

October 15, 2012

Regulatory Affairs Correspondence  
Email: [gas.regulatory.affairs@fortisbc.com](mailto:gas.regulatory.affairs@fortisbc.com)British Columbia Public Interest Advocacy Centre  
Suite 209 – 1090 West Pender Street  
Vancouver, BC  
V6E 2N7Attention: Ms. Leigha Worth, Executive Director

Dear Ms. Worth:

**Re: FortisBC Energy Inc. ("FEI")****Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GRR") and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")****Response to the British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization *et al* ("BCPSO") Information Request ("IR") No. 1**

---

On August 21, 2012, FEI filed the Application as referenced above. In accordance with the Regulatory Timetables set out by Commission Order No. G-125-12 for Phase 1 and Order No. G-127-12 for Phase 2, FEI respectfully submits the attached response to BCPSO IR No. 1.

If there are any questions regarding the attached, please contact the undersigned.

Yours very truly,

**FORTISBC ENERGY INC.*****Original signed by: Shawn Hill*****For:** Diane Roy

Attachment

cc (e-mail only): Commission Secretary  
Registered Parties

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 1

**1.0 Reference: Exhibit B-1, page 1, Appendix A, and Appendix B, GGRR**

Preamble: At 2(1)(a), the Regulation provides for offering natural gas vehicle incentives pursuant to "an open and competitive application process" in the form of grants or zero interest loans.

1.1 Please provide evidence that the incentive amounts that FEI seeks to recover in this proceeding were distributed after an open and competitive application process.

**Response:**

The incentive funds have not been distributed yet to the potential applicants that expressed interest in this round of funding. FEI is midway through the evaluation process and final awards are subject to FEI receiving approval from BCUC on this Application and successful execution of contribution agreements and completion of the due diligence process.

FEI ensured the evaluation of application for the NGT incentive program is open and competitive by taking the following measures:

- A Fairness Advisor was appointed to oversee the incentive funding process. The Fairness Advisor is an independent consultant who facilitated the evaluation of all applicants, and substantiated that the process has been carried out diligently, impartially and in a non-discriminatory fashion.
- FEI established a 3-step evaluation process consisting of a minimum financial and safety threshold that all applicants had to pass, scoring stage where each applicant was scored against a specific criteria and finally strategic fit stage to assess feasibility and fit of the applicant with FEI's objectives.
- Throughout the application process, FEI would post the responses to any questions received from the applicants on the FAQ section of the program website to ensure all applicants have access to the same information.
- Once the awards have been finalized, all awards will be made public and posted on the FEI website.

The process was discussed with the Minister of the Ministry of Energy, Mines and Natural Gas ("MEMNG"), as the Commission's role under the GGRR is to establish rate structures that ensure the recovery of the costs.



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 2

- 1.2 In the event that FEI chose to make the vehicle incentives by zero interest loans, please indicate how it would propose to recover costs from non-bypass natural gas customers. For example, what carrying costs on the loan would be charged to ratepayers and what would the rate charged to ratepayers be based on?

**Response:**

At this time, FEI is only offering grants under the GGRR and does not currently have any plans to offer zero-interest loans. However, in the event that FEI chooses in the future to provide zero-interest loans to parties for the purchase of eligible vehicles under the GGRR, the loans granted would be recorded in the same deferral account as the incentive amounts provided in the form of a grant (i.e. the NGT Incentives account). After receiving the zero-interest loan, the recipient would begin making payments according to the terms of their loan agreement until the aggregate sum of their payments equals the loan principal. The payments received to pay off the zero-interest loans would be applied to reduce the balance in the deferral account. The carrying costs applied to the deferral account would be the allowed rate of return for account balances in rate base or the AFUDC rate for amounts that may be temporarily in a non-rate base deferral account. The net effect is that the carrying costs of the zero-interest loans would be recovered from natural gas ratepayers but the principal would be recovered from the loan recipients.

- 1.3 Please confirm that non-bypass natural gas customers would be better off in the event that FEI decided to make its incentives available in the form of zero interest loans as opposed to grants. If unable to so confirm, please explain fully.

**Response:**

FEI does not believe that non-bypass customers would be better off if incentives are offered in the form of zero-interest loans as opposed to grants. This is because the additional load created by the NGT grants would not materialize to the same degree under a zero-interest loan approach. The benefits to non-bypass customers are generated by the load created by adoption of NGVs and FEI believes that there would be minimal adoption under the zero-interest loan approach. FEI is not aware of any jurisdiction where such an approach has led to increased rates of market adoption.

Thus, while the rate impact is lower in the short-term under a zero-interest loan approach, FEI believes that the granting of zero-interest loans will not result in as much increased load or the

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 3

corresponding long-term delivery margin benefits for non-bypass customers that are generated under the incentive approach.

In addition, many of the companies and organizations that may be interested in FEI's NGT grants have access to financing and a zero-interest loan may only be marginally less costly than their own financing arrangements. The business case for adopting natural gas as a fleet fuel should therefore still be positive even if a party was to fully finance natural gas-fuelled vehicles on its own as compared to FEI providing partial funding (i.e., a portion of the vehicle price differential as per the GGRR) on a zero-interest loan basis. However, in spite of an apparently favourable business case, it has been FEI's experience in BC that the level of interest in adopting natural gas as a fleet fuel has been very modest until FEI began offering vehicle incentives in the form of grants.

The prescribed undertaking is permissive in nature. The undertaking provides FEI the option of providing zero-interest loans and/or providing grants. FEI intends to exercise the grant portion of the undertaking and at the present time is not planning to offer zero-interest loans.

- 1.4 Does FEI agree that prudent administration would require that its incentives for gas vehicles be no greater than the minimum amount required to elicit interest and participation in its CNG and LNG vehicle programs? If so, please provide evidence that the current application respects this principle. If not, please explain why not.

**Response:**

The objective of the GGRR undertakings is to encourage adoption of natural gas vehicles which in turn leads to reductions of greenhouse gas emissions. The incentives are not designed with the end objective of eliciting "interest and participation in its CNG and LNG vehicle programs".

The GGRR undertaking allows utilities to provide incentives to develop a market that will provide a provincial benefit with respect to emissions reductions. Therefore, it is prudent to utilize the prescribed incentives in accordance with the undertaking, as proposed by the FEU. The undertaking has established administrative requirements regarding the incentives, which the FEU's programs have been developed to comply with.

In addition, the program design includes the following protections:

1. The program has a finite life expiring in March 2017. The program is designed to encourage early adoption by compensating vehicle operators for the perceived risks they



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 4

see in adopting NGV technology. The economic case for switching to NGVs exists but there is market inertia and a general reluctance to be the first operators to move to natural gas.

2. The program incentive declines substantially over time. The perceived risk is reduced with every fleet that successfully transitions to natural gas. Hence the amount of the incentive is reduced every year. This approach allows FEI to fine tune the incentive to minimize the potential for free riders. The first incentives awarded provided incentives of 100% of the incremental cost of NGVs over their diesel counterparts. FEI's current round of incentives is providing 75% of the incremental cost.
3. The program is designed to initiate additional adoption of NGVs beyond the vehicles that are funded in part by the incentives. A major part of the design results in follow on effects, which include:
  - a. Carriers will find that they need to invest in NGVs in order to remain competitive with the vehicles funded under this program.
  - b. Shippers who specify a requirement for the use of NGVs in order to get lower bids on their contracts. For example after having one vehicle funded under the FEI incentive program, the City of Surrey specified the use of NGVs for their refuse and recycling program. This generated additional new NG trucks into the market and allowed the City to save over \$2 million on their bid.
4. The program awards are made under a competitive process.
5. The program awards are reviewed under the annual reporting mechanism.
6. The program design and awards made under the program are subject to scrutiny by the fairness advisor.

FEI believes that the design of the program includes sufficient protections to ensure prudent administration of the incentives.

- 1.5 Is it FEI's view that the Regulation allows any and every public utility in B.C. to spend up to (i) \$62M in vehicle incentives, (ii) \$12M on CNG stations (own and operating costs), and (iii) \$30.5M LNG stations (own and operating costs).



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 5

**Response:**

Yes, it is FEI's view that the Regulation allows each public utility in B.C. to undertake the prescribed undertakings and make expenditures up to the specified spending limits. While this may be permitted by the Regulation, there are reasons why other utilities may not engage in programs under the prescribed undertakings or, if they do, there are practical limitations on the size of programs and expenditure amounts that are well below the spending caps. For instance smaller utilities may not have a large enough customer base to absorb the potential rate impacts of a large program. Further, there likely will not be a large number of suitable fleets in the service territory of a small utility to generate enough interested proponents for a large program.

The FEU (FEI, FEVI and FEW) will limit spending on the prescribed undertakings to the amounts specified in this Regulation on a combined basis.

- 1.6 Please confirm that FEI proposes to spend the maximum amount permissible under the Regulation and to provide all vehicle incentives in the form of grants. If unable to so confirm, please explain fully.

**Response:**

Confirmed. FEI plans to spend the full amount of \$62 million allowed in GGRR section 2(1) for vehicle incentives and related expenditures. At this time it is FEI's intention to provide all vehicle incentives in the form of grants.

- 1.7 Please provide an analysis that shows the costs and benefits to ratepayers in the event that FEI decided to use zero interest loans to provide incentives for LNG and CNG vehicles in cases in which a grant would not be required.

**Response:**

The premise of the question is that grants are not required to incent uptake, which FEI does not believe is a realistic assumption at present. FEI does not believe that loans would suffice at this point to spur adoption by a potential customer, and hence is focussing on grants at this time. Please refer to the response to BCPSO IR 1.1.3 for elaboration.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 6

- 1.8 To FEI's knowledge, were any entities that represented low-income, senior, or residential ratepayers consulted in the process leading up to the issuance of the GRR?

**Response:**

FEI's information is that two representatives of BCPSO were invited in late September 2011 to participate in the consultation process leading to the issuance of the GRR but it does not appear from subsequent lists of consultation participants that BCPSO participated. The consultation was conducted by the MEMNG commencing with an initial session held on October 13, 2011 in Vancouver.

- 1.9 In its approach to its proposed spending and form of incentives chosen by FEI pursuant to the GRR, explain how FEI took into consideration the interests of, or solicited the views of low-income, senior, or residential ratepayers

**Response:**

This Application relates to the mechanisms that ensure recovery of GRR related costs, and not the need for or form of the prescribed undertakings. The latter is a matter that falls outside of the Commission's jurisdiction under the GRR. FEI can advise that it considered the impact on rates and potential benefits for all customers including low income, seniors and residential ratepayers when it prepared this Application. The accounting treatment proposed and the potential to favourably impact customer rates, demonstrate that commitment.

Historical trends indicate a continued decline in throughput levels into the future and, left unchecked, the loss of throughput and lower customer attachments will lead to higher delivery rates for customers over time. An increase in throughput as a result of NGV will help to mitigate this effect and, depending on the success level in attracting NGV volumes, will lead to a decline in delivery rates relative to what they would be without the NGV-related throughput. As described in the response to BCPSO IR 1.1.3, grants are much more likely than zero-interest loans to generate uptake and the associated throughput.



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 7

FEI is proposing that grants as described in Prescribed Undertaking 1 be amortized over 10 years as this approximates the life of CNG/LNG vehicles as well as the period over which the benefits of the program are experienced. This proposal avoids the rate volatility that would be experienced if the grants were simply expensed in the year. It also meets the rate making accounting objective of matching costs with benefits and the fair treatment of intergenerational equity.

- 1.10 In FEI's understanding what period comprised year 1 of the Regulation, i.e., the period for which the incentive could provide 100% of the difference in price between an eligible vehicle and a comparable gasoline or diesel fuelled vehicle.

**Response:**

Please refer to the response to BCUC IR 1.1.1 for an explanation of the prescribed "undertaking period."

As explained in that response, the public utility has the discretion to decide when to begin to offer its first vehicle incentives. For instance, a public utility may decide to offer its first vehicle incentives under the GRR at a date between April 1, 2014 and March 31, 2015, which will then be year 1 of the undertaking for that utility. Year 2 of the undertaking would then be April 1, 2015 – March 31, 2016, and year 3 would be April 1, 2016-March 31, 2017. As the GRR undertaking period expires on March 31, 2017, the public utility will thus be forgoing the remaining years of the incentive undertakings.

There is nothing to prevent a public utility from providing a lower percentage of funding than set out in the table in GRR section 2 (1). The table only provides an upper limit by year. If the utility can be successful in placing incentives based on funding smaller percentages of the price differential there will be a greater number of natural gas-fuelled vehicles on the road generating more system throughput and greater conventional fuel displacement and GHG emission reductions, in short greater success of the programs.

- 1.11 In FEI's understanding, in the case in which the cost of a comparable gasoline fuelled vehicle and the cost of a comparable diesel fuelled vehicle differed, would





FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 8

the difference between the cost of an eligible vehicle and the lowest cost of a traditional comparable vehicle be used to calculate the maximum amount of incentives? Or should the incentive ceilings be based on the difference between the cost of an eligible vehicle and the cost of a vehicle the customer is currently using?

**Response:**

For heavy duty market applications, the comparison case is diesel-fueled vehicles. Gasoline powered vehicles are not used in the target market segments; hence the comparison case is simplified.

It is not practical to consider the cost of the vehicle the customer is presently using as that vehicle may be up to 10 years old. An approach based on the cost of the present vehicle would inflate the difference leading to higher incentives. In addition it is generally desirable to retire older vehicles to reduce emissions of both GHGs and air contaminants based on efficiency and other improvements in the newer diesel stock. FEI's program concentrates on fleets that are faced with a fleet renewal decision and it seeks to change the decision from re-ordering diesels to ordering NGVs.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 9

**2.0 Reference: Exhibit B-1, page 13, Appendix G, and Appendix H**

- 2.1 Please confirm that (i) regardless as to whether there is a robust or a less than robust take-up of LNG/CNG vehicles from now until April, 2017, (ii) regardless as to whether the expected case or the low-growth case is realized, and (iii) due to FEI's ability to reallocate amounts to or from vehicle incentives from or to CNG/LNG station costs under an envelope spending approach, that FEI plans on spending the maximum total amount permitted under the Regulation. If unable to so confirm, please explain.

**Response:**

Yes, it is FEI's plan to fully use the mechanisms established by the Regulation. However FEI wishes to correct one aspect of the question that is mistaken. Funding cannot be shifted between the three prescribed undertakings as suggested in the question. Funding for vehicle incentives and other expenditure categories in GGRR section 2(1) is limited in the undertaking period to \$62 million. Likewise spending for CNG stations is limited to \$12 million and LNG stations to \$30.5 million. The only shifting of spending limits that is permissible is within each prescribed undertaking. For example if spending on incentives for marine vessels is less than the specified limit of \$11 million the unspent amount on marine vessels can be redeployed to provide additional vehicle incentives to other eligible vehicles but it cannot be used to fund other spending on CNG or LNG stations.

It should be noted that expenditures will only be made if customers apply for the incentive and are approved by FEI. Otherwise there will be no grants awarded and no corresponding benefit received by FEI non-bypass customers as a result of incremental throughput.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 10

### 3.0 Reference: Exhibit B-1, page 4, Rate Base and Non-Rate Base Deferral Accounts

3.1 Please explain the difference between rate base and non-rate base deferral accounts, including differences in carrying costs, how such costs are calculated, and amortization periods.

#### **Response:**

The purpose of rate base and non-rate base deferral accounts is the same in that they are both used to ensure that forecast variances do not result in costs being inappropriately borne by customers or by the company, and are mainly used to mitigate the rate impacts and rate volatility for customers. The majority of deferral accounts are rate base accounts and most non-rate base deferral accounts transition to rate base at some point in time.

The recommendation for a rate base deferral account as compared to a non-rate base deferral account has primarily been one of timing, or as a means to stream cost recovery to a particular customer or group of customers separate from all other customers. In the case of a timing issue, if the Companies are able to forecast balances for deferral accounts and include them in revenue requirements, then that is the preferred treatment. In situations where the rates for a particular year have already been set and costs need to be recorded in a deferral account, that deferral account will be non-rate base attracting Allowance for Funds Used During Construction ("AFUDC") until such time as rates are re-set under the next revenue requirements process, and the account is rolled into rate base. In these instances where AFUDC is being charged, the deferral is not included in the utility's rate base, as the AFUDC is the earned return that compensates the utility investors, both debt and equity. AFUDC is provided for in the BCUC Uniform Code of Accounts. The following description is given on when and how AFUDC is to be applied:

*"This account shall include the net cost for the period of construction of borrowed funds used for construction purposes and a reasonable rate on other funds when so used. The amount capitalized shall be charged to this account and concurrently credited to account No. 324], "Allowance for Funds Used During Construction.*

*The rate applied must receive prior approval of the Commission. When a part only of a plant or project is placed in operation or is completed and ready for service but the construction work as a whole is incomplete, that part of the cost of the property placed in operation, or ready for service, shall be treated as "Utility Plant in Service" and allowance for funds used during construction thereon as a charge to construction shall cease. Allowance for funds used during construction on that part of the cost of the plant which is incomplete may be continued as a charge to construction until such time as it is placed in operation or is ready for service".*



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 11

Permission to apply AFUDC was first approved by the Commission in FEI's (formerly BC Gas Inc.) 1992 test year Revenue Requirements Application and has been applied since then.

The approved return on rate base is applied to rate base deferral accounts and the approved after-tax weighted average cost of capital (also referred to as the AFUDC rate) is typically applied to non-rate base accounts. The AFUDC rate is the return on rate base adjusted by having the cost of debt calculated based on an after-tax cost to reflect differences in treatment of income tax between the two calculations. Thus, in these situations, the carrying costs applied to the rate base and non-rate base deferral accounts are the same.

There have been some non-rate base deferral accounts, such as the Revenue Deficiency Deferral Account ("RDDA") in FEVI (which was the creation of a Special Direction), that are financed exclusively by short-term debt; therefore only the short-term debt rate is applied to the non-rate base account in this circumstance.

Amortization periods for deferral accounts are determined on an account-by-account basis and are set based on several considerations:

- the period over which the expenses accrued;
- the period over which costs/benefits associated with the initial benefit/cost are expected to occur; and
- a reasonable period over which to smooth out the impact to rates.

3.2 Please provide the current applicable AFUDC and show how it is calculated.

**Response:**

Line 8 in the table below shows the current applicable AFUDC rate. These rates are based on the 2012-2013 FEU Revenue Requirements and Rates Application as approved by Commission Order No. G-44-12.



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 12

***AFUDC Calculation 2012/2013 Approved RRA***

<b>Line</b>	<b>Particulars</b>	<b>2012</b>	<b>2013</b>
1	Return on Equity	9.50%	9.50%
2	Equity Thickness	40.00%	40.00%
3	Short Term Debt Rate	2.50%	3.50%
4	Short Term Debt Thickness	1.93%	3.03%
5	Long Term Debt Rate	6.85%	6.87%
6	Long Term Debt Thickness	58.07%	56.97%
7	Tax Rate	25.00%	25.00%
8	AFUDC Rate <sup>1</sup>	6.82%	6.81%

Notes

1 (Line 1 x Line 2) + (Line 3 x Line 4 + Line 5 x Line 6) x (1 - Line 7)



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 13

#### 4.0 Reference: Exhibit B-1, page 16

4.1 The referenced page indicates that in addition to the spending to subsidize LNG/CNG vehicles and required infrastructure under the GGRR, FEI can also apply to spend additional amounts in respect of similar programs under CPCN applications. Please provide FEI's current forecasted spending for CNG/LNG vehicles and associated infrastructure that FEI expects to spend from now until April 2017.

#### Response:

The forecast spending for vehicles is detailed in Appendix J, Table 3 on page 3.

Forecast station additions, shown below, are provided in Appendix J, Table 9 on page 7.

**Table 9: Fueling Station Additions 2012-2017**

Fueling Station Additions	2012	2013	2014	2015	2016	2017
CNG Stations	1	3	5	8	12	16
LNG Stations	1	3	5	7	10	15
<b>Total Number of Stations</b>	<b>2</b>	<b>6</b>	<b>10</b>	<b>15</b>	<b>22</b>	<b>31</b>

Average expenditures on CNG stations is limited to \$1.1 million per station and the cap is \$12 million (less administration and marketing costs limited to \$240,000) so approximately 10 stations can be provided under the GGRR undertaking. The remaining stations would need to be done under FEI's GT&Cs Section 12B unless the GGRR cap is amended by further regulation. Alternatively customers may elect to provide their own stations or third-party station providers may provide stations.

For LNG stations, expenditures must not exceed \$2.75 million per station and the cap is \$30.5 million (less administration and marketing costs limited to \$250,000 or tanker truck load-out limited to \$4 million) so 11 full-size stations can be provided under the GGRR undertaking. The remaining stations would need to be done under FEI's GT&Cs Section 12B unless this cap is amended by further regulation. Alternatively, the customers may elect to provide their own stations or third-party station providers may provide stations.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 14

## 5.0 Reference: CEA, 18(2)

- 5.1 Given the wording in the referenced section of the CEA, in FEI's view is it possible that FEI could negotiate rates with a CNG/LNG customer that were expected, when negotiated, to not recover the costs of undertaking stations from the customer, but rather from non-bypass gas distribution ratepayers?

### **Response:**

With respect to prescribed undertakings of CNG/LNG fueling stations, the GGRR requires that at least 80% of the energy provided at a customer's fueling station during the undertaking period will be backed by a take-or-pay agreement with a minimum term of five years. This means that FEI has the discretion to negotiate a rate with a CNG/LNG customer that will not, with certainty, provide full cost recovery<sup>1</sup>. As explained in the Application (page 15), fueling stations with less than full cost recovery still qualify as prescribed undertaking expenditures. Section 18(2) of the CEA provides that the Commission must set rates that allow a public utility to recover the costs of prescribed undertaking stations even if the revenues from the station customers do not recover all the costs.

Please refer to the response to BCUC IR 1.2.2 for an explanation of why the investments by FEI should be recoverable from all non-bypass customers.

- 5.2 In the event that rates were set to not recover the full costs of the fuelling stations, please confirm that ratepayers would be expected to provide ongoing subsidies to the owner/operator of such stations.

### **Response:**

Not confirmed. For instance, first, the fact that less than 100% of the volumes at a prescribed undertaking station may be under take-or-pay commitments does not mean that there is necessarily an unrecovered amount being borne by non-bypass customers. Additional uncontracted volumes being sold at a station, either during the take-or-pay period or after it finishes, may mean that station costs are being fully or more than fully recovered from the

---

<sup>1</sup> Prescribed Undertaking stations with less than 100% of volumes backed by a take-or-pay commitment may still have full cost recovery if the customers under take-or-pay commitments use more than their contractually-required volumes or if other parties make use of the station.



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 15

station users. Second, the terms on which a NGT customer renews its agreement at the end of the initial take-or-pay period is subject to Commission approval.

- 5.3 Ignoring the grant component applicable to vehicles, has FEI ever in the past, proposed rates for a CNG/LNG customer in the knowledge that the rates proposed would require an ongoing ratepayer subsidy? Does FEI expect to propose such rates in the future?

**Response:**

Please refer to the response to BCPSO IR 1.5.2. FEI does not agree that the rates proposed for prescribed undertaking stations with less than 100% of energy subject to a take-or-pay commitment will require an ongoing ratepayer subsidy although rates are under-recovering the cost of service for these stations during the contract term. FEI has not proposed rates in the past for CNG/LNG customers that on a forecast basis did not recover the cost of service arising during the contract term<sup>2</sup>. Nor does FEI propose to offer rates in the future that require an ongoing ratepayer subsidy.

---

<sup>2</sup> Load deterioration under FEI's prior NGV initiatives in the 1980s and 1990s, which were based mainly on a public station model, meant that revenues from stations were not enough to cover the full return on rate base on an actual results basis. Also FEI does not have access to the business cases for the NGV assets that were included in the 1988 acquisition of the BC Hydro Lower Mainland Gas Division and cannot confirm the basis for those investments.





FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 16

## 6.0 Reference: Exhibit B-1, Appendix W

6.1 Please explain why on line 15 of the tables shown on pages 2 and 3 of the referenced document, what is driving the behaviour of the annual PVs of benefits and costs, e.g., why is this line showing positive values for 2012 and 2013, negative values from 2014 to 2022, and positive values from 2023 to 2030.

### Response:

Factors contributing to the net costs or benefits in each of the periods identified are described below:

- Positive values for 2012 and 2013 – There is a net benefit in this period because the recovery of costs does not occur until 2014. This is because the costs (i.e. the incentives granted) have been placed in a non-rate base deferral account which earns AFUDC (commencing after Commission approval for recovery). Please refer to Line 10 of Schedule 1 for 2012 and 2013 which shows a value of zero. The non-rate base deferral account is transferred to a rate base deferral account in 2014, at which point the costs incurred in 2012 and 2013 begin to amortize. For the purpose of this cost benefit analysis, all volumes related to incentive spending have been included for 2012 and 2013.
- Negative values from 2014 to 2022 – There is a net cost because the recovery of costs exceeds the expected delivery margin benefits in this period. The costs are based on the amortization of the rate base deferral account over a period of ten years and include the amortization of the costs incurred in 2012 and 2013.
- Positive values from 2023 to 2030 – There is a net benefit in this period because the rate base deferral account is fully amortized by the end of 2023. As such, commencing in 2024 there are no costs remaining associated with the grants and the delivery margin benefit of the incremental load generated by the grants offsets costs throughout this period.

6.2 Schedule 1 shows an estimated NPV of the Cost of Service benefit as \$1.229M. Given the recovery from ratepayers – for the vehicle incentives alone – is greater than \$5.5M, is it fair to say that non-bypass ratepayers will be worse off, by over \$4M, as compared to the case where ratepayers are not subsidizing LNG/CNG vehicles?



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 17

**Response:**

No, this would be an incorrect statement. The costs of the vehicle incentives granted to the City of Surrey, Kelowna School District, Waste Management and Vedder Transport are included in the Appendix W analysis. The benefits of these customers' additional natural gas loads (i.e. additional delivery revenues) is also included in the analysis. Therefore, the \$1.229 million is the net present value of the benefits (gas load) less costs (rate base costs and amortization of the incentives granted). In other words, there are material positive benefits to customers.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 18

**7.0 Reference: Exhibit B-1, Sections 5.1 and 5.2.3**

7.1 Does FEI understand that it is entitled to a return on that portion of the equity financing for CNG/LNG fueling stations provided by natural gas ratepayers?

**Response:**

To clarify, natural gas customers do not provide equity financing – the shareholder of FEI provides the equity financing for rate base, included in which would be the equity financing for the CNG/LNG fueling stations.

A fair return on rate base, which includes an allowed equity component and return on equity as approved by the Commission is required under section 59 of the *Utilities Commission Act*. Thus, through natural gas delivery rates, the natural gas customers compensate the shareholder for the allowed equity return on rate base.

7.2 Please identify the assumptions that underlie FEI's assertion that "When the costs and throughput benefits of the prescribed undertakings are considered, delivery rates are forecast to decrease by approximately 5.6 per cent by 2030".

**Response:**

The forecast decrease to delivery rates of 5.6 per cent by 2030 is based on assumptions directly related to the prescribed undertakings as well as a forecast increase to delivery margin (and delivery rates) at 2 per cent per year. The assumptions related to the prescribed undertakings includes the forecast of increased natural gas consumption by natural gas vehicles, amortization of incentive costs, and the cost of adding LNG facilities to meet increasing LNG demand. Further detail is provided on page 2 of Appendix G and page 4 of Appendix J.

FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 19

## 8.0 Reference: Exhibit B-1

- 8.1 Please explain how FEI has in the past and plans in the future to determine the difference in cost between a conventional gas or diesel vehicle and a natural gas powered vehicle. Please provide evidence in support of the cost difference identified.

### **Response:**

Under the previous EEC incentive program, FEI asked applicants to provide evidence identifying the purchase price of a diesel powered vehicle having the same or similar attributes as the NGV, as well as a purchase order for their NGVs. Evidence includes recent sales or acquisitions and quotes from dealers or manufacturers. This practice has been continued under FEI's current incentive program. FEI also independently verifies the purchase price and estimates the price differential based on the evidence provided by the applicant or as otherwise obtained by FEI to ensure that the price differential is within a reasonable range and fair market value.

- 8.2 Is it FEI's understanding that the GRR permits less than 100% cost recovery? If so, what incentive does FEI have under the GRR to make only prudent investments?

### **Response:**

Under the GRR, a public utility is able to recover 100% of qualifying expenditures that it makes in carrying out each prescribed undertaking. However, the regulation does not contemplate that the public utility pays for 100% of each undertaking. For instance, for the CNG/LNG fueling stations, the regulation provides that, "at least 80% of the energy provided at each station during the undertaking period is provided to one or more persons under a take-or-pay agreement with a minimum term of 5 years." For Prescribed Undertaking 1, the vehicle grants and loans, the utility's investment limits, or the limits for grants or zero-interest loans, are based on percentage differences between the cost of the eligible vehicle and a comparable vehicle using gasoline or diesel fuel, starting at 100% and reducing to a smaller percentage each year during the undertaking period.

Please refer to the the responses to BCUC IR 1.1.2 and 1.1.3 regarding the Ministry and the Commission's respective roles with respect to the spending limits. The expenditures undertaken pursuant to the GRR are, by definition, prudent expenditures for the purposes of



FortisBC Energy Inc. ("FEI" or the "Company") Application for Approval of Rate Treatment of Expenditures under the Greenhouse Gas Reductions (Clean Energy) Regulation ("GGRR"), and Prudency Review of Incentives under the 2010 – 2011 Commercial NGV Demonstration Program (the "Application")	Submission Date: October 15, 2012
Response to British Columbia Public Interest Advocacy Centre on behalf of the British Columbia Pensioners' and Seniors' Organization et al ("BCPSO") Information Request ("IR") No. 1	Page 20

assessing cost recovery, but FEI will have processes in place to ensure that funds are disbursed optimally. If FEI intends to invest above the prescribed funding limits in each undertaking, FEI would have to seek an amendment to the regulation to accommodate these circumstances within the framework of the GGRR or pursue those expenditures and seek the Commission's approval to recover the costs above the limit in the normal course.