

May 25, 2016

Ms. Kirsten Walli  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: EB-2016-0004 – Union Gas Limited (“Union”) – Natural Gas Expansion Generic Proceeding  
- Undertaking Responses**

Please find attached Union’s responses to the Undertakings for the above noted proceeding.

Yours truly,

*[Original Signed by]*

Chris Ripley  
Manager, Regulatory Applications

c.c.: C. Keizer (Torys)  
EB-2016-0004 Intervenors

UNION GAS LIMITED

Undertaking of Mr. Kitchen  
To Mr. Mondrow

With reference to BOMA 59 (c) (ii), to provide the derviation of the 50 percent per year benefit.

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In the above Undertaking the 50 percent per year benefit should have read \$0.50 per year benefit.

In Exhibit S15.Union.BOMA.59 c) ii), Union estimated each existing general service customer would benefit by approximately \$0.50 per year related to the attachment of the 29 potential community expansion communities. Union's administrative and general costs are overhead costs that decrease on a per customer basis with the addition of new customers. The calculation of the estimated \$0.50 per year is based on the administrative and general O&M expense per Union's 2013 Board-approved cost allocation study (updated per EB-2013-0365). Please see Attachment 1 for the calculation of the estimated \$0.50.

Union's administrative and general costs on a per customer basis have not changed for contract customers because Union is not forecasting contract customer attachments as part of its community expansion proposal.

UNION GAS LIMITED  
General Service Distribution Administrative and General O&M Costs per Customer

Line No.	Particulars	Total (a)
	<u>2013 Board-Approved</u>	
1	General Service Distribution Administrative and General O&M costs (\$000's) (1)	95,514
2	General Service Customer Count	<u>1,387,718</u>
3	Total Administrative and General O&M Costs per Customer (line 1 / line 2)	<u>\$ 68.83</u>
	<u>Community Expansion Proposal for 29 Proposed Projects</u>	
4	Year 10 Estimated General Service Customer Attachments	9,107
5	Total Administrative and General O&M Costs per Customer [line 1 / (line 2 + line 4)]	<u>\$ 68.38</u>
	<u>Difference</u>	
6	Administrative and General O&M Cost per Customer Benefit (line 3 - line 5)	<u>\$ 0.45</u>

Notes:

- (1) 2013 Board-approved general service distribution administrative and general O&M costs of \$105.685 million (per EB-2013-0365), excluding the distribution-related employee benefits of \$10.171 million that increase with customer attachments.

UNION GAS LIMITED

Undertaking of Mr. Kitchen  
To Dr. Higgin

To attempt to estimate the rate base split between distribution, transmission, and storage.

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Please see Attachment 1.

UNION GAS LIMITED  
Rate Base by Function

Line		2013	2016
No.	Particulars (\$000's)	Board- Approved	Estimated
		(a)	(b)
	<u>Function</u>		
1	Storage	408	398
2	Transmission	1,166	1,777
3	Distribution	2,178	2,535
4	Purchase Production	<u>(40)</u>	<u>(16)</u>
5	Total Rate Base	<u>3,713</u>	<u>4,694</u>

UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Dr. Higgin

To confirm that the answer previously given to an undertaking for CPA is correct.

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Clarification:

The above Undertaking is in regards to the Stage 2 calculation found at EB-2105-0179 Exhibit B. CPA.18. Union's Exhibit A, Tab1, Appendix D was updated in December 2015 and the Stage 2 calculations found at Exhibit B.CPA.18 were not updated.

Stage 2 As filed	\$324 million
Stage 2 Updated	\$311 million

In response to Mr. Quinn, Transcript Volume 6, page 44, Union agreed to calculate the Stage 2 impacts with a revision to the oil and propane fuel prices as part of this Undertaking J4.8.

Stage 2 as adjusted for Mr. Quinn's request equals \$277 million.

The \$277 million is based on the following annual energy savings estimated to be made available through conversion to natural gas:

- Home Propane Estimate: \$1,225 (Exhibit S15.Union.Staff.10)
- Furnace Oil: \$1,571 (Exhibit S15.Union.Energy Probe 15, Attachment 1, p.3)
- Electricity: \$2,205 (Exhibit S15.Union.Energy Probe 15, Attachment 1, p.3)

UNION GAS LIMITED

Undertaking of Mr. Okrucky

To Ms. Spoel

To advise the number of customers added in the Prince Edward County area and the Espanola area.

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The total number of customers currently served by the Bay of Quinte line is approximately 4,800. The number of customers served in Prince Edward County is approximately 3,940.

The number of customers served by the North Shore pipeline out of Sault Ste Marie heading to Blind River and Elliot Lake is approximately 7,060. This does not include customers in Sault Ste Marie who are served from this pipeline.

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Ms. DeMarco

To provide the number of First Nations in the Union service territory.

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There are approximately 80 First Nations in Union's service territory.



UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Elson

To provide clarification or more granularity if needed on the maximum amount that would be taken from existing customers as a subsidy.

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For the purpose of responding to this Undertaking, Union has assumed future projects will have a similar composition of total revenue requirement, incremental revenue and TES and ITE deferral credits relative to the capital spend as the 29 community expansion projects proposed by Union.

As per the response at Exhibit S15.Union.IGUA.6, the maximum annual bill impact for an average residential customer with annual consumption of 2,200 m<sup>3</sup> per year is \$2.91. This is based on Year 10 for the 29 proposed projects. The subsidy from all existing customers in Year 10 is estimated to be \$8.0 million (total revenue requirement net of TES and ITE deferral credits of \$11.5 million<sup>1</sup> less incremental revenue of \$3.4 million<sup>2</sup>). By applying a multiple of 8.25 (\$24 divided by \$2.91) to the subsidy from all existing customers in Year 10 of \$8.0 million, Union estimates the maximum subsidy from all customers to be \$66.0 million in Year 10 if the maximum bill impact of \$24 per residential customer for the community expansion projects was reached.

Union estimates the approximate amount of the maximum subsidy that would be attributable to residential customers to be \$31.8 million calculated as \$24 multiplied by the 2016 estimated number of residential customers of 1.325 million.

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<sup>1</sup> EB-2015-0179 Exhibit JT1.3, Attachment 2, p.3, column (d), line 26.

<sup>2</sup> EB-2015-0179 Exhibit JT1.3, Attachment 1, column (j), line 12.

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Elson

To determine and provide the number of electricity customers in the province.

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Please see the link below for Board's 2014 Yearbook of Electricity Customers. For 2014, the number of electricity customers was 4,988,859.

<http://www.ontarioenergyboard.ca/OEB/Industry/Rules+and+Requirements/Reporting+and+Record+Keeping+Requirements/Yearbook+of+Distributors#elec>

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Kaiser

To provide the calculation over a 40-year term.

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Results below are provided for a TES term for each community expansion project to meet a PI of 1.0 (where it would end), or a TES term continuing for a term up to 40 years if the PI of 1.0 is not met. The requirement for “no subsidy from existing customers” is not applied as some projects would not meet a PI of 1.0 by year 40.

A total of 10 of the 29 projects would meet a PI of 1.0 prior to year 40. The TES term for these 10 projects range between nine and 25 years, and the TES for these projects end when they reach a PI 1.0. The remaining 19 projects pay the TES for the full 40 years. For this scenario, the net present value of the TES is approximately \$77 million and the PI of the 29 projects as a pool is approximately 0.9.

Potential Customers	18,300
Forecast Customers	9,100
Number of projects	29
Present Value TES (\$ million)	77
Total Capital (\$ million)	135
PI of the pool of projects	0.88

UNION GAS LIMITED

Undertaking of Mr. Simpson  
To Mr. Elson

To provide further details around this expansion that we've been discussing.

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This Undertaking relates to Advancement Charges for the Port Elgin-Southampton-Wiarton expansion Project<sup>1</sup>, and subsequent Owen Sound Line reinforcement that occurred following that Project.

Advancement Charges follow the principle that if a Project causes or brings forward additional reinforcement of an upstream pipeline system, the Project should be responsible for those costs. Union has proposed that this principle be applied to upstream distribution reinforcement expected to advance to within a three year period following the year a Project enters service.

The potential for application of Advancement Charges was first identified in the application for the expansion project to provide service to Wingham<sup>2</sup>. The details on the calculation for the Advancement Charge are provided at Exhibit S15.Union.Epcor.1.

The first project where Advancement Charges were applied was the Port Elgin-Southampton-Wiarton project. The economic feasibility analysis of the Project included a cost of \$6.045 million as a component of the capital costs of \$22.1 million. This cost was included in the economics of the Port Elgin project, and with its inclusion the Project PI was determined to be 0.68 without Aid of Construction. This resulted in a required up-front Aid to Construction estimated at \$3.8 million in order to increase the Project PI to 0.8.

The \$6.045 million cost was a result of changes in timing for a total of seven expected reinforcement projects on the Owen Sound Line. In the absence of the Port Elgin project, the first of these reinforcement projects would have occurred in 2007, and the last reinforcement project would have occurred in 2015. Because of the Port Elgin project, the timing of the first Owen Sound Line reinforcement project was advanced from 2007 to 1999, and a total of six projects were then expected in the period from 1999 to 2006.

The Board approved the Port Elgin project which included the Advancement Charges.

Following the Port Elgin project going into service the Owen Sound Line was reinforced in 1999<sup>3</sup>. This project involved the installation of 16.6 km of NPS 12 steel pipeline from St. Jacobs northerly to a point in Mapleton Township. The Board approved capital cost for the project was \$5.0 million, and the actual cost was \$3.6 million.

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<sup>1</sup> E.B.L.O. 259, 1997

<sup>2</sup> E.B.L.O. 253, 1995 (Decision is provided at Exhibit J6.6)

<sup>3</sup> RP-1999-0025

The actual cost of \$3.6 million for 1999 Owen Sound Line reinforcement compares to a future cost forecast of \$2.0 million that was imbedded in the economics of the Port Elgin project several years earlier. There was no reconciliation of the impact this increased cost might have had on Aid-to-Construction for the Port Elgin Project.

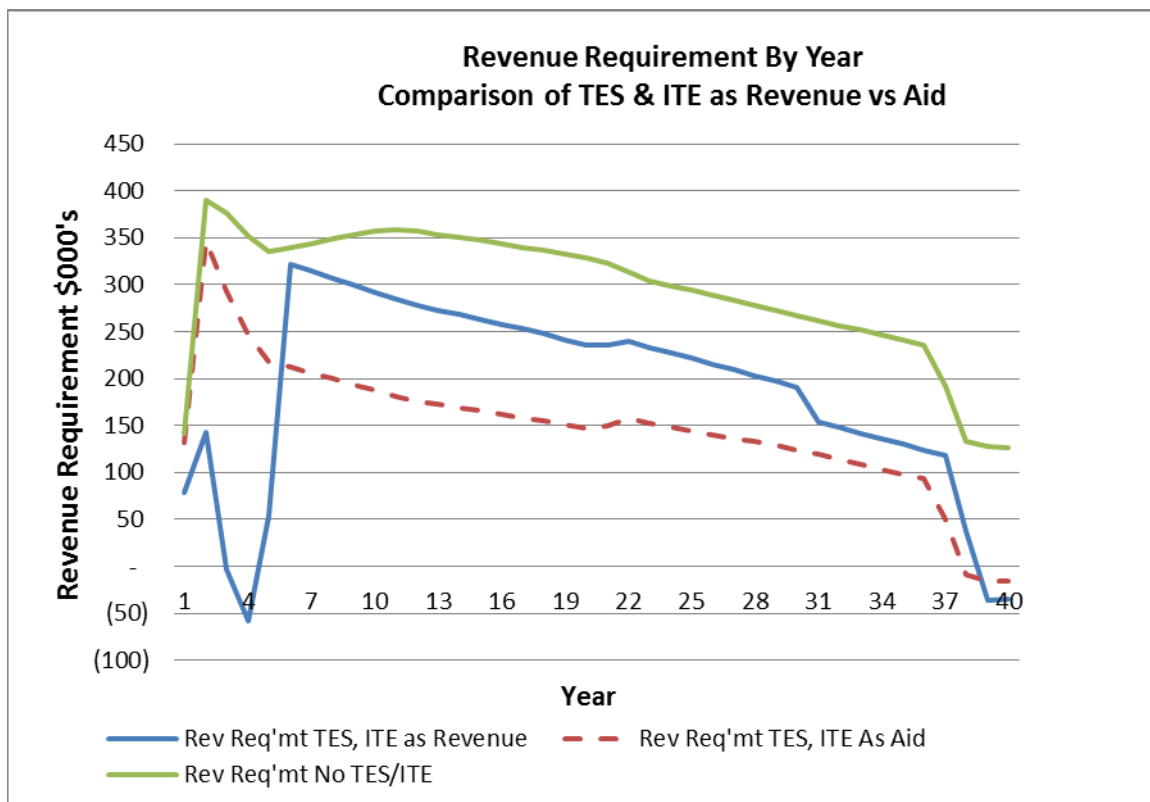
UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Mr. Aiken

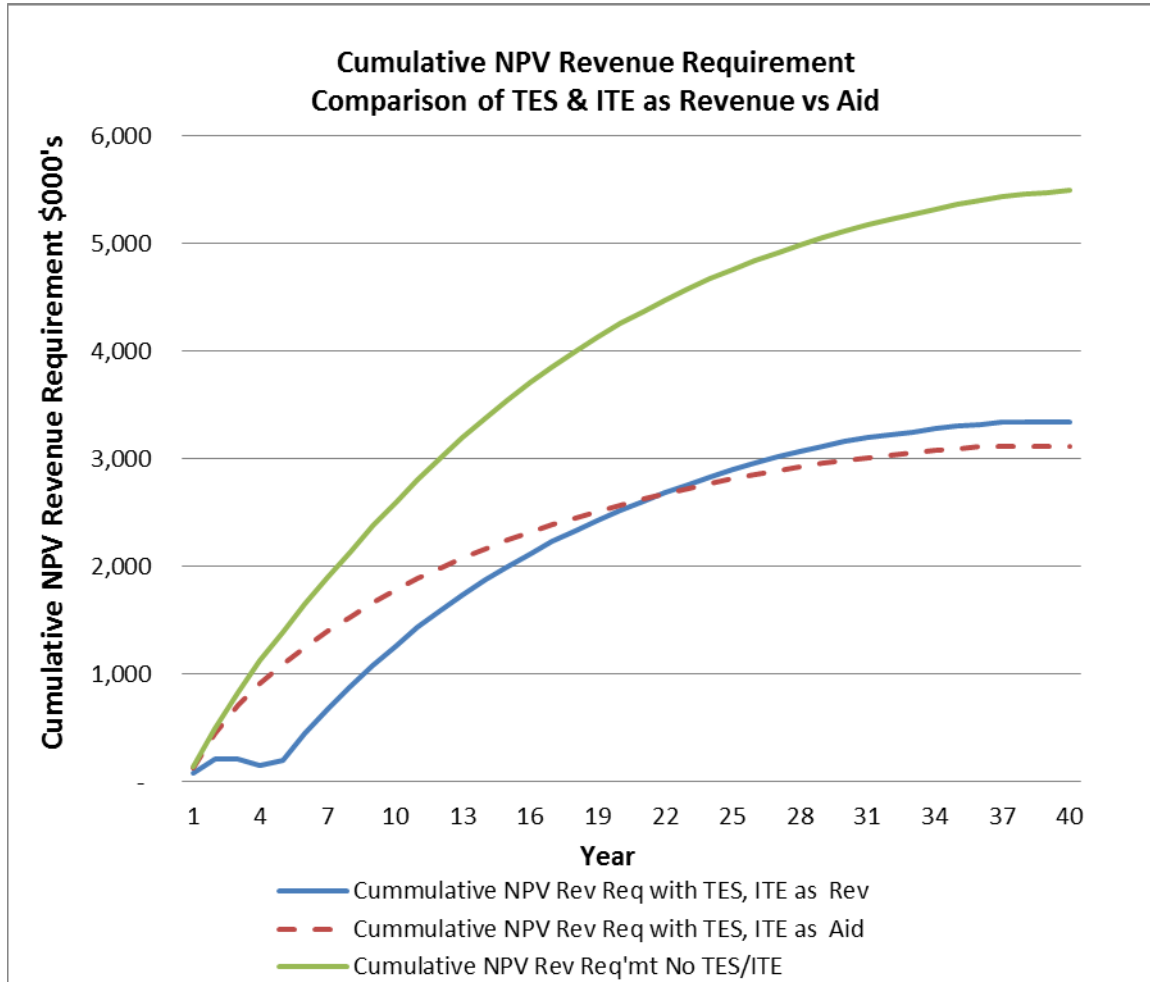
To provide Figures 1 and 2 using the revenue requirement before TES and ITE are removed that are calculated in Attachments 2 and 3 to that response.

Please refer to Figures 1 and 2. An additional line (green) has been added to the response at EB-2015-0179, Exhibit B.LPMA.1. The green line added is the revenue requirement for the Milverton project before collecting the TES and ITE.

**Figure 1: Revenue Requirement Annually**



**Figure 2: Cumulative NPV Revenue Requirement**



UNION GAS LIMITED

Undertaking of Mr. Kitchen  
To Mr. Kaiser

To provide Union's opinion on Mr.Kaiser's proposition of a monthly surcharge.

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Union has responded to the request based on a need to collect \$88 million + \$22 million = \$110 million in order for the pool of 29 community expansion projects to reach a PI of 1.0. The \$88 million is based on the NPV of \$75 million in subsidy from existing ratepayers referenced in EB-2015-0179 at Exhibit JT1.11 (Column D), which would increase to \$88 million as a result of the loss of the CCA tax shield due to treatment as aid of construction. The \$22 million is based on the NPV of the \$19 million in TES collected from the expansion area customers (Column B), which would increase to \$22 million for the same reason.

For this response Union has assumed that the payments would be treated as aid of construction as opposed to revenue. If the payments were recognized as revenue the monthly fee referenced below would be approximately \$10 per month less.

Applying the fixed rate monthly payments for 40 years to all expansion customers results in additional cross subsidization among expansion area customers served by the 29 projects, as some projects would reach as PI of 1.0 in as short as 10 years, but customers in those areas would continue to pay the surcharge for another 30 years.

The equivalent monthly fee resulting from this shortfall of \$110 million would be approximately \$67 per customer. A fixed fee of \$67 per month as a rate surcharge may result in incremental income taxes for the utility. If so, the monthly fee would need to be grossed up for tax to the equivalent of approximately \$90 per month.

The \$67 to \$90 per customer per month estimate recognizes customer attachments build up over 10 years and then remain at the 10th year level for the remaining term to year 40.

Union is concerned with the viability of a fixed surcharge approach, and consequently does not support that approach. Union submits this type of approach would result in no Projects becoming feasible. A monthly fixed cost of \$67 to \$90 for 40 years would result in additional annual costs for natural gas of \$804 to \$1,080. This would seriously impede the savings available from converting, and significantly reduce the willingness of consumers to convert.

A surcharge of \$67 to \$90 in addition to the current \$21 fixed monthly charge could become a significant barrier to water heating conversions in the expansion project areas. The fixed surcharge approach could encourage customers to not convert their water heaters to natural gas, which would allow them to shut off their meter for warmer months each year in order to avoid the fixed payments.



Applying the fixed rate monthly payments for 40 years to all expansion customers would result in additional cross subsidization from expansion area customers serviced by projects with higher natural PI's in favour of expansion customers in areas serviced by projects with lower natural PI's.

Further, taking a fixed rate recovery approach for all customers would result in less of the total surcharge being collected from larger customers and more collected from smaller customers. This approach would not satisfy Union's principle that customer contributions to project feasibility be commensurate with the energy savings achieved.

UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Mr. Quinn

To update the Stage 2 figures including the shareholder return over the 40 years.

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Clarification:

The Undertaking as described in the transcript is incorrect. The reference to a request related to Stage 2 occurs at page 44 of the transcript and has been provided in Undertaking J4.8.

The shareholder return is not part of Stage 1 or Stage 2. It is a component of the calculation of the annual revenue requirement.

**Response:**

The present value of the shareholder return is approximately \$45 million.

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Quinn

To provide the figures for O&M costs for customers in the North and O&M costs for customers in the South.

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Please see Attachment 1.

UNION GAS LIMITED  
2013 Board-Approved Distribution O&M Expense per Customer

Line No.	Particulars	Union North			Union South			Total General Service (g) = (c+f)
		Rate 01 (a)	Rate 10 (b)	Total (c) = (a+b)	Rate M1 (d)	Rate M2 (e)	Total (f) = (d+e)	
1	Total Distribution O&M Expense (1)	67,878	5,692	73,570	169,827	13,860	183,687	257,257
2	Less: Distribution Administrative & General O&M (2)	24,990	1,675	26,666	64,530	4,318	68,848	95,514
3	Net Distribution O&M Expense (line 1 - line 2)	42,888	4,016	46,904	105,298	9,541	114,839	161,743
4	2013 Board-Approved Average Number of Customers	319,978	2,052	322,030	1,058,900	6,788	1,065,688	1,387,718
5	Net Distribution O&M Expense per Customer	<u>\$ 134.03</u>	<u>\$ 1,956.86</u>	<u>\$ 145.65</u>	<u>\$ 99.44</u>	<u>\$ 1,405.70</u>	<u>\$ 107.76</u>	<u>\$ 116.55</u>

Notes:

- (1) Distribution O&M expense per the 2013 Board-approved cost allocation study updated in EB-2013-0365.
- (2) 2013 Board-approved general service distribution administrative and general O&M costs of \$105.685 million (per EB-2013-0365), excluding the distribution-related employee benefits of \$10.171 million that increase with customer attachments.

UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Mr. Duncanson

Union to identify from its list of projects that would collectively achieve a PI of 1.0 (a) how many projects you could include in the portfolio; (b) how many potential customers would be associated with that portfolio; (c) how many forecast customers would be associated with that portfolio.

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Results below are provided for a scenario where the TES term is applied for 40 years for each community expansion project, and there is a requirement for the portfolio of projects to be a PI  $\geq 1.0$ . Fixing the term for 40 years would result in 10 projects with a PI of as high as 1.95 subsidizing 14 projects with a PI as low as 0.6. Some projects would reach a PI of 1.0 with a TES term as short as 9-10 years and under a 40 year TES scenario would continue to pay the TES for a further 30 years.

The total number of projects is 24 and the largest project (Kincardine and area) would not fit within the portfolio. For clarity, in this analysis the project list is treated as a top down summation until the portfolio PI falls below 1.0. At 24 projects the PI is 1.09. At 25 projects the PI would fall below 1.0.

The net present value of the TES in this case is \$44 million.

Summary

Potential Customers	9,400
Forecast Customers	4,500
Number of projects	24
Present Value TES (\$ million)	44
Total Capital (\$ million)	62
PI of the pool of projects	1.09

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Rubenstein

To file a copy of the Wingham decision.

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Please see Attachment 1.



# ONTARIO ENERGY BOARD

VOLUME: 4  
DECISION

DATE: Tuesday, June 20, 1995

BEFORE:

P.W. HARDIE

PRESIDING MEMBER

G.A. DOMINY

VICE-CHAIR MEMBER

J.B. SIMON

MEMBER

**FARR**  
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& E.B.A. 705/E.B.C. 230 & E.B.A. 706/E.B.C. 231

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& E.B.A. 707/E.B.C. 232 & E.B.A. 708/E.B.C. 233

6

# THE ONTARIO ENERGY BOARD

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IN THE MATTER OF the Municipal Franchises Act,  
R.S.O. 1990, c. M.55;

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AND IN THE MATTER OF the Applications by Union  
Gas Limited for an order, or orders approving the  
terms and conditions upon which the Town of  
Wingham, the Villages of Blyth, Brussels and  
Teeswater, and the Townships of East Wawanosh,  
Morris, Grey, Turnberry and Culross are, by  
bylaw, to grant to Union Gas Limited rights to  
construct and operate works for the distribution  
of gas; to extend or add to the works; to supply  
gas to the inhabitants of the said  
municipalities; and the period for which such  
rights are to be granted;

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AND IN THE MATTER OF the Applications by Union  
Gas Limited for an order, or orders dispensing  
with the assent of the municipal electors of the  
Town of Wingham, the Villages of Blyth, Brussels  
and Teeswater, and the Townships of East  
Wawanosh, Morris, Grey, Turnberry and Culross  
regarding the said bylaws;

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AND IN THE MATTER OF the Applications by Union  
Gas Limited for a certificate of public  
convenience and necessity to construct works to  
supply gas and to supply gas to the inhabitants  
of the Town of Wingham, the Villages of Blyth,  
Brussels and Teeswater, and the Townships of East  
Wawanosh, Morris, Grey, Turnberry and Culross;

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AND IN THE MATTER OF the Ontario Energy Board  
Act, R.S.O. 1990, c. O.13;

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AND IN THE MATTER OF the Application by Union Gas Limited for an order granting leave to construct natural gas pipelines and ancillary facilities in the Town of Wingham, the Villages of Blyth and Brussels, and the Townships of Goderich, Hullet, East Wawanosh, Morris and Turnberry, all in the County of Huron, and in the Village of Teeswater and the Township of Culross, both in the County of Bruce.

Hearing held at 2300 Yonge Street,  
25th Floor, Hearing Room No. 1,  
Toronto, Ontario on Tuesday, June  
20, 1995, commencing at 9:05 a.m.

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VOLUME 4  
DECISION  
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B E F O R E :

P.W. HARDIE	The Presiding Member
G.A. DOMINY	The Vice-Chair/Member
J.B. SIMON (absent)	Member

Filed: 2016-05-25  
EB-2016-0004  
Exhibit J6.6  
Attachment 1

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A P P E A R A N C E S

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JENNIFER LEA

Board Technical Staff

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CHRISTINE JACKSON

Union Gas Limited

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1 ---Upon commencing at 9:05 a.m.

2 THE PRESIDING MEMBER: Please be seated.

3 Is it okay with the court reporter if we  
4 leave the door open? I think the air circulation is a bit  
5 better if we do that.

6 Now, as you may know, what we are going to  
7 do this morning is first of all read out an oral decision  
8 on Union Gas's application under Board file No. EBLO 253  
9 et al; it is otherwise known as the Wingham Project. And  
10 that is a decision of George Dominy, Judy Simon and  
11 myself, Pamela Hardy. Judy Simon is not present this  
12 morning, but she is a participant in the decision and is  
13 in agreement with it. And once we have done that, then we  
14 will proceed with Consumer Gas' application.

15 So Mr. Dominy will read the Board's decision  
16 on the Union Gas matter.

17 BOARD DECISION:

18 THE VICE-CHAIR: The Board is sitting today  
19 to deliver its oral decision on Union Gas' application  
20 under Section 9 of the Municipal Franchises Act, for  
21 orders approving the terms and conditions of proposed  
22 municipal franchise agreements, approve the bylaws and for  
23 dispensation with assent of electors and, under Section 8  
24 of the Act, for certificates of public convenience and  
25 necessity for the right to supply gas and construct and  
26 operate works to supply gas in the Town of Wingham, the  
27 Villages of Blyth, Brussels and Teeswater in the Townships  
28 of East Wawanosh, Morris, Grey, Turnberry and Culross,

## Decision

Filed: 2016-05-25

EB-2016-0004

Exhibit J6.6

1 Board file Nos. EBA 700 to 708 and EBC 225 to 231 Attachment 1

2 Union Gas also made application under  
 3 Sections 49 and 48 of the Ontario Energy Board Act for  
 4 leave to construct natural gas pipelines and ancillary  
 5 facilities in the Town of Wingham, the Villages of Blyth  
 6 and Brussels and the Townships of Goderich, Hullet, East  
 7 Wawanosh, Morris and Turnberry, all in the County of  
 8 Huron, and in the Village of Teeswater and the Township of  
 9 Culross, both in the County of Bruce, Board file No. EBLO  
 10 253.

11 The Board's findings and decision:

12 The Board has reviewed the evidence in these  
 13 proceedings regarding the applications by Union Gas under  
 14 the Ontario Energy Board Act and the Municipal Franchises  
 15 Act and, in arriving at its decision on these  
 16 applications, has taken particular note of evidence on  
 17 public interest factors, the economic feasibility of the  
 18 project, and the environmental implications.

19 The Board observes that Union's policy for  
 20 distribution system expansion was reviewed in a parallel  
 21 proceeding before this Board; namely, Union Gas' main rate  
 22 case, EBRO 486.

23 The Board accepts the advice of both Union  
 24 and Board Staff that the issues arising from that policy  
 25 were more fully tested within that hearing and therefore  
 26 the Board makes no general findings on the threshold  
 27 criteria, the level of market contribution, or the use of  
 28 a multiplier of the residential contribution for

Filed: 2016-05-25

EB-2016-0004

Exhibit J6.6

1 application to commercial customers in this case. Attachment 1

2 The Board equally cautions that the findings  
3 of this specific case should not be regarded as setting  
4 any precedent for a future facilities application.

5 However, the Board had made a number of directions related  
6 to filings for future facilities applications.

7 With regard to the public interest, the  
8 Board recognizes the support of representatives of the  
9 communities for receiving gas service and the positive  
10 results of the customer surveys undertaken by Union Gas.  
11 The Board also takes into consideration the evidence that  
12 those customers that convert to natural gas will enjoy  
13 substantial fuel cost savings.

14 The Board also notes Board Staff's position  
15 that providing gas service to these communities would be  
16 in the public interest. The Board finds that the case for  
17 this project to be in the public interest has been proven.

18 The Board agrees with Board staff that there  
19 is uncertainty as to the degree of understanding by the  
20 community of the costs of conversion to natural gas. The  
21 Board agrees with Board staff's recommendation and directs  
22 Union Gas in future to include information on the costs  
23 for conversion to natural gas in the initial communication  
24 with potential customers and surveys or questionnaires  
25 assessing the potential for customer attachments. The  
26 Board suggests that Union develop a pamphlet which  
27 summarizes and explains these costs.

28 The Board also directs Union to file in

1 future facilities applications sample pay-back  
2 calculations for the various custom groups that expect to  
3 attach.

4 The Board also shares some of the concerns  
5 raised by Board staff regarding the conduct of Union's  
6 surveys. The Board, however, does not at this time direct  
7 Union to retain external expertise to assist Union's  
8 methodology. Instead, the Board directs Union to review  
9 its survey methodology, to address the concerns raised  
10 regarding possible bias in the selection of its sample,  
11 the danger that survey respondents may have been  
12 preconditioned on the appropriate level of market  
13 contribution and inadequate understanding on the part of  
14 respondents on the costs of conversion.

15 The Board directs Union to provide a more  
16 complete summary of the survey results than it provided in  
17 this application in future applications. The summary  
18 should include for each community to be served the number  
19 of potential customers and the attachment rate by type of  
20 customer for both existing and new buildings, by type of  
21 space heating and water heating system, and the potential  
22 for other applications of natural gas.

23 The Board also directs Union to file in  
24 future facilities applications up-to-date information on  
25 other projects, comparing the customer attachments  
26 actually achieved with the number of attachments it  
27 forecast and which form the basis of its economic analysis  
28 of its distribution system expansion projects.

Filed: 2016-05-25

EB-2016-0004

Exhibit J6.6

1           The Board agrees with Board Staff that Union  
2           should be required to file in future facilities  
3           applications an estimate of the costs of any reinforcement  
4           of existing lines that may be necessary as a result of the  
5           specific application, and an assessment of the impact of  
6           these costs on the economics of the project. The Board is  
7           aware of Union's concern that such reinforcement may be  
8           considered joint use facilities, and as such, should not  
9           be to the account of an individual project.

10                   The Board agrees with Board Staff that it  
11           would be not be in the public interest in this project to  
12           change the level of the residential monthly market  
13           contribution from the \$15 level proposed.

14                   The Board has identified earlier its concern  
15           that the community may have been preconditioned on the  
16           appropriate level of a market contribution and has  
17           recommended that Union review its survey its methodology  
18           to avoid this.

19                   The Board observes that the category of  
20           customers identified by Union as commercial customers  
21           covers a very wide spectrum of users with very different  
22           consumption levels and costs for conversion. The Board is  
23           not able, on the basis of the information provided in this  
24           hearing, to calculate an appropriate monthly contribution  
25           for these customers. The Board understands that Union had  
26           not undertaken a detailed assessment of appropriate market  
27           contributions from commercial customers for this project.

28                   The Board expects Union to apply in this

1 project any guidelines on an appropriate market  
2 contribution from commercial customers that may be  
3 provided in the decision from Union's main rates case,  
4 EBRO 486. The Board advises Union that it will require in  
5 future facilities applications separate justification of  
6 the market contribution from commercial customers that  
7 takes into account differences between residential and  
8 commercial customers.

9 The Board was advised that Union has not  
10 completed its negotiations with the two industrial  
11 customers as to the contribution they will make to the  
12 project. The evidence at the hearing showed that these  
13 customers consume substantial volumes of natural gas and  
14 are likely to receive significant benefits from conversion  
15 to natural gas.

16 The Board also notes that according to the  
17 evidence filed by Union, the ratio of peak volumes of  
18 these customers to their average volumes is greater than  
19 that of the residential/commercial customer class.  
20 Union's evidence indicated that the inclusion of these  
21 customers in the project substantially improves the  
22 overall profitability of the project.

23 The Board is not able to make a  
24 determination as to an appropriate level of contribution  
25 to require from these customers. The Board directs Union  
26 to continue its negotiation with these customers and to  
27 file with the Board the results of its negotiations. The  
28 Board advises Union that the Board will review the



Filed: 2016-05-25

EB-2016-0004

Exhibit J6.6

1       reasonableness of the contributions obtained when Attachment 1  
2       assessing the inclusion in rate base of the capital costs  
3       of this project.

4                     The Board accepts Union's agreement to  
5       record separately the moneys obtained from market  
6       contributions for this project and directs Union to do  
7       this for each class of customer and to report on this  
8       matter at future rate hearings. The Board advises Union  
9       that any shortfalls may be to the account of the  
10      shareholders.

11                    The Board observes that the project has a PI  
12      of 0.71, which meets Unions current threshold of 0.7 for  
13      projects without a market contribution, and has a PI of  
14      0.82 if the market contribution is included.

15                    The Board also notes that the project has a  
16      positive cost benefit result in a stage 2 analysis. The  
17      Board agrees with Board Staff position that the economics  
18      of this project are borderline, but, pending further  
19      review of Union's distribution system expansion policy by  
20      the EBRO 486 Panel, and given that the PI is consistent  
21      with the existing policy, the Board accepts the forecasted  
22      economic feasibility of the project.

23                    The Board has taken account of the evidence  
24      that there are no unresolved environmental issues and that  
25      Union will meet all local bylaws in undertaking this  
26      project.

27                    The Board also recognizes that the franchise  
28      agreements are in the form with the model franchise

1 agreement with no amendments and are all for a period of  
2 20 years.

3 In light of the above findings, the Board  
4 approves Union Gas application for approval of the  
5 franchise agreements, the associated bylaws, the  
6 dispensation with incentive electives and grants  
7 certificates of public convenience and necessity for the  
8 Town of Wingham, the Villages of Blyth, Brussels and  
9 Teeswater, the Townships of East Wawanosh, Morris, Grey,  
10 Turnberry and Culross as defined in Applications EBA 700  
11 to 708 and EBC 225 to 233.

12 The granting of the certificates of public  
13 convenience and necessity will be subject to the following  
14 condition.

15 If Union Gas should fail to substantially  
16 complete construction of the gas mains proposed in the  
17 application within 24 months following the issuance of the  
18 Board certificate, the certificate shall expire.

19 The Board also will grant leave to  
20 construction referred to EBLO 253, subject to the  
21 conditions proposed by Board Staff filed as Exhibit 8.1 in  
22 the hearing and with Condition D amended as agreed to by  
23 Union Gas to read:

24 Union shall file with the Board's  
25 designated representative and the Chair of  
26 the Ontario Pipeline Co-ordinating Committee  
27 prior to construction commencing written  
28 notice of the commencement of the

1 construction of the pipeline.

2 The Board also amends condition I to read:

3 The interim monitoring report shall  
4 confirm Union's adherence to conditions A  
5 and B and shall include a description of the  
6 effects noted during construction and the  
7 actions taken or to be taken to prevent or  
8 mitigate the long-term effects of the  
9 construction upon the land and the  
10 environment. This report shall describe any  
11 outstanding concerns of landowners and how  
12 they will be addressed.

13 The Board also adds the following condition as condition  
14 Q:

15 Union shall file a report on any instances  
16 where it has not complied with the local  
17 bylaw and the reasons for this  
18 noncompliance.

19 The Board will issue the necessary orders  
20 and certificates as required under the Ontario Energy  
21 Board Act and the Municipal Franchises Act. The Board  
22 directs Union Gas to pay the Board's costs of and incident  
23 to these proceedings, immediately upon receipt of the  
24 Board's cost order and invoice.

25 THE PRESIDING MEMBER: Thank you, Mr.  
26 Dominy.

27 Are there any questions?

28 MS. JACKSON: No, Madam Chair.

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Exhibit J6.6

Attachment 1

1 THE PRESIDING MEMBER: Thank you, Ms.

2 Jackson.

3 With that, that will conclude Union's  
4 application under Board file EBLO 253 et al.

5 MS. JACKSON: Thank you very much.

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8 ---Whereupon the rendering of the decision was concluded.

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EB-2016-0004  
Exhibit J6.6  
Attachment 1

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I N D E X   o f   P R O C E E D I N G S

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28 TD/BV [(c) Copyright 1985].



UNION GAS LIMITED

Undertaking of Mr. Simpson  
To Mr. Rubenstein

To file a copy of the press release from the Minister of Energy from May 3.

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Please see Attachment 1. The news release can be accessed using the following link:

[https://news.ontario.ca/mei/en/2016/05/ontario-raises-197-billion-for-infrastructure-investments.html?utm\\_source=ondemand&utm\\_medium=email&utm\\_campaign=p](https://news.ontario.ca/mei/en/2016/05/ontario-raises-197-billion-for-infrastructure-investments.html?utm_source=ondemand&utm_medium=email&utm_campaign=p)

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## **Ontario Raises \$1.97 Billion For Infrastructure Investments**

*More Than Half of Secondary Share Offering Sold to Retail Investors*

May 2, 2016 8:30 A.M.

The secondary share offering of Hydro One has now been completed, generating approximately \$2 billion in gross proceeds that will now be dedicated to critical investments in transit and infrastructure throughout Ontario and pay down debt.

On April 5, the Province sold 72,434,800 common shares at \$23.65 per share, generating \$1.7 billion in gross proceeds. The Province granted an over-allotment option to the underwriters to purchase up to an additional 10,865,200 common shares. The underwriters have elected to exercise this over-allotment option in full. The over-allotment shares were offered on the same terms and conditions as the base offering. Approximately 53 per cent of the offered Hydro One common shares were sold to retail investors, reflecting a strong demand by individual retail investors across the province.

The government continues to hold approximately 70 per cent of Hydro One and will proceed with future offerings in a careful, staged, and prudent manner, over time reducing Ontario's stake to 40 per cent while remaining the largest shareholder.

Ontario remains on track to generate approximately \$9 billion in gross proceeds and other revenue benefits. This includes \$4 billion in net revenue gains that will be invested in infrastructure and \$5 billion to reduce debt. As an example, assuming a long-term interest rate of 3 per cent, \$5 billion in reduced debt would provide annual interest savings of about \$150 million.

Net revenue gains from the Province's sale of Hydro One common shares will be dedicated to the Trillium Trust to help fund infrastructure projects that will create jobs and strengthen the economy. These net revenue gains will help fund priority projects such as GO Transit Regional Express Rail, Light Rail Transit projects in communities across Ontario through the Moving Ontario Forward initiative, and natural gas network expansion in rural and northern communities.

Maximizing the value of provincial assets is part of the government's economic plan to build Ontario up and deliver on its number-one priority to grow the economy and create jobs. The

four-part plan includes investing in talent and skills, including helping more people get and create the jobs of the future by expanding access to high-quality college and university education. The plan is making the largest investment in public infrastructure in Ontario's history and investing in a low-carbon economy driven by innovative, high-growth, export-oriented businesses. The plan is also helping working Ontarians achieve a more secure retirement.

## QUOTES

" Completing this second phase of broadening Hydro One's ownership means the government will realize approximately \$2 billion in gross proceeds from this offering to invest in new roads, bridges, rapid transit, schools and hospitals in communities across Ontario, and pay down debt."

- Bob Chiarelli

Minister of Energy

## QUICK FACTS

- An over-allotment option is commonly available to underwriters of an offering, allowing the sale of shares in addition to the base amount committed to be sold in the offering.
- The Ontario government remains the largest shareholder of Hydro One, and by law no other shareholder or group of shareholders is permitted to own more than 10 per cent.
- Hydro One rates will continue to be set by the independent regulator, the Ontario Energy Board.
- Ontario is making the largest investment in public infrastructure in the province's history - about \$160 billion over 12 years, which is supporting 110,000 jobs every year across the province, with projects such as roads, bridges, transit systems, schools and hospitals. In 2015, the Province announced support for more than 325 projects that will keep people and goods moving, connect communities and improve quality of life.

## LEARN MORE

- [The secondary share offering of Hydro One](#)
- [Details on the Hydro One secondary offering process](#)
- [The government's plan to unlock the value of public assets](#)
- [The Trillium Trust and Moving Ontario Forward](#)

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**Dan Moulton** Minister's Office  
416-327-3551  
**Aslan Hart** Communications Branch  
416-326-4542

[Available Online](#)  
[Disponible en Français](#)



UNION GAS LIMITED

Undertaking of Mr. Kitchen  
To Mr. Rubenstein

To provide if we get to the \$24 a year for residential customers, the total amount of money that Union will have from all sets of customers that is being subsidized toward Community Expansion.

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Please see the response at Exhibit J5.3.

UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Mr. Rubenstein

To provide some commentary on the undertaking response as to whether or not Union can do a portfolio per se as Enbridge has done.

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Union could adopt a Portfolio approach to Community Expansion Programs (“CEP”), but does not support a number of components of the Enbridge proposal. If a Portfolio approach is adopted by the Board, Union would require variations to the Enbridge proposals, specifically related to the Portfolio minimum PI level, the use of minimum Project PI’s, and the TES term.

Irrespective of the above concerns, Union has applied the following criteria to estimate the results of applying the Enbridge proposal to a potential Union Gas CEP Rolling Project Portfolio (“RPP”):

- All Community Expansion Projects become part of a CEP RPP that includes all projects regardless of the year they enter service;
- Projects are ranked in the CEP RPP based on their natural PI<sup>1</sup> (those with the highest PI’s are included first);
- The minimum CEP RPP PI is 0.5;
- No minimum project PI threshold has been applied;
- The TES term is a minimum of 4 years and a maximum of the lesser of the number of years required for a project to reach a PI of 1.0, or 40 years;
- The ITE term is a minimum of 4 years and a maximum of 10 years; and,
- No Investment Portfolio minimum PI thresholds are required.

The application of Enbridge’s methodology to Union’s project list results in a total of approximately 59 Projects that might become feasible. These projects would provide access to 31,000 consumers, and 15,000 forecast customers, at a gross capital cost of \$500 million. The NPV of the Portfolio would be (\$270) million and the PI of the portfolio would be 0.50. The least feasible project included in the Portfolio, on a stand-alone basis, would have a natural PI of 0.07, which would increase to a PI of 0.27 after including TES for 40 years, and ITE for 10 years.

Union has not attempted to estimate separate RPP results for Union South or Union North in the above analysis, although this would become a factor in which specific projects could be put forward if the Board were to adopt this approach.

The range in natural PI’s for the projects that each utility have suggested may become feasible through their respective proposals is a key distinguishing feature of the two potential project lists.

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<sup>1</sup> Natural PI is the PI in the absence of Aid to Construction, TES or ITE.

This “starting point” has been reflected in the nature of the two proposals. The two projects with the highest natural PI’s in Enbridge’s potential project list represent over 30% of the gross capital required for all 39 projects identified. These projects have proposed PI’s of 0.70 and 0.58 after including SES and ITE for 40 years, and are the only two projects with proposed PI’s in excess of the CEP RPP threshold PI of 0.5 that Enbridge has proposed. Their size enables these two projects to carry all the other projects in Enbridge’s proposal. In other words, the NPV in excess of that required for a PI of 0.5 from these two projects is used to supplement the NPV’s of all the other 37 projects. If those two projects do not occur, Enbridge’s proposals would not allow for any other projects. In contrast, Union’s top projects (those with the highest natural PI’s) are significantly smaller in terms of required capital investment and consequently do not provide the same capacity to carry as many other projects in a Portfolio. Enbridge has only identified two projects with PI’s in excess of 0.4 after applying the TES for 40 years. This compares to Union’s top 29 projects which are all able to meet a minimum PI of 0.4 with a TES term limited to 10 years.

Union does not agree that an extension of the SES/TES term for a period of the lesser of the time required for a project to reach a PI of 1.0 or 40 years is appropriate. Application of the SES/TES term for this length of time has not been tested with consumers to determine if the customer attachment forecast would be negatively affected. Further, a SES/TES term of up to 40 years would represent in essence a permanent departure from Union’s preference to continue to apply postage stamp ratemaking principles over the longer term. Extending the period to a maximum of 40 years would in effect disadvantage businesses, homeowners and municipalities in CEP areas on a permanent basis, since energy costs for natural gas in those areas would be higher than those in neighbouring communities. In addition, predictions of energy costs and the relative savings of switching to natural gas are likely to be less reliable for 40 years in comparison to 10 years, which might also affect consumer willingness to convert.

UNION GAS LIMITED

Undertaking of Mr. Okrucky  
To Mr. Rubenstein

To reconcile the two numbers indicated.

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Union identified 1,265 private dwellings in the Red Lake project area (EB-2011-0040). EB-2015-0179, Exhibit B.Staff.14, Attachment 1 provides the forecasted customer connections over the 10 year forecast period as compared to the actual connections that have occurred to this point. The total number of existing private dwellings in the project area was not provided in Attachment 1. Union forecasted 1,071<sup>1</sup> of the total of 1,265 existing residential dwellings would be connected in the 10 year forecast period.

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<sup>1</sup> EB-2015-0179, Exhibit B.Staff.14, Attachment 1, Conversion Residential Line, 2012-2021 Total-Original Forecast.

UNION GAS LIMITED

Undertaking of Mr. Kitchen  
To Mr. Quesnelle

To elaborate on Mr. Kitchen's description that different approaches may result in different outcomes.

---

An existing utility and a new entrant utility may propose different approaches to recover project costs that result in different ratemaking and rate recovery proposals.

Union's community expansion proposal does not include the capital cost to connect contract customers. The costs attributable to a contract customer will be based on their site specific costs (e.g. services, meters and regulators) plus any incremental common project costs.

Union has proposed that the required minimum PI for a contract customer to connect to a community expansion project be the same as the minimum PI set for the community expansion project, provided the contract customer makes a binding commitment prior to commencement of construction of the system. If a financial contribution is required to meet the minimum PI, Union's contract customers can elect different means to make required financial contributions such as paying an upfront contribution in aid of construction ("CIAC"), taking a longer-term contract or contracting with a higher minimum annual volume ("MAV").

Union's proposal for contract customers allows it to use its existing cost allocation methodology and rate classes without developing new rate classes or customer specific rates. Any subsidy required resulting from a PI below 1.0 will be allocated to existing customers consistent with Board-approved cost allocation methodologies.

An alternate approach could be to develop a customer, community or project specific rate that allows for the full recovery of the project costs. The project costs could be allocated to customers or communities based on a number of different allocation methodologies as proposed by the utility and approved by the Board. This rate recovery approach is more feasible for new entrant utilities because they do not have existing rate schedules or established rate classes. A proposal from an existing utility that does not fit within its current rate structure could be inefficient and create unnecessary administrative burden.

UNION GAS LIMITED

Undertaking of Mr. Hockin  
To Mr. Janigan

To provide how many projects could be done with maintaining the individual PI of .8 if you use the 14.6 Figure, which is effectively making the rolling PI of 1, and as well, the lowering the IP figure so the safety factor is removed so that that is also 1.

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The Undertaking asked how many projects can be completed if the Investment Portfolio ("IP") minimum PI was reduced from 1.1 to 1.0, while maintaining the individual minimum project PI of 0.8.

In the absence of TES and ITE, no projects would reach the minimum project PI of 0.8. With the TES and ITE as proposed, only three projects would reach the minimum PI of 0.8 and in this case the IP PI would remain above 1.0. Thereafter, since Union's project list is generally sorted by declining project PI, further projects would require relaxation of the minimum project PI to something below 0.8, and the number of projects that could occur each year would be limited to Projects with total capital costs in the same range as the three projects noted above (approximately \$7 million per year).