

**Ontario Energy Board**

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*,  
S.O. 1998, c. 15, (Schedule B);

**AND IN THE MATTER OF** an Application by Union Gas  
Limited, pursuant to section 36(1) of the *Ontario Energy  
Board Act, 1998*, for an order or orders necessary to  
accommodate a new interruptible natural gas liquefaction  
service at its Hagar Liquefied Natural Gas facility.

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**INTERROGATORIES OF  
ENERGY PROBE RESEARCH FOUNDATION  
("ENERGY PROBE")**

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**July 22, 2014**

**UNION GAS LIMITED**

**Hagar Liquefied Natural Gas Facility**

**EB-2014-0012**

**ENERGY PROBE INTERROGATORIES**

**Energy Probe – IR #1**

**Ref: Exhibit A, Tab 1, Page 1, Line 11ff**

**Preamble:**

**The sale, transmission, distribution or storage of motor vehicle fuel gas by a person other than a Class A distributor is exempted from Section 36 of the OEB Act by Section 2. (2) (b) of O. Reg. 161/99.**

- a) Why does Union want to provide this proposed LNG Transportation Fuel Service as a Regulated Service/Rate rather than as a non-utility business? Please provide the regulatory case/rationale for this.**
- b) Assuming Union would provide the LNG Transportation Fuel as a non-regulated service and Union “LNG” paid Union Gas for the appropriate costs for use of the utility assets at the Hagar facility, what would be the reduction in the annual revenue requirement related to Hagar? Please provide a schedule that shows the allocated costs and shows the annual revenue requirement change over the IRM period.**
- c) Would this change to revenue (assuming Union “LNG” is responsible for capital) be considered a Y factor under the IR regime? Please discuss in detail and in particular alternative regulatory treatments assuming LNG Transportation Fuel is a non-utility business.**

**Energy Probe – IR #2**

**Ref: Exhibit A, Tab 1, Page 1**

**Preamble:**

**Further, this new service will result in better utilization of Hagar. This better utilization will benefit Union’s ratepayers over the Incentive Regulation Mechanism (“IRM”) term (2014-2018) by contributing to regulated earnings subject to sharing. On rebasing, the revenue from this service will form part of regulated revenue for ratemaking.**

- a) Please summarize, under the regulated service option, what the annual change in revenue requirement 2015-18 will be. Please provide details of the Y factor adjustment that is being sought to the Ratebase and Return.
- b) Please provide a Schedule showing the projected volume sales and incremental revenues 2015-2018 from the LNG Transportation Service.
- c) Please provide a Schedule that shows under the ESM Mechanism, how much Union and Ratepayers will receive. Clearly state any assumptions regarding the base earnings and incremental earnings related to the LNG Service.

**Energy Probe – IR #3**

**Ref: Exhibit A, Tab 1, Page 4**

**Preamble:**

As per Exhibit A, Tab 2, Schedule 5, line 9, column (e). The liquefaction forecast is based on 415,520 GJ of average annual activity from September 1, 2015 to December 31, 2018.

Please provide the sales/volume forecast for each year 2015-2018.

**Energy Probe – IR #4**

**Ref: Exhibit A, Tab 1, Pages 8/9**

**Preamble:**

A FortisBC press release dated November 28, 2013, highlights key changes issued by the British Columbia government and the British Columbia Utilities Commission (“BCUC”) designed to “boost” the use of LNG as a transportation fuel. These changes include updates to the greenhouse gas reduction regulation as well as a direction that would exempt the planned expansion of Fortis BC’s Tilbury LNG facility from a review by the BCUC.

- a) Please provide a Copy of the BC Government Direction to the BCUC.
- b) Please provide a copy of the BCUC Order Fortis BC Order (G-165-11A)

## **Energy Probe – IR #5**

**Ref: Exhibit A, Tab 1, Page 10**

### **Preamble:**

**Union indicates it had discussions with several parties looking to enter Ontario's LNG distribution market. To assess and verify the market interest in the service, Union conducted a non-binding call for Expressions of Interest ("Expression") for volumes of LNG from the Hagar plant.**

- a) Please provide the specific details of the "Expressions of Interest" and provide the document issued in the non-binding call.**
- b) Please outline Union's next steps and timing in the process beyond the "Expressions of Interest" phase.**
- c) For each Party identified, please discuss readiness i.e. the timing of when the minimum annual commitment could be realized.**

## **Energy Probe – IR #6**

**Ref: Exhibit A, Tab 1, Pages 12/ 13 and  
Exhibit A, Tab 2, Page 4**

### **Preamble:**

**The 2013 Board-approved revenue requirement for Hagar is approximately \$6.2 million and is recovered from Union North customers in delivery rates.**

- a) Please provide the detailed Revenue Requirement Calculation for the Hagar Facility for 2015- 2018.**
- b) Please provide the actual use of the liquefaction facility for the historic years 2010-2013 and projections for 2015-2018.**
- c) Please define and illustrate what capacity (Space and Deliverability) is required and what is excess to system integrity by month for 2015-2018.**
- d) Please illustrate what capacity space and deliverability and volumes are available to provide LNG Transportation Fuel on an interruptible service basis over a typical year. Please clarify assumptions regarding base System Integrity requirements**

## **Energy Probe – IR #7**

**Ref: Exhibit A, Tab 1, Page 14/15**

### **Preamble:**

**Union proposes to replace the current height measurement equipment with a radar measurement system. This radar measurement system can measure the height of LNG in the tank without any physical contact with the LNG surface, and without the need for inside-tank components that require service. Union proposes to recover the \$200,000 capital cost as part of the liquefaction rate.**

- a) Please confirm the costs of this upgrade.**
- b) Please indicate whether this upgrade is required for System Integrity Service.**
- c) Please indicate the upgrade is required for LNG Transportation Service.**
- d) If this upgrade is desirable for SE purposes, confirm the costs are below the threshold under the IRM Plan.**
- e) If required for the unregulated LNG Transportation Fuel Business, confirm the fully allocated costs will be recovered from that non-utility business.**

## **Energy Probe – IR #8**

**Ref: Exhibit A, Tab 1, Page 17**

### **Preamble:**

**The first option is for the customer to contract with Union for the provision of utility sales service under the proposed L1 rate schedule and the Union North Schedule “A”. Under this option, Union would provide both gas supply commodity and upstream transportation. The second option is for the customer to contract directly with gas suppliers or marketers for the provision of gas supply commodity and upstream transportation to deliver natural gas to the Union NDA. Under this option, the customer will manage its own gas supply and upstream transportation arrangements in a manner similar to other Union North direct purchase.**

**Please provide a copy of the draft modifications to Union North Schedule “A” to accommodate gas supply charges in dollars per gigajoule (\$/GJ) in order to charge customers for this service as:**

- sales service or**
- direct purchase customers.**

**Energy Probe – IR #9**

**Ref: Exhibit A, Tab 1, Page 19**

**Preamble:**

**At Page 19, Union discusses customer forecast and minimum annual volumes.**

**Please provide the forecast annual revenues for each of the years 2015 to 2018 based on the minimum annual commitment from the six Parties that expressed interest in purchasing LNG.**

**Energy Probe – IR #10**

**Ref: Exhibit A, Tab 2, Schedule 5**

**Preamble:**

**In Schedule 5 Union provides the forecast liquefaction sales activity and number of liquefaction days per year for the years 2015 to 2018.**

**Please provide the calculation that supports the forecast liquefaction sales activity amounts for each year and number of liquefaction days for each year and include all assumptions.**

**Energy Probe – IR #11**

**Ref: Exhibit A, Tab 1, Page 19**

**Preamble:**

**At the end of the contract year, if the customer has not met its Minimum Annual Volume commitment within the 12 months, any quantity shortfall will be invoiced in the month for the liquefaction component only (i.e. no natural gas commodity or transport fees).**

**By way of example, please provide the calculation for the liquefaction component only under this scenario.**

**Energy Probe – IR #12**

**Ref: Exhibit A, Tab 1, Page 20 and Table 3**

**Preamble:**

**Union will invest an estimated \$8.7 million in project capital costs. These costs include the installation of the radar measurement system as well as valves and piping that will allow LNG to flow to dispensing facilities plus the construction and installation of piping and a LNG dispensing/pumping skid and weigh scales required to measure the LNG transferred into the tanker truck.**

**Please indicate the basis of and level of confidence in the Capital Costs.**

**Energy Probe – IR #13**

**Ref: Exhibit A, Tab 1, Page 20 and Table 4**

**Preamble:**

**Union is forecasting total incremental O&M expenses of \$1.072 million per year by 2018. These incremental O&M expenses are driven by the increased usage of the liquefaction equipment at Hagar associated with the provision of the proposed liquefaction service. Table 4 provides a detailed breakdown of the forecasted incremental O&M expenses from September 2015 to December 2018.**

- a) Please provide details of the Salary and Wage costs in terms of FTEs.**
- b) Indicate why/whether the employees are dedicated or incremental to existing staff for Hagar Operations (Manager, one supervisor, one administration staff and eight operators).**
- c) Please provide explanation as to why the Road Upgrade Capital is Expensed.**
- d) Please provide details of the incremental Insurance costs for the LNG Transportation Fuelling Facility**

**Energy Probe – IR #14**

**Ref: Exhibit A, Tab 2, Page 6 and Table 2, Page 7 and  
Exhibit A, Tab 2, Schedule 1**

**Preamble:**

**For 2013 Board-approved Hagar costs that support the overall operations of the Hagar facility and cannot be directly attributed to a particular function, Union is proposing to functionalize those costs in proportion to the functionalization of directly assigned costs.**

- a) Please provide a copy of the KPMG Cost Allocation study.**
- b) For other LNG facilities in BC and Quebec compare the functionalization of directly assigned assets to those proposed for Hagar.**
- c) Please compare the Other Asset allocations to the directly assigned assets for these facilities.**
- d) Confirm the KPMG CA study is for 2013.**

**Energy Probe – IR #15**

**Ref: Exhibit A, Tab 2, Schedule 1 and  
Exhibit A, Tab 2, Schedule 5**

**Please provide a Schedule with the proposed 2015 in-service allocation and Revenue Requirement for the Hagar System Integrity facility.**

- a) Confirm Exhibit A, Tab 2, Schedule 5 shows the fully allocated Incremental Cost for the Transportation Fuel Service.**
- b) What are the incremental Insurance Costs?**
- c) Please provide a version of Schedule 5 including these incremental insurance costs.**



**Energy Probe – IR #16**

**Ref: Exhibit A, Tab 2, Page 11**

**Preamble:**

**The second step in the cost allocation review was to determine the function of Hagar (2013) operating and maintenance expenses. Examples of operating and maintenance expenses include salary and wages, materials, electricity costs and equipment maintenance.**

**Please provide a Schedule that shows the 2013 Operating Expenses functionalized by function as well allocation of any non-functionalized costs.**

**Energy Probe – IR #17**

**Ref: Exhibit A, Tab 2, Page 21 and  
Exhibit A, Tab 2, Schedule 6**

**Preamble:**

**The derivation of the interruptible liquefaction rate can be found at Schedule 6. Based on the average forecast level of liquefaction activity of approximately 416,000 GJ per year and Union's proposed interruptible liquefaction rate of \$5.096/GJ, Union estimates that the interruptible liquefaction service will generate approximately \$2.1 million per year in utility revenue (Schedule 6, line 21).**

- a) Please list all the rate design assumptions for the base case and indicate why these are appropriate values for each of the three years.**
- b) Please indicate what will happen if either the 7,000 GJ/day or 170 days of interruptible service are found to be inappropriate after the RFP has been issued.**