

September 14, 2011

Regulatory Affairs Correspondence  
Email: [gas.regulatory.affairs@fortisbc.com](mailto:gas.regulatory.affairs@fortisbc.com)British Columbia Utilities Commission  
Sixth Floor  
900 Howe Street  
Vancouver, B.C.  
V6Z 2N3Attention: Ms. Alanna Gillis, Acting Commission Secretary

Dear Ms. Gillis:

**Re: FortisBC Energy Utilities<sup>1</sup> (“FEU”) 2012 and 2013 Revenue Requirements and Natural Gas Rates Application**

**Response to the British Columbia Utilities Commission (“BCUC” or the “Commission”) Supplemental Information Request (“IR”)**

---

On May 4, 2011, the FEU filed the Application as referenced above. On August 19, 2011, the FEU filed its responses to IRs No. 2, in accordance with Order No. G-129-11 which set out the amended Regulatory Timetable for the review of the Application.

On August 26, 2011, the Commission issued Supplemental IRs and directed the FEU to submit responses by September 14, 2011. The FEU respectfully submit the attached response to the BCUC Supplemental IR.

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

Yours very truly,

**on behalf of the FORTISBC ENERGY UTILITIES*****Original signed:***

Diane Roy

Attachment

cc (e-mail only): Registered Parties

---

<sup>1</sup> Comprised of FortisBC Energy Inc. (“FEI”), FortisBC Energy Inc. Fort Nelson Service Area (“Fort Nelson”), FortisBC Energy (Whistler) Inc. (“FEW”), and FortisBC Energy (Vancouver Island) Inc. (“FEVI”)



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 1

## 1.0 LNG Tankers – Use of Tanker

**Reference: Application for Approval of a Temporary Service Agreement for LNG Service, Service**

**Agreement for LNG Delivery, Daily Charge for the Use of a LNG Tanker and Daily Charge for the Use of a Mobile LNG Refueling Station (Vedder Application), LNG Tanker Service Charge and the IMC 6000 Service Charge, p. 7;**

**Exhibit B-17, Response to BCUC IR 2.86.5; Exhibit B-1, Application, Appendix I**

"In order to complete the LNG service to Vedder, FEI will utilize two types of assets currently in FEI's ownership and possession – the LNG tankers and IMC 6000 temporary refueling facility. FEI believes that a specific service charge for the rental use of these assets is required when the assets are dedicated to the use by a particular customer for a specific period of time....

As mentioned above, FEI currently owns two LNG tankers, both of which are kept in inventory at the Tilbury LNG facility available for service as required. Currently, the LNG tankers are used primarily for emergency response when LNG is required to be delivered and vaporized into the FEI delivery system in circumstances such as large scale service outages." (Vedder Application)

"FEI accounting records currently show one LNG tanker in asset class 485-20 Heavy Mobile Equipment purchased in December 2010. A second LNG tanker currently being used is fully depreciated, having been built and purchased in 1996." (BCUC IR 2.86.5)

1.1 What was the reason for purchasing the second LNG tanker?

**Response:**

The LNG tanker referred to in the question is an asset that can be used for the transport of LNG by road. The tanker has an insulated, double walled containment vessel designed and approved for the transport of LNG. The tanker can be transported by a semi-tractor to locations as required to provide LNG. The primary use of the tanker will be as a backup resource for system reliability and integrity in both planned and unplanned (emergency) outages. When FEI's gas lines are hit or when planned pipeline work is required that involves interrupting the flow of gas, the LNG tanker is used as an alternate natural gas supply source where the LNG is vapourized



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 2

into the distribution system to maintain service to customers. When available, the tanker will also be used to provide LNG transportation service to customers such as Vedder Transport.

The expenditures for the LNG tanker were forecast in the 2010-2011 Revenue Requirements Application ("2010-2011 RRA"), where FEI explained the reasons for purchasing the tanker as follows (at page 457):

*"LNG expenditures include upgrades to existing LNG storage facilities such as piping, insulation, heat exchangers, valves, regulators, controllers, and other components to ensure safe and efficient operations. These expenditures are anticipated to be \$0.5 and 2.1 million in 2010 and 2011 and include upgrades to boil-off compression at the Tilbury LNG Facility, and a new LNG road tanker and a high volume gas fired LNG vaporizer for the temporary supply of natural gas for planned or emergency work while maintaining gas service to customers."*  
[Emphasis added.]

In response to BCUC IR 1.174.3 in the 2010-2011 RRA proceeding, FEI explained:

*"The new road tanker and the gas fired LNG vaporizer would work together as a temporary natural gas supply system for planned or emergency work while maintaining gas service to customers. Therefore, the two components would be acquired together."*

The reasons for purchasing this second LNG road tanker are explained in further detail below:

- 1) FEI required the second tanker as a backup to its older tanker. FEI is required to have an Emergency Response Plan registered with Transport Canada for LNG transport. As Transport Canada does not allow transport of LNG in a damaged tanker, the plan identifies that a second tanker is required to offload product in the event of an accident when one of the LNG tankers is damaged. Previously, FEI used a LNG tanker from Clean Energy to provide a backup. However, the Clean Energy tanker had since been relocated to the US, which left FEI with no backup tanker prior to the purchase of the second tanker.
- 2) The new tanker can be transported further distances and remain on site longer than the older tanker, providing FEI with increased flexibility as a temporary natural gas supply system. The older LNG tanker has limited hold time for long-distance hauling and a long duration of stationary storage. A LNG tanker is constructed with insulation to reduce heat leak to the cryogenic liquid. However, given sufficient time, heat leaks to the cryogenic liquid would eventually vaporize the cryogenic liquid and increase vapour



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 3

pressure to the limit of the tanker. By definition, the hold time is the amount of time it takes for an LNG tanker to build up its vapour pressure to cause a release of LNG vapour into the atmosphere. The older tanker, which was purchased in 1996 but was built in 1971, has vastly inferior insulation capabilities as compared to a new tanker. The existing tanker has a hold time of only 60 to 70 hours which limits the distance it can be transported and how long it can remain at a site. In comparison, the new tanker has a hold time in excess of 650 hours, which offers FEI much more flexibility in how and where it can be used.

- 3) The new tanker increases the natural gas supply for planned work or during emergency system interruption. The second LNG tanker, along with the yet to be purchased large volume gas fired vaporizer, will provide increased capacity to provide temporary gas supply during planned work or emergency situations. The older tanker and existing vaporizer supply less than 500 customers, while the new tanker and vaporizer would supply over 10,000 residential customers. The need for increased capacity was demonstrated in 2007 when FEI was required to relocate its transmission pipelines to accommodate the Ministry of Highway's South Fraser Perimeter Road construction as a part of the Gateway Project. To avoid service interruption to the large number of gas customers in Ladner and Delta due to the isolation of the transmission lines, FEI made use of two LNG road tankers along with a high volume gas fired LNG vaporizer from Pacific Gas & Electric to provide the temporary natural gas supply. The Pacific Gas & Electric equipment is in regular use by PG&E so it is not always available when needed.

In summary, the new LNG tanker is a valuable backup resource for system reliability and integrity in both planned and unplanned (emergency) outages. The new tanker is required as a backup under FEI's Emergency Response Plan registered with Transport Canada for LNG transport and the design of the new tanker offers increased flexibility and capacity in use compared to the older tanker in FEI's possession. The revenue from use of the tanker for LNG transport service to customers such as Vedder Transport will be used to offset the cost of service of the asset.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 4

1.2 Is the tanker purchased in 1996 still used and useful?

**Response:**

Yes, although the tanker has limitations due its age as described in the response to BCUC Supplemental IR 1.1, it is still used and useful as it continues to be used to provide emergency response and to support the FEI distribution system during planned outages. When FEI's gas lines are hit or when planned pipeline work is required that involves interrupting the flow of gas, the LNG tanker is used as an alternate natural gas supply source where the LNG is vapourized into the distribution system to maintain service to customers. The tanker is also used to provide LNG transport service to customers, such as Vedder.

1.2.1 When was the last time this LNG tanker was used and for what purpose?

**Response:**

The older tanker was last used to make an LNG delivery to Westport Power on August 25, 2011. LNG is delivered to Westport Power under Tariff Supplement I-8. FEI receives a rental fee for the tanker. The rental fee is used to offset the natural gas cost of service.

1.2.2 Please describe the use of this LNG tanker over the period from its purchase in 1996. Specifically, in table format by year, provide the number of emergency responses for the FEI delivery system, the number of scheduled responses for the FEI delivery system, the number of tanker deliveries at the request of a FEI customer noting the Tariff Supplement where applicable and the number of tanker deliveries to an outside party.

**Response:**

The primary purpose for the tanker has been to provide availability of gas in the event of a planned or unplanned outage of part of the FEI delivery system. Even though the tanker may not be in use all of the time, it is available for emergency situations if required.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 5

The tanker has also been rented by Clean Energy to ship LNG to International Forest Products Limited's Adams Lake Lumber Division and Westport Power when the Clean Energy tanker was unavailable for use. Adams Lake lumber ceased to be a customer in the spring of 2007. The tanker has been rented by Clean Energy to make the deliveries to Westport Power since that time. Clean Energy is charged by the kilometer for the usage of the tanker.

The table below shows the planned and unplanned FEI responses as well as FEI customer deliveries and deliveries to outside parties. The table includes the requested information going back to 2003. However, we have very little data for the period between 1996 and 2002.

LNG is delivered to Westport Power under Tariff Supplement I-8.

LNG was delivered to Adams Lake Lumber under Tariff Supplement I-5.

Year	Emergency Responses	Scheduled Responses Fortis	Scheduled Responses Outside Party	Deliveries to Customers	Delivers to Outside Parties
1996					
1997			1 - Pacific Northern Gas 1 - Westcoast Energy		
1998					
1999					
2000					
2001			1- Atco Gas		
2002					
2003	1 - Prince Rupert			3 - Westport 37 - Adams Lake	2 Bobell Trucking / 2 Northwest Natural
2004		1- Sechelt		10 - Westport 27- Adams Lake	8 - Newport, Oregon / 1 - Gig Harbour / 2 - Portland
2005	1 - Quesnel			22 - Westport 12 - Adams Lake	3 - Portland
2006	1 - Nanaimo			26 - Westport 17 - Adams Lake	
2007	1- Ladysmith			30 - Westport	
2008				29- Westport	1 - Paccar
2009				13 - Westport	
2010				32 - Westport	
2011	1 - Burnaby			16 - Westport	



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 6

1.2.3 How much longer does management believe that the original tanker will be in service?

**Response:**

FEI plans to keep the tanker in service as long as possible.

1.3 Please describe the use of each of the two tankers since the purchase of the new tanker in December 2010.

**Response:**

The new tanker has not been used to make any LNG deliveries. It has only been loaded with LNG for testing our Transportation Emergency Response Plan and training purposes at the Tilbury LNG Plant site. It has been available for responding to FEI delivery service emergencies and planned outages but has not been required to this point in time.

Since receiving the new tanker near the end of November 2010 the older tanker has made 22 deliveries to Westport Power and has been used on one emergency outage that lasted four days.

1.3.1 Please provide the date of each delivery, the quantity of LNG delivered, the purpose of the delivery, whether it was an emergency situation or a scheduled outage in the case where it was used for the FEI delivery system and, if the purpose of the delivery was not for the FEI delivery system, provide the name of the FEI customer or outside party and any charges that were billed to the party requesting the use of the tanker.

**Response:**

As discussed in response to BCUC Supplemental IR 1.3, since purchasing the new LNG tanker in December 2010, all deliveries and responses were done by the tanker purchased in 1996. There was one LNG emergency response in Burnaby, on March 18 to 22, 2011. The rest of the deliveries were to Westport Power (delivery service provided through Clean Energy) as



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 7

indicated in the table below. These tanker rentals are invoiced at the end of the year and are based on \$0.18 per kilometer. The round trip for a delivery to Westport is 60 km. Details on each delivery is provided in the table below.

LNG Deliveries to Westport Power since the new tanker was received  
 All deliveries were by the tanker purchased in 1996

Date	LNG Delivered (lbs)	GJ
17-Nov-10	19220	480
24-Nov-10	18840	471
3-Dec-10	17580	439
10-Dec-10	17760	444
21-Dec-10	19460	486
10-Jan-11	19020	475
18-Jan-11	19440	486
26-Jan-11	18120	453
4-Feb-11	19360	484
22-Feb-11	19200	480
9-Mar-11	18600	465
5-Apr-11	18540	463
19-Apr-11	18500	462
5-May-11	18960	474
31-May-11	24960	623
20-Jun-11	18660	466
5-Jul-11	18580	464
14-Jul-11	18020	450
28-Jul-11	25540	638
11-Aug-11	19060	476
25-Aug-11	17200	430

1.3.2 How many days have each of the two tankers sat idle since the purchase of the new tanker in December 2010?





FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 8

**Response:**

The new tanker has not been used for deliveries in the 290 days since FEI took delivery of it. It was unavailable for service for approximately one week during this period because of a design issue that the vendor was working to resolve. It was otherwise available for use as a supply source in planned and unplanned outages and as a backup to the other tanker in accordance with FEI's Emergency Response Plan filed with Transport Canada.

The tanker purchased in 1996 has been available for use for approximately 240 of these 290 days. On the 50 days it was being used it was either being filled, responding to an emergency or being used to transport LNG to Westport Power. The tanker is normally filled with LNG the day before it is sent out.

As described in BCUC Supplemental IR 1.1, having a backup tanker is required at all times to meet the requirements of the Emergency Response Plan registered with Transport Canada, regardless of how much they are used. Making greater use of the tankers by providing service to Vedder Transport makes more efficient use of these assets.

1.3.3 How many days were both tankers in use at the exact same time?

**Response:**

Since purchasing the new tanker in December 2010, both tankers have not been used to transport LNG at the same time. Please see the responses to BCUC Supplemental IRs 1.3, 1.3.1 and 1.3.2 regarding the use of the two tankers during this time. As indicated in the response to BCUC Supplemental IR 1.3.2, the new tanker has been available to respond to FEI gas delivery system emergencies and planned outages and as a back up to the other tanker (i.e. to respond to an incident where the old tanker is damaged and needs to be emptied). There was a period of approximately one week where the new tanker was unavailable for use due to a design issue that the manufacturer was working to resolve. Please also see the response to BCUC Supplemental IR 1.1 for details on the need for the new tanker.

As described in BCUC Supplemental IR 1.1, having a backup tanker is required at all times to meet the requirements of the Emergency Response Plan registered with Transport Canada, regardless of how much they are used. Making greater use of the tankers by providing service to Vedder Transport makes more efficient use of these assets.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 9

1.4 Did the new tanker require a commissioning period? If so, why?

**Response:**

No, the new tanker did not require commissioning.

It did, however, require a modification that was performed at the vendor's expense. This modification involved the addition of a relief valve and the updating of the tanker piping and instrumentation drawing showing the added relief valve. A hold-time test was performed and the weight distribution of the tanker was measured to verify the manufacturer's specifications.

1.5 What date did delivery of LNG to Vedder Transport commence and how many tanker deliveries have been made to date to Vedder for each of the tankers?

**Response:**

The scheduled date for the first delivery of LNG to Vedder Transport is September 27<sup>th</sup>, 2011. The commissioning of the IMC 6000 facility to serve as a temporary LNG station for Vedder Transport was pushed back in response to a delay in the delivery schedule of the LNG tractors. The first delivery will coincide with Vedder Transport having received at least 6 LNG tractors, at which time the expected consumption will justify the commissioning of the IMC 6000 facility. FEI expects to deliver one tanker load per week to Vedder Transport using whichever tanker is available.

1.6 In each of 2011, 2012 and 2013, how often does FEI forecast that a tanker will be dispatched to Vedder? Does FEI forecast the LNG tankers will be used to deliver LNG to any other Rate Schedule 16 customers in this time period? If so, please provide a forecast of the number of trips by year.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 10

**Response:**

The fuel consumption estimate for the 50 trucks that Vedder is purchasing is 138,000 GJ. The capacity of the LNG tanker is approximately 1,100 GJ. This means that Vedder will receive approximately 125 deliveries over the course of a year, which is roughly one load every three days. The cycle time for a delivery to Vedder's site in Abbotsford will require the tanker to be occupied for approximately 4 hours per delivery (transport to site, offloading, return to site). The Vedder operation runs 24 hours per day, seven days per week so there is flexibility to schedule deliveries at mutually convenient times. In addition, FEI will be monitoring the LNG tank levels at Vedder's site and will be able to anticipate and schedule upcoming deliveries.

The level of demand from the 50 trucks is not expected to change over the time frame in question.

FEI plans to develop additional LNG customers under Rate Schedule 16 as presented in the Application (Exhibit B-1), Appendix I. Exact site locations have not yet been identified, thus LNG delivery duration and number of trips are not known at this time. The Vedder operation provides one point of reference.

However, the present tariff offering under Rate Schedule 16 limits such business development to 1,040 GJ/day. The volume associated with the Vedder contract is approximately 36% of what is presently allotted.

As FEI develops additional agreements, it is contemplated that FEI would apply for an increase in the allotment of LNG available for sale to approximately 2,500 GJ/day. FEI's analysis indicates that this level can be supported without impairing the ability of the Tilbury facility to fulfill its emergency backup and peak shaving roles.

- 1.7 Is either of the tankers dedicated to use by Vedder or any other Rate Schedule 16 or LNG Service customers? If so, what is the period of time that the tanker is dedicated to the customer?

**Response:**

No. The tankers are not dedicated to use by Vedder or other Rate Schedule 16 or LNG Service customers. The tankers' priority is to be available for emergency outages. The LNG transport service complements the downtime each tanker experiences in between emergency response



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 11

requirements. Customer contracts indicate that the priority service of the tankers is for emergency response.

- 1.8 Please describe the relative priority of use for each of the two tankers with respect to providing emergency response for the FEI delivery system, to providing response for scheduled outages on the FEI delivery system, and to providing use of the tankers by Rate Schedule 16 or CNG and LNG Service customers.

**Response:**

The priority use for each tanker is to provide emergency response for the FEI delivery system and for scheduled outages. The unavailability of the tankers due to emergency services will be considered force majeure under an LNG transport customer contract as proposed in the Vedder Transportation Services Agreement. Therefore, at this moment, there is not a tanker dedicated to LNG transport for Rate Schedule 16 or CNG or LNG Service customers. Given the availability of the tankers outside of emergency response requirements, FEI can optimize the use of these assets to benefit ratepayers by generating additional revenue.

- 1.9 Assuming the forecast for 2012 and 2013 as set out in Appendix I of the 2012-2013 Revenue Requirements Application and assuming that all of the LNG Service customers request FEI to provide LNG transportation service from the Tilbury facility to the customer site, would FEI need to purchase additional LNG tankers? If so, how many additional LNG tankers would be required?

**Response:**

No. The referenced FEI forecast of NGV fueling station customer additions for 2012 and 2013 can be served without additional tankers.

The forecasted NGV fueling station customer additions for 2012 and 2013 have been amended downwards with the Evidentiary Update filed on September 12, 2011. This amendment is to



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 12

reflect two decisions that have been made recently by the BCUC (Order No. G-128-11 pertaining to the CNG-LNG Application and Order No. G-145-11 pertaining to NGV EEC Incentives).

1.10 Why should the new tanker be included in ratebase?

**Response:**

The new tanker is used and useful for providing utility service and should therefore be included in rate base. The primary purpose of the new LNG tanker (and the older tanker) is to provide backup supply to the system during emergency and scheduled work. The new tanker is required by FEI's Emergency Response Plan registered with Transport Canada for LNG transport. As Transport Canada does not allow transport of LNG in a damaged tanker, the plan identifies that a second tanker is required to offload product in the event of an accident when one of the LNG tankers is damaged. Compared to the older tanker, the new tanker provides FEI with more flexibility in use as a backup supply, since it can be transported greater distances and has more capacity. When available, the new tanker will also be used to provide LNG transportation service to customers such as Vedder Transport. The incremental revenue from these services will be used to offset the cost of service related to the tanker. Accordingly, the new LNG tanker is properly included in rate base. Please also see the response to BCUC Supplemental IR 1.1.

Note that under both IFRS and Canadian GAAP, major spare parts and standby equipment are capitalized to Property, Plant and Equipment, with depreciation commencing immediately. This is based on the premise that the purpose of the standby equipment is to function as a backup, and that the standby equipment is therefore already providing service from the time it is available to be used as a backup. The following example is provided in the Deloitte publication iGAAP: IFRS for Canada, A comprehensive reference guide by Deloitte, 3rd Edition, Example 8.3.2 (page 248):

*"An entity has installed two turbines. One will produce energy for the plant, and the other will be used as a backup in case the first turbine fails, or is otherwise rendered out of service. The probability that the spare turbine will ever be used is very low. The spare turbine is necessary, however, to ensure the continuity of the production process if the first turbine fails. The useful life of the standby turbine will equal the life of the plant, which is the same as the useful life of the primary turbine."*



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 13

There is no specific guidance on this topic under US GAAP, although the general practice of the regulated industry in the US is similar to the treatment above for long-lived spare parts. This treatment is also supported by the FEU's Plant Accounting Manual.

1.11 Would FEU consider excluding this asset from ratebase?

**Response:**

No, the FEU would not consider excluding this asset from rate base. As discussed in the response to BCUC Supplement IR 1.1 and 1.10, the new LNG tanker is appropriately included in rate base because it is a necessary system asset that is required as a backup resource for system reliability and integrity in both planned and unplanned (emergency) outages.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 14

## 2.0 IMC 6000 – Use of Mobile Refueling Station

**Reference: Vedder Application, LNG Tanker Service Charge and the IMC 6000 Service Charge, p. 8;**

**Exhibit B-17, Response to BCUC IR 2.135.0**

<http://literature.chart-ind.com/ProductDetail.aspx?id=66>

"The IMC 6000, manufactured by Chart Industries, is a mobile LNG station and can be deployed to sites to provide temporary or permanent LNG refueling solutions. FEI currently owns one IMC 6000 unit, which was originally purchased in December 2010 to provide LNG refueling to another party. The LNG supply agreements with the other party were not completed due to delays incurred while FEI seeks clarification of regulatory issues associated with providing NGV purchase incentives. FEI has not yet determined where this asset will be deployed following its use at the Vedder site..." (Vedder Application)

"On July 12, 2011, FEI submitted an Application to the Commission seeking approval of a daily charge for a mobile LNG refuelling station amongst other approvals sought. The application is before the Commission at this time.

The Company confirms the ownership of a mobile LNG station known as IMC 6000. The equipment has been received but is still pending successful commissioning and performance testing. As discussed in the July 12, 2011 Application, this unit was purchased in December of 2010 at a capital cost of \$428,000 to provide LNG refuelling to a potential fleet customer. The LNG supply agreements were not completed with this customer due to delays incurred while FEI sought clarification of regulatory issues associated with providing EEC incentives for NGVs. However, FEI has found a short term use for this asset. The IMC 6000 is scheduled to be deployed at the site of Vedder Transport, a heavy duty trucking fleet operator who has purchased 50 LNG vehicles, on a temporary basis until the Vedder permanent station is in place, as approved by BCUC Order G-144-11. Over the longer term, FEI foresees a few potential alternatives for the asset which include:

- 1) Use at the customer's site for which it was originally purchased;
- 2) Use at another NGV customer's site as a permanent solution;
- 3) Use as a backup system resource to fuel existing gas customers and/or NGV customers.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 15

A decision on which alternative to pursue will be made at the conclusion of the temporary service agreement period with Vedder. Once a decision on which alternative to pursue is known the treatment of this asset will be confirmed.

At this time the asset is anticipated to be placed into service and rate base during 2011 and is not impaired as the Company expects to fully recover the cost of the asset through rates over its useful life. The IMC 6000 will be captured in asset class 476-20 (LNG Dispensing Equipment) and will be depreciated at a rate of 5%, consistent with the depreciation rate for LNG Dispensing Equipment approved in Commission Order G-128-11." (BCUC IR 2.135.0)

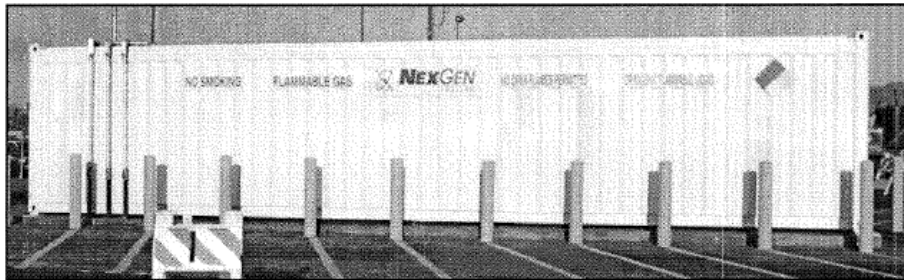
Attachment A contains a copy of IMC 6000 product description sheet. Please refer to this attachment to address the following questions.



<p>FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities"</p> <p>2012-2013 Revenue Requirements and Natural Gas Rates Application</p>	<p>Submission Date: September 14, 2011</p>
<p>Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")</p>	<p>Page 16</p>

# IMC-6000

## LNG FUELING SYSTEM



### LNG Fueling System

Chart Industries' IMC-6000 fuel station is self-contained, pre-assembled and tested. The system is mounted inside a standard 40-foot ISO container and provides the following advantages:

- Quick installation - no field welding required
- Seismically stable - system requires minimal foundation
- Lockable container doors provide station security
- Suitable for either temporary or permanent locations
- Can be easily relocated for future requirements

### PRODUCT HIGHLIGHTS

- Inner vessel - 9% nickel
- Outer vessel - carbon steel
- Insulation - multi-layer super-insulation with high performance vacuum
- Submerged pump capable of dispensing 30-40 GPM at 210 psig discharge and offloading LNG from transport
- Temperature compensated metering system accurate to +/- 2.5%
- Integrated LNG saturation system (typical saturation time is less than 30 minutes)
- Integral gas and heat detection monitors and emergency stops
- Primary spill containment integral to the ISO container
- Skid-mounted PLC/alarm panel with control air compressor
- Required NFPA placarding attached to container
- Two fire extinguishers and fueling personnel safety equipment included
- Offload hose included to allow for two hose LNG transfer to IMC storage without venting

FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 17

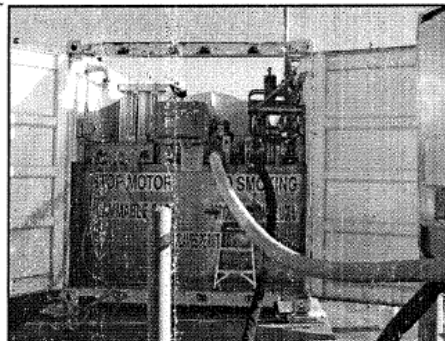
# IMC-6000

## LNG FUELING SYSTEM

SPECIFICATIONS	
LNG Capacity (at 10% ullage)	5,523 US Gallons / 20,906 Liters
Maximum Allowable Working Pressure	175 psig / 12.07 bar
Length (of ISO container)	40 ft / 12.192 m
Width (of ISO container)	8 ft / 2.438 m
Height (of ISO container)	8.5 ft / 2.591 m
Weight (tare)	37,000 lbs / 16,783 kg
Required Site Electrical	380 to 480VAC, 50 to 60Hz, 3 phase, 100 amp
Design Codes	ASME Section VIII Division 1 NFPA 52 California Title 8
Electrical Design Codes	NFPA 70 UL NEMA

### SPECIFIC COMPONENT SPECIFICATIONS

- J.C. Carter® or Parker Kodiak® quick-connect fill fitting
- Macro-Tech® quick-connect vent fitting
- General Monitors® gas monitoring system, FM and ATEX approved
- Fenwal® heat detectors, FM and UL approved
- Siemens® differential pressure transmitter, FM approved
- Burns® resistance temperature detector, FM approved
- Jenny Fan,® UL listed
- Rosemount Flowmeter,® FM approved
- Crouse Hinds® light fixture and switch, UL listed
- Neo-dyn® differential pressure switch, UL listed
- Adelet® junction boxes, UL listed





FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 18

2.1 What date did FEI take receipt of the IMC 6000 unit?

**Response:**

This response addressed BCUC Supplemental IRs 2.1 through 2.4.

FEI received the IMC 6000 unit at Vedder's site on June 20, 2011. Prior to the receipt of the IMC 6000, FEI completed the concrete foundation required to support the unit. In July 2011 FEI completed the electrical connections required to power the unit.

FEI confirms the product description provided by the Commission is similar to the IMC 6000 unit purchased by FEI. Although the unit is "self-contained, pre-assembled and tested," commissioning of the fueling station cannot be performed until the LNG trucks arrive at Vedder's site. Vedder communicated to FEI that the first delivery of trucks would be delayed by the vehicle manufacturer from the initially anticipated in-service date. At this time, Vedder has received its first few trucks and expect a total of approximately 10 to 12 will arrive by the end of September 2011.

The remaining commissioning and testing activities expected to occur the week of September 26, 2011 includes:

- Installation, tie-in and other pre-commissioning checks;
- Storage tank curing and first fill procedure testing and commissioning;
- Final commissioning and training with various operators; and
- First responders information session and site tour.

The cost of the above commissioning activities is captured in the \$428,000 unit price.

Following final commissioning, FEI anticipates the IMC 6000 unit will be used by Vedder starting in early October of 2011. Vedder will continue fueling with the IMC 6000 unit until their minimum quantity commitment of 57,500 GJ is reached and the permanent fueling station is commissioned. FEI anticipates the permanent Vedder LNG fueling station will go into service in early 2012. Engineering and project plans are still being finalized and construction has not yet begun on this permanent station.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 19

- 2.2 Please confirm that the above product description sheet for an IMC 6000 LNG Fueling System applies to the IMC 6000 unit purchased for FEI or is sufficiently similar to describe the unit purchased by FEI.

**Response:**

Please see the response to BCUC Supplemental IR 2.1.

- 2.2.1 The subject product description sheet describes the IMC 6000 unit as "self-contained, pre-assembled and tested." Please describe the commissioning and performance testing that FEI notes, in response to BCUC IR 2.135.0, is still pending on the unit since receipt of the unit and the reason that this commissioning and performance testing was required given that the asset appeared to be in usable state at the point of purchase.

**Response:**

Please see the response to BCUC Supplemental IR 2.1.

- 2.3 Please provide the date that IMC 6000 unit went into service at Vedder.

**Response:**

Please see the response to BCUC Supplemental IR 2.1.

- 2.4 What is the anticipated date that the permanent Vedder LNG fueling station will go into service?

**Response:**

Please see the response to BCUC Supplemental IR 2.1.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 20

- 2.5 If FEI suspends any further LNG Service beyond what it has contracted for with Vedder Transport, would "use as a backup system resource to fuel existing customers and/or NGV customers" be the only remaining potential use of the IMC 6000 of those listed by FEI in response to BCUC IR 2.135.0? If this is not correct, please describe which uses still apply and why.

**Response:**

FEI does not intend to suspend further LNG Service development. If, however, FEI is prevented from providing further LNG service beyond what it has contracted for with Vedder Transport, use as a backup system resource would be the only remaining option of the options listed in the response to BCUC IR 2.135.1. It is only in the specific case where FEI is prevented from providing further LNG Service that the IMC 6000 would be limited to backing up Vedder's permanent station.

In addition to the options listed in BCUC IR 2.135.1, the IMC 6000 unit could be used in support of the development of a satellite LNG to CNG natural gas distribution system or as a means to store LNG for a remote community's power generation system. FEI is investigating these potential markets and early assessments indicate that both have attractive business cases. Both these uses would require the addition of a heat exchanger to assist in the gasification process. The IMC 6000 unit could also be sold for service in NGV operations in other jurisdictions.

- 2.5.1 Would the new Vedder Transports permanent station be the only station in this category of potential use?

**Response:**

Please see the response to BCUC Supplemental IR 2.5.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 21

2.6 If FEI is unable to find other areas to deploy the IMC 6000 beyond use as a temporary LNG fueling station for Vedder, could it become a stranded asset? Please explain why or why not.

**Response:**

FEI believes the IMC 6000 asset will continue to be used and useful for the foreseeable future and will not be a stranded asset.

As described in BCUC Supplemental IR 2.5, FEI foresees the following potential uses of the IMC 6000 beyond use as a temporary LNG fueling station for Vedder:

- 1) Use at the customer's site for which it was originally purchased;
- 2) As a backup system resource for existing NGV customers;
- 3) Supporting the development of a satellite LNG to CNG natural gas distribution system;  
or
- 4) LNG storage for a remote community's power generation.

If the options listed above are not executed on, the mobile IMC 6000 could potentially be sold into other jurisdictions for NGV service.

2.7 Please provide the criteria that FEI would use to determine if the IMC 6000 is a stranded asset.

**Response:**

FEI believes the IMC 6000 asset will continue to be used and useful for the foreseeable future and will not be a stranded asset.

2.8 Why should the fueling station be included in ratebase?



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 22

**Response:**

Assets used and useful in the provision of utility service must, as a matter of just and reasonable rates, be included in rate base. Please also refer to the response to BCUC Supplemental IR 2.6 on the other potential uses for the fueling station. Consistent with all other assets associated with the provision of CNG and LNG Service, the fueling station should be included in rate base because it is used and useful for providing temporary LNG Service to Vedder Transport and service to other future customers. The refueling station can be placed at a location to provide temporary service or permanent service for a new LNG customer whether it is for NGV or some other type of application of the LNG service.

2.9 Would FEU consider excluding this asset from ratebase?

**Response:**

No. FEI believes that the IMC 6000 is appropriately included in rate base as discussed in the response to BCUC Supplemental IR 2.8.



<p>FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities"</p> <p>2012-2013 Revenue Requirements and Natural Gas Rates Application</p>	<p>Submission Date: September 14, 2011</p>
<p>Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")</p>	<p>Page 23</p>

**3.0 LNG Tanker - AFUDC**

**Reference: Vedder Application, Appendix C, Schedules 6 and 8**

<b>Total LNG tanker capital spending prior to 2011</b>	
(\$000's)	
	<b>Prior to 2011</b>
Tanker	275
AFUDC	4.7
Annual Capital Spending and AFUDC	<b>279.7</b>

3.1 Please provide the following:

- The date that the LNG tanker cost was first included in CWIP
- The date that the LNG tanker went into service at Vedder
- The date that the LNG tanker cost was first included in rate base
- The date that FEI began charging depreciation on the tanker

**Response:**

The cost for the LNG tanker was first included in CWIP in December 2010 and was available for use and placed into rate base in December 2010. Depreciation commenced in January 2011. At this time, FEI anticipates the LNG tanker will be used at Vedder in October 2011.

3.2 Please show the calculation of the \$4,700 of AFUDC.

**Response:**

Please note that the AFUDC amount has only been included in the calculation of the rate to provide a conservative estimate of the cost. No AFUDC has been calculated on the amount included in rate base and revenue requirements. The financial schedules that support the rate assume that AFUDC for 3 months on the capital spending is accumulated as follows:





FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 24

$$\begin{aligned} &= \text{Capital Spend} \times ((1 + \text{AFUDC Rate}/12)^3 - 1) \\ &= \$275,000 \times ((1 + 6.83/12)^3 - 1) \\ &= \$4,700 \end{aligned}$$

The 6.83% AFUDC Rate is based on the 2011 approved capital structure for FEI and is calculated as follows:

$$\text{AFUDC Rate} = (\text{ROE} \times \text{Equity Thickness}) + [(\text{Long Term Debt Rate} \times \text{Long Term Debt Thickness}) + (\text{Short Term Debt Rate} \times \text{Short Term Debt Thickness})] \times (1 - \text{Tax Rate})$$

- 3.3 Given that the LNG Tanker is not an asset constructed by FEI, please explain why AFUDC has been added to the cost of the LNG Tanker.

**Response:**

Although it is the case that FEU generally does not apply AFUDC to assets which are not self-constructed, the BCUC Uniform Code of Accounts does allow for the application of AFUDC to assets constructed for the Utility (Account 6, page 7):

*"If the plant is constructed by or for the company, the cost to be recorded shall include the cost of labour, material and supplies, special machine and heavy work equipment service, transportation, contract work, insurance, injuries and damages, privileges, overhead charged to construction and allowance for funds used during construction..."*

*"...Cost of allowance for funds used during construction may include the cost to the company for the use of funds for the purposes of construction whether or not the long term debt has been incurred. The basis of calculation of cost shall be as outlined in account No. 497, "Allowance for Funds Used During Construction".*

Please also refer to the response to BCUC Supplemental IR 3.2.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 25

#### 4.0 LNG Tanker - Depreciation

**Reference: Exhibit B-17, Response to BCUC IR 2.86.5;**

**Amendment to Vedder Application dated August 8, 2011, p.3;**

"FEI's accounting records currently show one LNG tanker in asset class 485-20 Heavy Mobile Equipment purchased in December 2010. A second LNG tanker currently being used is fully depreciated, having been built in 1971 and purchased in 1996.

Previous to 2012, assets in asset class 485-20 were depreciating at 8.48%. The current recommended depreciation rate for this asset class is 18.06% and reflects a useful life of only approximately 6 years. The revised rate for the asset class was established using the recommendations from Gannett Fleming in the latest depreciation study and is applicable to the wide variety of assets included in this asset class.

The tanker purchased in 2010 is anticipated to have a useful life of approximately 20-30 years depending on the frequency of use. The 2010 tanker was not included in the depreciation study, as it only included assets existing at December 31, 2009." (BCUC IR 2.85.5)

"Upon additional review of the financial schedule, FEI has discovered correction that is required to the depreciation expense pertaining to the LNG Tanker cost of service. The depreciation rate for heavy mobile equipment asset pool (asset class 485-20) of 8.48 percent or 12 years was incorrectly used in the determination of the annual depreciation expense for the LNG Tanker. The estimate for depreciation should reflect the expected life of the LNG Tanker, which is in the range of 20-30 years, depending on the frequency of use. As a result, the financial schedules in Appendix C have been updated to reflect the conservative side of that range using a depreciation rate of 5 percent or 20 years." (Amended Vedder Application)

4.1 Please confirm the depreciation rate that FEI currently recommends for LNG tankers is 5%. If it is not, please provide the depreciation rate that FEI recommends.

#### **Response:**

This response also addresses BCUC Supplemental IR 4.2.

For the purpose of determining the LNG Tanker Service Charge FEI has used a depreciation rate of 5% reflecting the expected life of an LNG Tanker, approximately 20 to 30 years. This was done to calculate a cost of service and rate(s) to charge Vedder Transport for the LNG Transportation service.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 26

To clarify, FEI is not proposing any changes to the Gannett Fleming recommended depreciation rate applicable to asset class 485-20 for 2012 and 2013. The LNG Tanker is included in asset class 485-20 which has a current recommended rate of 18.06% reflecting the average service life of the asset pool. This rate is based on the latest depreciation study performed by Gannett Fleming, which only included assets existing at December 31, 2009 and thus excluded the newest LNG tanker. A review of the assets in account 485-20, including the new LNG tanker, will be performed in the next depreciation study. Therefore, the FEI is not applying for a separate depreciation rate for the two LNG tankers in the Heavy Mobile Equipment asset pool for this Revenue Requirements Application.

4.2 Does FEI intend to create a separate asset class for LNG tankers?

**Response:**

No. Please refer to the response for BCUC Supplementary IR 4.1.



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 27

## 5.0 IMC 6000 - AFUDC

**Reference: Vedder Application, Appendix D, Schedules 6 and 8**

<b>Total IMC 6000 capital spending prior to 2011 (\$000's)</b>	
	<b>Prior to 2011</b>
IMC 6000	428
AFUDC	7.4
Annual Capital Spending and AFUDC	<b>435.4</b>

5.1 Please provide the following:

- The date that the IMC 6000 cost was first included in CWIP
- The date that the IMC 6000 went into service at Vedder
- The date that the IMC 6000 cost was first included in rate base
- The date that FEI began charging depreciation on the IMC 6000

### **Response:**

The costs for the IMC 6000 were first included in CWIP in January 2011. The IMC 6000 has been received but is still pending final commissioning (see the response to BCUC IR S.2.1). The asset is anticipated to be available for use at Vedder in October 2011. At that time, the costs will be included in rate base with depreciation commencing November 2011.

5.2 Please show the calculation of the \$7,400 of AFUDC.

### **Response:**

Please note that the AFUDC amount has only been included in the calculation of the rate to provide a conservative estimate of the cost. No AFUDC has been calculated on the amount included in rate base and revenue requirements. For the purpose of calculating a cost of service for the temporary solution of having the IMC 6000 refueling station at Vedder Transport and to establish a rate to charge Vedder Transport, FEI has assumed a 3 month period in which AFUDC charges are incurred prior to the asset being available to serve. The calculation of the



FortisBC Energy Utilities ("FEU"), comprised of FortisBC Energy Inc. ("FEI" or "Mainland"), FortisBC Energy (Vancouver Island) Inc. ("FEVI" or "Vancouver Island"), FortisBC Energy (Whistler) Inc. ("FEW" or "Whistler"), and FortisBC Energy Inc. Fort Nelson Service Area ("Fort Nelson"), collectively also referred to as the "Companies" or the "Utilities" 2012-2013 Revenue Requirements and Natural Gas Rates Application	Submission Date: September 14, 2011
Response to British Columbia Utilities Commission ("BCUC" or the "Commission") Supplemental Information Request ("IR")	Page 28

AFUDC on the financial schedules that support the rate for 3 months on the capital spending is as follows:

$$\begin{aligned} &= \text{Capital Spend} \times ((1 + \text{AFUDC Rate}/12)^3 - 1) \\ &= \$428,000 \times ((1 + 6.83/12)^3 - 1) \\ &= \$7,400 \end{aligned}$$

The 6.83% AFUDC Rate is based on the 2011 approved capital structure for FEI and is calculated as follows:

$$\text{AFUDC Rate} = (\text{ROE} \times \text{Equity Thickness}) + [(\text{Long Term Debt Rate} \times \text{Long Term Debt Thickness}) + (\text{Short Term Debt Rate} \times \text{Short Term Debt Thickness})] \times (1 - \text{Tax Rate})$$

5.3 Given that the IMC 6000 is not an asset constructed by FEI, please explain why AFUDC has been added to the cost of the IMC 6000?

**Response:**

Please refer to the response to BCUC Supplemental IR 3.3 for the reasons why the IMC 6000 asset should attract AFUDC.