Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 8, Table 1

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

Question:

IGUA wishes to understand the differences between the IR regime being proposed by Union and the recommendations of Pacific Economics Group ("PEG") for Union. In this context, please provide responses to the following questions:

(a) Please revise Table 1 to show how Union's summary would differ if the Board accepted PEG's recommendations for Union.

Response:

a) Please see Attachment.

Question: August 23, 2007 Answer: September 4, 2007

Table 1 – Revised per Exhibit C13.1 Union Price Cap Plan Proposal Summary

	Evidence			posai Summar	·				
Paramete r	Section		Proposal						
Summary	5.7				Union	PEG			
PCI		Productivity Di	fferential		0.52	0.52			
		Input Price Diff			0.22	0.22			
		Average Use Fa			-0.72	-0.72			
		Stretch Factor			0.00	0.50			
	1					3.50			
		X Factor [A =	sum of above]		0.02	0.52			
		Recent GDP IP	I FDD Trend	B]	<u>1.86</u>	1.86			
	1	PCI [B-A]		-	1.84	1.34			
Base Rate	5.1	Adjust the 2007	Board approv	ved rates for:					
Adjustments		items from	previous Boar	rd Decisions, and					
· ·	}	a one-time	adjustment to	reflect the 20-year	trend weath	ner normalization			
		method							
Plan Term	5.2	5 year term beg	inning Januar	/ 1, 2008					
Marketing	5.3	Continue to have	e the flexibilit	ty to:					
Flexibility		Adjust fixe							
		 Develop, o 	_ *						
		when requi	red						
Price Cap vs.	5.4	Price Cap							
Revenue Cap									
Inflation	5.6	 GDP-IPI F 	DD Canada in	dex (average of ani	nualized qua	rterly cha	nges		
Factor			our quarters).						
		 Adjusted as 	nnually.						
Service	5.7.5		Recent	X Factor	Adjusted				
Group PCIs			GDP IPI	Excluding	AU	Net X			
		Union	FDD Trend	Stretch and AU	<u>Factor</u>	<u>Factor</u>	<u>PCI</u>		
		General Service		0.74	-1.12	-0.38	2.24		
	1	All other	1.86	0.74	0.00	0.74	1.12		
		PEG							
İ		Rate M2	1.86	1.24	-1.37	-0.13	1.99		
		Rate 01	1.86	1.24	-1.37	-0.13	1.99		
		Nonresidential	1.86	1.24	0.54	1.78	0.08		
Y Factors	5.8			transportation cost	S				
			ncreases and o						
			_	storage deferral ac	count				
			ral accounts						
Z Factors	5.9			4 including a thres					
				e: return on equity		e paymen	t		
				nages; and permit for	ees				
Non-Energy	5.10	 Outside of j 	price cap						
Services									
Off Ramps	5.11	 No off ram 		· · · · · · · · · · · · · · · · · · ·					
Reporting	6.0	 Data filing 							
			lity requireme	nts					
		 Rate setting 							
		 Reporting a 	t rebasing						

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 6

- Issue 1.2 What is the method for incentive regulation that the Board should approve for each utility?
 - 5.1 What are the Y Factors that should be included in the IR plan?
 - 6.1 What are the criteria for establishing Z Factors that should be included in the IR plan?

Question:

Union's evidence suggests that an IR plan should be comprehensive. Yet, the IR plan Union proposes has Y factor features, including Deferral Accounts, and Z factor features. IGUA regards Y factors, including Deferral Accounts, and Z factors as continuing features of Cost of Service ("COS") rate regulation. IGUA wishes to obtain from Union an analysis of the extent to which the regulated revenue requirement of Union will continue to be subject to some form of continuing COS regulation over the duration of any IR plan the Board might approve for Union. To this end, please provide the following information:

- (a) Union's total base year regulated revenue requirement.
- (b) The portion of the revenue requirement amount to be provided in response to question (a) which is Union's total base year delivery-related regulated revenue requirement.
- (c) A segregation of the total base year regulated revenue requirement to be provided in response to question (a) between the following broad categories:
 - Cost of gas, operations and maintenance expenses,
 - Depreciation,
 - Property taxes,
 - Capital taxes,
 - Return segregated as follows:
 - *Equity return*
 - Cost of debt
 - Income taxes
- (d) Within each of these broad categories, list and quantify any item of COS which, in whole or in part, falls within the categories of Y factors, including Deferral Accounts, and Z factors proposed by Union.
- (e) Using information to be provided in response to the previous questions, estimate the following:

Question: August 23, 2007 Answer: September 4, 2007

- (i) the proportion of the total regulated revenue requirement provided in response to question (a) which will not be subject to some form of continuing COS treatment under the IR plan proposed by Union, and
- (ii) the proportion of the delivery-related revenue requirement for Union provided in response to question (b) which will not be subject to some form of continuing COS treatment under the IR plan proposed by Union.
- (f) Please list all of the Deferral Accounts for which Union has obtained Board approval and indicate whether Union is proposing to eliminate any of those Deferral Accounts as part of its proposed IR plan.
- (g) Is Union proposing to add any Deferral Accounts as part of its proposed IR plan?

Response:

a) to c)

	(\$ 000's)
2007 Revenue Requirement	2,018,852
2007 Delivery-Related Revenue Requirement	925,360
Gas Supply Commodity/Admin	1,036,559
Northern Upstream Transportation	56,933
Delivery-related Cost of Gas	102,033
Operating and Maintenance Expense	325,939
Depreciation	173,781
Property Taxes	59,368
Capital Taxes	8,341
Income Taxes	20,849
Return	
Equity	100,561
Preference Shares	4,999
Cost of Debt	153,928
Other Revenue	(24,434)

Question: August 23, 2007 Answer: September 4, 2007

d) The following items within Union's 2007 approved revenue requirement considered Y factors are:

Gas Supply Commodity/Admin	\$1,036,559
Northern Upstream Transportation	\$56,933
Demand Side Management	<u>\$17,000</u>
Total	\$ <u>1,110,492</u>

e)

i. Changes to Gas Supply Commodity Charges and the impact on Northern Upstream Transportation costs resulting from changes in TCPL tolls are managed through the Board approved QRAM process and accordingly are excluded from the price cap formula.

The costs associated with Union's DSM programs are escalated by 10% per year in accordance with the Board's EB-2006-0021 – DSM Generic Proceeding decisions. DSM costs have therefore also excluded from the price cap plan.

As a percent of Union's total regulated revenue requirement, the items above account for approximately 55%.

- ii. The only Y-factor that is delivery related is DSM. DSM accounts for approximately 2% of Union's delivery- related revenue requirement.
- f) Please see interrogatory response provided at Exhibit C1.10.
- g) See Union's evidence at Exhibit B, Tab 1, p. 39, Section 5.8.4 Other Deferral Accounts.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 8, Table 1

- Issue 1.1 What are the implications associated with a revenue cap, a price cap and other alternative multi-year incentive ratemaking frameworks?
 - 1.2 What is the method for incentive regulation that the Board should approve for each utility?

Question:

IGUA wishes to have Union provide a schedule which will illustrate the incremental revenues, over and above the base year revenue requirement, which will be available to Union in an illustrative 1% price cap scenario for each of the years 2008 to 2012 inclusive.

Please make the following assumptions:

- a 2007 rate base of \$3.4B
- a composite depreciation rate of 3%
- a 2007 revenue requirement, including cost of gas of \$2B, with the delivery-related component thereof in an amount of \$900M
- over the years 2008 to 2012 inclusive, the addition of 20,000 residential customers per year

If further assumptions need to be made to provide the illustrations, then please make the further assumptions which Union considers to be reasonable.

Under these assumptions, please provide an exhibit which will show the following:

- (a) The incremental revenues over and above the base year revenue requirement which a 1% price cap for each of the years 2008 to 2012 will produce in each of those years.
- (b) The estimated amount of capital spending which the 1% price cap will accommodate in each of the years 2008 to 2012 inclusive.
- (c) Please produce all documents in Union's possession, including internal e-mail communications, PowerPoint presentations, etc., containing Union's estimates of the incremental revenues which will be available on a year-by-year basis under PEG's Price Cap proposals for Union and under Union's Price Cap proposals, for each of the years 2008 to 2012 inclusive.
- (d) Please quantify the opportunities Union has to enhance and increase the portion of its base year revenue requirement which is attributable to Union's use of temporarily idle utility assets to generate incremental revenues, and produce any and all

Question: August 23, 2007 Answer: September 4, 2007

- documents in Union's possession, including internal e-mail communications, and PowerPoint presentations, etc., containing estimates of this incremental revenue potential, for each of the years 2008 to 2012 inclusive.
- (e) Please quantify the extent to which Union has opportunities to reduce costs included in its 2007 base year revenue requirement, and produce any and all documents in its possession, including internal e-mail communications and PowerPoint presentations, etc., containing estimates of this cost reduction potential for each of the years 2008 to 2012 inclusive.

Response:

a) A 1% price cap will provide the following approximate incremental revenues:

2008 \$8 million 2009 \$16 million 2010 \$25 million

b) The 1% price cap will accommodate approximate capital spending as follows:

2008 \$262 million 2009 \$268 million 2010 \$300 million

- c) Union does not have any documents of the nature requested other than the forecast provided in the interrogatory response provided at Exhibit C23.52.
- d) See response provided in part c).
- e) Please see interrogatory response provided at C32.4.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, pp. 23 to 26

Issue 3.1 - How should the X factor be determined?

Question:

The evidence indicates that the X factor is an off-set to inflation in the adjustment formula Union proposes to apply. Consultatives with respect to the X factor issue have revealed that its statistically-derived components are controversial and its judgementally determined components are equally controversial. In this context, please provide responses to the following questions:

- (a) Does a negative X factor imply negative productivity?
- (b) Does Union agree that regulators ought not to countenance negative productivity? Please include a brief rationale for Union's response to this question.
- (c) What simplified approaches to the X factor component of the adjustment mechanism did Union consider? For example, did Union consider the rate freeze approach or a percentage of inflation approach as simplified approaches to the adjustment mechanism? Please explain the extent to which simplified approaches were considered and the results of Union's consideration of each approach considered.

Response:

a) A negative X-factor does not imply that a utility is not efficient. Please see pp. 4-5 of the PEG Study where PEG describes that there are two different ways to weight output growth when calculating a productivity index. One way is to reflect the relative importance of output growth on company cost, which would be a measure of efficiency. The other is to use billing determinant weights, which is used in price cap index plans when rate structures don't reflect utility cost drivers very well and it is important to incorporate the affects of declining use per customer. As a result of a macro-economic inflation factor (GDP IPI FDD) being used in the price index, the X-factor proposed by PEG also includes a productivity differential and input price differential, which measures the difference in productivity and input prices experienced in the gas industry relative to the general economy.

There is a wide range of negative X-factors which would be consistent with positive productivity for Union. Union is proposing an X factor of 0.02% based on PEG's projection for Union of a total factor productivity growth rate of +1.73% per year

Question: August 23, 2007 Answer: September 4, 2007

(please see p. 64 of the PEG Study). Any productivity growth rate for Union below +1.71% per year would have result in a negative X factor.

- b) Union would agree that regulators should be structuring their ratemaking frameworks to provide incentives to the utilities they regulate to be as productive as possible. Union understands that this was one of the considerations the Board took into account in its NGF Report when it concluded that all stakeholders will benefit from a more predictable and longer term treatment of rates.
- c) Union initially considered supporting a percentage of inflation approach. In Union's view this would have been simple to administer and could have been constructed in a manner that would have achieved the objectives of incentive regulation identified in Union's evidence. When it became apparent through the consultations that Board staff initiated last fall that there were stakeholders that felt that the incentive regulation plans approved by the Board would need to be supported by productivity studies, Union did not pursue/refine the approach. Rather, Union turned its attention to providing PEG with the data it required to complete its productivity studies.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, pp. 26 to 32

- Issue 4.1 Is it appropriate to include the impact of changes in average use in the annual adjustment?
 - 4.2 How should the impact of changes in average use be calculate?
 - 4.3 If so, how should the impact of changes in average use be applied (e.g., to all customer rate classes equally, should it be differentiated by customer rate classes or some other manner)?

Question:

The evidences discusses the average use factor as an adjustment to the X factor. Union's IR plan contemplates that matters pertaining to Demand Side Management ("DSM") will be a Y factor adjustment. The evidence also indicates that DSM measures and declines in average use are inter-related. In this context, please provide Union's response to the following questions:

- (a) Is there any reason why declines in average use could not be included within the ambit of the Board's consideration of matters pertaining to a Y factor for DSM or as a separate average use Y factor?
- (b) Please revise the Summary PCI and Service Group PCIs shown in Union's Table 1 at Ex.B, Tab 1, page 8 to exclude declining average use as an adjustment to the X factor.

Response:

- a) If the AU factor did not change year over year, it could likely be treated as a Y factor. However, this would appear to have the same outcome as including it in the pricing formula. Otherwise, changes to the AU factor would need to be calculated by PEG.
- b) Please see Attachment.

Question: August 23, 2007 Answer: September 4, 2007

Table 1 – Revised per Exhibit C13.5 Union Price Cap Plan Proposal Summary

	Evidence							
Parameter	Section			Proposal				
Summary	5.7	Productivity Di	fferential		0.52			
PCI		Input Price Diff	erential		0.22			
	e E	Average Use Fa	ctor					
		Stretch Factor			0.00			
		X Factor [A =			0.74			
		Recent GDP IP	I FDD Trend	[B]	<u>1.86</u>			
		PCI [B-A]			1.12			
Base Rate	5.1	Adjust the 2007						
Adjustments				rd Decisions, and				
			adjustment to	reflect the 20-year	trend weathe	er normali	ization	
		method					· · · · · · · · · · · · · · · · · ·	
Plan Term	5.2	5 year term beg						
Marketing	5.3		Continue to have the flexibility to:					
Flexibility			Adjust fixed/variable rates on a revenue neutral basis					
			 Develop, on a timely basis, new services and change existing services when required 					
D : C			rea					
Price Cap vs.	5.4	Price Cap						
Revenue Cap Inflation	5.6	■ GDP-IPI FI	DD Canada in	dex (average of anr	welized aver	et anh caha	n a a a	
Initation Factor	5.0		our quarters).	dex (average of ani	iuanzeu quai	terry cha	nges	
ractor		Adjusted ar						
Service	5.7.5	7 tajustea ar	Recent	X Factor	Adjusted			
Group PCIs	3.7.3		GDP IPI	Excluding	AU	Net X		
Group reas				Stretch and AU	<u>Factor</u>	Factor	PCI	
		General Service		0.74		0.74	1.12	
		All other	1.86	0.74	0.00	0.74	1.12	
Y Factors	5.8	 Cost of gas 	and upstream	transportation cost	S			
			ncreases and o					
		Elimination	of long-term	storage deferral acc	count			
		 Other defer 						
Z Factors	5.9	 Criteria as l 	isted in Table	4 including a thres	hold of \$1.5	M		
				e: return on equity		e paymen	t	
				nages; and permit fe	ees			
Non-Energy	5.10	 Outside of p 						
Services								
Off Ramps	5.11	 No off ramp 						
Reporting	6.0	 Data filing § 						
			lity requireme	ents				
		 Rate setting 						
		 Reporting a 	t rebasing					

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 42, Ex.B, Tab 1, Appendix A

Issue 10.1 - Should an ESM be included in the IR plan? 10.2 - If so, what should be the parameters?

Question:

In the Board Staff Discussion Paper attached as Appendix A to Ex.B, Tab 1, Board Staff appears to support the notion that an Earnings Sharing Mechanism ("ESM") should not be part of an IR mechanism. In its evidence, Union suggests there is no need for offramps and does not mention an ESM as a feature of an IR plan. IGUA is interested in obtaining Union's views on matters pertaining to the appropriateness of including or excluding an ESM as a feature of its IR plan. In this context, please provide Union's responses to the following questions:

- a) In Union's view, does a regulator have a continuing obligation over the duration of an IR regime to monitor the rates being charged to assess whether they remain within just and reasonable limits and are not producing unreasonable returns for utility shareholders?
- b) In Union's view, is an ESM feature of an IR plan equivalent to treating a portion of equity return in excess of the utility allowed return a Y factor or a Z factor adjustment to rates?
- c) Is the excessive return off-ramp equivalent to a 100% ESM mechanism in favour of the ratepayers?

Response:

a) Union does believe that regulators need to continue to monitor how utilities are performing under incentive regulation. Under Union's proposal this will happen through the reporting requirements that exist under the Natural Gas Reporting & Record Keeping Requirements (RRR) Rule for Gas Utilities. However, Union also believes that less emphasis should be placed on what the utilities are earning under incentive regulation than was present under cost of service regulation. Greater incentives to pursue productivity improvements should be present under incentive regulation and if a utility is performing well (one of the objectives of incentive regulation) these incentives should lead to higher earnings. Customers get a share of these benefits within the term of the incentive regulation plan and at the time of rebasing.

Question: August 23, 2007 Answer: September 4, 2007

b) and c) Union does not know why the regulator would want to structure an ESM to operate similar to a Y factor, Z factor or an off ramp. Y factors, Z factors and offramps are intended to address issues entirely different than earnings sharing. As discussed elsewhere, ESMs dilute incentives for utilities to aggressively pursue productivity improvements.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, pp. 36 and 37

Issue 3.1 - How should the X factor be determined?

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

Question:

Union's evidence at Ex.B, Tab 1, page 37, Table 3, indicates that the Price Cap Index ("PCI") for its general service customers would be 2.24% and for all other customers, would be 1.12% when a negative average use adjustment factor is included in the X factor. Union's evidence indicates that the PCI for all rates classes would be 1.12% if the average use is treated as a Y factor rather than as an adjustment which reduces the X factor. PEG's evidence indicates different results for PCIs by service groups. In this context, please respond to the following questions:

- a) What other regulators have adopted service group PCIs in the IR plans for the utilities they regulate?
- b) What statistical confidence levels apply in measuring PCIs by service group?

Response:

a) and b) Please see interrogatory response provided at Exhibit C4.8.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Exhibit B, Tab 1, p. 5 of 48

- Issue 1.1 What are the implications associated with a revenue cap, a price cap and other alternative multi-year incentive ratemaking frameworks?
 - 1.2 What is the method for incentive regulation that the Board should approve for each utility?

Question:

Union states that the benefit of productivity improvements, both cost efficiency gains and growth, should ultimately be shared between customers and the utility.

- a) Does Union believe that the sharing of those efficiency gains and growth should be shared between customers and the utility during the Incentive Regulation ("IR") plan, or only upon completion of the term of the IR plan?
- b) If Union believes that the sharing of those efficiency gains and growth should be shared between customers and utility during the IR plan, how is this achieved without a positive stretch factor or an Earnings Sharing Mechanism ("ESM")?

Response:

- a) Yes. Union believes productivity improvements should be shared during the incentive regulation term. Also please see interrogatory response provided at Exhibits C1.4, C13.24 and C22.3.
- b) Union is not proposing a positive stretch factor. Union is proposing a zero stretch factor. Also please see interrogatory response provided at Exhibit C1.4.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 6 of 48

Issue 12 - Rate-Setting Process

Question:

Union states that the ratemaking framework should provide the utility with the freedom to make and be accountable for certain pricing and service decisions without undue regulatory intervention.

(a) Please list all pricing and service decisions which Union seeks the freedom to make without "undue regulatory intervention" during the IR period.

Response:

a) The phrase "the freedom to make and be accountable for certain pricing and service decisions without undue regulatory intervention" refers to Union's request that it be granted the authority to make changes to the monthly customer charges and other fixed charges on a revenue neutral basis as part of the IR framework.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 10 of 48

Issue 3.1 - How should the X factor be determined?

14 - Adjustments to Base Year Revenue Requirements and/or Rates

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

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

Question:

Union proposes that certain adjustments be made to the 2007 Board approved revenue requirement and base year rates. One of the reasons for the requested adjustment is a proposed change of the degree days derived from the Board approved weather normalization methodology. In essence, Union is seeking a change in the Board approved weather normalization process because it's degree day forecast will be lower over the term of the IR Plan. IGUA suggests that there are other items from Union's 2007 Board approved revenue requirement which will likely be lower during the term of the IR plan. In this context, please:

- a) Identify all items contained in the 2007 board approved revenue requirement that will reduce below the 2007 level during the 2008-2012 time period.
- b) List all of Union's long-term debt instruments.
- c) Identify which long-term debt instruments will expire during the 2008-2012 time period.
- d) For all of the long-term debt instruments listed in (c), please provide the reduction in debt costs for the 2008-2012 time period if each instrument is renewed at an interest rate of 6%.

Response:

a) Union does not have a detailed listing of all of the cost reductions that may occur relative to the 2007 Board approved levels. However, the following items have been included in the forecast provided at Exhibit C23.52: debt, capital tax and income tax.

Question: August 23, 2007 Answer: September 4, 2007

		Effective		
Line	Offering	Cost	Maturity	06/30/07
No.	Date	Rate	Date	_(\$000's)_
	(a)	(c)	(d)	(e)
1	11/14/83	13.630	11/14/08	4,000
2	10/07/88	11.690	10/15/10	49,000
3	07/11/89	10.760	07/11/11	125,000
4	07/31/89	10.850	07/31/09	30,000
5	08/28/90	11.630	08/28/15	150,000
6	11/06/92	9.830	11/06/17	125,000
7	08/05/93	8.900	08/05/18	125,000
8	10/19/93	8.790	10/19/18	75,000
9	02/24/93	8.040	02/24/14	150,000
10	11/10/95	8.790	11/10/25	125,000
11	07/14/98	5.860	07/14/08	100,000
12	06/01/00	7.330	06/01/10	185,000
13	05/04/01	6.740	05/04/11	250,000
14	12/17/02	5.310	12/17/07	200,000
15	09/21/05	4.700	06/30/16	200,000
16	09/11/06	5.500	09/11/36	165,000
17	11/23/06	4.910	04/25/22	125,000
				<u>2,183,000</u>

 Question:
 August 23, 2007

 Answer:
 September 4, 2007

 Docket:
 EB-2007-0606 / EB-2007-0615

c)

		Effective		
Line	Offering	Cost	Maturity	06/30/07
No.	Date	Rate	Date	_(\$000's)_
	(a)	(c)	(d)	(e)
11	07/14/98	5.860	07/14/08	100,000
12	06/01/00	7.330	06/01/10	185,000
14	12/17/02	5.310	12/17/07	200,000

d)

					Increase (I	Decrease) @ 69	% Renewal
Line	Offering	Effective	Maturity	06/30/07	12/31/08	12/31/09	12/31/10
No.	Date	Cost Rate	_Date_	_(\$000's)	_(\$000's)_	(\$000's)	_(\$000's)_
	(a)	(c)	(d)	(e)	(f)	(g)	(h)
11	07/14/98	5.860	07/14/08	100,000	65	140	140
12	06/01/00	7.330	06/01/10	185,000			(1,436)
14	12/17/02	5.310	12/17/07	200,000	1,380	1,380	1,380
					1,445	1,520	84

Question: August 23, 2007 Answer: September 4, 2007 Docket: EB-2007-0606 / EB-2007-0615

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex. B, Tab 1, page 12 of 48

Issue 14 - Adjustments to Base Year Revenue Requirements and/or Rates

- 14.1 Are there adjustments that should be made to base year revenue requirements and/or rates?
- 14.2 If so, how should these adjustments be made?

Question:

Union proposes that its current board approved weather forecasting methodology be changed from the 55% 30-year average and 45% 20-year declining trend blended method ("55/45 Blend") to the 20-year declining trend.

- a) Please provide, in a chart, the degree day forecast for the 2007 Base Year calculated by the following methods: the 55/45 blend, the 20-year declining trend method, the naïve method, the 10-year moving average method, the 20-year moving average method, the DeBeaver method, and the DeBeaver with trend method.
- b) For each of the methods set out in (b), please set out the estimated adjustment to the rate base that would result from Board approval.

Response:

a) and b)

Union Gas Franchise Area - Weather Normal Estimates Year 2007

		Southern Operations Area Northern & Eastern Opera			erations Area		
Line				General Service Rate		·	General Service Rate
No.	Normal Method	HDD	Difference	Impacts (\$)	HDD	Difference	Impacts (\$)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Blended 55:45	3,822	-	-	5,090		-
2	20 Year Declining Trend	3,705	(117)	4,820,578	4,931	(159)	2,195,741
3	Naïve (Actual 2004)	3,786	(36)	1,482,359	5,148	58	(800,964)
4	10 Year Moving Average	3,773	(49)	2,017,727	5,051	(39)	538,579
5	20 Year Moving Average	3,838	16	(661,097)	5,154	64	(883,822)
6	Leo de Bever	3,888	66	(2,721,217)	5,184	94	(1,298,114)
7	Energy Probe (LdeB w/trend)	3,803	(19)	782,452	5,096	6	(82,858)

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 12 of 48

Issue 14 - Adjustments to Base Year Revenue Requirements and/or Rates

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

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

Question:

Union proposes that the 20-year declining trend weather forecast method replace its current "55/45 blend".

a) If the 20-year declining trend weather forecasting method is approved, will any of the Price Cap Indexes ("PCIs) or Service Group PCIs calculated by PEG and/or Union need to be adjusted? If yes, please set out what adjustments would be necessary.

Response:

a) With respect to the PEG Study, to the best of Union's knowledge, no adjustment is required.

In Union's opinion, no adjustment is required.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex. B, Tab 1, page 15 of 48

Issue 14 - Adjustments to Base Year Revenue Requirements and/or Rates

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

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

Question:

Union's weather normalization method was approved as part of the Financial Settlement reached in its 2007 Rates Proceeding (EB-2005-0520). Union observes that the 2007 Rates Proceeding financial settlement was for 2007 only and that no representations were made for rates beyond 2007.

- a) Does Union agree that at the time that the financial settlement for its 2007 Rates Proceeding was being negotiated, it was publicly known that an IR framework would be developed for fiscal 2008?
- b) If the answer to (a) is yes, does Union agree that it was publicly known that the IR framework developed for 2008 could use the Board approved rates for fiscal 2007 as the Base Rates for that IR Plan?

Response:

- a) Yes.
- b) Union agrees that it was publicly known that the Board could use 2007 as the base for the incentive regulation plan, but any adjustments to the base were not determined at that time.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex. B, Tab 1, pp. 10 - 12

Issue 14 - Adjustments to Base Year Revenue Requirements and/or Rates
14.1 - Are there adjustments that should be made to base year revenue
requirements and/or rates?
14.2 - If so, how should these adjustments be made?

Question:

In the NGEIR proceeding, Union produced exhibits indicating that its total 2007 storage-related rate base was \$483.619M and that Union had allocated \$102.9M of the rate base to ex-franchise storage sales. The NGEIR evidence indicated that about 90 Bcf of storage was being used in 2007 to support Union's provision of in-franchise storage services, with the remaining 60 Bcf being used to support ex-franchise sales. Accordingly, about 40% of Union's sale of storage services are ex-franchise storage services sales. An allocation of 40% of Union's 2007 storage rate base to ex-franchise sales results in a rate base reduction for the utility of about \$193M and not \$103M which Union has calculated. In this context, please provide a response to the following question:

a) What is the reduction in Union's 2007 base year revenue requirement and in rates which will ensue if another \$90M of storage rate base is allocated to ex-franchise sales transactions.

Response:

a) Union's calculation of ex-franchise storage-related rate base of \$103 million is correct. The calculation is provided below:

Total 2007 Storage Rate Base	\$483.619 million	EB-2005-0551
		Exhibit B, T3; K4.2
Less In-franchise Balancing Gas		
Inventory and Gas in Inventory	\$236.242 million	
Total 2007 Storage Rate Base		
Excluding Inventory	\$247.377 million	
Ex-franchise Storage Rate Base	\$102.916 million	
Ex-franchise %	41.6%	EB-2005-0551
		Exhibit B, T3; K4.3

Question: August 23, 2007 Answer: September 4, 2007

It would not be appropriate to allocate an additional \$90 million of storage rate base to ex-franchise storage services.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 17 of 48

Issue 12.3 – Changes in Rate Design

- 12.3.1 What should be the criteria for changes in rate design?
- 12.3.2 How should the change in the rate design be implemented?
- 12.3.3 What should be the information requirements for a change in rate design?

Question:

Union states that it would not be appropriate to apply the Price Cap equally to fixed and variable charges as it would result in Fixed Monthly Charges that are not whole numbers, and that it is Union's practice to have Fixed Monthly Charges.

- (a) What is Union's rationale for the practice that it has adopted to having Fixed Monthly Charges that are whole numbers?
- (b) Is Union capable of charging Fixed Monthly Charges that are not whole numbers? If not, why not.

Response:

- a) Please see interrogatory response provided at Exhibit C1.22.
- b) Yes.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 17 of 48

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

Question:

Union states that, as part of the NGEIR proceeding (EB-2005-0551) Union identified potential new services for power generators.

- a) Please provide a list of all potential new services for power generators identified by Union.
- b) If these new services are implemented during the IR plan, will the costs of those services be allocated to any customer other than power generators? If yes, please explain and identify those classes of customers that would share in the costs of those new services.

Response:

- a) Please see interrogatory response provided at Exhibit C2.1 a).
- b) During the IR term, the revenue and costs associated with any new service will accrue to Union.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 17 of 48

Issue 12 - Rate-Setting Process

Question:

Union seeks to have the ability to adjust the Fixed Monthly Charge and the Variable Charge on a revenue neutral basis.

a) Please identify every rate class to which Union may seek to change the Fixed Monthly Charge and the Variable Charge during the term of the IR Plan.

Response:

a) Please see interrogatory response provided at Exhibit C1.21 and Exhibit C3/C16/C33.6.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 17 of 48

Issue 12 - Rate-Setting Process

Question:

Union states that it has been slowly moving the Fixed Monthly Charge towards full customer related cost recovery. What is the split between Fixed Monthly Charge and the Variable Charge necessary for Union to obtain full customer related cost recovery? If the split varies by Rate Class, please provide the current split between Fixed and Variable Charges for each applicable Rate Class, and the split necessary for full customer related cost recovery for each applicable Rate Class.

Response:

Rate Class	Customer-related Costs (a)	Fixed Monthly Charge Revenue (b)	Total Delivery Revenue (c)	$\frac{\text{Curren}}{\text{Fixed}}$ $\frac{\text{(d)=(b)/(c)}}{\text{(d)}}$	t Split Variable ((e)	•	sary for full ated recovery Variable (g)
M2	252,551	189,516	410,803	46.1%	53.9%	61.5%	38.5%
M5A	913	816	8,038	10.2%	89.8%	11.4%	88.6%
T1	1,868	1,732	55,033	3.1%	96.9%	3.4%	96.6%
Т3	206	206	5,588	3.7%	96.3%	3.7%	96.3%
R01	99,129	56,769	132,592	42.8%	57.2%	74.8%	25.2%
R10	5,301	2,488	21,882	11.4%	88.6%	24.2%	75.8%
R20	606	599	7,444	8.0%	92.0%	8.1%	91.9%
R100	237	232	16,153	1.4%	98.6%	1.5%	98.5%
R25	481	181	2,402	7.5%	92.5%	20.0%	80.0%
	361,292	252,539	659,935	38.3%	61.7%	54.7%	45.3%

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex. B, Tab 1, pp. 17 to 18 of 48

Issue 12.3 - Changes in Rate Design

- 12.3.1 What should be the criteria for changes in rate design?
- 12.3.2 How should the change in the rate design be implemented?
- 12.3.3 What should be the information requirements for a change in rate design?

Question:

Union is seeking to have the ability to adjust the Fixed Monthly Charge and the Variable Charge on a revenue neutral basis annually. Please confirm that a change in the Fixed Monthly Charge and the Variable Charge can result in some customers experiencing a rate increase while other customers from that same rate class experience a rate decrease.

Response:

Confirmed. Rate design changes that reduce intra-class subsidies will result in some customers within a rate class experiencing a rate increase while others experience a rate decrease.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 18 of 48

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

Question:

Union believes that a Price Cap Mechanism should be used rather than a Revenue Cap Mechanism. Please set out the advantages and disadvantages of the Price Cap Mechanism compared to the Revenue Cap Mechanism.

Response:

Please see interrogatory response provided at Exhibit C1.1.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 19 of 48

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

Question:

Union states that Price Cap parameters that are known in advance will result in more stable and predictable rates than a Revenue Cap Mechanism. Please provide the evidence which Union relies upon for this proposition.

Response:

Union agrees with the comments made by Board Staff on page 7 of the January 1, 2007 EB-2006-0209 Board Staff Discussion paper. Board Staff noted that:

"Revenue caps differ from price caps in reducing both the incentive and risk to the utility associated with demand fluctuations. Under a revenue cap, the difference between actual revenue and the approved revenue requirement is captured in a balancing account, and the ratepayer is at risk for this balance."

On page 7, Board staff also note that:

"Price caps generally result in rates that are more stable and predictable than a revenue cap mechanism. This is a result of the balancing account under a revenue cap. Additionally, revenue caps typically do not specify how revenue growth would be reflected in rates."

Also, please see interrogatory response provided at Exhibit C3/C16/C33.7.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 19 of 48

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

Question:

Union states that a Revenue Cap Mechanism may result in greater controversy and regulatory administration. Please provide the evidence Union relies upon for this proposition.

Response:

Union agrees with the comments made by Board Staff on page 7 of the January 1, 2007 EB-2006-0209 Board Staff Discussion paper. Board Staff noted that:

"Regulatory cost can be greater under a revenue cap. This is due in part to the potential controversy in the design of the output growth factor in the revenue cap index formula. Additionally, there might be a continued need to consider the allocation of the revenue requirement amongst service offerings, customer rate classes, and rate design matters."

Also, please see interrogatory response provided at Exhibit C3/C16/C33.7.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 32 of 48

Issue 3.1 - How should the X factor be determined?

Question:

Union states that it has had a significant motivation to implement productivity improvements or the last ten years. Please list the productivity improvements which have been achieved by Union over that time period.

Response:

Please see interrogatory response provided at Exhibit C32.15.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 32 of 48

Issue 3.1 - How should the X factor be determined?

Question:

Union states that a stretch factor is usually added to an IR Plan when there is a belief that, during the term of the Plan, the utility will have both an incentive and an ability to increase productivity at a greater percentage than that determined by the historical industry TFP trend.

- a) Please provide the evidence which Union relies upon for this proposition.
- b) Is it the position of Union that it will not have, during the term of the IR Plan, an incentive and an ability to increase productivity at a greater percentage than that determined by the historical industry TFP trend? Please explain.
- c) Is it the position of Union that the productivity improvements it has achieved over the last 10 years are greater than the productivity improvements available over the term of the proposed IR Plan? Please explain.
- d) If the answer to (c) is yes, why is Union seeking a five-year IR Plan instead of bringing an Annual Cost of Service Application?

Response:

- a) Page vii of the PEG Study indicates that "the stretch factor term of the X factor reflects expectations concerning the potential for better performance under the incentives generated by the IR plan".
- b) and c) Union assumes that incentives to pursue productivity improvements will be present in the plan approved by the Board. Incentives are present in the plan Union has proposed. In the plan Union has proposed the incentives aren't diluted by the presence of an ESM.

It is Union's belief that it will be a significant challenge for the Company to maintain the rate of productivity growth that it has been able to achieve in the past. With only three cost of service proceedings in ten years, the more readily available productivity improvements have been implemented. As Union's evidence indicates at Exhibit B,

Question: August 23, 2007 Answer: September 4, 2007

Tab 1, pap 32-34, the Company will be stretched to manage its business within an annual inflationary increase. Union will have to manage significant cost and revenue pressures.

d) A properly designed incentive regulation framework will provide utilities with the framework to aggressively pursue productivity improvements. Without the incentives present in a properly constructed incentive regulation framework, annual cost of service proceedings would result in higher rate increases for customers.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 32 of 48

Issue 3.1 - How should the X factor be determined?

Question:

Union states that there is no justification for a stretch factor during its next IR Plan term. In the absence of a stretch factor, does Union agree that an ESM would be appropriate? Please explain why or why not.

Response:

No. Please see interrogatory responses provided at Exhibits C1.15 and C23.36.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 32 of 48

Issue 3.1 - How should the X factor be determined?

Question:

Union states that there is no justification for a stretch factor during its next IR Plan term. Is Union aware of any jurisdictions in which a Price Cap Plan has been implemented without the inclusion of either a stretch factor or an ESM? If yes, please provide details of the jurisdiction and the Price Cap Plan.

Response:

Yes. Union's source is Table 1 from the presentation provided by PEG at the EB-2006-0209, November 3, 2006 stakeholder meeting.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 32 of 48, and PEG Report, p. (vii)

Issue 3.1 - How should the X factor be determined?

Question:

PEG states in its report that no evidence has been brought to its attention concerning the recent operating efficiency of Enbridge or Union. Please explain why Union did not provide any evidence to PEG with respect to its operating efficiency.

Response:

Union answered all PEG data requests. This specific information was not requested by PEG

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 40 of 48

Issue 6 – Z Factor

- 6.1 What are the criteria for establishing Z factors that should be included in the IR plan?
- 6.2 Should there be materiality tests, and if so, what should they be?

Question:

Union identifies changes in the ROE formula used by the NEB and OEB, and changes in the OEB approved capital structure for other utilities in the province, as a possible Z factors.

- a) Please explain why a change in the ROE formula used by the NEB would justify a change to Union's ROE.
- b) If the ROE formula applicable to Union is changed during the term of the IR Plan, will this necessitate any changes to the Board approved PCI? If yes, please explain.
- c) Will Union be taking or supporting an initiative to change the ROE formula during the term of the IR plan?

Response:

- a) Union is not necessarily saying that a change to the ROE formula used by the NEB would justify a change to Union's ROE. As pg. 40 of Exhibit B, Tab 1 of Union's evidence indicates, Union believes that utilities should have the opportunity to apply for a similar change during the price cap term. Ontario and NEB regulated companies compete for capital in similar markets. A change in the ROE formula used by the NEB may raise issues of fairness if similar adjustments are not made to OEB regulated utilities. In Union's view this would be a change in regulation.
- b) No. Any changes applicable to Union resulting from changes to the ROE formula during the term of incentive regulation will address the fair return standard for the company. The incentive regulation parameters establish how rates are set but does not address, nor are they a substitute for, a fair return on investment.

Question: August 23, 2007 Answer: September 4, 2007

c) Two noteworthy reports on cost of capital have recently been released: "A Comparative Analysis of Return on Equity of Natural Gas Utilities" prepared by Concentric Energy Advisors and "Return on Equity: Allowed Returns for Canadian Gas Utilities" prepared by the Canadian Gas Association. The conclusions that "the current ROE differential between Canada and the U.S. is in the range of 1.50 and 2.00 percent" and that "there are no apparent fundamental differences between gas utilities in Ontario and those of the U.S. that would cause the sizable gap in ROEs" should be of concern to the Board and other stakeholders. The reports provide further impetus for a review of the cost of capital issue by the Board. Union would be supportive of the Board changing the ROE formula. Union has not determined what steps it will take to accomplish this.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B, Tab 1, page 42 of 48

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

Question:

IGUA has previously advocated that Union and Enbridge should file information equivalent to quarterly surveillance reports required by the NEB. In IGUA's view, the utilities should be required to provide the following information:

- (a) Financial Statements of both the utility and of its parent company (or, those portions of the parent company financial statements reflecting the utility's contributions)
- (b) Rate Base and Capital Expenditures, including:
 - (i) gross assets by function;
 - (ii) accumulated depreciation by function;
 - (iii) allowance for Working Capital by component;
- (c) Gas Delivery Volumes by rate class and by sales versus direct customers; and customer additions (number, by rate class, volume)
- (d) Revenue from operations, including:
 - (i) weather normalization;
 - (ii) by rate class;
 - (iii) unit revenues by rate class;
 - (iv) non-distribution revenue by source (storage, T-service, load balancing, miscellaneous fees);
 - (v) transactional services.
- (e) Operating Costs (excluding Cost of Gas)

Question: August 23, 2007 Answer: September 4, 2007

- (i) Operations and Maintenance broken down by major cost elements (executive, information services, legal and regulatory, engineering, operations, buildings, communications, etc.);
- (ii) Depreciation, Amortization and Depreciation;
- (iii) Corporate Cost Allocation;
- (iv) Income Tax, Corporation Tax, Capital Tax;
- (v) DSM program costs.
- (f) Cost of Gas
 - (i) Average cost of gas purchases for sales customers;
 - (ii) Average cost of gas used in operations;
 - (iii) Lost and unaccounted for gas;
 - (iv) Cost of transportation by upstream contract, both total and average/per unit cost.
- (g) Return on Equity (dollar and percentage)
- (h) Deferral Account Balances
- (i) Cost Allocation
 - (i) Allocation of costs by customer class
 - (ii) Allocation of rate base by customer class
- (j) Rate Design Schedules

Please identify from the information listed in (a) through to (j) which items Union opposes to producing on a quarterly basis. For those items to which Union opposes quarterly reporting, please provide an explanation.

Response:

- a) Quarterly and annual financial statements of both Union and Westcoast Energy Inc are available at www.sedar.com.
- b) Rate base is an annual measure not calculated quarterly. Gross plant by function is also determined annually as the majority of Union's capital investments relate to

Question: August 23, 2007 Answer: September 4, 2007

projects that are not in service until the fourth quarter.

- c) Volumes and customers by rate class and service type can be provided quarterly.
- d) Revenue from operations as listed in the question is not information currently prepared internally for management. Requiring this information for quarterly regulatory filings will required changes to systems and additional internal resources to prepare, check and review for filing.
- e) Operating cost information requested is at a level of detail not currently prepared internally for management. Requiring this information for quarterly regulatory filings will required additional internal resources to prepare, check and review for filing.
- f) Cost of Gas information requested is at a level of detail not currently prepared internally for management. Requiring this information for quarterly regulatory filings will require additional internal resources to prepare, check and review for filing.
- g) ROE is an annual measure that is not calculated quarterly.
- h) This information is currently provided as part of Union's RRR quarterly filing.
- i) The cost allocation study is not prepared on a quarterly basis. It is prepared to support the rate setting process during a cost of service year. It is used to allocate the forecast cost of service to rate classes. Union will not be providing a forecast cost of service as part of its incentive regulation filings. Once the IR plan is in place, the next time the cost study will be required for rate setting will be at rebasing.
- j) Under Union's IR plan, Union's will file a rate package annually on October 1st of each year of the IR term. The rate package will include the draft rate order with all supporting working papers. Unless Union is seeking approval of a rate or service outside of the normal annual timetable, there is no need to file rate design schedules more frequently.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: Ex.B

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

Question:

Please provide copies of all documents, including internal memoranda and PowerPoint Presentations, presented to Union's management, Board of Directors or Shareholders, that address Union's proposed Price Cap, including the consideration of a revenue cap compared to a price cap.

Response:

Please see interrogatory responses provided at Exhibits C1.6 and C22.4.

Question: August 23, 2007 Answer: September 4, 2007

Answer to Interrogatory from Industrial Gas Users Association ("IGUA")

Reference: PEG Report, p. (v), and Union Evidence, Ex.B, Tab 1, page 18

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

Question:

Union believes that a Price Cap Mechanism should be used. PEG has calculated a Price Cap Index and Revenue Cap Index.

- a) If the Board determines that a Revenue Cap Mechanism is more appropriate than a Price Cap Mechanism, does Union accept the Revenue Cap Index set out in the PEG Report?
- b) If the answer to (a) is no, please identify which components of the Revenue Cap Index, set out at (vi) of the PEG Report, Union does and does not accept. For those components of the Revenue Cap Index that Union does not accept, please provide an explanation.

Response:

Please see interrogatory response provided at Exhibit C1.2.

Question: August 23, 2007 Answer: September 4, 2007