

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

**AND IN THE MATTER OF an Application by Union
Gas Limited for an Order or Orders approving or fixing
rates for the sale, distribution, transmission and storage
of gas commencing
January 1, 2008.**

SECOND SET OF INTERROGATORIES

FROM THE

SCHOOL ENERGY COALITION

Issue 1.1 What are the implications associated with a revenue cap, a price cap, and other alternative multi-year incentive ratemaking frameworks?

1. [B/1/18] Please confirm that, in Union's view, a price cap plan "will provide greater incentives for the utility to implement productivity improvements" than a revenue cap plan.
2. [B/1/19] Union notes that revenue cap plans have more volatile rates as compared to price cap plans. Please describe, and if possible quantify, the impact of Y factors and Z factors on the stability and predictability of rates during a price cap plan.

Issue 1.2 What is the method for incentive regulation that the Board should approve for each utility?

3. [B/1/47] Please describe how the nature of the price cap formula relates to Union's willingness to "continue to be an active community participant". Please describe what aspects of a price cap formula would, if implemented, cause Union to stop its community activities.
4. [B/1/1] What would be the impact on Union and its customers if the Board ordered a revenue cap per customer plan for Union similar to that proposed by Enbridge in its application?

Issue 1.3 Should weather risk continue to be borne by the shareholders, and if so what other adjustments should be made?

5. [B/1/12] Please provide a detailed breakdown, by year from 2008 through 2012, of the projected impacts of the change to weather methodology proposed. Please show how each annual impact calculation was derived.

6. [B/1/13] Please provide all data behind Chart 1, in Excel format.
7. [B/1/14] Please confirm that the Board rejected Union's evidence in RP-2003-0063 relating to the 20-year declining trend method.
8. [B/1/15 and B/2/6] Please confirm that the utility's weather methodology is not intended to predict the weather for a future period, but to create a situation in which, in the long term, cumulative annual differences between actual and forecast will approach zero.
9. [B/1/16] Please advise why Union did not forecast total degree days for the entire IR period, using as its base past five year periods. Please confirm that, mathematically, a methodology that forecasts multi-year periods using multi-year periods in the historical data will be likely to have a lower annual percentage variance from future actuals than a method that forecasts annual periods based on annual periods in the past data.
10. [B/1/16] Please advise why Union prefers a 20 year trend to a 30 year trend, 40 year trend, or 50 year trend. Please file whatever evidence Union has that demonstrates that the underlying causes of falling degree days have arisen over a 20 year period, but not over any longer period.
11. [B/2/10] Please confirm that the data in Table 1 shows 50/50 and 20 year trend to be equal in symmetry, 20 year trend superior in accuracy, and 50/50 superior in stability.
12. [B/2/10-11] Please expand Tables 1 & 2 to include 30 year trend, 40 year trend, 30 year moving average, and naïve methods. Please provide a further table, for all seven methods, for the forty-year period 1967 to 2006.
13. [B/1/16] Please advise whether Union would be satisfied with a weather variance account, to which variances in actual revenue caused by differences between the actual and forecast degree days were debited or credited annually, and recovered from or paid to ratepayers, with interest, over the following ten years on a rolling annual basis.
14. [B/1/16] Please provide any studies, memos, research, analyses, or other documents, physical or electronic, in the possession of Union, its affiliates, or parent dealing in whole or in part with:
 - a. The impact of weather uncertainty on perceived investment risk related to the utility's equity;
 - b. The impact of weather risk on ROE, cost of debt, or equity thickness, whether quantitatively or qualitatively;
 - c. The impact of weather risk on the price of any past acquisition or sale of Union or its parent.
15. [B/1/16] Please provide a table showing the weather normalized ROE of Union for each year

from 1987 to 2006 inclusive.

Issue 2.1 What type of index should be used as the inflation factor? Which should be used?

No questions

Issue 2.2 Should the inflation factor be based on actual or forecast?

No questions

Issue 2.3 How often should the Board update the inflation factor?

16. [B/1/23] Please provide the GDP IPI data for each of the last eleven quarters.

Issue 2.4 Should the gas utilities ROE be adjusted in each year of the incentive regulation plan using the Board's approved ROE guidelines?

No questions

Issue 3.1 How should the X factor be determined?

17. [B/1/8 and many other places] Please provide the annual O&M and capital spending of Union for each year from 1997 through 2006, eliminating therefrom all items that Union proposes should be Y factors or Z factors during the IR period.
18. [B/1/8] Please calculate and provide, for each year from 1997 through 2006, the revenue requirement per customer, and then recalculate and provide the same, but excluding therefrom the impact of all items that Union now proposes should be Y factors or Z factors during the IR period.
19. [B/1/32] Please provide any forecasts, estimates, projections, analyses, or other documents, physical or electronic, showing whether, after rates are adjusted by Y factors and Z factors, rates will rise at no more than "an annual inflationary increase".
20. [B/1/32] Please provide a table showing the average bill (excluding commodity charges) for each residential customer, each commercial general service customer, and each industrial general service customer, for each of the years 1997 through 2006.

Issue 3.2 What are the appropriate components of an X factor?

See Issue 3.1

Issue 3.3 What are the expected cost and revenue changes during the IR plan that should be taken into account in determining an appropriate X factor?

21. [B/1/33] Please provide a detailed table showing the average age and years of service for

Union's employees in each of the last twenty years, broken down by employee category (e.g. executive, managerial, unionized, other, or finer breakdowns if possible). If Union has any forecasts of that same data for future years, please provide those forecasts as well.

22. [B/1/33] Please provide a detailed table showing the average cost per employee for each of pension costs and benefit costs in each of the last twenty years, broken down by employee category (e.g. executive, managerial, unionized, other, or finer breakdowns if possible). If Union has any forecasts of that same data for future years, please provide those forecasts as well.
23. [B/1/34] Please provide a calculation of the expected impact of changes to the Canadian dollar exchange rate on Union's throughput and revenues during the IR period. Please provide any studies, analyses, and other information related to such impacts.

Issue 4.1 Is it appropriate to include the impact of changes in average use in the annual adjustment?

24. [B/1/28-31] Please provide the data behind Charts 3 through 9, in Excel format.
25. [B/1/28-31] Please advise whether any of the customers excluded from the data were schools and, if so, the number of schools excluded and the Charts affected thereby.
26. [B/1/28-31] Please restate Charts 3 and 5 using the proposed new M1 and M2 classes as the criterion for breakdown.
27. [B/1/37] Please calculate the appropriate AU factor for each of the new M1 and M2 classes on the assumption that the AU factor should correctly capture changes in average use for each class. Please provide the detailed data sources for your calculation.
28. [B/1/29] Please provide any studies, memos, research, analyses, forecasts, or other documents, physical or electronic, dealing in whole or in part with the reasons for changes in average use for commercial M2 or Rate 10 customers, including, without limiting the generality of the foregoing, any documents that calculate or estimate the disaggregated factors driving changes in average use.
29. [B/1/30] Please advise why, in Union's view, the changes in normalized average use for Rate 10 differ so substantially in pattern from those of Commercial Rate M2.
30. [B/1/37] Please explain why Union proposes to apply the General Service AU factor to all General Service customers, when Union's data shows that Commercial M2 customers have no material decline in normalized average use.
31. [B/1/37] Using forecast impacts for each of the years 2008 through 2012, please provide a proof that Union's proposed change to the application of the AU factor would be revenue neutral for the utility.

Issue 4.2 How should the impact of changes in average use be calculated?

See Issue 4.1.

Issue 4.3 If so, how should the impact of changes in average use be applied?

See Issue 4.1.

Issue 5.1 What are the Y factors that should be included in the IR plan?

No additional questions.

Issue 5.2 What are the criteria for disposition?

No additional questions.

Issue 6.1 What are the criteria for establishing Z factors that should be included in the IR plan?

32. [B/1/40] Using the utility's proposed criteria for Z factors, please advise whether each of the following hypotheticals would, in Union's opinion, qualify for Z factor treatment:

- a. The NEB approves an ROE formula for TCPL that includes a "flotation factor" of 150 basis points instead of 50 basis points, as is used in Ontario.
- b. The OEB approves an ROE formula for electricity utilities for 3rd generation IRM that reduces the overall level, relative to the ROE applicable to gas utilities, by 100 basis points.
- c. The federal government reduces the corporate income tax rate by 4%.
- d. The Ontario government reduces the corporate income tax rate by 4%.
- e. GAAP is changed to require expensing of the undepreciated capital cost of an asset as soon as it is known that it will be taken out of service within five years.
- f. The Ontario government increases the minimum wage to \$12, and that has a ripple effect in wages at all levels throughout the province.
- g. Increased uncertainty in the Ontario electricity generation sector due to changes in government policy leads to material changes in the level of gas-fired merchant generation planned in the Union franchise area.
- h. A gas-fired air conditioner that is competitive with electric heat pumps is invented and available commercially in Ontario.

- i. The Ontario government bans the sale of mid-efficiency furnaces to reduce greenhouse gas emissions.
- j. A fire of unknown origin destroys the head office building of the utility.

Issue 6.2 Should there be materiality tests, and if so, what should they be?

No additional questions

Issue 7.1 How should the impact of the NGEIR decisions, if any, be reflected in rates during the IR plan?

33. [B/1/39] Please confirm that the overall impact of the NGEIR Decision dated November 7, 2006 was expected to be a net benefit to ratepayers. Please provide a breakdown of how Union proposes to include that net benefit (including the impact of changes in storage margin percentages) in rates during the IR period. If Union is proposing that the increases in rates associated with storage margins should be adjusted, but offsetting benefits to ratepayers should not be adjusted, please provide your justification for that proposal.

Issue 8.1 What is the appropriate plan term for each utility?

34. [B/1/16] Please advise whether Union would be comfortable with a plan term longer than five years, such as ten years. Please advise what changes, if any, would have to be made to Union's application to make a ten year IR period acceptable to Union.
35. [B/1/16] Please advise whether, in planning during an IR period, the term of the plan is a material consideration in deciding the timing of efficiency investments within the IR period. By way of example, is it reasonable to expect a utility to focus efficiency investments in the first year or two of the plan, in order to maximize the time the shareholder has to reap the rewards, but reduce efficiency investments in the later years since the benefits will be more limited?

Issue 9.1 Should an off-ramp be included in the IR plan?

No questions.

Issue 9.2 If so, what should be the parameters?

No questions

Issue 10.1 Should an ESM be included in the IR plan?

36. [B/1/32] Please advise how the lack of a stretch factor, and deferral of ratepayer benefits until rebasing, is consistent with the following statement at page 3 the Natural Gas Forum report:

“The Board does not intend for earnings sharing mechanisms to form part of IR plans. The

Board views the retention of earnings by a utility within the term of an IR plan to be a strong incentive for the utility to achieve sustainable efficiencies. The Board will ensure that the benefits of the efficiencies are shared with customers **through the annual adjustment mechanism and** through rebasing.’ [emphasis added]

Issue 10.2 If so, what should be the parameters?

No questions.

Issue 11.1 What information should the Board consider and stakeholders be provided with during the IR plan?

37. [B/1/44] Please provide a summary of the utility’s annual corporate budgeting process, including major steps, responsibilities, information available at each step, and the actual dates of each step in 2007. Please include a description of how the utility’s budget process is related to, or integrates with, the budgeting of some or all of the other members of the parent company’s corporate group.

38. [B/1/43] Please provide the last two quarterly, and the last annual, RRR filing of Union.

Issue 11.2 What should be the frequency of the reporting requirements during the IR plan?

No additional questions.

Issue 11.3 What should be the process and the role of the Board and stakeholders?

No additional questions.

Issue 12.1 Annual adjustment.

No questions.

Issue 12.2 New energy services.

No questions.

Issue 12.3 Changes in rate design.

39. [B/1/17] Please confirm that Union’s proposal for flexibility to adjust the fixed charge would include an application to the Board, supporting evidence including customer impacts, an opportunity for ratepayers and other stakeholders to ask interrogatories and participate fully in the application, and a hearing (oral or written) for the Board to determine the issues.

40. [B/1/17] Please provide Union’s current plan for changes to the fixed charges (for each rate class that would be affected), including the forecast rates for each of the years 2008 through 2012, and the forecast customer bill impacts for each such year for each class and sample

customer normally used in such forecasts.

41. [B/1/17] Please give other examples, aside from changes to the fixed charge, of ways in which Union wishes to be able to change the design of existing rates during the IR period.
42. [B/1/17] Please provide all studies, analyses, plans, forecasts, and other documents, physical or electronic, related to intended or expected or proposed changes in rate design during any of the years 2008 through 2012, including but not limited to any impact analyses of such changes.

Issue 12.4 Non-energy services.

43. [B/1/41] Please confirm that Union would, under this proposal, be limited to changes that are revenue neutral. If not, please advise the criteria under which Union would be allowed to increase its overall revenue through these charges.

Issue 13.1 What information should the Board consider and stakeholders be provided with at the time of rebasing?

No questions.

Issue 14.1 Are there adjustments that should be made to base year revenue requirements and/or rates?

44. Please advise whether Union has looked at the tax impacts of changing its corporate structure (for example, to that of an income trust or a partnership) during any period that would include any IR period. If so, please provide copies of any plans, forecasts, internal proposals, or other documents related to any such potential change in corporate structure.
45. Please provide a detailed breakdown of the expected opening rate base for Union on January 1, 2008, by asset category, together with the depreciation and cost of capital amounts that would result from that rate base (without accounting for any additions) during the years 2008 through 2012 inclusive. Please include a continuity chart showing the opening rate base in each subsequent year, by asset category. Please break down the annual costs by rate class using the current cost allocation percentages for 2007.
46. Please restate the breakdowns, result, and continuity chart in the last question, but for each of the years 2008 through 2012 adding capital expenditures in each asset category equal to the average actual (with 2007 as forecast) capital expenditures in each such category for the years 2003 – 2007 inclusive.

Issue 14.2 If so, how should these adjustments be made?

47. [B/1/11] Please file detailed calculations showing the split of rate M2 into rates M1 and M2, including cost allocation model, rate schedules, customer bill impacts, and revenue impacts, all in the standard form filed by Union in each cost of service application as Exhibit H.

Issue: CIS/Customer Care Application.

48. Please advise whether Union has any intention or expectation of acquiring a new CIS after 2007 and prior to 2018. If so, please provide copies of any plans, forecasts, internal proposals, or other documents relating to those intentions or expectations, or the impacts (including any tax impacts) thereof.
49. Please advise whether Union has any intention or expectation of implementing any other major IT software or hardware project having a total capital cost in excess of \$10 million after 2007 and prior to 2018. If so, please provide copies of any plans, forecasts, internal proposals, or other documents relating to those intentions or expectations, or the impacts (including tax impacts) thereof.

General Questions

50. [Ref: B/1/48] Please advise Union's proposal for implementation of 2008 rates in the event that those rates constitute an increase, but due to the schedule for this proceeding a rate order cannot be made available until June 1, 2008.
51. Please take Exhibit H2, Tab 7, filed by Enbridge in EB-2006-0034 and apply to each of the examples there the approved rates for Union for each of 2006 and 2007. If for any of the sample customers in that Exhibit Union is unable to determine what the appropriate rates are to apply, please explain the nature of the difficulty and the likeliest correct answer, in your opinion.

Respectfully submitted on behalf of the School Energy Coalition this 20th day of August, 2007.

SHIBLEY RIGHTON LLP

Per: _____
Jay Shepherd