UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1 page 1 and page 5

Issue 1 - Revenue Cap and Price Cap

Question:

At page 1 Union references the NGF "Sustainable efficiency improvements that benefit customers and shareholders and ensure appropriate quality of service for customers" and at page 5 states its own fairness principle: "the benefit of productivity improvements, both cost efficiency gains and growth, should ultimately be shared between customers and the utility." Please describe how Union's IR plan accomplishes this and how Union will measure and report on this.

Response:

Please see interrogatory responses provided at Exhibits C1.4 and C22.3.

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1 page 1 and page 6

Issue 1 - Revenue Cap and Price Cap

Question:

Please explain what Union means by "earn a superior return for superior performance".

Response:

The phrase means being able to earn returns higher than they would otherwise be (e.g. regulated rate of return) if Union is able to identify and implement productivity improvements that wouldn't otherwise be identified and implemented.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1 page 1 and page 7

Issue 1 - Revenue Cap and Price Cap

Question:

How will Union measure and report that customers are better off in terms of rates and service quality?

Response:

Service quality requirements will be measured and reported on as per the Gas Distribution Access Rule ("GDAR") and the Natural Gas Reporting & Record Keeping Requirements ("RRR") Rule for Gas Utilities. Union does not accept the premise underpinning the question that incentive regulation in Ontario is intended to result in service quality improvements, only to guard against service quality degradation. See p. 19 of the NGF Report where the Board indicates that "it is generally believed that the gas utilities provide good customer service". There is no evidence that service quality has been a problem in the past.

Customers will be better off in terms of rates if the incentive regulation plan(s) approved by the Board provide incentives to the utility to pursue productivity improvements and these improvements result in rates that are lower than they would otherwise be under cost of service regulation. Union does not plan to attempt to measure and report on what rates are under incentive regulation relative to what they would have been under cost of service regulation. In Union's view, this analysis would be very difficult to do.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1

Issue 1.1 - Revenue Cap and Price Cap

Question:

a) *What criteria did Union use to select its Price Cap proposal and why?*

b) *In light of Enbridge's decision to use a Revenue Cap method did Union revisit its decision to use a Price Cap method. If so please summarize the comparison that Union used to confirm that it would continue to propose a Price Cap method. If not why not?*

c) *If the Board approves different IR methods for Union and Enbridge are there any issues or implications that Union is concerned about? If yes, what are they and how would they impact Ontario gas consumers?*

Response:

a) Union was guided by the Board's NGF Report, the incentive regulation consultations that started last fall and the incentive regulation objectives identified at pp. 5 – 7 of Exhibit B, Tab 1 of Union's evidence. Please also see interrogatory response provided at Exhibit C3/C16/C33.7.

b) No. Union did not see the need to revisit its decision to propose a price cap.

c) In Union's view, the Board can approve different incentive regulation plans for Union and Enbridge. Consistency should not be a significant consideration given that there are only two large gas utilities in the province. The plans approved for each company should recognize the attributes of each company. However, one framework should not provide a materially better or worse financial opportunity than the other.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1 page 12

Issue 1.3 - Weather Risk

Question:

a) *Union has proposed a change to weather normalization. Please provide an analysis of the impact that such a change would have on Union's inventory carrying costs related to the cost of gas associated with such a change.*

b) *Please provide an analysis of the impact that the change in weather normalization has on the storage required for Union's use. If a reduction in storage results due to the change in weather normalization throughout the plan period, how does Union propose to adjust its rates to reflect such a change?*

Response:

a) Union's carrying costs would decrease by $0.2 million. The analysis supporting this calculation can be found in the attached schedule.

b) The change in weather normalization method will reduce Union's existing in-franchise storage requirement by an estimated 1.4 PJs. Assuming that this volume of storage is not required for in-franchise load growth, it would be sold in the secondary markets as storage services.

   Union is not adjusting the storage rate as a result of the change in weather method. The reduction in volume associated with moving to a lower weather normal will result in a corresponding reduction in storage costs. Accordingly, there will be minimal impact on the storage rate. The benefit to customers comes in the form of a reduced bill as a result of lower consumption.

Line No.	Particulars	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Inventory Impact (TJs)	(723)	(154)	(36)	34	(121)	-	123	110	95	(728)	(800)	(1,193)	(723)
2	Monthly Average (TJs)		(439)	(95)	(1)	(43)	(60)	62	117	102	(317)	(764)	(997)	(958)
3	Average of Monhtly Averages (TJs)		(283)											
4	WACOG ($/GJ)		9.439											
5	Rate Base Impact ($000's) (line 3 x line 4)		(2,669)											
6	Carrying Cost (%) *		7.50%											
7	Carrying Cost ($000's) (line 5 x line 6)		(200)											

*	Common equity (after tax)	36.00%	8.54%	3.07%
	Gross-up for tax @36.12%			1.74%
	Common equity (pre-tax)			4.81%
	Short-term debt	64.00%	4.20%	2.69%
				7.50%

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1 Page 19

Issue 1 - Revenue Cap and Price Cap

Question:

a) *Union states that by selecting the Price Cap method that it expects "more stable and predictable rates than a revenue cap". Does Union expect rates to be more stable and predictable than cost of service? If so what impact will a move to price cap have on overall customer behavior?*

b) *Have these factors been incorporated in Union's price cap assessment? If so how?*

Response:

a) and b) Union expects prices to be more stable and predictable than under cost of service.

Union has not analyzed what impact a move to price cap will have on overall customer behaviour.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1

Issue 7.1 - NGEIR

Question:

a) *What impacts on rates does Union anticipate and will it incorporate in rates over the duration of the plan based on implementation as approved by the Board?*

b) *What increase in activity level by rate class does Union project during the term of the IR related to implementation of NGEIR and or gas use by new gas fired generators under ACES, CES and standard offer CHP and NUG contracts as proposed by the OPA?*

c) *Have these activity increases been reflected in Union's IR plan? If so how?*

d) *If not how would Union propose to reflect these activity increases?*

e) *At page 38 of Union evidence Union states that "Union will modify the meth(od) used to establish commodity prices to reflect any changes approved by the Board as a result of that process". Does Union anticipate any changes will be required to its proposed IR if and when this should occur? If so what could those changes be?*

Response:

a) Please see response to interrogatory provided at C2.2 a).

b) Union does not have a projection by rate class of this activity. Union is actively working on various services with a number of gas fired generation projects including:

In-Franchise Power

- Invenergy, St.Clair Power (570 MW)
- East Windsor Cogeneration Centre (84 MW)
- Halton Hills Generating Station (600 MW)
- Great Northern Tri-gen (12 MW)
- Countryside London Generation Facility (12 MW

Ex-Franchise Power

- Greenfield Energy Centre (1,005 MW)
- Portlands Energy Centre (538 MW
- Goreway Station (860 MW)
- Thorold Cogeneration Project (236 MW)

c) and d) Under a price cap formula, a revenue forecast is not used. The X-factor is determined based on historical trends.

e) Without knowing what the changes are, this question cannot be answered with certainty. However, Union does not anticipate that any change to how commodity prices are set would impact the proposed incentive regulation structure.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1

Issue 8 - Term of the Plan

Question:

a) *Please explain the relationship in general between the term of an IR plan and the incentives provided to a regulated utility to increase productivity.*

b) *Please explain the intent of the five-year term in the company's proposed IR plan.*

c) *Would Union expect its incentives would be higher under a five-year term then under a three-year term?*

d) *Would Union expect its incentives to be higher under a five-year term then under a two-year term?*

Response:

Please see interrogatory response provided at Exhibit C32.4.

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1

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

Question:

The company notes on p. 32 of its evidence:

In Union's view there is no justification for a stretch factor during its next IR plan term. The proposed stretch factor is purely an ad hoc add-on; its value cannot be determined from the logic of price indexing as are the other components of the price cap formula. 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) *Is it Union's belief that it will not have an incentive to increase productivity during the term of the plan?*

b) *Would Union expect its incentives under a five-year IR plan to be greater than the incentives the company faced during its three-year PBR and two-year rate freeze from 2001 to 2005?*

c) *Is it Union's belief that it will not have the ability to increase productivity during the term of the plan?*

Response:

a) to c) Please see interrogatory response provided at Exhibit C13.24.

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #1

Issue 3.1 - How should the X factor be determined?

Question:

The PEG Report calculates that Union's TFP averaged 1.87 percent per year from 2000 to 2005 and 2.28 percent from 1999 to 2005 using the COS capital price approach (see Exhibit below). Furthermore, PEG calculates that Union's US Peer Group had annual average TFP growth of 2.04 percent annually from 1994-2004.

Union's TFP Performance, US Peer Group Performance and "Modeled" TFP Performance from the US LDC Statistical Cost Model

	COS	*US Peers*	*Econometric Cost Model*
1999-2005	*2.28*		
2000-2005	*1.87*		*1.73*
1994-2004		*2.04*	

Source: PEG June 8, 2007 Report.

a) *Please confirm that Union's proposed X factor relies on the 1.73 average annual TFP growth estimated by PEG for Union from PEG's statistical cost model.*

b) *Is it Union's understanding that the data underlying the statistical cost model come from LDCs operating across most of the regions of the US?*

c) *In particular, please confirm that it is Union's understanding that no data from Enbridge or Union were used to estimate the model.*

d) *Is it Union's understanding that no data from any Canadian LDC was used to estimate the statistical cost model used by PEG?*

e) *Please explain Union's understanding of the rationale behind the inclusion of the US LDCs data that are used to estimate PEG's statistical cost model.*

f) *Please explain Union's understanding of the rationale behind the exclusion of Canadian LDCs from the data used by PEG to estimate the statistical cost model used to develop Union's TFP for its X factor proposal.*

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

g) *Please explain Union's understanding of the rationale behind the selection of the US LDCs that PEG used to form the Peer Group of LDCs to benchmark Union.*

h) *Please explain Union's understanding of the rationale behind PEG's exclusion of Canadian LDCs from the Peer Group of LDCs used to benchmark Union.*

i) *The Board has stated in the NGF report that it expects rate payers to share immediately in the efficiency gains from the IR and that it would be particularly diligent in its review of the parameters of the IR like the X factor to ensure that such sharing be effective from the beginning of the IR and not rely on rebasing alone at the end of the term to accomplish this. Furthermore, Board Staff in their discussion paper have noted that no one would be made worse off from the IR. According to PEG's calculations, the average TFP growth rate over the 1999 to 2005 period for Union was 2.28 percent per year. The recommended X factor of 1.73 falls far short of the company's performance under the then operative COS and PBR frameworks. The addition of the recommended stretch factor of 0.5 produces an X factor of 2.23, is still less than Union's calculated performance since 1999. Please explain how ratepayers would be made better off if the targeted X factor is less than what the company achieved under its COS and PBR terms?*

Response:

a) Confirmed.

b) Page 24 of the PEG Study states: "These estimates were drawn from an econometric model of the relationship between the ("total") cost of gas utility base rate inputs and various business conditions. PEG developed this model expressly for this project. The econometric research also has uses in fashioning TFP targets and the calculation of PCIs for particular service classes, as we discuss further below. We estimated the parameters of two cost models using US data for the full 1994-2004 sample period."

c) Based on the statement noted in b) above, Union believes that no data from Enbridge or Union was used in PEG's econometric model.

d) Based on the statement noted in b) above, Union believes that no data from Canadian LDC's was used in PEG's econometric model.

e) to h) Dr. Mark Lowry of PEG is a recognized expert in the field of incentive regulation. These questions should be referred to him.

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615

i) Although PEG includes TFP growth over the two periods 1999-2005 and 2000-2005 in Table 5 of its report, in the text of the report it uses only the 2000-2005 period result as its estimate of Union's TFP growth. This was done presumably in recognition of the fact that 1999 was not a representative year for Union, since during that year ancillary services were transferred to a separate Company. This transfer complicates the calculation of the inputs and outputs which remained with the regulated company and renders any TFP estimate based on the 1999 data unreliable. The TFP growth rate for the 2000-2005 period was estimated to be 1.87% per year, close to the recommended TFP projection of 1.73%.

UNION GAS LIMITED

Answer to Interrogatory from
Power Workers' Union ("PWU")

Reference: Exhibit #A, Tab #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?

Question:

a) *Please explain the impact on rates from an IR plan with an X factor of .02 versus an X factor of .52 all else being equal.*

b) *Would rates be higher under the X factor of .02?*

c) *Please explain the impact on revenues from an IR plan with an X factor of .02 versus an X factor of .52 all else being equal.*

d) *Would revenues be higher under the X factor of .02?*

e) *Please explain the impact on profits from an IR plan with an X factor of .02 versus an X factor of .52 all else being equal.*

f) *Would profits be higher under the X factor of .02?*

Response:

a) All other things being equal, if the X-factor is 0.52% rather than 0.02%, rates will be lower.

b) All other things being equal, rates will be higher under an X-factor of 0.02%

c) All other things being equal, if the X-factor is 0.52% rather than 0.02%, revenues will be lower.

d) All other things being equal, revenues will be higher under an X-factor of than 0.02%.

e) All other things being equal, if the X-factor is 0.52% rather 0.02%, profits will be lower.

f) All other things being equal, profits will be higher under an X-factor of than 0.02%.

Question: August 20, 2007
Answer: September 4, 2007
Docket: EB-2007-0606 / EB-2007-0615