

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 approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas as of January 1, 2013.

**INTERROGATORIES OF
BUILDING OWNERS AND MANAGERS ASSOCIATION,
GREATER TORONTO (BOMA)**

B. Rate Base

1. *Is Union's forecast level of capital spending in 2013 appropriate?*

1. B1, T3, Page 2 – Please provide a copy of the Distribution Business Guidelines filed in EB-2005-0520, and a blacklined version of the "new guidelines" filed in Appendix A to the current filing for ease of comparison. Please explain any proposed changes fully.
2. Table 1, Page 5 – Please provide those additional 2012 and 2013 estimated housing starts now available for the eight sources that had not reported at time Union created the forecast. Please explain any 2012 and 2013 estimates that are still not available and state when they will be available.
3. Page 7 - Please break down the forecast 2013 starts (17.702) into single family homes, condominiums, and rental units. Are the same methods used to project

future gas volumes for these three categories of dwelling, or are there differences?
Please provide details.

4. Please provide recent trends, say the last five years, for average square footage for single family homes, condominiums, and rental units, constructed in Union's franchise area. Please estimate the impact the changes would have on throughputs, all else being equal.
5. Page 7, Line 20 – Please provide a longer term record, at least ten years for the 11.6 ratio. How are new medium and large office buildings, large warehouses and shopping centres, and institutional buildings, eg. hospitals, attachments accounted for? What are the thresholds for providing separate building specific estimates?
6. B1, T1, Page 3 – What is the correct number for "Transfers" for 2012?
7. B1, Pages 1 and 7 – Please explain fully what is meant by the draw downs of "accumulated deferral taxes" which is shown as a reduction in the Rate Base Summary, Table 1.
8. Please provide the impact on rates in each year over the period of the useful life of an asset in question (20 years) of capitalizing \$1.00 of O&M each year. If you wish, show the result for assets depreciated over different periods.
9. Please compare Union's amount of total O&M (including overhead expenses shown separately) capitalized under the current policy with that of Enbridge, and other Canadian gas utilities.

10. What would the amount capitalized in 2013 be if Union were to operate under IFRS rather than US GAAP? Please discuss and provide necessary references to IFRS documentation.
11. D1, T2, Page 3, Table 2 – Capitalization of O&M is showed to decrease by 14.1 million in 2013 from Board approval in 2007. Please explain the difference. Is it due in whole or in part to a difference in capitalization policy?
12. B1, T2, Pages 7-10 – Please provide the amount of capital spent on new or renovated service centres in each year from 2007 to 2012 inclusive, and what is proposed to be spent in 2013? Please describe the projects in detail. Please list the centres. Please provide a copy of the CB Richard Ellis study.
13. T2, Page 11 – Please describe in detail the Marcellus-Kirkwall Station modifications and the Parkway Measurement Upgrade.
14. T2, Page 7 – Please complete Table 1 by providing the actuals for 2008 and 2009.
15. T2, Table 4, Page 6 – Has OPG's proposed Lambton coal to gas conversion plant received approval yet from: 1) the OPG Board; 2) the provincial government? What is the proposed size of the plant?
16. T2, Page 6 – Has the OPG's proposed Guelph cogeneration power plant received approval yet from: 1) the OPG Board; 2) the provincial government? What is the proposed size of the plant?

17. T2, Page 9 – How do Union's Vehicle Replacement Guidelines compare with Spectra's? Please provide a copy of the PHH Strategic Consulting Study.
18. B1, T5, Page 3 – What is meant by non-facility capacity in lines 4 and 11? Please explain fully and describe the non-facility capacity that was put in place for the winters of 2010/2011 and 2011/2012.
19. B1, T6, Page 4 – Please provide a copy of CSAZ66207 Standard for Oil and Gas Pipeline Systems, adopted by the Technical Standards and Safety Authority.
20. T6, Page 8, Table 8 – Why did Union's IMP related actual expenditures on IMP plan for Pipelines, at or about 30% SMUS, exceed budgeted amounts by over 100% in 2010 and over 200% in 2011? Please provide details. What have the actuals been, both capital and operating vs. proposed (see Table 3, page 11) for 2012?
21. B1, T9, Page 1 – Please explain, with a diagram, if necessary, the difference between the "suction side" and the "discharge side" of the Parkway Station. Please describe, in detail, with diagrams, what infrastructure does TCPL have, contiguous with, or very near, the Union Parkway Station?
22. Page 2 – Please explain what is meant by "exports and imports" to and from Parkway Compression, using diagrams. Please break down the forecast increase of "exports" from 2.0 PJ/d to 3.0 PJ/d from 2011 to 2015/16 among the four causes contained in paragraphs (i) through (iv) on page 2.

23. Pages 2-3 – Please explain how LCU protection is achieved for Dawn, Lobo and Bright compression, and how it is proposed to be achieved at Parkway discharge. Please provide the description of the technical solutions and the costs that were used, or will be used, in the case of Parkway discharge, in each case. Please show in detail how the LCU at Parkway discharge will prevent the loss of: 1) delivery capability to TCPL; 2) consequences of that failure.
 24. Page 4 – Please describe, with diagrams, how the proposed "second metering and header" station fits into Union's existing compressor infrastructure at Parkway, including the existing connections with Enbridge at Parkway (Consumers) and Lisgar. Please explain the significance of the valve site. Please describe where the Lisgar station is, in relation to Parkway station. Is Lisgar a direct connection between Union and Enbridge? Please discuss fully.
 25. Page 5 – Has Union optioned the land in question for the Parkway West?
 26. Page 6 – Does the Parkway West Project deal with the "TCPL congestion at Maple"? Please explain Union's understanding of the congestion issue, why it exists, and its history. How does the Parkway West Project, if at all, deal with the "congestion" problem? Please explain fully, using diagrams, if appropriate.
6. ***Are the methods proposed by Union to allocate the cost and use of capital assets between regulated and non-regulated activities appropriate, and are the proposed allocations to the regulated business appropriate for the Test Year?***
1. B1, T2, Page 7 – Union apparently spent \$13.1 million in capital on unregulated storage projects. Please explain how the financing and ownership costs of these projects are kept separate from the regulated utility accounts, with respect to rate

base, depreciation, interest during construction, insurance, and the like, and how are the physical assets themselves distinguished.

C. Operating Revenues

1. Is Union's general service demand forecast appropriate?

1. A2, T1, Schedule 1, Page 19 - Please provide any studies Union has done itself, or had done by third party experts, to support the change to a twenty year declining trend weather normalization method, and to support its claim that the current method has resulted in the overestimation of heating demand of customers by 2.9% in a typical year. How much would the revenue forecast and throughout forecasts be reduced by this proposed change? What would be the impact of such a change on (a) upstream transportation and (b) balancing costs? Please show calculations.
2. Page 21 - What requirements are included in the throughout forecasts each year from 2013 to 2018, inclusive, for the Thunder Bay Generating Station? Please provide a copy of the Minister's directive to the OPG for the conversion of the station from coal to gas.
3. Page 21 - When (in which year) does Union expect that OPG's Lambton and Nanticoke Gas conversion projects, the proposed Waterloo-Cambridge peaking facility, and the replacement for the "Oakville project", to start using natural gas? How does Union propose to deal with the very large increases in gas consumption, if they occur during the next five IRM years? What expenditures

will be necessary on Union's part to serve each of the four planned gas facilities?
How much capital and/or O&M is being forecast for each of the four gas plants in 2013?

4. Page 22 - What are the estimated gas revenues from the test year and through next IRM years for gas transport to the St. Clair, East Windsor, and Halton Hills generation stations?
5. Can you provide the number of contracts and the volumes of gas under each contract to each shipper on the Dawn Parkway, and Dawn-Kirkwall lines that expire on November 1 of each of 2014, 2015, 2016, 2017, and 2018? Do most of the contracts take the form of annual contracts, renewable automatically, unless two years' notice of termination is provided, as described in the 2011 Annual Report, or are there variations? Please describe the types of variations from the model described above.
6. C1, T1, Page 3 – Please provide, or provide a link to, the rate documentation for each of the four rates shown on Table 1.
7. Page 3 – Why are the adjustments applying the NAL to Commercial Rates M1 and M2 in the opposite direction from one another? Please explain fully.
8. Page 4 – Are all of the commercial rate customers general services customers or are some contract customers? Please explain fully. Please explain the dividing line between contract customers and general service customers in functional terms, eg. type of load (residential, commercial, institutional, industrial, etc.)

volumes or demand thresholds, other contractual requirements, types of pipe [pressure, thickness], etc. For example, are, or could, universities, large hospitals, or very large office buildings be contract customers? Please explain fully.

9. Page 5, Lines 5-8 – Please explain more completely the method for estimating commercial NAL estimates.
 10. Page 13, Table V – Please provide 2011 actuals.
 11. Pages 13 and 14, Table V – Please explain how the Energy Efficiency Index is calculated.
 12. Page 14 – Please show Table V and Figure 1 with the current weather normalization method.
2. ***What is the appropriate methodology to be used to forecast degree days for the Test Year?***
1. Pages 3 and 6 – Please reproduce Tables 1 and 2 using the currently approved normalization method, rather than Union's new proposal in this application. Why is the same pattern repeated as between the .01 and 10. commercial rates, except for a very small decimal adjustment for 01 compared with M2?)

D. Cost of Service

1. *Is the 2013 O&M budget appropriate?*

1. A2, T1, Schedule 1, Page 3 - Please explain the increase in "Other" (line 14) from 4, in evidence filed (2011-11-10), to 7 in evidence filed (2012-03-27).

2. Pages 2 and 3 - In what years did TCPL offer an FT RAM credit? Were Union's FT RAM revenue subject to the Earnings Sharing Agreement in each year over the recent IRM period? Please discuss, showing amounts of FT RAM credits in each year. If not, why not? Please discuss fully. Were the FT RAM credits Z-factors for each IRM year during which Union participated in them? Please discuss.
3. What is Union's forecast of inflation for the years 2012, 2013, 2014, 2015, 2016, 2017, and 2018, relative to the years 2012 over 2011 for the all in "CPI", and the "all in" OPI?
4. Please provide a schedule showing the impact on earnings and revenue requirement of Union's past participation in TCPL's FT RAM program, for each of the IRM years, including 2012.
5. Page 25, Table 5 - Please explain what incremental revenue was realized in 2008, 2009, 2010, and 2010 through the use of FT RAM credits. How much of the revenue shown on line 3 is due to FT RAM? Will that revenue reoccur in 2012?
6. Page 25 - Union projects sustainable O&M productivity gains of \$22.5 million in 2013, consisting of \$15.9 million of gains persisting from savings taken up to and including 2011, and incremental productivity gains realized in 2012 of \$6.6 million which will persist into 2013.
 - (a) (i) Please describe in detail each category of the \$15.5 million of persisting O&M productivity gains of \$15.9 million and the 1.1, 1.9, 9.7,

and 10.8 of capital productivity gain in years 2008 through 2011, respectively. Please describe the difference between O&M productivity gain and capital productivity gain. Please include examples of each. (ii) What incremental O&M and capital productivity gains, if any, were achieved in 2012.

- (b) What explains the increase in persisting total productivity gain from 15.5 to 15.9? Is the additional 0.4 million capital productivity gain?
- (c) Why do more of the capital productivity gains for 2011 and previous years not persist into 2012 and 2013?
- (d) Will the entire 22.9 in 2013 productivity gain persist through the years 2014, 2015, 2016, 2017, and 2018? If any parts of it will not, what parts, and why?

14. *Is the gas supply plan for 2013 appropriate?*

- 1. A2, T1, Schedule 1, Page 10, Figure 1 - Would Union please update the graph of Dawn-Kirkwall's activity to the end of 2011?
- 2. Page 10 - Are shipper contracts, on Dawn-Kirkwall route multi-year demand based contracts? To what extent do reduced volumes mean reduced revenues? Please discuss and quantify. Please provide a copy of the rate and standard contract(s) used for ex-franchise transmission on Dawn-Kirkwall and Dawn-Parkway.

3. Page 11 - Has the 375,000 GJ/d of Dawn-Kirkwall capacity turned back by TCPL on October 31, 2010, effective November 1, 2012, been resold under comparable terms, ie. revenue, demand/commodity, and term.
4. Page 11 - What are the remaining terms and volumes of each of the contracts from Dawn-Kirkwall line?
5. A2 - Are they all priced at the M12 rate? What is the difference between C1 Transportation and M12? Please explain fully.
6. Page 11 - Union states that, effective November 1, 2013, TCPL has turned back 186.6 GJ/d of Dawn-Kirkwall capacity, and that TCPL and two other parties have turned back 122,000 GJ/d of Dawn Parkway service for a total 310,000 GJ/d (122,000 GJ/d Dawn Parkway and 186,000 GJ/d from Dawn-Kirkwall). Why has Union forecast 350,000 GJ/d for 2013 from Dawn-Kirkwall and Dawn Parkway, and what is breakdown between the two.
7. What is the breakdown in gas throughput on Dawn-Kirkwall and Dawn Parkway routes as between gas utilized in Union franchise area, gas utilized in Enbridge franchise, gas used in Quebec, and gas used in the United States. Please list the names of the ex-franchise shippers, which currently hold capacity on Dawn-Kirkwall and Dawn Parkway, the amounts of capacity held, and the revenues paid in 2012.
8. Page 11 - How does Union estimate:

- (i) the transportation capacity at risk of turn back in the years "beyond 2013" to be greater than 800,000 GJ/d? Please provide details.
 - (ii) Please provide the estimated turn back in each of the years 2014 through 2018.
- 9. Page 12, Table 4 - Please provide the calculation underpinning the dollar value of the revenue impact in line 9 of Table 4. How many years out in the calculation done. What discount rate is used to derive the \$48,116 million in that revenue?
- 10. Page 12, Line 8, Table 4 - Please confirm that the total revenue impact of 2011 and 2012 turnback has totally offset by reselling of the services.
- 11. Pages 12-13:
 - (i) What is the current status of the TCPL's Eastern Extension application to the NEB to remove congestion at Maple?
 - (ii) Is the NEB acting on it? Please provide copies of, or links to, the TCPL application and the NEB's responses to date.
 - (iii) Has it become part of TCPL current mainline tolls application? Please provide details.
 - (iv) What is the likelihood, in Union's view, that TCPL will eliminate the congestion between Parkway and Maple, and when?

- (v) Please explain what is meant by the sentence "Union is working to repurpose" the turn back of Dawn-Kirkwall transmission services as Dawn Parkway transmission service".
- 12. Pages 14-15 - Please provide links to any IRs (and TCPL's responses to those IRs) and evidence filed by Union in the TCPL's 2012/2013 mainline tolls application, which deal with TCPL's toll redesign proposals, described on pages 14-15, including the elimination of FT RAM.
- 13. Page 15, Line 11: Please explain how TCPL's elimination of FT RAM "severely limits Union's ability to sell exchanges and other upstream transportation services". Please quantify the answers to the extent possible.
- 14. Please provide the materials provided to Union by TCPL, as part of the mainline toll application, or otherwise, which describe the FT RAM service.
- 15. Page 14, Lines 10-19 - On which segments of TCPL system is service offered pursuant to "short haul tolls". Please describe each "short haul segment" and its toll, identify the receipt and delivery point for the service, and the competitive threats to each segment of the TCPL system which is the subject of a "short haul" toll, in respect of which TCPL has, in Union's view, submitted, in the mainline tolls case, a proposed short haul toll which is not sustainable.
- 16. (a) Page 16, line 8: Please provide the average short-term peak storage price sold in 2008, 2009, 2010, and 2012, and (estimated) for 2013. What other factors, in addition to the smaller differential between summer and winter

seasonal prices affect demand and supply for Union's short term peak service? What are the underlying factors driving the decrease in price volatility?

- (b) Can Union's customers that require high deliverability storage service, eg. power plants, effectively access the necessary amounts of storage service in a timely manner, from storage facilities provided (other than Union and Enbridge), and the other, very small, Ontario suppliers? Please answer separately for customers in the Union franchise area and the Enbridge franchise area, and in Quebec. Please include in the answer what type of transportation services will need to be contracted on which pipelines, and an assessment of whether such service is currently available.

17. At page 14 of the 2011 Annual Report, Union states that:

"We have taken steps to allow for the emerging Marcellus Shale gas suppliers to serve our Ontario system customers beginning in 2012, including contracting for firm transportation capacity on other pipelines to facilitate moving this supply to Dawn, and ultimately to our customers".

How much capacity, on what terms, on which pipelines, has Union contracted for in order to facilitate moving Marcellus Shale gas to supply to Ontario customers?

What other steps were taken to do this? Please discuss each initiative separately and thoroughly.

18. At page 14 of the 2011 Annual Report, Union states:

"Union Gas applied to the OEB in 2010 and 2011 for transportation service enhancements to respond to the changing flow patterns. These services were

approved by the OEB and will enhance access to emerging supply basins and provide enhanced flexibility to attract gas to Dawn...".

- (a) What service enhancements are being referred to here? Please provide details, including reference to the OEB decisions and applications referred to.
 - (b) Which emerging supply basins will enjoy increased access to Dawn as a result of this? Please provide a detailed discussion.
 - (c) Please describe in detail, the "enhanced flexibility" referred to in the quote from the Annual Report. Please discuss and show how such flexibility will enhance Dawn's and Ontario's attractiveness as a gas market for emerging supply basins.
19. D1, T1, Page 2 - Please file a copy of Union's five year Gas Supply Plan completed in 2011.
 20. D1, T1, Page 2 - Please confirm that by use of the term "unbundled service", in line 21, Union means a transportation service, provided to a customer which does not include load balancing or storage. Such a customer would need to contract separately for storage and load balancing. Please provide a copy of, or a link to, the unbundled rate and typical contract.
 21. Page 4 – Please describe in detail "TCPL Dawn Diversion". Is this a tariffed service offered by TCPL? If so, please provide a link to TCPL documents.

22. Page 5 – Please explain in detail how the STS withdrawal service works in the winter. Is this a backhaul service where gas is dropped off by TCPL to Union North, and that gas is essentially returned to TCPL at Dawn?
23. Please explain and/or provide link to material which explain Union's contractual pool rights with respect to STS.
24. Page 5, Lines 17-18 - Please explain the reason for the increase in MDC to 10.4 PJ in 2013 from 4.4 PJ in EB-2005-0520. BOMA was unable to isolate the reasons for this increase from the discussion of volumes in Mr. Gardner's and Ms. Van Der Poelt's evidence, Exhibit C, T1 and T2.
25. Page 7, Line 5 – Please explain, in detail, by way of a few examples, what is meant by the statement that "Union still retains load balancing obligation related to weather variances relative to February inventory checkpoints and March weather and consumption variances" (our emphasis) for both sales service and bundled direct purchase customers.
26. D1, Page 13, Line 16 – Please provide, in detail, an explanation of why Union elected not to renew the Alliance contract beyond December 1, 2015.
27. D1, Page 13, Line 20 – What are the revised provisions in the Vector contract? How did Union decide whether to extend the Vector contract beyond November 30, 2015?
28. D1, Page 15, Line 7 – What is the receipt point(s) for the 71,327 GJ/d of TCPL capacity?

29. D1, Page 12 - Does Union hold transmission service on National Fuel Gas Transmission or another US pipeline for the 21,101 GJ/d, in Marcellus Gas, or does it purchase the gas at Niagara? If Union holds capacity on a US pipeline, from which basin and from whom is the gas sourced?

E. Cost of Capital

2. *Is the proposed change in capital structure increasing Union's deemed common equity component from 36% to 40% appropriate?*

1. At page 11 of the Annual Report, Union says that its quarterly dividend is paid to maintain the common equity component of capital structure at least no greater than that approved by the OEB. Please explain fully. Does that explain the very high levels of dividends paid in relation to the earnings allocated to the common shareholder, in 2009, 2010, and 2011?
2. Please explain the unusually high level of dividends paid to the parent company. Why is the Limited Partnership, Great Lakes Basin LP, placed between Westcoast Energy Inc. and Union Gas Limited? What is the corporate/tax function of Great Lakes Basin LP?

O. Other Issues

1. *Has Union responded appropriately to all relevant Board directions from previous proceedings?*

1. Please provide a forecast for the test year and the following IRM years of the percentage utilization of Union's St. Clair Line.

2. At page 9 of its 2011 Annual Report, Union states that the need for the St. Clair Line was largely replaced by the construction of the Vector Pipeline and its interconnection with the Sarnia Industrial Line in 2005, such that the St. Clair Line was underutilized (our emphasis).
 - (a) Please prepare an annotated map showing the interconnection of the Vector Pipeline to the Sarnia Industrial Line, in relation to Dawn, the St. Clair Pipeline (NEB regulated), the Bluewater Pipeline, and the Union St. Clair Line, the Great Lakes/TCPL connection, and any other pipelines that connect with Dawn.
 - (b) Please describe the Union Service Industrial Line, including its purpose, when it was constructed, diameter, and pressure, and what loads are served off it. Does it serve the entire Sarnia area load, or just certain large industrial loads? Please explain fully and include a map.
 - (c)
 - (i) When was the Vector Line connected? What is current capacity? Is it at capacity currently? What are its receipt points and delivery points?
 - (ii) Does the gas coming on the Vector Line displace gas from Dawn, and supply large industrial load at Sarnia, all of the time, part of the time? Union's supply accessed through Vector is integrated into Union's total supply.
 - (d) Is the Sarnia Industrial Line bidirectional?

- (e) How much capacity does Union hold on the Vector line? What are the terms and conditions? Please provide a copy of or link to, the Vector tariff, its General Terms and Conditions, and any contract templates.
- (f) Does Union currently own an interest in Vector? What is its interest? If not, has Union ever had an ownership interest? If so, what percentage, and when was it directed?
- (g) How is the ownership of the Vector pipeline structured in the United States and Canada? Are there separate Vector companies for the US and Canada; is the river crossing pipe held by a separate, NEB regulated company?