

**ONTARIO ENERGY BOARD**

**Union Gas Limited**

**Application for approval to expand natural gas service to certain rural and remote communities in Ontario; for certain exemptions to meet revenue recovery requirements that apply to pipeline projects and approval to construct facilities to serve the communities of Milverton, Prince Township and the Chippewas of Kettle and Stony Point and Lambton Shores.**

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**Interrogatories**

**Energy Probe Research Foundation**

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**November 17, 2015**

**Energy Probe Research Foundation Interrogatories**  
**Union Gas Community Expansion Project Proposal**

**Energy Probe IR #1**

**Ref: Exhibit A, Tab 1, Appendix A- OEB Letter February 18, 2015**

- a) Please provide a list of all correspondence, e-mails and notes or minutes of meetings with Government Ministry officials and with Ontario Energy Board Staff in the development of the Application. Indicate the availability of the listed documents.**
- b) Please provide a list of correspondence, e-mails and notes or minutes of meetings with the 5 proposed communities in development of the Application. Indicate the availability of the listed documents.**
- c) Please provide Union's costs related to the Opportunity Assessment Project.**
- d) Please provide Union's costs related to the development of the Application and of the 5 Community Expansion Project LTC applications.**
- e) Please explain how Union proposes to recover these costs if the applications are/are not approved.**

**Energy Probe IR #2**

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

**Preamble: The Ontario government's desire to expand natural gas distribution systems, which will increase natural gas use, is inconsistent with their recently announced intent to implement a cap and trade program whose objective is to significantly reduce the use of natural gas. While Union supports its Community Expansion proposals as filed in this application, the ultimate degree to which any approved regulatory flexibility is used will depend on reconciling these two opposing government policy positions**

**Please provide any correspondence (emails, letters and so on) that it has been written to or received from the provincial government regarding the provincial government's proposed cap and trade system for carbon emissions.**

### Energy Probe IR #3

Ref: Exhibit A, Tab 1, Page 5

Preamble: Union indicates the following Guiding Principles:

1. Customers and municipalities who directly benefit from Community Expansion Projects should contribute to the financial viability of the project.
  2. Expansion customer contributions to project feasibility should be commensurate with the savings achieved by switching to natural gas.
  3. Moderate cross subsidization from existing customers is acceptable, provided long term rate impacts are reasonable.
  4. Natural gas distributors should not be exposed to financial risk related to the incremental new community capital investments.
- a) Please explain why responding to Government and OEB direction is not a Guiding Principle?
- b) Please explain why “Customers should not be exposed to financial risk related to the incremental new community capital investments” is not a Guiding Principle. (should this not also be a consideration so that Union’s approach is appropriate – customers are also at financial risk as they ultimately pay for these projects
- c) Please explain why the optimum use of available Government Loans and Grants for gas infrastructure development is not included?

### Energy Probe IR #4

Ref: Exhibit A, Tab 1, Page 8

Preamble: The E.B.O. 188 Decision supports an approach that facilitates the expansion of natural gas service while adhering to a key principle that existing ratepayers ultimately be held harmless from rate impacts resulting from the cost of new connections.

- a) Does Union disagree with the objectives of The E.B.O. 188 Decision? If so, indicate in detail why this is the case.
- b) Please indicate if Union is proposing to Change the E.B.O. 188 approach
- only for the current 5 Community Expansion projects,
  - for the Opportunity Assessment top 30 projects,
  - for the Opportunity Assessment Potential Projects.

- c) Why does Union now believe ratepayers should not be held harmless from rate impacts from the cost of connections?

#### **Energy Probe IR #5**

**Ref: Exhibit A, Tab 1, Page 10 and  
Exhibit A, Tab 1, Appendix E**

**Preamble: Figure 2 shows the cumulative energy costs a typical residential customer can experience if converting to natural gas. The natural gas cost estimate for year one includes the estimated cost of replacement of existing equipment, or conversion of equipment to natural gas, at a cost of \$4,000 and assumes an up-front customer contributions-in-aid-of-construction (“CIAC”) payment of \$2,500.**

- a) Please provide the Spreadsheet Model (live) that predicts residential energy cost savings populated with the baseline prediction in Figure 2 and notes on all input assumptions including cost of capital etc.
- b) Please provide the supporting energy cost forecasts for each alternative.
- c) Specifically provide the future gas price forecast used by Union for the next 10 years. Provide references and as appropriate, reconcile to the latest ICF International gas price forecast provided to Union.
- d) Please provide a Table that reconciles the calculations in Figure 2 to those in Exhibit A, Tab 1, Appendix E.

#### **Energy Probe IR #6**

**Ref: Exhibit A, Tab 1, Page 10 and  
Exhibit A, Tab 1, Appendix E**

**Preamble: Energy Probe wishes to understand in the framework of IRP, if OPA/IESO CDM programs for Electricity distributors e.g. Hydro One, may facilitate conversion from Electricity to Natural Gas and whether also DSM programs are available for home retrofit and furnace upgrades.**

- a) Has Union determined/assessed if customers converting from electricity to gas can access CDM programs and incentives? If so, provide a precis of the available programs/incentives.
- b) In preparing its savings estimates, did Union take into account all such assistance/programs. If not why not?

- c) **Did Union take into account assistance from its own proposed DSM programs for homeowners and particularly for Low Income households? Please summarize the available assistance, including retrofit measures and furnace replacement.**
- d) **Please rerun Savings Scenarios for typical households with available incentives from**
  - i. **CDM (assume an electricity price forecast) and**
  - ii. **DSM programs (using future gas price forecast)**

**Please summarize all input assumptions and provide the results in Excel format in the same Workbook requested in IR #5 a).**

- e) **Given the Boards Policy on IRP, please describe the specific steps Union has taken to implement IRP methodology in planning for these projects**

#### **Energy Probe IR #7**

**Ref: Exhibit A, Tab 1, Page 12**

**Preamble: Union states that "despite the increasing number of conversion customer attachments, very few of these customer attachments were in 'new -to-gas' communities. In the past decade Union has only expanded to one new community requiring Board facilities approval, Red Lake."**

- a) **Is it correct that the primary reason that Union has not expanded to new communities is because the economics of those projects were unfavourable (having a Profitability Index of less than 1.0).**
- b) **Please explain how many projects were rejected due to economics or other considerations.**
- c) **Please provide the rationale to proceed with the expansion to Red Lake.**

#### **Energy Probe IR #8**

**Ref: Exhibit A, Tab 1, Page 16**

**Preamble: Union states: "The proposed TES provides a means of satisfying the principle that those that benefit from expansion should bear a share of the costs, as well as the principle that customer contributions to project feasibility be commensurate with the savings they achieve by switching from other energy sources to natural gas."**

- a) Does the proposal mean that large volume customers will be cross subsidizing low volume customers, as the costs to service the two customers may be similar, while the TES charges will be significantly higher for one? Please explain.
- b) Did Union consider a fixed charge? Please discuss.

### **Energy Probe IR #9**

**Ref: Exhibit A, Tab 1, Page 16/17**

**Preamble: An additional barrier is the CIAC mechanism applying only to those customers who attach in the year a project goes into service. Customers who delay attaching until future years can avoid paying their share of the CIAC. As proposed, the TES mitigates the incentive for customers to delay connection by ensuring all customers who attach during the TES period associated with the project feasibility analysis pay the TES.**

- a) Please provide the forecast of customer attachments for each project.
- b) Please provide the TES period for each of the 5 Community Expansion Projects.
- c) Please indicate the customer attachments forecast during the period of the TES.
- d) If the TES period was extended to 10 years, how would this impact the forecast attachment? Please be specific for each project.

### **Energy Probe IR #10**

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

- a) Please provide the sources for all the data used to generate Table 2.
- b) For what year(s) are the costs applicable?
- c) Please provide a comparable Table for Water Heating Costs.
- d) Please provide a Table that shows/combines costs for each of Space and Water Heating.

## **Energy Probe IR #11**

**Ref: Exhibit A, Tab 1, Page 23- E.B.O.188 Exemption: Minimum Project PI Threshold**

**Preamble: Union proposes an exemption from E.B.O. 188 that would allow the minimum economic threshold for Community Expansion Projects to be lowered to a PI of 0.4 from the current minimum of 0.8.**

- a) Please indicate if this minimum PI of 0.4 is before or after including TES, ITE and CIAC revenues.**
- b) Please indicate why Union is proposing a minimum PI of 0.4 rather than any other level.**
- c) Is 0.4 a minimum PI threshold for all projects proposed to be implemented from the Opportunity Assessment? Please explain.**

## **Energy Probe IR #12**

**Ref: Exhibit A, Tab 1, Page 25, Figure 4 and Exhibit A, Tab 1, Appendix D**

**Preamble: The main reason for the increase in customers that could be served as the PI decreases from 0.5 to 0.4 is the impact of a large project that becomes feasible at 0.4. This project would provide access to natural gas to over 9,000 potential customers in the communities of Kincardine, Tiverton, Paisley and Chesley.**

- a) Please explain why the Kincardine, Tiverton, Paisley and Chesley Project is being advanced when it has a natural PI of 0.18.**
- b) Please explain why it is appropriate that the PI minimum should be decreased from 0.5 to 0.4 to accommodate this project.**
- c) Please confirm/provide the following resulting impacts:**
  - Cost /Customer**
  - Total Capital cost**
  - Cost/rate impact to existing customers**
- d) Please provide a scenario with a Provincial CIAC loan/grant to make the minimum PI threshold 0.5 for this and other top 30 projects.**

### **Energy Probe IR #13**

**Ref: Exhibit A, Tab 1, Page 25 and  
Exhibit A, Tab 1, Appendix D**

**Preamble: Table 3 provides a summary of the projects that may become feasible at each PI level without a need for CIAC sourced from the grants and loans announced by the Province.**

- a) Please provide in both tabular and graphical form the Unit Capital cost to service customers for the recent (last 3 years) OEB approved System Expansion Projects.**
- b) Please provide in both tabular and graphical form the Unit Capital cost to service the current 5 Projects and the top 30 Opportunity Assessment projects.**

### **Energy Probe IR #14**

**Ref: Exhibit A, Tab 1, Page 31**

**Preamble: Union proposes to adjust rates annually to recover the forecasted net revenue requirement associated with the gross capital investment for all Community Expansion Projects. Consistent with Union's current practice, gross capital will be reduced by any upfront CIAC that is received (i.e. provincial funding). In addition, Union proposes to create a deferral account (see Section 4.6) to capture the variances between the forecast net revenue requirement and the actual net revenue requirement for the Community Expansion Projects.**

- a) Please provide a Summary Table that provides the Rate class impacts by year for each of the 5 projects...**
- b) Please provide a table providing the amount of money that to be spent on the proposed community expansion projects that will come from:**
  - current residential natural gas ratepayers,**
  - ratepayers that are being connected through the new program,**
  - municipal governments and**
  - provincial taxpayers (in the form of government grants and loans).**

## **Energy Probe IR #15**

**Ref: Exhibit A, Tab 1, Page 35**

**Preamble: Union is seeking approval of five projects in this application. For the remaining 25 that can be serviced under its Proposal, Union will continue to file leave to construct (“LTC”) applications for those expansion projects that meet the Board’s LTC criteria. The LTC applications will include the requests for approval of the net revenue requirement associated with the projects. Union will also apply for franchise and certificate applications if necessary. For those projects that do not meet the Board’s LTC criteria, Union will file an application for approval of the forecast net revenue requirements. Union will then include the approved net revenue requirement impacts for all the approved projects in its next annual rate-setting application.**

- a) Please explain why the E.B.O. 188 Exemption applies beyond the 5 projects in the existing Application.**
- b) Please explain why the CE Plan should not involve phasing projects to mitigate rate impacts.**
- c) Please explain why all CE Applications that do not meet E.B.O. 188 should not be filed with full information on feasibility, economic benefits and rate impacts.**

## **Energy Probe IR #16**

**Ref. Exhibit A, Tab 1 page 42**

**Preamble: Union indicates the criteria and form of funding from the announced provincial funding are unknown at this time.**

**Please discuss the timing of when the criteria and form of funding will be known.**

## **Energy Probe IR # 17**

**Ref: Exhibit A, Tab 1, Page 4, Small Main Extension Project Proposal Tab 3, Appendix O**

**Preamble: The parameters of Union’s proposals have been set to achieve the following objectives:**

1. Temporary Connection Surcharge (“TCS”) rate for smaller main extension projects.
  2. To maximize the number of new communities to receive natural gas service without the use of provincial funding support, and
  3. To limit the rate impacts on existing customers to a maximum approximating \$2 per month (\$24 per year) over the multi-year expansion program.
- a) Please indicate if the TCS rate and the TES rate are identical. If not, explain the differences.
  - b) Please indicate if the above rate impacts are included or on top of the subsidy/impact from the Community Projects. Please provide the combined total.
  - c) Please provide a list of prospective Small Main Extension Projects with timing and estimated costs.
  - d) If available, provide information on estimated PIs without TCS.

#### **Energy Probe IR # 18**

**Ref: Exhibit A, Tab 1, Appendix H-Distribution New Business Guidelines**

- a) Please provide a Blackline version of the revised Guidelines.
- b) Please indicate if the revised Guidelines will apply generally or to only the Opportunity Assessment Community expansion Projects.

#### **Energy Probe IR # 19**

**Ref: Exhibit A, Tab 1, Appendix J**

- a) Please provide a similar schedule showing the Revenue Requirement for the 5 initial Projects in the same format.
- b) Please provide details of the Incremental Revenue calculation (line 12) for the 5 projects. Clarify if not shown, whether TES and ITE are included.
- c) Please provide details of the Incremental Revenue calculation for the 30 projects (line 12). Clarify if not shown, whether TES and ITE are included.

- d) Please list the Projects and Data for the 30 projects in the same format as Appendix D.
- e) Please explain the criteria determining if a Provincial CIAC loan/grant is or is not required for each of the projects.

#### **Energy Probe IR # 20**

**Ref: Exhibit A, Tab 1, Appendix K and  
Exhibit A, Tab 1, Appendix L**

- a) Please provide a schedule with the Rate Class cost allocation for the initial 5 projects.
- b) Please provide a schedule with the General Service Rate Impacts for the initial 5 projects.

#### **Energy Probe IR # 21**

**Ref: Exhibit A, Tab 1, Appendix M**

- a) Please provide a schedule with the Rate Class cost allocation including TES and ITE for the initial 5 projects.
- b) Please provide a schedule with the General Service Rate Impacts including TES and ITE for the initial 5 projects.

#### **Energy Probe IR # 22**

**Ref:**

**Exhibit A, Tab 2, Section A, Kettle Point Project  
Exhibit A, Tab 2, Section B, Milverton Project  
Exhibit A, Tab 2, Section C, Moraviantown Project  
Exhibit A, Tab 2, Section D, Prince Township Project  
Exhibit A, Tab 2, Section E, Walpole Project**

- a) Please provide a Summary Workbook and schedules with the details of each project including:
  - In service date
  - Customer attachments
  - Capital Cost
  - Natural NPV and PI
  - NPV and PI with TES and ITE.
  - TES period

- Amount of TES contributions**
- Amount of ITE contributions**
- Provincial Infrastructure CIAC**
- Revenue forecast for 10 years and lifetime 40 years**

**b) Please reconcile the above to the data in respective Sections A-D and E and to Exhibit A, Tab 1, Appendix D.**

**c) Please provide an estimate for each project of the additional revenue/CIAC required to achieve a PI of 0.8. List assumptions used to prepare the estimates.**