

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 for an Order or Orders approving or fixing a multi-
year incentive rate mechanism to determine rates for the
regulated distribution, transmission and storage of natural gas,
effective January 1, 2008;

AND IN THE MATTER OF an Application by Enbridge
Gas Distribution Inc. for an Order or Orders approving or
fixing rates for the distribution, transmission and storage of
natural gas, effective January 1, 2008;

AND IN THE MATTER OF a combined proceeding Board
pursuant to section 21(1) of the *Ontario Energy Board Act*,
1998.

ENERGY PROBE RESEARCH FOUNDATION
("ENERGY PROBE")

INTERROGATORIES OF UNION GAS LIMITED

August 21, 2007

UNION/ENBRIDGE COMBINED PROCEEDING 2008 INCENTIVE REGULATION MECHANISM

EB-2007-0606/EB-2007-0615

Energy Probe Research Foundation Interrogatories to Union

Interrogatory # 1 – Ref: Union Exhibit B, Tab 1, p. 36

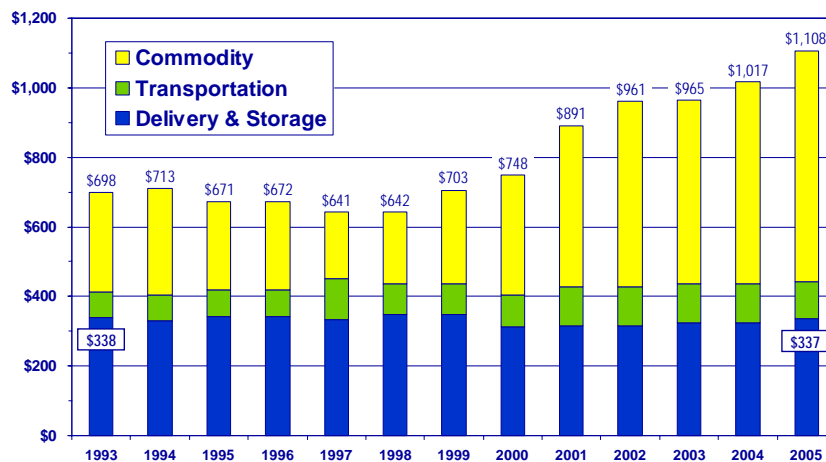
Issue Number: 1.1

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

Residential Bill Comparison

southwest service area

Based on an annual consumption of 2,600 m³



Note: Union Gas delivery and storage rates are cheaper in 2005 than in 1993.



0504-0246

- Similar to the chart above, previously produced by Union, please provide a chart showing the delivery and storage-only, transmission, and commodity rate history for typical system gas residential and small business customers using a fixed annual volume of gas. Utilizing actuals and projected forecasted annual costs over the PBR period, please extend the rate analysis from 1993 up to and including the proposed rates until 2012.
- Please provide the underlying figures in table format.
- Please provide the average cost per residential customer addition for each of the last 5 years and the forecasted annual cost over the PBR period.

Interrogatory # 2 – Ref: EB-2005-0520 Union Ex. J10.03

Issue Number: 14.1

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

Interrogatory J10.03 in the EB-2005-0520 Rates Case, at c), posed the following question to Union:

Please advise if the ability to “reduce price volatility through a diversified portfolio” is considered by Union to be “the reasonable value to customers” ...

Union’s Response was as follows:

- c) Yes. Union’s risk management program provides reasonable value to customers **in part** through reduced price volatility **and a diversified portfolio. (emphasis added)**
- a) Please advise the Board what the other part referred to by the Applicant consists of, that part other than reduced price volatility and a diversified portfolio, which provides reasonable value to customers.
- b) Please advise the Board how a diversified portfolio provides reasonable value to customers other than through its use in the attempt to reduce price volatility.

Interrogatory # 3 – Ref: EB-2005-0520 Union Ex. J10.05

Issue Number: 14.1

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

Interrogatory J10.05 in the EB-2005-0520 Rates Case, at b), posed the following question to Union:

Please identify and list by Union Rate Case, each change of Risk Management program purpose and/or the Risk Management program objective submitted to the Board since the initial introduction of the Risk Management program.

Union's Response was as follows:

- b) In 1998, as part of the E.B.R.O. 499 proceeding, Union filed its "Union Gas Risk Management Program Policies and Procedures" at Exhibit D1, Tab 19, Appendix A. The objectives at that time were:

1. Achieve a market responsive price;
2. Stability.

In 2002, as part of the RP-2001-0029 proceeding, Union's risk management program and policy was provided at Exhibit C1.5. The policy however remained unchanged from the E.B.R.O. 499 proceeding.

- (a) Please define "market responsive price" as used by the Applicant to identify its objectives for the Risk Management Program.
- (b) Please provide examples of how the Applicant's Risk Management Program achieves market responsive prices.
- (c) Please provide examples which will permit the Board to understand how the termination of the Applicant's Risk Management Program will cause non market responsive prices.
- (d) If the result of termination of the Applicant's Risk Management Program causes non market responsive prices, what would the prices be responsive to?
- (e) In respect of the second objective of the Applicant's Risk Management Program, please identify the rate years since 1994 that commodity price stability was achieved by the Risk Management Program.

Interrogatory # 4 – Ref: EB-2005-0520 Union Ex. J10.07

Issue Number: 14.1

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

Interrogatory J10.07 in the EB-2005-0520 Rates Case, posed the following request to the Applicant:

Please provide the percentage of residential and general service customers on Direct Purchase and the trend in these ratios since 2000.

The Applicant's Response was a chart described as follows:

The following identifies the proportion of the general service market (residential, commercial and industrial) on a Direct Purchase arrangement by year.

- (a) Please update the chart to from 2000 to 2007, with the following additions in adjoining columns:
 - i. the percentage of residential customers that are on both a Direct Purchase arrangement and on the Applicant's Equal Billing Plan in each of the years 2000 to 2007;
 - ii the percentage of residential customers that are on a system gas purchase arrangement and on the Applicant's Equal Billing Plan in each of the years 2000 to 2007.
- (b) Please provide any forecasts or analysis produced by Applicant that would project allow the Applicant to project that chart annually to 2112, the possible end of the Incentive Regulation period.
- (c) Would it be correct for the Applicant to state that there are no conditions necessary for a Union Gas residential customer to qualify for the Equal Billing Program, and there is no charges levied against residential customers to join or for administration?

Interrogatory # 5 – Ref: EB-2005-0520 Union Ex. J23.03

Issue Number: 14.1

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

Interrogatory J23.03 from Superior Energy Management in the EB-2005-0520 Rates Case, posed the following request to the Applicant:

Please provide, in a table format, for the natural gas purchased or planned to be purchased that was or is proposed to be hedged for each of 2001 to 2007:

- i. the volumes;
- ii. delivery periods; and
- iii. associated price risk.

In its response, the Applicant did provide the following table:

a) The table below shows the delivery period, volume and associated price risk of natural gas purchased or planned to be purchased from 2001 to 2007:

(i) Delivery Period	(ii) Volume (PJs)	(iii) Associated Price Risk (Volatility US\$/mmbtu)*
2001	33.1	\$2.26
2002	24.2	\$0.65
2003	48.7	\$1.26
2004	47.7	\$0.90
2005	49.5	\$2.99
2006	TBD	TBD
2007	TBD	TBD

Please update the table to the present.

Interrogatory # 6 – Ref: Decision With Reasons, EB-2005-0001 Enbridge Rates Case

Issue Number: 14.1

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

In the EB-2005-0001 Enbridge Rates Case, the Decision With Reasons at Section 5.5.10, stated as follows:

No evidence has been provided that demonstrates whether the hedging activity had **a material effect on the volatility experienced by customers**, given the effects of QRAM, the PGVA, and equal billing programs over the same period. (emphasis added)

In the EB-2006-0034 Enbridge 2007 Rates Case, the Applicant was requested to complete two charts to allow the Board Panel to more fully assess the impact that their Equal Billing Plan had on price volatility. In this proceeding, we are requesting that Union provide the same information, allowing the Board to explore the price volatility experienced by customers. The Tables compare the payment experience of residential customers on system gas but not on the Equal Billing Plan with residential customers on system gas and participating in the Equal Billing Plan. If the Tables do not fit the exact data captured by Union, please complete them on a best efforts basis.

- a) Please complete Table A below to demonstrate the Equal Billing Plan impact on price volatility of the hedged portfolio of Union Gas.
- b) Please complete Table B below to demonstrate the Equal Billing Plan impact on price volatility of the unhedged portfolio of Union Gas.

**Table A – EQUAL BILLING PLAN IMPACT ON PRICE VOLATILITY
2003-2007
Hedged Portfolio**

	Residential Consumer Per 273 m3 Monthly With RM	Quarterly Price Change Per 273 m3	Equal Billing Price Per 273 m3 With RM	Quarterly Price Change Per 273 m3	Percentage Reduction in Volatility (%)
Date					
1-Jan-03					
1-Apr-03					
1-Jul-03					
1-Oct-03					
1-Jan-04					
1-Apr-04					
1-Jul-04					
1-Oct-04					
1-Jan-05					
1-Apr-05					
1-Jul-05					
1-Oct-05					
1-Jan-06					
1-April-06					
1-Jul-06					
1-Oct-06					
1-Jan-07					
1-Apr-07					

**Table B – EQUAL BILLING PLAN IMPACT ON PRICE VOLATILITY
2003-2007
Unhedged Portfolio**

	Residential Consumer Per 273 m3 Monthly No RM	Quarterly Price Change Per 273 m3	Equal Billing Price Per 273 m3 No RM	Quarterly Price Change Per 273 m3	Percentage Reduction in Volatility (%)
Date					
1-Jan-03					
1-Apr-03					
1-Jul-03					
1-Oct-03					
1-Jan-04					
1-Apr-04					
1-Jul-04					
1-Oct-04					
1-Jan-05					
1-Apr-05					
1-Jul-05					
1-Oct-05					
1-Jan-06					
1-April-06					
1-Jul-06					
1-Oct-06					
1-Jan-07					
1-Apr-07					

Interrogatory # 7 – Ref: Decision With Reasons, EB-2005-0001 Enbridge Rates Case

Issue Number: 14.1

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

In the EB-2005-0001 Enbridge Rates Case, the Decision With Reasons at Section 5.5.10, stated as follows:

No evidence has been provided that demonstrates whether the hedging activity had **a material effect on the volatility experienced by customers**, given the effects of QRAM, the PGVA, and equal billing programs over the same period. (emphasis added)

In the EB-2006-0034 Enbridge 2007 Rates Case, the Applicant was requested to complete the following table to allow the Board Panel to more fully assess the impact that their Risk Management Plan had on price volatility.

Please complete the Table below based on the Union experience.

Date	PGVA with RM (\$/103M3)	PGVA no RM (\$/103M3)	RM impact (\$/103M3)	RM impact (%)
3-Jan				
3-Apr				
3-Jul				
3-Oct				
4-Jan				
4-Apr				
4-Jul				
4-Oct				
5-Jan				
5-Apr				
5-Jul				
5-Oct				
6-Jan				
6-Apr				
6-Jul				
6-Oct				
7-Jan				
7-Apr				
Average				

Interrogatory # 8 – Ref: Decision With Reasons, EB-2005-0001 Enbridge Rates Case

Issue Number: 14.1

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

In the EB-2005-0001 Enbridge Rates Case, the Decision With Reasons at Section 5.5.10, stated as follows:

The question that remains is the extent to which Enbridge's risk management program is redundant or represents a useful and **cost effective tool** to reduce consumer price volatility in a fair and reasonable way. (emphasis added)

To better inform the Board Panel on the cost effectiveness of the Union Risk Management Program, please fill in the Table below, similar to a Table supplied in the EB-2006-0034 Enbridge Rates Case.

Year	Union/Volume of Risk of Management Activity (m³)	Cost of Risk Management – Purchases/Options (Gain/Loss) \$Millions	Average AECO Spot Price of Gas Over Same Period (C\$/10³m³)	Impact of Risk Management on PGVA Price (% + or -)
2006				
2005				
2004				
2003				
2002				