a lower fuel price could have a significant impact on a fleet owner's ability to secure future business and contracts such as municipal contracts that require service bids. The Spot Charge and Short-Term Charge, totaling \$2/GJ or \$0.08/DLE would affect a third-party customer's ability to provide the most competitive price offering in responding to requests for proposal such as municipal refuse collection. Long-term volume committed customers can avoid paying these charges and, therefore, improve their operating margins and lower their cost to serve their customers.

8.4 Please discuss how FEI differentiates between an anchor customer and a third-party customer. As part of the response, please provide FEI's definition of an "anchor customer" and a "third-party customer" and describe any differences in fueling service provided to each type of customer.

8.4.1 Based on the response in the preceding IR, please explain whether GFL should be considered an anchor customer or a third-party customer at the Langford Fueling Station. If GFL is considered a third-party customer, please explain why it should be applied the same rates as ColdStar.

Response:

Please refer to the response to BCUC IR2 8.2 for a discussion regarding anchor customers and third-party customers. FEI considers GFL to be an anchor tenant. As discussed in BCUC IR2 8.2, for GGRR stations that have completed the initial term, FEI considers the anchor customers to be those customers with new fueling services agreements based on commitments to a long-term (minimum three years) and a minimum fuel volume, which are used to establish

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 12

the base rates for the station over that term. In the case of the Langford Fueling Station, this includes Coldstar and GFL.

8.5 Aside from ColdStar and GFL, please confirm, or explain otherwise, that all existing fueling customers at the Langford Fueling Station are considered third-party customers.

8.5.1 If confirmed, please explain why all the other existing fueling customers are considered third-party customers.

8.5.2 If not confirmed, please identify the other existing fueling customers that are considered anchor customers and explain why they are considered anchor customers. As part of the response, please discuss whether these anchor customers would be applied the same rates proposed for ColdStar and GFL if and when their respective agreements are renewed. Why or why not?

Response:

Confirmed. As discussed in the responses to BCUC IR2 8.2 and 8.4, all other existing fueling customers at the Langford Fueling Station are considered third-party customers. McRae's is the only other existing third-party customer at the Langford Fueling Station who has an agreement with a long-term and volume commitment. However, McRae's fueling agreement is not up for renewal. Please refer to the response to BCUC IR2 8.2 where FEI confirms that all new third-party customer agreements, including amendments or renewals to existing agreements will use the base rates in effect for the station at the time the agreement is entered into (base rates approved by the BCUC on a permanent basis for the station) which would be the same rates applicable to the anchor customers, ColdStar and GFL .

8.6 Please discuss whether there are differing terms and conditions contained in third-party agreements of different customers at the Langford Fueling Station. In other words, do all third-party agreements at the Langford Fueling Station contain the same terms and conditions? As part of the response, please provide examples of any differences.

Response:

Over the years, there have been improvements to the language for FEI's agreements, so there can be variances to the drafting of certain clauses; however, such occurrences are not to the operation of the terms but rather improvements to drafting over time to provide more clarity. For

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 13

example Part II, Section A, Part 4 (c) was added in the more recently executed agreements with Emterra and Waste Management, compared to other existing third-party agreements at the Langford Fueling Station. Part II, Section A, Part 4 (c) of the Emterra and Waste Management agreements adds clarification to situations when the dispensing rate would be adjusted due to timing issues as described below. Part II, Section A, Part 4, (c) of the Emterra and Waste Management Agreement states:

(c) FEI may adjust the Dispensing Rate in Part 1 by the above Annual Rate Escalation if:

(i) this Agreement is signed by the Customer prior to the Rate Change Date but the Commencement Date occurs after the Rate Change Date; or

(ii) the Customer signs this Agreement after the Rate Change Date but those rates have not yet been escalated by FEI due to the unavailability of the Consumer Price Index as it has not yet been published by Statistics Canada for the previous twelve-month period.

The following table prepared by BCUC staff compares the Capital Rate and Operations and Maintenance (O&M) Rate proposed for ColdStar and GFL with the rates proposed for third-party customers for fueling service at the Langford Fueling Station in 2021.

BCUC Staff Table 1: Comparison of Proposed 2021 Rates at the Langford Fueling Station for ColdStar, GFL and Third-Party Customers³

Per GJ	ColdStar and GFL	Third Parties	Difference
Capital Rate	\$4.420	\$8.479	(\$4.059)
O&M Rate	\$2.286	\$2.995	(\$0.709)
Total	\$6.706	\$11.474	(\$4.768)

The following table prepared by BCUC staff compares the Capital Rate and the O&M Rate for Vedder Transport Ltd. (i.e. the anchor customer at the Vedder Abbotsford Fueling Station) and third-party customers for fueling service at the Vedder Abbotsford Fueling Station in 2019.

³ Exhibit B-1, Application, Table 3, p. 6.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 14

BCUC Staff Table 2: Comparison of 2019 Rates at the Vedder Abbotsford Fueling station for Vedder Transport Ltd. and Third-Party Customers

Per GJ	Vedder Transport Ltd. ⁴	Third Parties ⁵	Difference
Capital Rate	\$2.806	\$2.005	\$0.801
O&M Rate	\$0.638	\$0.638	\$0.000
Total	\$3.444	\$2.643	\$0.801

8.7 Given that the difference between the rates applied to the anchor customer(s) and the third-party customers at the Langford Fueling Station are greater than the difference at the Vedder Abbotsford Fueling Station (i.e. \$4.768/GJ versus \$0.801/GJ), please discuss whether the quantum of the difference should be a consideration of whether or not the proposed rates are unduly discriminatory or unduly preferential. In other words, could a \$4.768/GJ (or 71.1 percent)⁶ difference be considered unduly discriminatory or unduly preferential while a \$0.801/GJ (or 23.3 percent)⁷ difference would not be?

Response:

No, the quantum of the difference between anchor and third-party rates at other stations should not be a consideration of whether or not the proposed rates are unduly discriminatory or unduly preferential. The rates at each fueling station constructed under the GGRR are a factor of the anchor tenant volume and term commitment, and the capital and operating costs for the station which are driven by the station design and required configuration (unique to each station) at the time the rates for that station are set. In addition to each fueling station's unique design, stations are located in different geographic areas, provide different fuel types (CNG or liquefied natural gas) and serve different customer segments. Consequently, the quantum of the difference between rates at other stations reasonably varies from station to station based on the particular factors at play at each station. Therefore, the difference between rates, whether anchor customer or third-party customer cannot reasonably be compared from station to station. Further, as discussed in the response to BCUC IR2 8.2, differences in the rates, whether between the anchor customer and third-party customers or among third-party customers at the same station can occur based on timing of execution of agreements and the effective permanent base rates approved for the station at that time. Such differences are merely a result of timing differences and should not be considered to be unduly discriminatory or unduly preferential by the BCUC.

⁴ Exhibit A2-2, Table 1, p. 3.

⁵ Exhibit A2-2, Table 2, p. 6.

⁶ 71.1% = \$4.768/\$6.706 x 100.

⁷ 23.3% = \$0.801/\$3.444 x 100.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 15

9.0 Reference: PROPOSED RATES

Exhibit B-2, BCUC IR 3.1 and 3.2, Attachment 3.2, Schedule 7 and 8

Accumulated Depreciation

In response to BCUC IR 3.1, FEI provided a reconciliation of the accumulated depreciation between the actual accumulated depreciation in the Application and the forecast accumulated depreciation in the ColdStar-Langford 2013 Application. Table 2 of that response is reproduced in part below.

Line	Particulars	Reference	2014	2015	2016	2017	2018	2019	2020
1	<u>Actual-Accumulated Depreciation</u>								
15	Accumulated Depreciation, Ending								
16	CNG Dispensing Equipment	Line 4 + Line 10	(47)	(55)	(142)	(190)	(239)	(287)	(335)
17	Foundation	Line 5 + Line 11	(7)	(34)	(21)	(28)	(36)	(43)	(50)
18	NG Dehydrator	Line 6 + Line 12	(3)	(5)	(8)	(11)	(13)	(16)	(19)
19	Total Accumulated Depreciation, Ending	Sum of Lines 16 through 18	(57)	(134)	(172)	(230)	(287)	(345)	(403)

In Schedule 8 of Attachment 3.2, FEI provided \$345,000 as the total accumulated depreciation at the beginning of 2021 (i.e. balance at the ending of 2020).

Schedule 8 also shows \$1.098 million as the total accumulated depreciation at the end of 2033 (line 25). Schedule 7 in the same attachment shows \$1.158 million total gross plant in service at the end of 2033 (line 25). BCUC staff calculate a remaining net book value of \$0.060 million at the end of 2033.

9.1 Please confirm, or explain otherwise, that the total accumulated depreciation at the beginning of 2021 should be \$403,000.

9.1.1 If confirmed, please reproduce the financial schedules provided in Attachment 3.2 with the corrected accumulated amortization and provide the recalculated annual cost of service. Please also provide a working Excel spreadsheet of the financial schedules.

Response:

Confirmed that the total accumulated depreciation at the beginning of 2021 should be \$403,000. FEI clarifies that Schedule 8 of Attachment 3.2 included in response to BCUC IR1 3.2 are the financial schedules used to calculate the proposed rates shown in the ColdStar and GFL Fueling Services Agreements, but with the analysis period shortened to 13 years which coincides with the expected remaining life of the station. This same Schedule 8 does not reflect the revised property tax and the correct opening accumulated depreciation for 2021 as discussed in response to BCUC IR1 3.1. As such, the aforementioned Schedule 8 displays a 2021 opening balance for accumulated depreciation of \$345,000, rather than \$403,000.

FEI has attached updated financial schedules to this response which include the revised property tax and the 2021 opening accumulated depreciation discussed in response to BCUC IR1 3.1. It can be seen in Schedule 8 of this attachment (Attachment 9.1A) that the opening balance of the 2021 accumulated depreciation is equal to \$403,000. Please refer to Attachment

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 16

9.1.A for the financial schedules and Attachment 9.1B for a Confidential copy of the updated excel file.

FEI is filing the live financial model provided in Attachment 9.1B on a confidential basis pursuant to section 18 of the BCUC's Rules of Practice and Procedure regarding confidential documents as set out in Order G-15-19, for the reasons described in the cover letter to the Application.

9.1.1.1 Please provide the percentage of cost recovery that the rates proposed in the ColdStar and GFL Fueling Agreements would recover based on the annual cost of service calculated in the preceding IR.

Response:

The proposed Coldstar and GFL fueling rates (i.e., \$4.420 per GJ in 2021) would recover 82 percent of the updated cost of service calculated in Attachment 9.1A provided in the response to BCUC IR2 9.1 over the 5-year contract term. Please see Line 12 in the below table for the calculated cost recovery percentage.

Line	Particular	Reference	2021	2022	2023	2024	2025
1	Total COS	Attachment 9.1, Schedule 10, Line 1	179,233	179,966	179,731	178,946	177,725
2	PV Total COS	(Line 1)/(1 + Line 14)^Yr	169,937	161,783	153,192	144,612	136,176
3	Sum of PV Total COS	Sum of Line 2	765,699				
4							
5	Volume with Commitment (GJ)	Appendix C, Schedule 10, Line 5	21,000	21,000	21,000	21,000	21,000
6	Proposed Capital Rate (\$/GJ)	Appendix C, Schedule 10, Line 74	4.420	4.508	4.598	4.690	4.784
7	Proposed O&M Rate (\$/GJ)	Appendix C, Schedule 10, Line 75	2.286	2.332	2.379	2.427	2.476
8	Proposed Total Rate (\$/GJ)	Sum of Line 6 to Line 7	6.706	6.840	6.977	7.117	7.260
9	Revenue at Committed Volume (\$)	(Line 5 x Line 8)	140,826	143,640	146,517	149,457	152,460
10	PV of Revenue at Committed (\$)	(Line 9)/(1 + Line 14)^Yr	133,522	129,127	124,882	120,781	116,818
11	Sum of PV Revenue at Committed (\$)	Sum of Line 10	625,130				
12	% Recovery w/ Committed Volume	Line 11 / Line 3	82%				
13							
14	Annual Discount Rate (After-Tax WACC)		5.47%	5.47%	5.47%	5.47%	5.47%

9.1.2 If not confirmed, please explain why there should be a net book value of \$0.060 million remaining at the end of the Langford Fueling Station's useful life (i.e. 2033).

9.1.2.1 Please recalculate and provide the annual cost of service based on the recovery of the entire net book value of the Langford Fueling Station by the end of fiscal 2033 (i.e. increase the annual depreciation amount starting in 2021 such that there would be a zero net book value at the end of 2033).

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 17

As part of the response please also provide the percentage of cost recovery that the rates proposed in the ColdStar and GFL Fueling Agreements would recover.

Response:

As discussed in BCUC IR2 9.1, Schedule 8 of Attachment 3.2 included in the response to BCUC IR1 3.2 does not reflect the correct opening accumulated depreciation discussed in the response to BCUC IR1 3.1. Therefore, the net book value of \$0.060 million in 2033 from the financial schedules of Attachment 3.2 is incorrect.

In the revised financial schedules included in Attachment 9.1A provided in response to BCUC IR2 9.1, the forecast net book value of the Langford Fueling Station at the end of its useful life (2033) is \$1,948. The reason for the \$1,948 residual net book value is because there were some small additional capital expenditures in years 2015 and 2017, as discussed in the response to BCUC IR1 3.1, which are also depreciating at the approved depreciation rates of 5 percent per year. If FEI increased the deprecation to reduce the net book value to zero by 2033, FEI would still recover approximately 82 percent of the forecasted cost of service with the proposed rates.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 18

10.0 Reference: PROPOSED RATES

Exhibit B-1, Table 2, p. 5; Exhibit B-2, BCUC IR 2.4

Cost of service model

In response to BCUC IR 2.4, FEI expanded Table 2 in the Application to include the volume of the five other customers of the station over the next 20 years.

10.1 Please explain why sustainment capital is not required during the initial term of the ColdStar and GFL agreements. As part of the explanation, please discuss when sustainment capital would be expected for the station and provide an estimate of the amount. Please provide any assumptions used.

Response:

It is FEI's experience that regular repairs and maintenance included in O&M costs will ensure that the station remains functional throughout its useful life. Therefore, FEI does not foresee any sustainment capital required throughout the useful life of this station.

10.2 Please reproduce Table 2 in the Application for each of the scenarios listed below. Please provide any assumptions used and include a working Excel spreadsheet for each of the scenarios.

- i) Inclusion of the volume for the five other customers of the station under the assumption that these customers would continue consuming 5,000 GJ each year on a go forward basis (i.e. add 5,000 to lines 4 and 13);
- ii) Expand the table to include the years up to the station's expected useful life (i.e. from 2021 to 2033) and include the volume for the five other customers of the station under the assumption that these customers would continue consuming 5,000 GJ each year on a go forward basis (i.e. add 5,000 to lines 4 and 13); and
- iii) Same scenario as scenario (ii) above, but with the inclusion of sustainment capital based on the timing and amount provided in response to IR 10.1.

Response:

FEI has reproduced Table 2 in the Application for each of the scenarios as requested. FEI notes that the purpose of Table 2 in the Application was to demonstrate that the recoveries from the committed volumes by ColdStar and GFL at the proposed "lower" Capital Rate will continue to be better than no committed volumes by ColdStar and GFL at the original "higher" Capital Rate. The tables below show that even if the 5,000 GJs of third-party volumes are included in

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 19

1 this analysis, the recoveries with committed volumes from ColdStar and GFL at the proposed
2 “lower” rates are still better both in the short term (i.e., 107 percent vs. 92 percent for 5 years)
3 and long term (i.e. 118 percent vs. 69 percent for 13 years until the expected life of the assets).
4 FEI also notes that in both the short-term and long-term analysis, the recoveries with committed
5 volumes are over 100 percent; thus, FEI’s non-bypass customers will benefit from a credit
6 through their delivery rates. In comparison, if there are no committed volumes from ColdStar
7 and GFL but with a higher Capital Rate, both the short-term and long-term recoveries are less
8 than 100 percent resulting in a deficiency to be recovered from FEI’s non-bypass customers.

9 The following tables included the following assumptions:

- 10 • The cost of service of the station (Line 1 of the tables) is based on the updated cost of
11 service provided in the response to BCUC IR2 9.1 Attachment 9.1A, which includes the
12 revised property tax and correction of the 2021 opening balance of accumulated
13 depreciation;
- 14 • Capital and O&M Rates escalate by 2 percent each year. For the case of volume with
15 commitments from ColdStar and GFL, the 2021 Capital and O&M Rates are the rates
16 as proposed in the Application (Table 3 of the Application). For the case of volume
17 without commitments from ColdStar and GFL, the 2021 Capital and O&M Rates are the
18 current 2020 rates (Table 3 of the Application), escalated to 2021 rates based on 2
19 percent for capital, and 0.8 percent CPI (January to December 2020) for O&M,
20 respectively;
- 21 • For the calculation of recovery with committed volumes (Line 16 of the tables), the
22 commitments from ColdStar and GFL (i.e., 21,000 GJs) remains constant over the
23 length of the analysis (Line 5 of the tables);
- 24 • For the calculation of recovery with committed volumes (Line 16 of the Tables), FEI
25 assumed the 5,000 GJs of volume from third-party customers will be on the proposed
26 Capital Rate (Line 7 of the tables) over the length of the analysis instead of the Capital
27 Rate from their existing agreements. This is a conservative assumption since the
28 Capital Rate from their existing agreements is higher than the proposed Capital Rate,
29 thus the recovery with committed volumes (Line 16 of the tables) would have been
30 higher using the existing agreement rates; and
- 31 • Spot and Short Term Charges are applied to the 5,000 GJs of third-party volume for
32 both calculations for the recovery with committed volumes (i.e., Line 16) and recovery
33 with Spot volumes (i.e., Line 27).

34 FEI notes that it did not complete the analysis requested in scenario iii) above as FEI is not
35 expecting sustainment capital over the remaining life of the assets based on the response to
36 BCUC IR2 10.1.

37 Please refer to Attachment 10.2 for a copy of the fully functional Excel spreadsheet containing
38 the updated Table 2 for scenarios i) and ii).

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 20

1 BCUC Scenario i)

Line	Particular	Reference	2021	2022	2023	2024	2025
1	Total COS	BCUC IR2 9.1 Attachment 9.1A, Schedule 10, Line 1	179,233	179,966	179,731	178,946	177,725
2	PV Total COS	(Line 1)/(1 + Line 29)^Yr	169,937	161,783	153,192	144,612	136,176
3	Sum of PV Total COS	Sum of Line 2	765,699				
4							
5	Volume with Commitment (GJ)	Appendix C, Schedule 10, Line 5	21,000	21,000	21,000	21,000	21,000
6	Third party Volume (GJ)	Estimated Third Party Customers	5,000	5,000	5,000	5,000	5,000
7	Proposed Capital Rate (\$/GJ)	Appendix C, Schedule 10, Line 74	4.420	4.508	4.598	4.690	4.784
8	Proposed O&M Rate (\$/GJ)	Appendix C, Schedule 10, Line 75	2.286	2.332	2.379	2.427	2.476
9	Proposed Total Rate (\$/GJ)	Sum of Line 7 to Line 8	6.706	6.840	6.977	7.117	7.260
10	Spot and Short Charge (\$/GJ)		2.000	2.000	2.000	2.000	2.000
11	Revenue at Committed Volume (\$)	Line 5 x Line 9	140,826	143,640	146,517	149,457	152,460
12	Revenue at Third Party Volume (\$)	Line 6 x (Line 9 + Line 10)	43,530	44,200	44,885	45,585	46,300
13	Total Revenue (\$)	Line 11 + Line 12	184,356	187,840	191,402	195,042	198,760
14	PV of Revenue at Committed (\$)	(Line 11)/(1 + Line 29)^Yr	174,795	168,861	163,139	157,620	152,294
15	Sum of PV Revenue at Committed (\$)	Sum of Line 14	816,708				
16	% Recovery w/ Committed Volume	Line 15 / Line 3	107%				
17							
18	Volume at Spot (GJ)	GFL and Coldstar	15,000	10,000	5,000	2,000	-
19	Third party Volume (GJ)	Estimated Third Party Customers	5,000	5,000	5,000	5,000	5,000
20	Capital Rate (\$/GJ)	Current Capital Rate + 2% Escalation	8.649	8.822	8.998	9.178	9.362
21	O&M Rate (\$/GJ)	Current O&M Rate + 0.8% CPI (Jan to Dec 2020)	3.019	3.079	3.141	3.204	3.268
22	Spot and Short Charge (\$/GJ)		2.000	2.000	2.000	2.000	2.000
23	Spot Total Rate (\$/GJ)	Sum of Line 20 to Line 22	13.668	13.901	14.139	14.382	14.630
24	Revenue at Spot Volume (\$)	(Line 18 x Line 23) + (Line 19 x Line 23)	273,360	208,515	141,390	100,674	73,150
25	PV of Revenue at Spot (\$)	(Line 24)/(1 + Line 29)^Yr	259,182	187,447	120,512	81,358	56,049
26	Sum of PV Revenue at Spot (\$)	Sum of Line 25	704,548				
27	% Recovery w/ Spot Volume	Line 26 / Line 3	92%				
28							
29	Annual Discount Rate (After-Tax WACC)		5.47%	5.47%	5.47%	5.47%	5.47%

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 21

1 BCUC Scenario ii)

Line	Particular	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Total COS	BCUC IR2 9.1 Attachment 9.1A, Schedule 10, Line 1	179,233	179,966	179,731	178,946	177,725	174,216	172,493	170,560	168,466	166,248	163,938	161,559	159,132
2	PV Total COS	(Line 1)/(1 + Line 29)^Yr	169,937	161,783	153,192	144,612	136,176	126,564	118,813	111,389	104,315	97,603	91,255	85,266	79,630
3	Sum of PV Total COS	Sum of Line 2	1,580,535												
4															
5	Volume with Commitment (GJ)	Appendix C, Schedule 10, Line 5	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000
6	Third party Volume (GJ)	Estimated Third Party Customers	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
7	Proposed Capital Rate (\$/GJ)	Appendix C, Schedule 10, Line 74	4.420	4.508	4.598	4.690	4.784	4.880	4.978	5.078	5.180	5.284	5.390	5.498	5.608
8	Proposed O&M Rate (\$/GJ)	Appendix C, Schedule 10, Line 75	2.286	2.332	2.379	2.427	2.476	2.526	2.577	2.629	2.682	2.736	2.791	2.847	2.904
9	Proposed Total Rate (\$/GJ)	Sum of Line 7 to Line 8	6.706	6.840	6.977	7.117	7.260	7.406	7.555	7.707	7.862	8.020	8.181	8.345	8.512
10	Spot and Short Charge (\$/GJ)		2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
11	Revenue at Committed Volume (\$)	Line 5 x Line 9	140,826	143,640	146,517	149,457	152,460	155,526	158,655	161,847	165,102	168,420	171,801	175,245	178,752
12	Revenue at Third Party Volume (\$)	Line 6 x (Line 9 + Line 10)	43,530	44,200	44,885	45,585	46,300	47,030	47,775	48,535	49,310	50,100	50,905	51,725	52,560
13	Total Revenue (\$)	Line 11 + Line 12	184,356	187,840	191,402	195,042	198,760	202,556	206,430	210,382	214,412	218,520	222,706	226,970	231,312
14	PV of Revenue at Committed (\$)	(Line 11)/(1 + Line 29)^Yr	174,795	168,861	163,139	157,620	152,294	147,153	142,189	137,396	132,765	128,291	123,968	119,789	115,749
15	Sum of PV Revenue at Committed (\$)	Sum of Line 14	1,864,008												
16	% Recovery w/ Committed Volume	Line 15 / Line 3	118%												
17															
18	Volume at Spot (GJ)	GFL and Coldstar	15,000	10,000	5,000	2,000	-	-	-	-	-	-	-	-	-
19	Third party Volume (GJ)	Estimated Third Party Customers	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
20	Capital Rate (\$/GJ)	Current Capital Rate + 2% Escalation	8.649	8.822	8.998	9.178	9.362	9.549	9.740	9.935	10.134	10.337	10.544	10.755	10.970
21	O&M Rate (\$/GJ)	Current O&M Rate + 0.8% CPI (Jan to Dec 2020)	3.019	3.079	3.141	3.204	3.268	3.333	3.400	3.468	3.537	3.608	3.680	3.754	3.829
22	Spot and Short Charge (\$/GJ)		2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
23	Spot Total Rate (\$/GJ)	Sum of Line 20 to Line 22	13.668	13.901	14.139	14.382	14.630	14.882	15.140	15.403	15.671	15.945	16.224	16.509	16.799
24	Revenue at Spot Volume (\$)	(Line 18 x Line 23) + (Line 19 x Line 23)	273,360	208,515	141,390	100,674	73,150	74,410	75,700	77,015	78,355	79,725	81,120	82,545	83,995
25	PV of Revenue at Spot (\$)	(Line 24)/(1 + Line 29)^Yr	259,182	187,447	120,512	81,358	56,049	54,057	52,142	50,297	48,518	46,806	45,155	43,565	42,031
26	Sum of PV Revenue at Spot (\$)	Sum of Line 25	1,087,120												
27	% Recovery w/ Spot Volume	Line 26 / Line 3	69%												
28															
29	Annual Discount Rate (After-Tax WACC)		5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 22

10.3 Please provide the Capital Rate and the O&M Rate necessary to recover 100 percent of the forecast cost of service during the initial term of the ColdStar and GFL Agreements when the expected volume from the third party customers are included (i.e. 21,000 GJ collectively from ColdStar and GFL plus 5,000 GJ from the five other customers of the station).

Response:

While including the volumes from all other third-party customers could, in theory, lower the Capital Rates, they are not committed volumes and including them would result in under recovery if these volumes do not materialize. ColdStar and GFL are both committed volumes over the term of the agreement and, therefore, ensure a minimum recovery of costs up to their committed volumes.

FEI provides in the table below recalculated Capital and O&M rates for a 100 percent recovery of the cost of service considering volumes from both the anchor tenants (21,000 GJs from ColdStar and GFL) and the existing third-party customers (5,000 GJs). To calculate the rates in the table below, FEI used the updated Financial Schedules included in Attachment 9.1A provided in response to BCUC IR2 9.1 and included the third party volume of 5,000 GJs from the other five third-party customers of the station.

Line	Particular	Reference	2021	2022	2023	2024	2025
1	Capital Rate (\$/GJ)		4.327	4.414	4.502	4.592	4.684
2	O&M Rate (\$/GJ)		2.308	2.354	2.401	2.449	2.498
3							
4	Proposed Capital Rate (\$/GJ)		4.420	4.508	4.598	4.690	4.784
5	Proposed O&M Rate (\$/GJ)		2.286	2.332	2.379	2.427	2.476
6	Proposed Total Rate (\$/GJ)		6.706	6.840	6.977	7.117	7.260
7							
8	Capital Rate Reduction	Line 1 - Line 4	(0.093)	(0.094)	(0.096)	(0.098)	(0.100)
9	O&M Rate Reduction	Line 2 - Line 5	0.022	0.022	0.022	0.022	0.022

Including the third-party customers in the rate design for a recovery of 100 percent forecast cost of service as requested for this scenario will reduce the Capital Rate (due to more volume), while slightly increasing the O&M Rate (due to the 100 percent recovery of O&M). Please refer to Lines 8 and 9 in the above table for the resulting Capital Rate and O&M Rate changes. FEI notes that under this scenario both the Capital and O&M Rates will have to be applied to all customers fueling at the Langford Fueling Station (i.e. ColdStar, GFL, and all other third-party customers) since all volumes were used to determine the rates. FEI also notes that the Spot and/or Short-term Charges would continue to be applied to the third-party customers depending on their individual volume commitment and length of their agreement.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 23

11.0 Reference: PROPOSED RATES

**Exhibit B-1, p. 3; Exhibit B-2, BCUC IR 2.2; GGRR, Sections 1, 2(2);
Direction No. 5 to the BCUC⁸, Sections 3(a) and (b); Clean Energy
Act (CEA), Section 18**

Prescribed Undertakings

On page 3 of the Application, FEI states:

As the Langford Fueling Station met the GGRR requirements, it is a prescribed undertaking pursuant to section 18 of the Clean Energy Act.

Section 2(2) of the GGRR provides the requirements that must be met for a CNG fueling station to be considered a prescribed undertaking pursuant to section 18 of the CEA.

Section 1 of the GGRR defines “undertaking period” as “the period that ends on March 31, 2022.”

11.1 Please discuss when, if at all, the Langford Fueling Station would cease to be deemed a prescribed undertaking.

Response:

The Langford Fueling Station satisfies the requirements of section 2(2) of the GGRR and, therefore, is a prescribed undertaking under section 18 of the *Clean Energy Act*, and will always be a prescribed undertaking.

There are no provisions of section 2(2) of the GGRR, or the GGRR generally, that limit the amount of time that the Langford Fueling Station is a prescribed undertaking. Rather, the correct legal analysis is that the Langford Fueling Station fits the definition of the class defined in section 2(2) of the GGRR and, therefore, *simply is* a prescribed undertaking for the purpose of section 18 of the *Clean Energy Act*. As stated in section 2(2) of the GGRR:

A public utility's undertaking that is in the class defined as follows is a prescribed undertaking for the purposes of section 18 of the Act:... [Emphasis added.]

As stated in section 7(1) of the *Interpretation Act*: “Every enactment must be construed as always speaking.” Therefore, section 2(2) of the GGRR continually has the effect of stating that stations that are in the class as defined in that section are a prescribed undertaking.

Even after the “undertaking period” as defined in section 1 of the GGRR, the Langford Fueling Station will continue to be in the class defined in section 2(2) of the GGRR and, therefore, will continue to be a prescribed undertaking. The “undertaking period” is a defined term in section 1 of the GGRR. A defined term does not, by itself, impose any substantive legal requirement. Rather, the purpose of a defined term is to dictate how that term must be interpreted when it is used elsewhere in the legislation. Therefore, we must look to how the term is used in the GGRR to see what effect it has.

⁸ B.C. Reg. 245/2013, including amendments up to B.C. Reg. 115/2017, March 22, 2017.

<p style="text-align: center;">FortisBC Energy Inc. (FEI or the Company)</p> <p style="text-align: center;">Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)</p>	<p>Submission Date: June 9, 2021</p>
<p style="text-align: center;">Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2</p>	<p style="text-align: center;">Page 24</p>

The term “undertaking period” is not used anywhere in the GGRR to impose a time at which a CNG fueling station ceases to be a prescribed undertaking. Rather, the term is used in various ways as part of the definition of classes of prescribed undertakings.

The term “undertaking period” is used twice in section 2(2) of the GGRR to impose limits on the average expenditures and administrative and marketing expenditures during the “undertaking period”. The Langford Fueling Station meets these two requirements. The term “undertaking period” has no other relevance to whether the Langford Fueling Station is a prescribed undertaking.

There is also no provision of the *Clean Energy Act* or any other legislation that indicates that a prescribed undertaking under section 18 of the *Clean Energy Act* ceases to be a prescribed undertaking at some point in time.

11.2 Please discuss whether the undertaking period or the terms in section 2(2) of the GGRR limit the period of time that a station can be a prescribed undertaking? Why or why not?

Response:

Please refer to the response to BCUC IR1 11.1.

Section 3(a) and (b) of Direction No. 5 to the BCUC state that when setting rates under the Utilities Commission Act (UCA) for FEI, the BCUC must:

- (a) treat CNG service and LNG service, and all costs and revenues related to those services, as part of the utility's natural gas class of service;
- (b) allocate all costs and revenues related to CNG service and LNG service to all applicable customers;

11.3 Considering the requirements in subsection 3(a) and (b) of Direction No. 5 to the BCUC, please discuss whether there would be any rate implications to FEI's non-bypass ratepayers if the Langford Fueling Station ceases to be deemed a prescribed undertaking.

11.3.1 If yes, please identify and discuss the rate implications.

FortisBC Energy Inc. (FEI or the Company) Application for Approval of Revised/Renewal Rates for the Langford Compressed Natural Gas (CNG) Fueling Station under the GGRR (Application)	Submission Date: June 9, 2021
Response to British Columbia Utilities Commission (BCUC) Information Request (IR) No. 2	Page 25

1 **Response:**

2 As discussed in the response to BCUC IR1 11.1, the Langford Station is and will continue to be
3 a prescribed undertaking. Therefore, this question is hypothetical and is not an issue that needs
4 to be considered in this proceeding. Nonetheless, in the hypothetical situation that the Langford
5 Fueling Station were not a prescribed undertaking, there would only be rate impacts to non-
6 bypass customers if the BCUC were to disallow costs that would otherwise be recoverable only
7 because of section 18 of the *Clean Energy Act*. As such, FEI does not consider that there
8 would be any rate implications.

9

10

11

12 In response to BCUC IR 2.2, FEI provided a table that shows a total actual surplus of
13 \$83,362 for the period from 2014 to 2020 related to the Langford Fueling Station
14 refunded to non-bypass ratepayers.

15 Section 18(2) of the CEA states:

16 In setting rates under the Utilities Commission Act for a public utility carrying out
17 a prescribed undertaking, the commission must set rates that allow the public
18 utility to collect sufficient revenue in each fiscal year to enable it to recover its
19 costs incurred with respect to the prescribed undertaking.

20 11.4 Please confirm, or explain otherwise, that actual surpluses related to natural gas
21 fueling stations are treated the same way as actual deficits (i.e. refunded or
22 recovered from FEI's non-bypass ratepayers).

23

24 **Response:**

25 Confirmed, the actual surplus related to natural gas fueling stations are refunded to FEI's non-
26 bypass ratepayers.

27

Attachment 9.1A

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Revenue Requirement
Schedule 1
(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Revenue Requirement														
2	Cost of Energy Sold		-	-	-	-	-	-	-	-	-	-	-	-	-
3	Operation and Maintenance	Schedule 2, Line 18	60	61	62	64	65	66	68	69	70	72	73	75	76
4	Property Taxes	Schedule 2, Line 23	3	3	3	3	3	3	3	3	3	3	3	3	4
5	Depreciation Expense	Schedule 8, Line 13 + Line 30	58	58	58	58	58	58	58	58	58	58	58	58	58
6	Amortization Expense	Schedule 9, Line 46	1	1	1	1	1	-	-	-	-	-	-	-	-
7	Other Revenue	Schedule 2, Line 19	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Income Taxes	Schedule 3, Line 20	11	14	17	18	19	20	20	20	21	20	20	20	20
9	Earned Return	Schedule 5, Line 23	46	42	38	35	31	27	24	20	17	13	9	6	2
10															
11	Annual Revenue Requirement	Sum of Lines 2 through 9	179	180	180	179	178	174	172	171	168	166	164	162	159
12															
13	Calendar Year = Contract Year														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: O&M, Other Revenue and Property Tax

Schedule 2

(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Gross O&M														
2	Labour Costs		-	-	-	-	-	-	-	-	-	-	-	-	-
3	Vehicle Costs		-	-	-	-	-	-	-	-	-	-	-	-	-
4	Employee Expenses		-	-	-	-	-	-	-	-	-	-	-	-	-
5	Materials & Supplies		-	-	-	-	-	-	-	-	-	-	-	-	-
6	Computer Costs		-	-	-	-	-	-	-	-	-	-	-	-	-
7	Lease Cost		-	-	-	-	-	-	-	-	-	-	-	-	-
8	Contractor Costs		60	61	62	64	65	66	68	69	70	72	73	75	76
9	Electricity		-	-	-	-	-	-	-	-	-	-	-	-	-
10	Recoveries & Revenue		-	-	-	-	-	-	-	-	-	-	-	-	-
11															
12	Non-Labour Costs		60	61	62	64	65	66	68	69	70	72	73	75	76
13															
14	Total Gross O&M Expenses		60	61	62	64	65	66	68	69	70	72	73	75	76
15															
16	(Less): Capitalized Overhead		-	-	-	-	-	-	-	-	-	-	-	-	-
17	Add (Less): Adjustment		-	-	-	-	-	-	-	-	-	-	-	-	-
18	Net O&M		60	61	62	64	65	66	68	69	70	72	73	75	76
19															
20	Property Taxes														
21	General, School and Other		3	3	3	3	3	3	3	3	3	3	3	3	4
22	1% in Lieu of General Municipal Tax ¹	Schedule 10, Line 57/1000 x 1%	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Total Property Taxes		3	3	3	3	3	3	3	3	3	3	3	3	4
24															
25	1 - Calculation is based on the second preceeding year; ex., 2023 is based on 2021 revenue														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Income Tax Expense
Schedule 3
(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Income Tax Expense														
2															
3	Earned Return	Schedule 5, Line 23	46	42	38	35	31	27	24	20	17	13	9	6	2
4	Deduct: Interest on debt	Schedule 5, Line 22	(21)	(19)	(18)	(16)	(14)	(13)	(11)	(9)	(8)	(6)	(4)	(3)	(1)
5	Add (Deduct): Amortization Expense	Schedule 9, Line 46	1	1	1	1	1	-	-	-	-	-	-	-	-
6	Add: Depreciation Expense	Schedule 8, Line 13 + Line 30	58	58	58	58	58	58	58	58	58	58	58	58	58
7	Add: Removal Cost Provision		-	-	-	-	-	-	-	-	-	-	-	-	-
8	Deduct: Overhead Capitalized Expensed for Tax Purposes		-	-	-	-	-	-	-	-	-	-	-	-	-
9	Deduct Removal Costs		-	-	-	-	-	-	-	-	-	-	-	-	-
10	Deduct: Capital Cost Allowance	Schedule 4, Line 22	(53)	(43)	(35)	(29)	(24)	(19)	(16)	(13)	(11)	(10)	(8)	(7)	(6)
11	Taxable Income After Tax	Sum of Lines 3 through 10	31	39	45	49	52	53	55	55	55	55	55	54	53
12															
13	Income Tax Rate		27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%
14	1 - Current Income Tax Rate	1 - Line 13	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
15															
16	Taxable Income	Line 11 / Line 14	43	54	62	68	72	73	75	76	76	76	75	74	73
17															
18	Total Income Tax Expense	Line 16 x Line 13	11	14	17	18	19	20	20	20	21	20	20	20	20
19	Adjustments		-	-	-	-	-	-	-	-	-	-	-	-	-
20	Net Tax Expense	Line 18 + Line 19	11	14	17	18	19	20	20	20	21	20	20	20	20

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Capital Cost Allowance
Schedule 4
(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	CNG Dispensing Equipment (hoses and fill posts)- Class 8 @ 20%														
2	Opening Balance	Preceding Year, Line 5	230	184	147	118	94	75	60	48	39	31	25	20	16
3	Additions	Schedule 7, Line 10 - AFUDC	-	-	-	-	-	-	-	-	-	-	-	-	-
4	CCA	[Line 2 + (Line 3 x 1/2)] x CCA Rate	(46)	(37)	(29)	(24)	(19)	(15)	(12)	(10)	(8)	(6)	(5)	(4)	(3)
5	Closing Balance	Sum of Lines 2 through 4	184	147	118	94	75	60	48	39	31	25	20	16	13
6															
7	CNG Foundations- Class 1 @ 4%														
8	Opening Balance	Preceding Year, Line 11	109	105	101	97	93	89	85	82	79	76	73	70	67
9	Additions	Schedule 7, Line 11 - AFUDC	-	-	-	-	-	-	-	-	-	-	-	-	-
10	CCA	[Line 8 + (Line 9 x 1/2)] x CCA Rate	(4)	(4)	(4)	(4)	(4)	(4)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
11	Closing Balance	Sum of Lines 8 through 10	105	101	97	93	89	85	82	79	76	73	70	67	64
12															
13	CNG Dehydrator- Class 8 @ 20%														
14	Opening Balance	Preceding Year, Line 17	13	10	8	6	5	4	3	3	2	2	1	1	1
15	Additions	Schedule 7, Line 12 - AFUDC	-	-	-	-	-	-	-	-	-	-	-	-	-
16	CCA	[Line 14 + (Line 15 x 1/2)] x CCA Rate	(3)	(2)	(2)	(1)	(1)	(1)	(1)	(1)	(0)	(0)	(0)	(0)	(0)
17	Closing Balance	Sum of Lines 14 through 16	10	8	6	5	4	3	3	2	2	1	1	1	1
18															
19	Total CCA														
20	Opening Balance	Preceding Year, Line 23	352	299	256	221	192	168	149	133	119	108	99	91	84
21	Additions	¹	-	-	-	-	-	-	-	-	-	-	-	-	-
22	CCA	²	(53)	(43)	(35)	(29)	(24)	(19)	(16)	(13)	(11)	(10)	(8)	(7)	(6)
23	Closing Balance	Sum of Lines 20 through 22	299	256	221	192	168	149	133	119	108	99	91	84	78
24	1 - Schedule 4, Sum of detailed Additions lines														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Rate Base
Schedule 5
(*\$000's*), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Rate Base														
2	Gross Plant In Service- Beginning	Schedule 7, Line 7	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158
3	Gross Plant In Service- Ending	Schedule 7, Line 25	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158
4															
5	Accumulated Depreciation- Beginning	Schedule 8, Line 7	(403)	(461)	(519)	(577)	(635)	(693)	(751)	(808)	(866)	(924)	(982)	(1,040)	(1,098)
6	Accumulated Depreciation- Ending	Schedule 8, Line 25	(461)	(519)	(577)	(635)	(693)	(751)	(808)	(866)	(924)	(982)	(1,040)	(1,098)	(1,156)
7															
8	Contributions in Aid of Construction- Beginning	Schedule 7, Line 29	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Contributions in Aid of Construction- Ending	Schedule 7, Line 32	-	-	-	-	-	-	-	-	-	-	-	-	-
10															
11	Accumulated Amortization- Beginning	Schedule 8, Line 29	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Accumulated Amortization- Ending	Schedule 8, Line 32	-	-	-	-	-	-	-	-	-	-	-	-	-
13															
14	Net Plant in Service, Mid-Year	Sum (Lines 2 through 12)/2	725	668	610	552	494	436	378	320	262	205	147	89	31
15															
16	Unamortized Deferred Charges, Mid-Year	Schedule 9, Line 49	3	5	4	2	1	-	-	-	-	-	-	-	-
17	Cash Working Capital	¹	2	2	2	2	2	2	2	2	2	2	2	2	2
18	Total Rate Base	Sum of Lines 14 through 17	730	675	615	556	496	438	380	322	264	206	148	91	33
19															
20	Return on Rate Base														
21	Equity Return	Line 18 x ROE x Equity %	25	23	21	19	17	15	13	11	9	7	5	3	1
22	Debt Component	²	21	19	18	16	14	13	11	9	8	6	4	3	1
23	Total Earned Return	Line 21 + Line 22	46	42	38	35	31	27	24	20	17	13	9	6	2
24	Return on Rate Base %	Line 23 / Line 18	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
25															
26	1 - Schedule 7, Line 25 x FEI CWC/Closing GPIS %														
27	2 - Line 18 x (LTD Rate x LTD% + STD Rate x STD %)														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Capital Spending
Schedule 6
((\$000's), unless otherwise stated)

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Capital Spending Prior to 2021														
2	CNG Dispensing Equipment (hoses and fill posts)		-												
3	CNG Foundations		-												
4	CNG Dehydrator		-												
5	Total Capital Spending Prior to 2021	Sum of Lines 2 through 4	-												
6															
7	AFUDC Prior to 2021														
8	CNG Dispensing Equipment (hoses and fill posts)		-												
9	CNG Foundations		-												
10	CNG Dehydrator		-												
11	Total AFUDC Prior to 2021	Sum of Lines 8 through 10	-												
12															
13	Capital Spending 2021 Onwards														
14	CNG Dispensing Equipment (hoses and fill posts)		-	-	-	-	-	-	-	-	-	-	-	-	-
15	CNG Foundations		-	-	-	-	-	-	-	-	-	-	-	-	-
16	CNG Dehydrator		-	-	-	-	-	-	-	-	-	-	-	-	-
17	Total Capital Spending 2021 Onwards	Sum of Lines 14 through 16	-	-	-	-	-	-	-	-	-	-	-	-	-
18															
19	Total Capital Spending ¹	Line 5 + Line 17	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Total AFUDC	Line 11 + Line 18	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Total Annual Capital Spending and AFUDC	Line 19 + Line 20	-	-	-	-	-	-	-	-	-	-	-	-	-
22															
23	Contributions in Aid of Construction		-	-	-	-	-	-	-	-	-	-	-	-	-
24	Removal Costs		-	-	-	-	-	-	-	-	-	-	-	-	-
25	Net Annual Project Costs- Capital	Line 21 + 23 + 24	-	-	-	-	-	-	-	-	-	-	-	-	-
26															
27	Total Project Costs- Capital Spending and AFUDC	Sum of Line 21	-												
28	Total Net Project Costs- including CIAC & Removal Costs	Sum of Line 25	-												
29															
30	1 - Excluding capitalized overhead; First year of analysis includes all prior year spending														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Gross Plant in Service & Contributions in Aid of Construction

Schedule 7
(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Gross Plant in Service														
2															
3	Gross Plant in Service, Beginning														
4	CNG Dispensing Equipment (hoses and fill po: Preceeding Year, Line 22		962	962	962	962	962	962	962	962	962	962	962	962	962
5	CNG Foundations	Preceeding Year, Line 23	142	142	142	142	142	142	142	142	142	142	142	142	142
6	CNG Dehydrator	Preceeding Year, Line 24	53	53	53	53	53	53	53	53	53	53	53	53	53
7	Total Gross Plant in Service, Beginning	Sum of Lines 4 through 6	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158
8															
9	Gross Plant in Service, Additions														
10	CNG Dispensing Equipment (hoses and fill po: Schedule 6, Lines 2 + 8 + 14 + 18		-	-	-	-	-	-	-	-	-	-	-	-	-
11	CNG Foundations	Schedule 6, Lines 3 + 9 + 15 + 18	-	-	-	-	-	-	-	-	-	-	-	-	-
12	CNG Dehydrator	Schedule 6, Lines 4 + 10 + 16 + 18	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Total Gross Plant in Service, Additions	Sum of Lines 10 through 12	-	-	-	-	-	-	-	-	-	-	-	-	-
14															
15	Gross Plant in Service, Retirements														
16	CNG Dispensing Equipment (hoses and fill posts)		-	-	-	-	-	-	-	-	-	-	-	-	-
17	CNG Foundations		-	-	-	-	-	-	-	-	-	-	-	-	-
18	CNG Dehydrator		-	-	-	-	-	-	-	-	-	-	-	-	-
19	Total Gross Plant in Service, Retirements	Sum of Lines 16 through 18	-	-	-	-	-	-	-	-	-	-	-	-	-
20															
21	Gross Plant in Service, Ending														
22	CNG Dispensing Equipment (hoses and fill po: Line 4 + Line 10 + Line 16		962	962	962	962	962	962	962	962	962	962	962	962	962
23	CNG Foundations	Line 5 + Line 11 + Line 17	142	142	142	142	142	142	142	142	142	142	142	142	142
24	CNG Dehydrator	Line 6 + Line 12 + Line 18	53	53	53	53	53	53	53	53	53	53	53	53	53
25	Total Gross Plant in Service, Ending	Sum of Lines 22 through 24	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158
26															
27															
28	Contributions in Aid of Construction (CIAC)														
29	CIAC, Beginning		-	-	-	-	-	-	-	-	-	-	-	-	-
30	Additions		-	-	-	-	-	-	-	-	-	-	-	-	-
31	Retirements		-	-	-	-	-	-	-	-	-	-	-	-	-
32	CIAC, Ending	Sum of Lines 29 through 31	-	-	-	-	-	-	-	-	-	-	-	-	-

Langford CNG Station: Accumulated Depreciation & Amortization
Schedule 8
((\$000's), unless otherwise stated)

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Accumulated Depreciation														
2															
3	Accumulated Depreciation, Beginning														
4	CNG Dispensing Equipment (hoses and fill posts)	Preceding Year, Line 22	(335)	(383)	(431)	(479)	(527)	(575)	(623)	(672)	(720)	(768)	(816)	(864)	(912)
5	CNG Foundations	Preceding Year, Line 23	(50)	(57)	(64)	(71)	(78)	(85)	(93)	(100)	(107)	(114)	(121)	(128)	(135)
6	CNG Dehydrator	Preceding Year, Line 24	(19)	(21)	(24)	(27)	(29)	(32)	(35)	(37)	(40)	(42)	(45)	(48)	(50)
7	Total Accumulated Depreciation, Beginning	Sum of Lines 4 through 6	(403)	(461)	(519)	(577)	(635)	(693)	(751)	(808)	(866)	(924)	(982)	(1,040)	(1,098)
8															
9	Accumulated Depreciation, Depreciation Expense ¹														
10	CNG Dispensing Equipment (hoses and fill posts)@ 5%	Schedule 7, Line 4 & Line 10	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)	(48)
11	CNG Foundations@ 5%	Schedule 7, Line 5 & Line 11	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
12	CNG Dehydrator@ 5%	Schedule 7, Line 6 & Line 12	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
13	Total Accumulated Depreciation, Depreciation Expense	Sum of Lines 10 through 12	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)	(58)
14															
15	Accumulated Depreciation, Retirements														
16	CNG Dispensing Equipment (hoses and fill posts)	Schedule 7, Line 16	-	-	-	-	-	-	-	-	-	-	-	-	-
17	CNG Foundations	Schedule 7, Line 17	-	-	-	-	-	-	-	-	-	-	-	-	-
18	CNG Dehydrator	Schedule 7, Line 18	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Total Accumulated Depreciation, Retirements	Sum of Lines 16 through 18	-	-	-	-	-	-	-	-	-	-	-	-	-
20															
21	Accumulated Depreciation, Ending														
22	CNG Dispensing Equipment (hoses and fill posts)	Line 4 + Line 10 + Line 16	(383)	(431)	(479)	(527)	(575)	(623)	(672)	(720)	(768)	(816)	(864)	(912)	(960)
23	CNG Foundations	Line 5 + Line 11 + Line 17	(57)	(64)	(71)	(78)	(85)	(93)	(100)	(107)	(114)	(121)	(128)	(135)	(142)
24	CNG Dehydrator	Line 6 + Line 12 + Line 18	(21)	(24)	(27)	(29)	(32)	(35)	(37)	(40)	(42)	(45)	(48)	(50)	(53)
25	Total Accumulated Depreciation, Ending	Sum of Lines 22 through 24	(461)	(519)	(577)	(635)	(693)	(751)	(808)	(866)	(924)	(982)	(1,040)	(1,098)	(1,156)
26															
27															
28	Accumulated Amortization of Contributions in Aid of Construction (CIAC)														
29	Accumulated Amortization CIAC, Beginning		-	-	-	-	-	-	-	-	-	-	-	-	-
30	Amortization	¹	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Retirements		-	-	-	-	-	-	-	-	-	-	-	-	-
32	Accumulated Amortization CIAC, Ending	Sum of Lines 29 through 31	-	-	-	-	-	-	-	-	-	-	-	-	-
33															
34	1- Depreciation & Amortization Expense calculation is based on opening balance + (additions x in-service days/365 if it is the in-service year for project; otherwise, it is based on the opening balance of the plant-in-service)														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station: Deferred Charges & Deficiency / Surplus [Tracker]

Schedule 9

(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Deferred Charge- Lease during Construction														
2	Opening Balance	Previous Year, Line 7	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Gross Additions														
4	Tax	Line 3 x Tax Rate	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Net Additions	Sum of Lines 3 through 4	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Amortization Expense @ 5 years		-	-	-	-	-	-	-	-	-	-	-	-	-
7	Closing Balance	Lines 2 + 5 + 6	-	-	-	-	-	-	-	-	-	-	-	-	-
8															
9	Deferred Charge- Application Costs														
10	Opening Balance	Previous Year, Line 15	-	6	4	3	1	-	-	-	-	-	-	-	-
11	Gross Additions		10												
12	Tax	Line 11 x Tax Rate	(3)	-	-	-	-	-	-	-	-	-	-	-	-
13	Net Additions	Sum of Lines 11 through 12	7	-	-	-	-	-	-	-	-	-	-	-	-
14	Amortization Expense @ 5 years		(1)	(1)	(1)	(1)	(1)	-	-	-	-	-	-	-	-
15	Closing Balance	Lines 10 + 13 + 14	6	4	3	1	-	-	-	-	-	-	-	-	-
16															
17	Deficiency / Surplus [Tracker]														
18	Opening Balance	Previous Year, Line 26	-	5	9	10	7	-	-	-	-	-	-	-	-
19	Gross Addition	Schedule 10, Line 31 / 1000	5	3	0	(3)	(7)	-	-	-	-	-	-	-	-
20	Tax		-	-	-	-	-	-	-	-	-	-	-	-	-
21	Net Addition	Line 19 + Line 20	5	3	0	(3)	(7)	-	-	-	-	-	-	-	-
22	AFUDC														
23	Equity	Line 18 x (Schedule 10, Lines 17 x Line 18)	-	0	0	0	0	-	-	-	-	-	-	-	-
24	Debt	¹	-	0	0	0	0	-	-	-	-	-	-	-	-
25	Interest Adjustment	²	-	-	-	-	0	-	-	-	-	-	-	-	-
26	Closing Balance	Sum of Lines 21 through 25	5	9	10	7	-	-	-	-	-	-	-	-	-
27															
28															
29	Deferred Charge- Non Rate Base														
30	Opening Balance	Previous Year, Line 38	-	5	9	10	7	-	-	-	-	-	-	-	-
31	Opening Balance, Adjustment	Opening balance transfer to rate base	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Gross Additions		5	3	0	(3)	(7)	-	-	-	-	-	-	-	-
33	Tax		-	-	-	-	-	-	-	-	-	-	-	-	-
34	AFUDC		-	0	0	1	0	-	-	-	-	-	-	-	-
35	Net Additions	Sum of Lines 32 through 34	5	4	1	(3)	(7)	-	-	-	-	-	-	-	-
36	Interest Adjustment		-	-	-	-	0	-	-	-	-	-	-	-	-
37	Amortization Expense		-	-	-	-	-	-	-	-	-	-	-	-	-
38	Closing Balance	Lines 30 + 31 + 35 + 36 + 37	5	9	10	7	(0)	-	-	-	-	-	-	-	-
39															
40	Deferred Charge- Rate Base														
41	Opening Balance	Previous Year, Line 47	-	6	4	3	1	-	-	-	-	-	-	-	-
42	Opening Balance, Adjustment		-	-	-	-	-	-	-	-	-	-	-	-	-
43	Gross Additions		10	-	-	-	-	-	-	-	-	-	-	-	-
44	Tax		(3)	-	-	-	-	-	-	-	-	-	-	-	-
45	Net Additions		7	-	-	-	-	-	-	-	-	-	-	-	-
46	Amortization Expense		(1)	(1)	(1)	(1)	(1)	-	-	-	-	-	-	-	-
47	Closing Balance	Lines 41 + 45 + 46	6	4	3	1	-	-	-	-	-	-	-	-	-
48															
49	Deferred Charge, Mid-Year	(Line 41 + Line 42 + Line 47) / 2	3	5	4	2	1	-	-	-	-	-	-	-	-
50															
51	1- Line 18 x [Schedule 10 , (Lines 20 x 21+ Lines 22 x 23) x (1- Tax Rate)]														
52	2- Adjustment to net account to zero in final year; result of varying WACC rates throughout contract														

Langford CNG Station: Contract Rate Design
Schedule 10
(\$/), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Annual Cost of Service (Total)	Schedule 1, Line 11	179,233	179,966	179,731	178,946	177,725	174,216	172,493	170,560	168,466	166,248	163,938	161,559	159,132
2	Annual Cost of Service (O&M, excl. lease)	Schedule 1, Line 3- Line 3	60,000	61,200	62,424	63,672	64,935	66,245	67,570	68,921	70,300	71,706	73,140	74,602	76,095
3	Annual Cost of Service (Lease Only)	Schedule 2, Line 7	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Annual Cost of Service (Incl. Lease)	Line 1 - Line 2	119,233	118,766	117,307	115,273	112,779	107,971	104,923	101,639	98,166	94,543	90,798	86,956	83,038
5	Annual Volume (TJ)	Minimum contract demand	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
6															
7	% of Annual Revenue Required to be Collected	GGRR: 80% during Contract Term; 100% thereafter	80%	80%	80%	80%	80%	80%	100%	100%	100%	100%	100%	100%	100%
8	Annual Revenue Required to be Collected (Incl. Lease)	Line 4 x Line 7	95,386	95,013	93,846	92,219	90,323	107,971	104,923	101,639	98,166	94,543	90,798	86,956	83,038
9	Annual Revenue Required to be Collected (O&M, excl. lease)	Line 2 x Line 7	48,000	48,960	49,939	50,938	51,957	66,245	67,570	68,921	70,300	71,706	73,140	74,602	76,095
10	Annual Revenue Required to be Collected (Lease Only)	Line 3 x Line 7	-	-	-	-	-	-	-	-	-	-	-	-	-
11	PV of Annual Revenue Required to be Collected (Incl. Lease)	Line 8 / (1 + Line 26) ^{*Yr}	90,439	85,413	79,988	74,525	69,131	78,439	72,271	66,378	60,785	55,505	50,542	45,893	41,552
12	PV of Annual Revenue Required to be Collected (O&M, excl. Lease)	Line 9 / (1 + Line 26) ^{*Yr}	45,511	44,013	42,565	41,165	39,810	48,126	46,542	45,011	43,530	42,098	40,713	39,373	38,078
13	PV of Annual Revenue Required to be Collected (Lease)	Line 10 / (1 + Line 27) ^{*Yr}	-	-	-	-	-	-	-	-	-	-	-	-	-
14															
15	Annual Discount Rate														
16	Equity Component														
17	ROE %		8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%
18	Equity Portion		38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%	38.50%
19	Debt Component														
20	Long Term Debt Rate		4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%	4.78%
21	Long Term Debt Portion		59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%	59.14%
22	Short Term Debt Rate		2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%	2.19%
23	Short Term Debt Portion		2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%
24	Tax Rate		27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%	27.00%
25															
26	Annual Discount Rate (After-Tax WACC)	¹	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%
27	1 - ROE % x Equity Portion + [(LTD x LTD Portion + STD x STD Portion) x (1 - Tax Rate)]														
28															
29	Cost of Service (Include Lease, Exclude O&M)														
30	Annual Capital Rate	Line 37 during Contract Term, Line 8 thereafter	90,000	91,800	93,636	95,509	97,419	107,971	104,923	101,639	98,166	94,543	90,798	86,956	83,038
31	Annual Deficiency (Surplus): Cost of Service - Contract Rate	Line 8 - Line 30	5,386	3,212	209	(3,290)	(7,196)	-	-	-	-	-	-	-	-
32	Annual Volumetric Capital Rate (\$/GJ): COS based beyond Contract Term	Line 30 / Line 5 / 1000	4.286	4.371	4.459	4.548	4.639	5.141	4.996	4.840	4.675	4.502	4.324	4.141	3.954
33															
34	Contract Term Capital Rate Calculation and Present Value Proof														
35	Capital Rate over Contract Term	Yr 1 = Line 50; Previous Year rate x Line 47	4.286	4.371	4.459	4.548	4.639	-	-	-	-	-	-	-	-
36	Volume (TJ)	Line 5	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
37	Capital Rate Revenue over Contract Term	Line 35 x Line 36 x 1000	90,000	91,800	93,636	95,509	97,419	-	-	-	-	-	-	-	-
38															
39	Present Value Proof														
40	PV of Capital Rate Revenue over Contract Term	Line 37 / (1 + Line 26) ^{*Yr}	85,332	82,525	79,810	77,184	74,644	-	-	-	-	-	-	-	-
41	Sum of PV Rate Revenue	Sum of Line 40	399,496												
42	PV Cost of Service over Contract Term	Sum of Line 11, from 2021 to 2025	399,496												
43	Difference from required Delivery Revenue (should be zero)	Line 41 - Line 42	-												
44															
45	Calculation of Year 1 Capital Rate over Contract Term (excluding O&M)														
46	Annual Capital Rate Escalation over Contract Term		2.00%	2.00%	2.00%	2.00%	2.00%	0%	0%	0%	0%	0%	0%	0%	0%
47	Annual Escalator over Contract Term	No escalation year 1; Yr2-> (1 + Line 46)	1.00%	1.02%	1.02%	1.02%	1.02%	0%	0%	0%	0%	0%	0%	0%	0%
48	Product of Escalators	Cumulative Product of Line 47	100.00%	102.00%	104.04%	106.12%	108.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
49	Formula		0.0498	0.0482	0.0466	0.0451	0.0436	-	-	-	-	-	-	-	-
50	r ₁	$r_1 = \frac{1}{\sum_{n=1}^N \frac{V_n \times (1+E)^{n-1}}{(1+D)^n}}$	4.286												
51															
52															
53															
54															
55	where:	r ₁ = Contract Rate Year 1 D = Discount Rate E = Annual Rate Escalation percentage PV COS = Present Value of the Cost of Service (excluding O&M) over Contract Term													
56															
57															
58															
59	Cost of Service (O&M, Excl. Lease)														
60	Forecast Annual BC CPI Rate	CPI BC Stats Canada	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
61	Annual O&M Expense (Excl. Lease)	Line 9	48,000	48,960	49,939	50,938	51,957	66,245	67,570	68,921	70,300	71,706	73,140	74,602	76,095
62	Annual Volumetric O&M Rate (\$/GJ)	Line 61 / Line 5 / 1000	2.286	2.331	2.378	2.426	2.474	3.155	3.218	3.282	3.348	3.415	3.483	3.552	3.624
63															
64															
65	Fueling Station Rate														
66	Capital Rate (\$/GJ)	Line 32	4.286	4.371	4.459	4.548	4.639	5.141	4.996	4.840	4.675	4.502	4.324	4.141	3.954
67	O&M Rate (\$/GJ)	Line 62	2.286	2.331	2.378	2.426	2.474	3.155	3.218	3.282	3.348	3.415	3.483	3.552	3.624
68	OH&M Rate (\$/GJ)	G-78-13	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520	0.520
69	Total Annual Volumetric Contract Rate (\$/GJ)	Sum of Line 66 to Line 68	7.091	7.223	7.357	7.494	7.633	8.816	8.794	8.642	8.542	8.437	8.327	8.213	8.098
70	Annual Forecast Revenue	(Line 5 x Line 69) x 1000	148,920	151,680	154,495	157,367	160,296	185,136	183,413	181,480	179,386	177,168	174,858	172,479	170,052
71															
72	Present Value Proof of Total Revenue Required under GGRR														
73	GGRR Requirement: 80% of total COS (incl. O&M) for the Over Contract Term of the operation recovered under take-or-pay agreement (contract demand) with a minimum term of 5 years														
74	Capital Rate (\$/GJ)	Line 66 over Contract Term of 5 years	4.286	4.371	4.459	4.548	4.639								
75	O&M Rate (\$/GJ)	Line 67 over Contract Term of 5 years	2.286	2.331	2.378	2.426	2.474								
76	Total Annual Volumetric Contract Rate (Capital & O&M only)	Line 74 + Line 75	6.571	6.703	6.837	6.974	7.113								
77	Annual Volume (TJ)	Minimum contract demand	21	21	21	21	21								
78	Annual Cost of Service Collected over Contract Term	(Line 76 x Line 77) x 1000	138,000	140,760	143,575	146,447	149,376								
79															
80	PV of REVENUE Collected	Line 78 / (1 + Line 26) ^{*Yr}	130,843	126,538	122,375	118,349	114,455								
81	Sum of PV REVENUE Collected over Contract Term	Sum of Line 80	612,559												
82	PV @ Total Cost of Service (100%) over Contract Term (incl. O&M)	(Line 1 + Line 23) / (1 + Line 9) ^{*Yr}	169,937	161,783	153,192	144,612	136,176								
83	Sum of PV @ 100% Cost of Service over Contract Term (incl. O&M)	Sum of Line 82	765,699												
84															
85	GGRR: 80% of total Cost of Service over Contract Term in PV	Line 83 x 80%	612,559												
86	Check: Percent of Cost of Service Collected over Contract Term (should be over 80 % Line 81 / Line 83)		80%												

Langford CNG Station: Discounted Cash Flow Analysis
Schedule 11
(*\$000's*), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Cash Flow														
2	Add: Revenue	Schedule 10, (Line 66 + Line 67) x Line 5 / Line 7	173	176	179	183	187	174	172	171	168	166	164	162	159
3	Less: O&M, Property Tax Expense	Schedule 1, - (Line 3 + Line 4)	(63)	(64)	(65)	(67)	(68)	(69)	(71)	(72)	(74)	(75)	(77)	(78)	(80)
4	EBITDA ¹	Line 2 + Line 3	110	112	114	116	119	105	102	98	95	91	87	84	80
5	Capital Expenditures ²	Schedule 6, Line 19 + Line 23	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Pre-Tax Cash Flow	Line 4 + Line 5	110	112	114	116	119	105	102	98	95	91	87	84	80
7	Income Tax Expense	Line 4 x (- Schedule 3, Line 13)	(30)	(30)	(31)	(31)	(32)	(28)	(27)	(27)	(26)	(25)	(24)	(23)	(21)
8	Overhead Capitalized Tax Shield	Schedule 3, -Line 8 x Line 13	-	-	-	-	-	-	-	-	-	-	-	-	-
9	CCA Tax Shield / Removal Cost	Schedule 3, (-Line 9 + Line 10) x Schedule 3, Line 13	14	12	9	8	6	5	4	4	3	3	2	2	2
10	Terminal Value of CCA Tax Shield	⁴	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Terminal Value	⁵	-	-	-	-	-	-	-	-	-	-	-	-	-
12															
13	Free Cash Flow	Sum of Line 6 to Line 11	94	93	93	93	93	82	79	76	72	69	66	63	60
14															
15	After Tax WACC %	Schedule , Line 17	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%	5.47%
16	Present Value of Free Cash Flow ³	Line 13 / (1 + Line 15)^Yr	89	84	79	75	71	59	54	49	45	41	37	33	30
17	Total Present Value of Free Cash Flow	Sum of Line 16	<u>747</u>												
18															
19	1 - Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)														
20	2 - Net of CIAC and removal costs (if applicable) and excludes capitalized overhead														
21	3 - 2021 present value calculates capital expenditure to occur at time zero														
22	4 - [Class 8 UCC Closing Balance x CCA Rate / (CCA Rate + WACC) + Class 1.3 UCC Closing Balance x CCA Rate / (CCA Rate + WACC)] x Income Tax Rate														
23	5 - Evaluation period reflects the useful life of the assets, therefore it is assumed that the terminal value is zero														

FortisBC Energy Inc.
Langford CNG Station
December 2020

Langford CNG Station : Approximate Contract Termination Fee
Schedule 12
(\$000's), unless otherwise stated

Line	Particulars	Reference	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	Total Gross Plant in Service, Ending	Schedule 7, Line 25	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158
2	Accumulated Depreciation, Ending	Schedule 8, Line 25	(461)	(519)	(577)	(635)	(693)	(751)	(808)	(866)	(924)	(982)	(1,040)	(1,098)	(1,156)
3	Contributions in Aid of Construction- Ending	Schedule 5, Line 9	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Accumulated Amortization- Ending	Schedule 5, Line 12	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Deferral Account Repayment	Schedule 9, Line 10	5	9	10	7	-	-	-	-	-	-	-	-	-
6	Add: Removal Costs ¹		-	-	-	-	-	-	-	-	-	-	-	-	-
7	Less: Excess Fueling Station Recoveries ²		-	-	-	-	-	-	-	-	-	-	-	-	-
8	Net Termination before Surcharge Payment ³	Sum of Line 1 to Line 7	702	648	590	530	465	407	349	291	233	176	118	60	2
9	Station Surcharge Contribution	Schedule 9, Line 27	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Net Termination after Surcharge Payment³		702	648	590	530	465	407	349	291	233	176	118	60	2
11															
12	1- Actual removal costs to be determined at time of contract termination and will be less the net salvage collected to date														
13	2 - Cumulative fueling station recoveries received from volumes in excess of minimum contract demand														
14	3 - The forecast early termination fee has been calculated on a year end basis. The actual fee would be determined at the time of contract termination and may be different than the amount shown on Line 10														

Attachment 9.1B

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

FILED CONFIDENTIALLY

Attachment 10.2

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)