

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOARD STAFF INTERROGATORY #13

INTERROGATORY

Issue: A-3

***Are the costs of the facilities and the rate impacts to customers appropriate?***

REF: EB-2012-0451, Overall Proposal  
EB-2012-0433, Overall Proposal  
EB-2013-0074, Overall Proposal

Preamble

Where applicable, the following questions are to be answered by both Companies separately.

Questions

- a) Please summarize the rate and bill impacts of the GTA Project on Enbridge's rate classes. Please separately summarize the rate and bill impacts of the two Union Projects on Enbridge's rate classes. Please provide a 5-year projection that shows the impacts of the GTA and Union Projects on the overall customer bill, and the delivery rates, transportation rates and load balancing rates.
- b) Please provide an assessment of the impact on Enbridge's and Union's transactional services business of the subject applications.
- c) Please provide an overview of the procurement and tendering process at Enbridge and Union for the services and assets required for the GTA Project and the Union projects. Please explain how gas customers, stakeholders and shareholders can be assured that they are getting the best possible value for money from the procurement process.
- d) Please describe how the projects are financed to completion. Please include a discussion of financial support timing and any interim financing, debt issuances, relevant interest rates, debt servicing costs and interest during construction. How and when will the projects close to Rate Base for each company?

Witnesses: K. Culbert  
C. Fernandes  
T. Horton  
A. Kacicnik  
B. Madrid  
S. Murray

- e) With respect to the volume forecast underpinning Enbridge's need, to what extent is the downtown Toronto residential condominium development, current and proposed, driving the need? Please discuss.
- f) For large capital projects \$50 million and over, what is Enbridge and Union's 10-year track record on estimated vs. actual project costs? Were they over or under budget? Were they completed per planned date, or not? Please list each project \$50 million and over. What are the main areas of divergence in the actual vs. estimated costs and what are the main areas of risk in estimating costs?

**RESPONSE**

- a) Please see the response to Environmental Defence IR#21, at Exhibit I.A4.EGD.ED.21, which depicts the rate impacts of the GTA Project and the rate impacts of the GTA project inclusive of gas cost savings. The following table provides the rate impacts of the GTA project (inclusive of gas costs savings) and the impact of the two Union projects on Enbridge's rate classes. The impacts are based on 2016 and are relative to the April 2013 QRAM rates.

		<b>BUNDLED RATES</b>	
<b>Rate Class</b>		<b>Sales Service</b>	
1		-1.5%	
6		-2.5%	
9		-3.9%	
100		-5.1%	
110		-5.1%	
115		-5.8%	
135		-6.4%	
145		-5.6%	
170		-6.7%	
200		-3.8%	
		<b>UNBUNDLED RATES</b>	
125		23.9%	
300		8.7%	

Witnesses: K. Culbert  
 C. Fernandes  
 T. Horton  
 A. Kacicnik  
 B. Madrid  
 S. Murray

- b) The GTA Project has been developed to meet load growth, enhance safety and reliability in the system, and reduce supply chain risks. The GTA Project is being undertaken without regard for EGD's ability to generate Transactional Services revenue. Enbridge cannot speculate whether there is a positive or negative impact on Transactional Services. Enbridge's Transactional Services are based upon surplus assets and transportation at times of the year when it is not needed. Transactional Service opportunities do not form a part of the Company's gas supply plan. Enbridge is not able to speculate if, in the future, excess assets will be available for Transactional Services and what value may be placed upon those assets.
- c) Enbridge intends to add value for money from the procurement process by applying procurement best practices, which includes prequalification of the industry standard contractors with adequate capacity, credibility, safe work practices, and quality. This will be followed by sourcing through the RFP process comprising Independent technical and commercial evaluation with appropriate weightage to both evaluations.
- d) The GTA project assumes a forecast overall mix and average cost of debt of 5.75% during the construction period, and is assumed to be closed to Rate Base on October 15th, 2015, where it is assumed to be financed within the Enbridge required overall capital structure ratios.
- e) The total peak hourly load forecast from apartment/condo's in 2025 is 14.9% of the total daily peak hourly load forecast for the GTA project influence area. The total historical hourly load forecast from apartment/condo's in 2012 was 14.7% of the total historical peak hourly load. Please note this uses the same methodology to derive peak hourly volumes on historical volumes as described in response to Environmental Defence IR#3, at Exhibit I.A4.EGD.ED.3.
- f) Enbridge has only had one project at or in excess of \$50 million during the 2003 to 2012 periods. This is described below.

Witnesses: K. Culbert  
C. Fernandes  
T. Horton  
A. Kacicnik  
B. Madrid  
S. Murray

### Toronto Portlands Reinforcement Pipeline (EB-2006-0305)

Costs (\$millions, %):

<u>Estimated</u>	<u>Revision</u>	<u>Actual</u>	<u>Variance to Original Estimate</u>	<u>Variance to Revised Estimate</u>
41.7	67.2	61.0	19.3 (46%)	- 6.2 (-9%)

Schedule:

<u>Activity</u>	<u>Original Estimated Date</u>	<u>Actual South NPS 20</u>	<u>Actual North NPS 36</u>
Start	July 2007	August 2007	January 2008
Completion	December 2007	January 2008	October 2008

Revision impacted dates for actuals

The original estimate for the project as filed in December 2006 was \$41.7 million. A revision was made in October 2007 and the revised estimate became \$67.2 million.

Witnesses: K. Culbert  
C. Fernandes  
T. Horton  
A. Kacicnik  
B. Madrid  
S. Murray

The increase in costs and schedule delays are a result of the following:

- Construction Labour increase was partially the result of additional horizontal directional drilling, but primarily attributed to increased construction costs in 2007 and 2008, a period of intense activity and limited labour supply in the pipeline construction industry.
- Land Costs were higher due to “over the fence” land evaluation from Ontario Realty Corporation.
- The External Costs variance is attributed to additional environmental work, inspection, survey, legal, and insurance expenses.
- Higher Environmental Assessment costs arose from additional open houses and soil assessment.
- Extra inspection services were required to cover multiple construction sites concurrently.
- Additional legal and insurance expenses were the result of the Expropriation Application (EB-2007-0692) to acquire easements for the project.
- Survey expenses were higher due to the extended construction period and additional survey requirements mandated by the Ministry of Transportation Ontario relating to the crossing of Highway 401.

In 2009, the project costs were audited by the Ontario Power Authority (PEC power contract issuer) and found to be reasonable.

### **Project Management Framework**

As filed at Exhibit C, Tab 2, and Schedules 1 and 3, the GTA Project will be executed using the project management framework developed by the Enbridge Group of Companies – Project Life Cycle Gating Control (“PLGC”). Through the use of this risk based project development and execution framework, Enbridge has been able to deliver high cost, technically complex, and strategically important projects.

Through the adaptation of the PLGC framework, the GTA Project will benefit from the rigorous risk management processes and control points along with proprietary tools and assessment frameworks developed by Enbridge Group of Companies.

The Project will leverage the extensive experience gained through the delivery of the projects shown below specifically in the areas of cost and schedule control, construction, and quality assurance.

Witnesses: K. Culbert  
C. Fernandes  
T. Horton  
A. Kacicnik  
B. Madrid  
S. Murray

Since the Enbridge Group of Companies implemented the PLGC framework, it has executed a number of similarly sized and costed pipeline projects. A summary of the results of similar pipeline projects completed by 2012 are below:

	Estimated Cost	Cost Variance <sup>‡</sup>	Schedule Variance
Project A	Larger	On Budget	On-Time
Project B	Larger	On Budget	On-Time
Project C	Similar	Below Budget	On-Time
Project D	Smaller	Below Budget	On-Time
Project E	Similar	Over Budget	On-Time
Project F	Similar	Over Budget	On-Time
Project G	Similar	Over Budget	On-Time
Project H	Similar	On Budget	Ahead

<sup>‡</sup>All projects were completed within 10% of their estimated cost.

The most significant cost risk is project scope definition, thus rigorous engineering, survey work and planning has been undertaken to mitigate scope risk. The congested urban construction environment adds complexity due to permitting, right of way access and acquisition, restricted workspace, and numerous utility and road crossings. However the impacts of these construction complexities are well understood and included in the estimate and plan.

Market escalation is also a significant source of exposure due to the extended project timeline, since material and labour pricing cannot be locked in until the project is fully approved. Therefore higher than anticipated increases in material costs or labour rates, or market factors that decrease labour productivity or availability can increase costs. The project has included escalation in the estimate to mitigate this risk.

Witnesses: K. Culbert  
C. Fernandes  
T. Horton  
A. Kacicnik  
B. Madrid  
S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOARD STAFF INTERROGATORY #14

INTERROGATORY

Issue: A-3

*Are the costs of the facilities and the rate impacts to customers appropriate?*

REF: EB-2012-0451, Exhibit E, Tab 1, Schedule 1, Page 3 of 9

Preamble

This section speaks specifically to Enbridge's Exhibit E on Project Benefits and Economics.

Questions

- a) Please run the Economic Feasibility model under the assumption that there are no transportation savings – i.e. that the transportation costs remain the same over the DCF period as they are today.
- b) Please run the Economic Feasibility model under the assumption that the transportation savings are only one-half the amount assumed in the Base case DCF.
- c) Please run the Economic Feasibility model under the assumption that the NEB's toll decision RH-003-2011 is implemented as in the NEB's March 27, 2013 Decision.
- d) Please run the Economic Feasibility under the assumption that the Shared Pipeline arrangement with TCPL does not proceed.
- e) Please display a summary of the results above relative to the Base Case (i.e. the applied-for DCF).

Witnesses: S. Murray  
J. Denomy

**RESPONSE**

As discussed in the response to Board Staff Interrogatory #48 at Exhibit I.D5. EGD.Staff.48, the 36" shared use option with TransCanada is the base case assumption for the GTA Project<sup>1</sup>. Included in I.D5.EGD.Staff.48 is a summary of key metrics including the feasibility of all three options (36" shared, 42" shared, and 36" sole use). The latter addresses part (d) above.

Please see table below for a range of sensitivities of realized Transportation Savings.

(\$ Millions)	Base Case	Transportation Savings Sensitivity				
		100%	75%	50%	25%	0%
GTA pipeline Capital	\$554.6	\$554.6	\$554.6	\$554.6	\$554.6	\$554.6
Total transportation savings	\$1,632.0	\$1,632.0	\$1,224.0	\$816.0	\$408.0	\$0.0
Total transportation service charge	\$277.6	\$277.6	\$277.6	\$277.6	\$277.6	\$277.6
<b><u>Summary of Results:</u></b>						
Net Present Value (40 years)	\$633.6	\$633.6	\$432.2	\$230.9	\$29.6	(\$171.8)
Profitability Index (40 years)	1.77	1.77	1.53	1.28	1.04	0.79

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<sup>1</sup> The Base Case also includes updated assumptions in relation to TransCanada's May 1, 2013 Compliance Filing and Review and Variance Application resulting from the NEB's March 27, 2013 Decision in RH-003-2011. The corresponding update to the pre-filed evidence was filed with the Board on May 15, 2013 in Update No. 3 at Exhibit A, Tab 3, Schedule 5, starting at page 21.

Witnesses: S. Murray  
 J. Denomy

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOARD STAFF INTERROGATORY #15

INTERROGATORY

Issue: A-3

*Are the costs of the facilities and the rate impacts to customers appropriate?*

REF: EB-2012-0451, Exhibit E, Tab 1, Schedule 1, Page 6 of 9, par. 19

Preamble

This section speaks specifically to Enbridge's Exhibit E concerning Project Benefits and Economics. In paragraph 19, Enbridge states that the GTA project will permit approximately 14,000 new residential customers each year.

Questions

- a) How many residential customer additions on average have been added in the last 10 years in the GTA area?
- b) Will the GTA Project permit additional gas customers in other delivery areas such as Ottawa and Niagara? Please provide details.
- c) How does the GTA Project take account of expected franchise growth in areas outside of the GTA influence area?

RESPONSE

Given the breadth and depth of many of the interrogatories filed in the GTA Project Leave to Construct Application, Enbridge would like to provide an explanation of its data gathering and forecasting processes, particularly as it relates to natural gas demand forecasting. Enbridge hopes that this explanation will assist the Board and interveners in understanding some of the interrogatory responses. There are several interrogatories for which data are not available, limited data is available or the Company, in the interest of assisting interveners and the Board, has provided information that are "derived". It is important for the Board and interveners to understand why, as laid out below

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

Enbridge utilizes forecasting processes which can be grouped into two main categories:

- 1) Forecasting processes utilized to derive information required for the setting of rates; and
- 2) Forecasting processes utilized for distribution system planning.

Both processes utilize methodologies that have been approved by the Board in past rate case and leave to construct applications. Due to the nature of each process the Company has developed processes which meet the requirements of each.

Forecasting Process for Rate Setting:

For the rate setting process, the Company has developed accurate and comprehensive methodologies for determining forecasts of natural gas demand. The Company utilizes a top down approach and regression analysis to determine the forecast of natural gas demand for its general service customers. Due to the variable nature of weather in each of the three weather zones comprising the Company's franchise areas and different demand profiles within customer segments the Company produces annual forecasts of average use by weather zone, by area, by rate class, by revenue class and sector. These forecasts are utilized to determine the forecast of general service average use and subsequently total general service demand by rate class.

The forecast of large volume natural gas demand for rate setting purposes utilizes a comprehensive bottom up approach whereby the Company's account executives consult with large volume customers in order to determine expected natural gas demand. Large volume natural gas demand forecasts by customer are then aggregated to determine the total annual demand forecast for all large volume customers by rate class.

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

The forecasting methodologies developed for rate setting purposes recognize that there are different drivers for natural gas demand across all customer types within the Enbridge franchise areas. This is necessary in order to develop an accurate forecast of natural gas demand. However, the Company charges postage stamp rates meaning that irrespective of geographic location each customer within a particular rate class pays exactly the same rate. Consequently, it is the aggregate annual demand of all customers that, in part, determines the rates charged by Enbridge.

As a consequence of the methodologies developed for forecasting annual natural gas demand, the Company has developed databases which support this forecasting process. These databases do not break out information based on individual customers (for a vast majority of customers) but rather contain aggregate information related to different customer classes, types and geographic regions. The information for these databases and forecasts derived therefrom are based on information contained in the Company's Customer Information System ("CIS").

The Enbridge CIS contains data related to monthly billed consumption along with information on customer type, location, number of customers and other information required for billing purposes. It is important to note that the CIS provides data related to billed consumption based on monthly meter reads or estimated reads for the vast majority of the Company's customers.

Forecasting for Distribution System Planning:

In addition to tracking metered consumption, the Company also tracks and monitors the amount of natural gas flowing into the distribution system through each gate station connected to the TransCanada and Union Gas transmission systems. This information is tracked on a much more frequent basis, hourly and daily, for the purpose of determining upstream natural gas supply flows from upstream suppliers, flows into the distribution system and flows to/from storage.

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

Gas control is particularly concerned with hourly and daily flows in order to balance supply and demand throughout a particular day, to ensure the Company is in compliance with all of its upstream contracts and can manage any operational constraints to ensure the safe and reliable distribution of natural gas.

For the purpose of gas supply planning, Enbridge utilizes the demand forecasts which underpin the rate setting process and develops a gas supply plan to meet this demand. In terms of developing a gas supply plan, the Company is concerned with projected daily demand within each of the toll regions or delivery points defined by the Upstream suppliers. The Company does not develop its gas supply plans by the hour nor for each, street, town, city, municipality or gate station within its distribution franchise, nor is the gas supply plan developed to meet the demand of specific customer types or rate classes. Rather, the gas supply plan is developed to meet aggregate demand on peak day and throughout the year within the geographic regions comprising the Enbridge CDA and Enbridge EDA.

The aforementioned gate station throughput data cannot be attributed to any one particular customer (for the vast majority of customers). Once natural gas is dispatched into the distribution system and consumed, it cannot be tracked back to a particular gate station for each individual customer (for a majority of customers), particularly in the Greater Toronto area which is supplied by several gate stations and is partially interconnected downstream of the gate stations by a vast distribution network.

The databases, forecasting methodologies and forecasts utilized by the Company for the purpose of distribution system planning are not those utilized to develop the annual volumetric forecast or the gas supply plan for the purpose of setting rates. Rather these forecasts are focused on providing natural gas demand information related to specific

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

geographic areas within the natural gas distribution system. Unlike annual demand forecasts, for the purpose of setting rates, these forecasts are concerned with peak hour loads only.

For the purposes of network modeling, a very detailed understanding of distribution system demand is required. Demand information on a customer by customer basis is required such that specific geographic areas (which do not necessarily coincide with the geographic areas utilized for annual volumetric forecasting for rate setting purposes) can be examined. For system planning, actual customer consumption volumes and corresponding temperature readings are used to determine demand for each customer. Given that customer meter reads or estimates are monthly, peak hourly loads are derived for each customer for design day conditions. This load is applied to the hydraulic model at the pipe level. This system model is used to analyze the system for the upcoming heating season to ensure the reliable supply of gas to the Company's customers and to manage the system on a day to day basis. This load information is also used for future distribution system requirements such as reinforcements or expansions.

Summary:

It is clear that there is no one all-encompassing database or forecasting methodology utilized by the Company. Different databases and forecasting methodologies have been developed as a result of regulatory process requirements, data availability, the nature of natural gas flows into/throughout the distribution system, and forecasting requirements.

As a consequence of the foregoing, the Company has been as responsive and informative as it can when providing responses to the numerous data requests contained in the interrogatories received. Where possible, the Company has provided

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

available information on a reasonable efforts basis. In cases where information is not provided, the Company has explained the reasons for why this is the case. Where possible, the Company has provided derived information on a reasonable efforts basis with the understanding that this information is based on numerous assumptions. In these instances, the Company has provided the rationale for why the information is derived and the assumptions underpinning said derivations. Finally, where interrogatories, either from the same intervener or across several interveners, request the same information, the Company has attempted to combine responses in order to prevent duplication.

- a) Approximately 14,179 residential customer additions have been added annually over the period from 2004-2012 on average in the GTA Project Influence Area.
- b) The GTA Project permits the addition of gas customers directly in the GTA Project Influence Area through reinforcement of distribution infrastructure. As described in evidence, the GTA Project also provides economic access to short haul supply from Dawn and Marcellus, in conjunction with additional infrastructure downstream of Albion, for customers residing outside the GTA Project Influence Area. As such, the GTA Project could be leveraged to permit the economic addition of customers elsewhere in its franchise and in Ontario and Quebec.
- c) The Bram West to Albion Pipeline will create up to 1,600,000 GJ/d or 2,000,000 GJ/d of capacity depending on whether the pipeline is sized at NPS 36 or NPS 42, respectively. Enbridge plans to retain 800,000 GJ/d for the benefit of the distribution customers in the GTA Project Influence Area. Enbridge has made this determination based on projected growth over the next ten years in the project influence area and the ability to increase reliability and reduce costs associated with discretionary supply serving the Enbridge Central Distribution Area.

Under the terms of the MOU, TransCanada may utilize the remaining capacity to meet its system requirements, including elimination of 500,000 GJ/d of short haul capacity that is currently served by utilizing back haul services on the Great Lakes system and use of long haul on the TCPL Mainline as described in

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

I.D5.EGD.STAFF.48 TransCanada may also use capacity to meet shipper requests for additional short haul services from Dawn and Marcellus. Depending on the ultimate sizing of the Bram West to Albion Pipeline, the remaining capacity will suffice to meet the growth needs of the Enbridge franchise from short haul supply and permit some level of displacement of long haul supply with short haul supply for the remainder of Enbridge's market and those of Union, Gaz Metro and others.

Witnesses: F. Ahmad  
M. Giridhar  
M. Suarez

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOARD STAFF INTERROGATORY #16

INTERROGATORY

Issue: A-3

*Are the costs of the facilities and the rate impacts to customers appropriate?*

REF: EB-2012-0451, Exhibit E, Tab 1, Schedule 1, Attachment Page 1 of 5

Preamble

This section speaks specifically to Enbridge's Exhibit E on Project Benefits and Economics. This attachment provides the feasibility parameters.

Questions

- a) How is the discount rate of 5.88% derived? How does this compare with the Company's 2013 regulated Cost of Capital?
  
- b) With respect to the annual volumes assumed (line 7), how is declining average use taken into account in the 40-year time horizon of the Economic Feasibility

RESPONSE

- a) The discount rate of 5.88% is the Company's 2013 after-tax weighted average cost of capital. It is derived from the Board Approved 2013 Capital Structure (Excluding CIS/Customer Care) as found in the EB-2011-0354 Final Rate Order, Appendix A, Page 7.

Please see table below for a breakdown of the calculation.

Witnesses: K. Culbert  
S. Murray

<b>Enbridge Gas Distribution Utility Capital Structure 2013 Test Year</b>					After-Tax ATWACC	
	Principal (\$millions)	Component %	Cost Rate %	Return Component %		
Long term debt	2,461.9	60.17	5.80	3.49 (A)	2.57	= (A) * (1-T)
Short term debt	56.7	1.39	2.00	0.03 (B)	0.02	= (B) * (1-T)
	2,518.6	61.56		3.52		
Preference shares	100.0	2.44	3.20	0.08 (C)	0.08	= (C)
Common equity	1,472.9	36.00	8.93	3.22 (D)	3.22	= (D)
	4,091.5	100.0	ROR	6.81	5.88	

Tax Rate in 2013 26.5% (T)

- b) The economic feasibility assumes all feasibility parameters including revenue rates are held constant in current year terms. Thus, average use has been held constant over the 40-year time horizon of the Economic Feasibility. This is consistent with past LTC applications.

Witnesses: K. Culbert  
 S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ASSOCIATION OF POWER PRODUCERS OF ONTARIO INTERROGATORY #9

INTERROGATORY

*A.3 Are the costs of the facilities and the rate impacts to customers appropriate?*

Reference: EB-2012-0451 Exhibit E Project Benefits and Economics

Preamble: Enbridge discusses the benefits and economics of the project and APPrO would like to better understand such benefits and economics.

- a) Please provide an annual revenue requirement and rate impact by rate class for 2015-2025 for all rate classes illustrating the incremental revenue requirement flowing from the GTA reinforcement project and the resulting incremental rate increases that will be incurred when the cost consequences of the project are implemented. Please also illustrate the current 2013 rate for comparison. In the event that TransCanada is unable to get approval to proceed with the Shared Pipeline, please also illustrate the requested information without TransCanada as a party to the Shared Pipeline.
- b) For the table headed "Savings on Gas Transportation", on the 'Summary of Inputs' on page 8 of 9 illustrates benefits to direct purchase customers:
  - i. Please indicate Enbridge's policy with respect to direct purchase volumes utilizing this new system.
  - ii. Please break out the benefits shown for system gas by rate class
  - iii. Please break out the benefits shown for direct purchase by rate class

RESPONSE

- a) Please see the response to Environmental Defence interrogatory #21 at Exhibit I.A4.EGD.ED.21 for the annual revenue requirement and rate impacts stemming from the GTA Project.

If TransCanada is unable to receive approval for the Shared Pipeline, the additional revenue requirement would need to be recovered from Enbridge's rate payers. As indicated in response to ED Interrogatory #21 at Exhibit I.A4.EGD.ED.21, the total (inclusive of TransCanda's share) 2016 revenue requirement for the GTA pipeline is

\$57.6 million, the estimated annual rate impact for 2016 (relative to existing April 1, 2013 QRAM rates) assuming Enbridge's customers pay for all of the GTA Project would be as follows:

		<b>BUNDLED RATES</b>	
<b>Rate Class</b>		<b>Sales Service</b>	
1		2.0%	
6		2.0%	
9		0.8%	
100		1.5%	
110		1.5%	
115		1.4%	
135		1.0%	
145		1.4%	
170		1.2%	
200		2.2%	
		<b>UNBUNDLED RATES</b>	
125		23.9%	
300		8.7%	

As described in Exhibit I.A4.EGD.ED21, the gas cost savings associated with displacing otherwise needed long haul Firm Transportation with short haul Firm Transportation are substantial. In the event that the benefit of sharing capacity is not achieved, the gas cost savings are expected to be higher due to a reduction in the Parkway to Bram West toll. As shown in the response to Board Staff Interrogatory #48 at Exhibit I.D5.EGD.Staff.48, the PI associated with sole and shared use are very similar. The PI for the sole use option is potentially understated since the entire cost of the pipeline is included but the ability to generate distribution revenues from servicing load growth beyond a ten year period is not.

The rate impacts depicted above assumes the increase in revenue requirement stemming from the GTA project is recovered solely from EGD's ratepayers with no sharing of Segment A with TransCanada. This impact would be offset by an increase in gas costs savings as outlined in part b) ii) and iii) to this response which would be further increased by a reduction in the Parkway to Bram West toll. The

net bill impact of the GTA project revenue requirement and gas cost savings assuming recovery solely from Enbridge's customers for 2016 (relative to the April 1, 2013 QRAM rates) would be as follows:

		<b>BUNDLED RATES</b>	
<b>Rate Class</b>		<b>Sales Service</b>	
1		-2.0%	
6		-3.2%	
9		-4.3%	
100		-5.8%	
110		-5.8%	
115		-6.4%	
135		-7.1%	
145		-6.2%	
170		-7.4%	
200		-4.5%	
		<b>UNBUNDLED RATES</b>	
125		23.9%	
300		8.7%	

- i) Please see the response to Direct Energy Interrogatory #1 at Exhibit I.A1.EGD.DE.1.
- ii) and iii) As indicated at Exhibit E, Tab 1, Schedule 1, page 8 (and also Exhibit A, Tab 3, Schedule 5, starting at p. 17), the Company has identified significant savings in gas costs resulting from the GTA proposal. These gas cost savings will flow through to customer's rates and bills through a reduction in Enbridge's annual forecast of gas costs (relative to today's status quo scenario). For 2016, the total savings identified for EGD's sales and western t-service customers as well as potential savings for its Ontario T-service customers is \$148.9 million. Enbridge's sales and western t-service customer's portion is approximately \$92.2 million. The estimated annual bill impact for 2016 (relative to existing April 1, 2013 QRAM rates) stemming from the forecast gas cost savings by customer rate class is as follows:

		<b>BUNDLED RATES</b>	
<b>Rate Class</b>		<b>Sales Service</b>	
1		-3.3%	
6		-4.6%	
9		-4.6%	
100		-6.6%	
110		-6.6%	
115		-7.1%	
135		-7.3%	
145		-6.9%	
170		-7.8%	
200		-6.0%	
		<b>UNBUNDLED RATES</b>	
125		0.0%	
300		0.0%	

Witness: A. Kacicnik

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOMA INTERROGATORY #38

INTERROGATORY

Issue: A.3

- (a) Please confirm that there is no pressure regulation at the Bram interconnect and that the Segment A shared 42 inch pipeline operates at the same pressure as the TCPL mainline at Bram West. Were the NEB not to approve TCPL's application to lease space in the Enbridge line to build a thirty-six inch line from Bram West to Albion, what would the capacity and pressure of that line be? Please discuss.
- (b) What would the costs to Enbridge be compared to the currently projected costs?
- (c) Please compare the impact on rates of the two alternatives

RESPONSE

- a) Confirmed. There is no pressure regulation proposed at BramWest. The capacity of an NPS 36 pipeline at 935 psig is estimated to 1600 TJ/d, in conjunction with additional infrastructure downstream of Albion.
- b) As described at Exhibit E, Tab 1, Schedule 2, page 2, the cost differential between NPS 36 and NPS 42 is approximately \$42.8M.
- c) Please see the response to Board Staff Interrogatory#13 at Exhibit I.A3.EGD.Staff.13.

Witness: M. Giridhar  
A. Kacincnik

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
BOMA INTERROGATORY #38

INTERROGATORY

Issue: A.3

- (a) Please confirm that there is no pressure regulation at the Bram interconnect and that the Segment A shared 42 inch pipeline operates at the same pressure as the TCPL mainline at Bram West. Were the NEB not to approve TCPL's application to lease space in the Enbridge line to build a thirty-six inch line from Bram West to Albion, what would the capacity and pressure of that line be? Please discuss.
- (b) What would the costs to Enbridge be compared to the currently projected costs?
- (c) Please compare the impact on rates of the two alternatives

RESPONSE

- a) Confirmed. There is no pressure regulation proposed at BramWest. The capacity of an NPS 36 pipeline at 935 psig is estimated to 1600 TJ/d, in conjunction with additional infrastructure downstream of Albion.
- b) As described at Exhibit E, Tab 1, Schedule 2, page 2, the cost differential between NPS 36 and NPS 42 is approximately \$42.8M.
- c) Please see the response to Board Staff Interrogatory#13 at Exhibit I.A3.EGD.Staff.13.

Witness: M. Giridhar  
A. Kacincnik

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CANADIAN MANUFACTURERS & EXPORTERS INTERROGATORY #10

INTERROGATORY

Issue A.3. Are the costs of the facilities and rate impacts to customers appropriate?  
Ref: EB-2012-0451, Exhibit C, Tab 2, Schedule 1

- (a) Please provide a schedule that shows the amount of capital expenditures that are forecasted to be closed to rate base in each of 2013 through to 2016;
- (b) For each year 2013 through to 2016, please show the revenue requirement associated with the amounts closed to rate base, along with the amount that would be allocated to each rate class.

RESPONSE

- a) The Company has provided the total GTA project revenue requirements for fiscal years 2015-2018 in the attached Table 1. An amount of \$554.6 million un-escalated is projected to close into service in 2015. No significant amounts are projected to close into service in the other years.
- b) For the total GTA Project revenue requirements for each of 2015-2018<sup>1</sup>, see the attached Table 1. As indicated in Table 1, the total revenue requirement of the GTA Project for 2016 is \$57.6 million. TCPL's shared portion of Segment A is \$11.8 million resulting in a net revenue requirement to be recovered from Enbridge's customers of \$45.8 million. The allocation to Enbridge's rate classes is as follows:

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<sup>1</sup> For reasons described in interrogatory response I.D5.EGD.Staff.48, the revenue requirement amounts assume Segment A's Bram West to Albion is a 36" pipeline.

Witnesses: A. Kacicnik  
B. Madrid

TOTAL REVENUE REQUIREMENT FOR GTA ALLOCATION														
DECEMBER 31, 2016														
(thousand dollars)														
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
ITEM NO.	DESCRIPTION	REVENUE REQUIREMENT	RATE 1	RATE 6	RATE 9	RATE 100	RATE 110	RATE 115	RATE 125	RATE 135	RATE 145	RATE 170	RATE 200	RATE 300
4.	Total Revenue Requirement for Enbridge	45,827.05	22,442.56	18,653.71	2.93	0.00	725.71	485.10	2,589.78	22.86	173.68	190.81	533.34	6.57
5.	TCPL Revenue Requirement from Shared Pipeline (Segment A)	11,789.22												
6.	Total Revenue Requirement for the GTA Project	57,616.27												

As seen in Table 1 attached, the change in revenue requirement for 2017 and 2018 are small, therefore the allocation of the revenue requirement to the customer rate classes would be very similar to 2016.

Witnesses: A. Kacicnik  
 B. Madrid

**TABLE 1**  
**REVENUE REQUIREMENT**  
**GTA TOTAL**

Line No.	(\$000's)	2015	2016	2017	2018
<b>Cost of capital</b>					
1.	Rate base	113,621.5	543,728.2	527,457.4	511,186.4
2.	Required rate of return	<u>6.81%</u>	<u>6.81%</u>	<u>6.81%</u>	<u>6.81%</u>
3.	Cost of capital	7,738.2	37,030.8	35,922.7	34,814.6
<b>Cost of service</b>					
5.	Operation and Maintenance	274.5	1,317.7	1,317.7	1,317.7
6.	Depreciation and amortization	2,712.3	16,273.6	16,273.7	16,273.8
7.	Municipal and other taxes	<u>346.6</u>	<u>1,663.7</u>	<u>1,663.7</u>	<u>1,663.8</u>
8.	Cost of service	3,333.4	19,255.1	19,255.2	19,255.3
<b>Income taxes on earnings</b>					
12.	Excluding tax shield	(4,941.8)	(8,869.4)	(8,373.8)	(7,908.6)
13.	Tax shield provided by interest expense	<u>(1,059.2)</u>	<u>(5,068.5)</u>	<u>(4,916.9)</u>	<u>(4,765.2)</u>
14.	Income taxes on earnings	(6,001.0)	(13,937.9)	(13,290.6)	(12,673.8)
<b>Taxes on (def) / suff.</b>					
15.	Gross (def.) / suff.	(6,898.8)	(57,616.3)	(56,989.5)	(56,321.2)
16.	Net (def.) / suff.	<u>(5,070.6)</u>	<u>(42,348.0)</u>	<u>(41,887.3)</u>	<u>(41,396.0)</u>
17.	Taxes on (def.) / suff.	1,828.2	15,268.3	15,102.2	14,925.1
18.	<b>Revenue requirement</b>	<u>\$ 6,898.8</u>	<u>\$ 57,616.3</u>	<u>\$ 56,989.5</u>	<u>\$ 56,321.2</u>

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CANADIAN MANUFACTURERS & EXPORTERS INTERROGATORY #11

INTERROGATORY

Ref: EB-2012-0451, Exhibit C, Tab 2, Schedule 1

Union states at EB-2012-0433, page 101 of 121 that it is seeking pre-approval of the recovery of cost consequences because:

- (a) Given the magnitude of the project, Union is not able to proceed with the development of the project without reasonable certainty of cost recovery;
- (b) It would be more efficient for the Board to address all known impacts from the project at once, and provide a predictable rate impact to Union's customers and other stakeholders;
- (c) An early finding by the Board will allow ex-franchise customers, who are primarily utilities, to incorporate the service and rate impacts into their future regulatory filings as needed; and
- (d) A finding of the rate impacts from the project will help inform the parameters of Union's next regulatory framework.

In this regard, CME has the following questions for EGD:

- (a) Please confirm that EGD is not seeking pre-approval and recovery of the cost consequences of the GTA Project in EB-2012-0451;
- (b) Please confirm that regardless of the magnitude of the project, EGD is able to proceed with the development of the GTA Project without reasonable certainty of cost recovery. If not, please explain why pre-approval of recovery of the cost consequences is not being sought in this application;
- (c) Does EGD agree with Union that it is more efficient for the Board to address all known impacts from the project at once, and provide a predictable rate impact to Union's customers and other stakeholders. If EGD agrees, please explain why the company is not seeking pre-

Witnesses: A. Kacicnik  
M. Giridhar

approval of the cost consequences at this time. If EGD disagrees, please explain why;

- (d) Would a finding of the rate impacts from the GTA Project help inform the parameters of EGD's next regulatory framework? If yes, please explain why pre-approval is not being sought at this time. If no, please explain why a finding on the rate impacts would not help inform the parameters of EGD's next regulatory framework.

## RESPONSE

- a) Confirmed.
- b) EGD is not able to proceed with the GTA Project without reasonable certainty of cost recovery. EGD is seeking cost recovery of the GTA Project through its upcoming EB-2012-0459 rate application which is expected to be filed in June 2013. EGD decided to separate the Leave to Construct Application for the GTA Project from the rate making implications based on historical precedent and the practice of the Ontario Energy Board, whereby the granting of the Leave to Construct has resulted in approval of cost recovery in the subsequent rates application. In this instance it is Enbridge's expectation that the EB-2012-0459 rate application timeline will provide for reasonable certainty of cost recovery, should the Ontario Energy Board approve the GTA Project.
- c) The specific requirements for approval of transmission and distribution facilities are laid out in EBO 134 and EBO 188 respectively, and the GTA Project application has complied with these requirements. Further, EGD has provided rate impact approximations on individual rate classes as a result of the GTA Project in the current proceeding. It is EGD's view that the process and the issues list set out by the Ontario Energy Board allows for all relevant impacts of the project to be considered within this application.
- d) Please see b) and c) above and response to CME Interrogatory #12 at Exhibit I.A3.EGD.CME.12.

Witnesses: A. Kacicnik  
M. Giridhar

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CANADIAN MANUFACTURERS & EXPORTERS INTERROGATORY #12

INTERROGATORY

Ref: EB-2012-0451, Exhibit A, Tab 2, Schedule 1, pages 4-5 of 12

At paragraph 10, EGD states that it will be seeking approval of Rate 332 in a subsequent rate proceeding when the rate impact of the GTA Project will be considered. It identifies that rate proceeding as EB-2012-0459. CME has searched the Ontario Energy Board's electronic filing system and EGS's regulatory website, and has been unable to locate any documents for EB 2012-0459. Has EGD filed that application? If not, when will that application be filed? To this end, please provide an explanation why the rate impact of the GTA Project will be considered in EB-2012-0459 and not in the current GTA Project Application EB-2012-0451.

RESPONSE

EB-2012-0459 refers to Enbridge's upcoming rate application which is expected to be filed in the next few weeks.

Please refer to the interrogatory response to Board Staff Interrogatory #21 at Exhibit I.A3.EGD.STAFF.13 and Environmental Defence Interrogatory #21 at Exhibit I.A3.ED.21 that summarizes projected rate and bill impacts of the GTA Project on Enbridge's rate classes.

The projected rate and bill impacts were derived based on the revenue requirement of the GTA Project and gas cost savings estimates facilitated by the GTA Project. Enbridge derived projected impacts as per Issue A3 which speaks to the appropriateness of the costs and the rate and bill impacts stemming from the GTA project. In other words, the projected impacts are a function of the GTA Project costs and gas cost savings only and were derived/considered in isolation from the rest of Enbridge's system. Note that this approach to the determination of rate impacts differs from the approach followed in an annual rate adjustment (i.e., rate case) proceeding where all factors that would typically arise in a rate adjustment proceeding, such as addition or loss of customers, increase or decrease in delivery volumes, increase or decrease in various costs are considered. Therefore, the rates based on a Final Rate Order resulting from the annual rate adjustment proceeding are designed to reflect the utility's total revenue requirement and revenues for the test year. It is the Final Rate Order rates that would be billed to customers in the test year.

Witness: A. Kacicnik

Having said that, the projected rate and bill impacts in this proceeding provide reliable information about the appropriateness of the impacts of the GTA Project in isolation from the rest of Enbridge's system.

With respect to the proposed Rate 332 transportation service, Enbridge is asking approval of the proposed Rate 332 transportation service and the methodology that will be applied to develop the monthly charge (i.e., rate) for Rate 332 transportation service in order to provide TransCanada with means to determine their future payment obligations and pursue regulatory approvals. Accordingly, Enbridge and TransCanada have determined that the request for approval of Rate 332 transportation service and the methodology to develop the monthly charge should precede TransCanada's application to the NEB. Enbridge is not seeking approval of a specific monthly charge (i.e., rate) for Rate 332 transportation service within this application. Enbridge will ask for such an approval within an annual rate adjustment application.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CONSUMERS COUNCIL OF CANADA INTERROGATORY #13

INTERROGATORY

3. Are the costs of the facilities and rate impacts to customers appropriate?

Issue: A.3-CCC-13

Reference: A/T3

a) Please calculate the full year commodity and delivery rate impact for rate classes 1 and 6 for the incremental capital and operating costs of the project and assuming no offsetting benefits other than revenues from TCPL for the shared pipeline.

RESPONSE

a) Please see the response to Board Staff Interrogatory #13 at Exhibit I.A3. EGD.STAFF.13 part (a).

**ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CONSUMERS COUNCIL OF CANADA INTERROGATORY #14**

**INTERROGATORY**

3. Are the costs of the facilities and rate impacts to customers appropriate?

Issue: A.3-CCC-14

Reference: E/T1/S1/pg.9; C/T2/S1/pg.1

a) Please reconcile the Summary of Inputs table at E/T1/S1/pg.9 with Table 1 – Summary of Total Estimated Project Cost at C/T2/S2/pg.1.

**RESPONSE**

Economic model inputs are based on 2013 dollars (non-escalated values) – please reference Exhibit E, Tab 1, Schedule 1, page 2, paragraph 7. Please see table below for reconciliation.

	Segment A (NPS 42 Option)		Segment A (NPS 36 Option)	
	Escalated	Non-escalated	Escalated	Non-escalated
<b>Base Project Cost</b>	\$ 500.6	\$ 500.6	\$ 476.8	\$ 476.8
<b>Contingency</b>	\$ 78.0	\$ 78.0	\$ 62.0	\$ 62.0
<b>Escalation</b>	\$ 27.8	\$ -	\$ 25.7	\$ -
<b>Interest During Construction</b>	\$ 17.4	\$ 16.7	\$ 16.4	\$ 15.8
<b>Total Estimated Project Cost</b>	<b>\$ 623.8</b>	<b>\$ 595.3</b>	<b>\$ 580.9</b>	<b>\$ 554.6</b>

Witness: S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CONSUMERS COUNCIL OF CANADA INTERROGATORY #15

INTERROGATORY

3. Are the costs of the facilities and rate impacts to customers appropriate?

Issue: A.3-CCC-15

Reference: E/T1/S2/pg.2

- a) What design differences were required in order to accommodate the sharing of pipe along segment A and that were in addition to upsizing of the pipe from NPS 36 to 42. Specifically address what additions or modifications are required to Albion Road Station and Bram West interconnect to accommodate this sharing arrangement? Please provide a table showing all the incremental costs with descriptions

RESPONSE

- a) In order to move the initiating location of Segment A from Parkway West to Bram West to accommodate the sharing of the pipeline, the following was required:
- a. Check metering is removed from Parkway West
  - b. Odourant facilities associated with the transmission pipeline are removed from Parkway West and added to Albion Station.
  - c. The launching facilities for in-line inspection of Segment A are removed from Parkway West and moved to the Bram West
  - d. The proposed metering at Albion Station is upgraded to accommodate for custody transfer rather than the simpler check metering
- b) Detailed cost breakdowns can be found in evidence at Exhibit C, Tab 2, Schedule 1, pages 4 to 6 in the original LTC evidence for the NPS 36 and the April 15, 2013 amended evidence for the NPS 42. It is available for those who have signed the Declaration and Undertaking for the confidential information.

Witness: T. Horton

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
CONSUMERS COUNCIL OF CANADA INTERROGATORY #16

INTERROGATORY

Are the costs of the facilities and rate impacts to customers appropriate?

Issue: A.3-CCC-16

Reference: E/T1/S2/pg.2

a) Are the 60% of capital costs associated with TCPL sharing of Segment A of the project recouped within the 15 years of the initial contract period?

RESPONSE

a) No. The capital cost associated with the Bram West to Albion pipeline will be depreciated over the useful life of the asset and reflected as such in revenue requirement calculations. If TCPL chooses not to renew its contract at the end of the initial contract term or terminates the contract, TCPL is required to reimburse Enbridge for the net book value of the pipeline as of the date of the termination, based on its share of the pipeline capacity.

Witness: M. Giridhar

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENERGY PROBE RESEARCH FOUNDATION INTERROGATORY #14

INTERROGATORY

Issue A3 What are the alternatives to the proposed facilities? Are any alternatives to the proposed facilities preferable to the proposed facilities?

Ref: EB-2012-0451 Exhibit C Tab 2 Schedule I page 1 Table I (filed 21/12/2012)  
& Updated Page I Table I (filed 15/04/2013)

- a) Please provide a consolidated copy of Table I based on the data in each filing.
- b) Please provide line-by- line explanations of material Cost changes

RESPONSE

The response was filed in confidence with Board. Parties who signed a Declaration and Undertaking will also receive copies.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENERGY PROBE RESEARCH FOUNDATION INTERROGATORY #15

INTERROGATORY

Issue A3 What are the alternatives to the proposed facilities? Are any alternatives to the proposed facilities preferable to the proposed facilities?

Ref: EB-2012-0451 Exhibit CTab2 Schedule I pages 4-6 (filed 2/12/2012) & Updated Pages 4-7 15/04/2013

- a) Please confirm that the original Schedule was for a standalone EGD facility and the Update for the revised shared use facility.
- b) Please provide a Schedule that combines the original and updated costs.
- c) Please provide explanations for all material cost changes, including in particular, the changes in costs associated with Parkway West land and facilities relocation.
- d) Please discuss the basis of the Contingency amount(s) in context of the Board's Guidelines and previous practice.
- e) Indicate what will happen to any Capital cost over/under amounts?
- f) Was a capital cost variance account considered given the materiality of the costs? Please discuss.

RESPONSE

The response was filed in confidence with Board. Parties who signed a Declaration and Undertaking will also receive copies.

**ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENVIRONMENTAL DEFENCE INTERROGATORY #30**

**INTERROGATORY**

Issue A3: “Are the costs of the facilities and rate impacts to customers appropriate?”

Reference: Ex. A, Tab 3, Schedule 5, pages 13, 18 & 20

Please state the quantities (TJ) of natural gas from the Marcellus and Utica shale basins that were consumed in: a) the GTA Project Influence Area; and b) Enbridge’s total Ontario franchise areas in 2012.

**RESPONSE**

a) At this point in time Ontario can access gas from shale basins in the US Northeast through delivery of these supplies at Niagara Falls. However, when natural gas is produced and transported it is intermixed with gas from other producers and producing regions, in other words it is comingled. It is impossible to “colour code” natural gas molecules to determine exactly where the gas consumed in the GTA Project Influence Area or Enbridge’s total Ontario franchise area was produced.

Based on the May 1, 2013 Contract Demand Energy (“CDE”) report from the TransCanada website there are five contracts which take receipt of gas at Niagara Falls for delivery into Ontario. Of these four contracts only one has a delivery point of the Enbridge franchise area, specifically the Enbridge CDA. The other four contracts deliver gas to Kirkwall. These contracts are listed in the table below:

Service Requester	Contract Start Date	Contract End Date	Service Type	Primary Receipt	Primary Delivery	Contract Demand (GJ/d)
J.P. Morgan Commodities Canada Corporation	2012-Nov-01	2022-Oct-31	FT	Niagara Falls	Enbridge CDA	211,011
DTE Energy Trading, Inc.	2012-Nov-01	2023-Mar-31	FT	Niagara Falls	Kirkwall	25,585
Emera Energy Incorporated	2012-Nov-01	2023-Oct-31	FT	Niagara Falls	Kirkwall	26,376
J.P. Morgan Commodities Canada Corporation	2012-Nov-01	2023-Oct-31	FT	Niagara Falls	Kirkwall	126,607
Union Gas Limited	2012-Nov-09	2022-Oct-31	FT	Niagara Falls	Kirkwall	21,101

Assuming that all of the gas received at Niagara Falls for delivery to the Enbridge CDA could be traced back to the Marcellus or Utica shale basins and that this contract was utilized fully each and every day since inception a total of 12,872 TJs

Witness: J. Denomy

would have been delivered to the Enbridge franchise area in 2012. If it is assumed that demand in the GTA Project Influence Area accounted for approximately 71% of Enbridge CDA demand during the period in which this contract was in place in 2012 and that supplies received at Niagara Falls for delivery to the Enbridge CDA could be traced back to the Marcellus or Utica shale basins approximately 9,128 TJs were consumed in the GTA Project influence area.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENVIRONMENTAL DEFENCE INTERROGATORY #31

INTERROGATORY

Issue A3: "Are the costs of the facilities and rate impacts to customers appropriate?"

Reference: Ex. A, Tab 3, Schedule 5, pages 13, 18 & 20

Please forecast the quantities (TJ) of natural gas from the Marcellus and Utica shale basins that will be consumed each year in: i) the GTA Project Influence Area; and ii) Enbridge's total Ontario franchise areas from 2015 to 2025 inclusive assuming: a) the GTA pipeline is approved; and b) the GTA pipeline is not approved.

RESPONSE

As indicated at Exhibit A, Tab 3, Schedule 5, Page 22, Enbridge will contract for 200,000 GJ/d of capacity on the TransCanada Mainline from Niagara Falls to the newly created Parkway Enbridge CDA distributor delivery area when the GTA Project facilities are in service. Current Niagara Falls to Enbridge CDA contracts of 211,011 GJ/d, contracted by a third party marketer are identified in the response to Environmental Defence Interrogatory #30 found at Exhibit I.A3.EGD.ED.30. Third party marketers do not necessarily deliver all of their volumes into the contracted delivery area.

If it is assumed no further contracting for the Niagara Falls to Enbridge CDA path occurs over the 2015 to 2025 timeframe then approximately 411,011 GJ/d could flow into the Enbridge CDA from Niagara Falls. The table below provides a forecast of the amount of natural gas from the Marcellus and Utica shale basins that would be consumed in the GTA Project Influence Area and the Enbridge Franchise area assuming the maximum volume flows into the Enbridge CDA. The forecast in the table assumes these contracts are fully utilized throughout each year, deliveries are made to the contracted delivery point and that the supplies sourced at Niagara Falls can be directly tied back to supplies from the Marcellus and Utica shale basins. The table also assumes that approximately 71% of demand in the Enbridge CDA can be attributed to the GTA Project Influence Area.

Witness: J. Denomy

<b>Contract:</b>	<b>Niagara Falls to EGD CDA</b>		<b>Niagara Falls to Enbridge Parkway CDA</b>	
<b>Contract Demand (GJ/d):</b>	<b>211,011</b>		<b>200,000</b>	
<b>Year</b>	<b>Flow (TJ/yr)</b>	<b>Of Which GTA Project Influence Area</b>	<b>Flow (TJ/yr)</b>	<b>Total Flows to GTA Project Influence Area</b>
2015	77,019	54,621	12,200	66,821
2016	77,230	54,771	73,200	127,971
2017	77,019	54,621	73,000	127,621
2018	77,019	54,621	73,000	127,621
2019	77,019	54,621	73,000	127,621
2020	77,230	54,771	73,200	127,971
2021	77,019	54,621	73,000	127,621
2022	77,019	54,621	73,000	127,621
2023	77,019	54,621	73,000	127,621
2024	77,230	54,771	73,200	127,971
2025	77,019	54,621	73,000	127,621

Witness: J. Denomy

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENVIRONMENTAL DEFENCE INTERROGATORY #32

INTERROGATORY

Issue A3: "Are the costs of the facilities and rate impacts to customers appropriate?"

Reference: Ex. C, Tab 2, Schedule 1

Please state the time period during which Enbridge is proposing to amortize the capital cost of the GTA pipeline for ratemaking purposes.

RESPONSE

The associated capital to support the GTA Project will remain in Rate Base until such time as it is fully depreciated. The applicable 2013 depreciation rates vary by asset category, ranging from 1.18% for Land Rights to 3.46% for Reinforcement Mains.

Witness: S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENVIRONMENTAL DEFENCE INTERROGATORY #37

INTERROGATORY

Issue A.3 "Are the costs of the facilities and rate impacts to customers appropriate?"

Interrogatory No. A.3-ED-37 Reference: Ex. C, Tab 2, Schedule 1

- a) What is the estimated total present value cost of the proposed facilities?
- b) What is the estimated total present value cost of (i) the Bram West Interconnect to Albion portion of Segment A, (ii) the Parkway West Gate Station portion of Segment A, and (iii) Segment B, as those portions of the project are defined in exhibit A, TAB 3, schedule 1, page 3?

RESPONSE

- a) Per the update provided in the response to Board Staff Interrogatory #48 at Exhibit I.D5.EGD.D5.48, the estimated total present value cost is \$554,575,341.
- b) Parts i to iii, please see the response to Energy Probe Interrogatory #14 at Exhibit I.A3.EGD.EP.14. Note, the cost breakdown information is available only to those who have signed a Declaration and Undertaking as the information is confidential.

Witness: S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
ENVIRONMENTAL DEFENCE INTERROGATORY #38

INTERROGATORY

Interrogatory No. A.3-ED-38 Reference: Ex. A, Tab 2, Sch. 4, Page 1

- a) Please state Enbridge's incremental cost of connecting its system to TransCanada's Bram West Interconnect (to achieve increased diversity of supply) assuming DSM has eliminated demand growth and hence the need for increased pipeline capacity to meet the needs of customers in the GTA Project Influence Area.
- b) Assuming DSM has eliminated demand growth and hence the need for increased pipeline capacity to meet the needs of customers in the GTA Project Influence Area, could Enbridge achieve increased diversity of supply by connecting its system to TransCanada's Bram West Interconnect? If further steps would be necessary to achieve increased diversity of supply, please state what those steps are and their incremental cost.

RESPONSE

- a) and b) Enbridge is of the opinion that DSM cannot be expected to eliminate demand growth as per Exhibit A, Tab 3, Schedule 7, paragraph 3. Eliminating the demand growth in the area does not eliminate the need for the proposed facilities as per the response to Environmental Defence Interrogatory #20 at Exhibit I.A4.EGD.ED.20. In order to achieve increased diversity of supply for the GTA, in addition to the Bram West interconnect, all of Segment A and Segment B would still be required, along with the Parkway West gate station and associated facilities. Without the additional pipelines and associated facilities, supply cannot be diversified as the system lacks the capacity to move the supply to the eastern portions of the GTA Influence Area and the downtown core.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
GAZ METRO INTERROGATORY #1

INTERROGATORY

*Issue A3: Are the costs of the facilities and rate impacts to customers appropriate?*

Reference: Enbridge's Evidence  
Exhibit A, Tab 2, Schedule 1, p. 9

Preamble: Enbridge and TransCanada are negotiating the commercial terms to permit TransCanada to use a portion for the capacity on the pipeline portion of Segment A from the Bram West Interconnect point to the Albion Road Station. Enbridge has filed certain financial and economic information in confidence. Furthermore, access to certain information in the economic modeling has also been filed in confidentiality.

Request:

- (a) Please provide the terms negotiated between Enbridge and TransCanada to permit TransCanada to use a portion for the capacity on the pipeline portion of Segment A from the Bram West Interconnect point to the Albion Road Station.
- (b) Please provide the economic modeling.

RESPONSE

- a) Please see response to Board Staff Interrogatory #48 at Exhibit I.D5. EGD.Staff.48 and CME Interrogatory # 6 at Exhibit I.A1.EGD.CME.6
- b) Please see response to Board Staff Interrogatory #48 at Exhibit I.D5. EGD.Staff.48 and 49 b)

Witness: M. Giridhar

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
GAZ METRO INTERROGATORY #2

INTERROGATORY

*Issue A3: Are the costs of the facilities and rate impacts to customers appropriate?*

Reference: Enbridge's Evidence  
Exhibit E, Tab 1, Schedule 2, p. 2

Preamble: As stated by Enbridge, TransCanada will provide financial backstopping to Enbridge for any incremental cost over the cost of an NPS 36 pipeline that Enbridge incurs for constructing the NPS 42 pipeline if TransCanada does not receive the required approvals, or is otherwise unable to construct the facilities require in order to take the transportation service.

Request: Please explain how that financial backstopping by TransCanada would be reflected in Enbridge's tolls.

RESPONSE

As a result of an Election made by TransCanada, Enbridge is reverting to an NPS 36 pipeline for the Bram West to Albion Pipeline. Therefore, there will be no impact associated with the NPS 42 option in Enbridge's tolls.

Witness: M. Giridhar

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
GAZ METRO INTERROGATORY #3

INTERROGATORY

*Issue A3: Are the costs of the facilities and rate impacts to customers appropriate?*

Reference: Enbridge's Evidence  
Exhibit A, Tab 2, Schedule 4, p. 3

Preamble: Enbridge has amended the Application to seek approval for the methodology to establish a new rate for the transportation service to be provided to TransCanada. Enbridge will seek approval for the rate in a subsequent rate application (EB-2012-0459).

Request:

- (a) Please explain the methodology for the new transportation rate (Rate 322) for the shared use of Segment A with TransCanada.
- (b) What are the parameters used to determine the new transportation rate.
- (c) Please elaborate on what your new transportation rate is based on.
- (d) Will your new transportation rate be reevaluate on a yearly basis.
- (e) Are you still planning to seek approval for the new rate in June 2013. If not, when.
- (f) Please state the time period during which Enbridge is proposing to amortize the capital cost of the GTA pipeline (Shared Pipeline) for ratemaking purposes.

Witness: A. Kacicnik

## RESPONSE

a) and b)

Enbridge proposes that the methodology for derivation of the Rate 332 monthly charge (i.e. rate) be based on the following processes and parameters;

- For the purposes of annual revenue requirement derivation and determination of Rate 332 monthly charge the shared pipeline will be considered as a stand-alone cost item.
- The revenue requirement for the shared pipeline will be based on a cost-of-service methodology and will include costs for administration, operation, maintenance, depreciation, cost of debt, return on equity, and municipal and income taxes.
- The revenue requirement and the Rate 332 monthly charge will be updated annually.
- 50%<sup>1</sup> of the annual revenue requirement for the shared pipeline will be recovered from TransCanada.
- The Rate 332 monthly charge will recover TransCanada's share of the annual revenue requirement through 12 (equal monthly) payments.

Also, please see the Company's evidence at Exhibit E, Tab 1, Schedule 2, Pages 3 and 4.

c) The proposed Rate 332 monthly charge is based on the annual cost (i.e. revenue requirement) to provide transportation service to TransCanada on the shared pipeline.

Also, please see the response to APPrO Interrogatory #12 at Exhibit I.D5.EGD.APPrO.12.

d) Confirmed. The revenue requirement and the Rate 332 monthly charge will be updated annually as laid out in response to parts a) and b) above.

e) With respect to the proposed Rate 332 transportation service (and based on the election made by TransCanada requesting Enbridge to work towards a 2015 timeline for completion of the shared pipeline), Enbridge is asking for approval of

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<sup>1</sup> Please see Exhibit I.D5.EGD.STAFF.48.

the proposed Rate 332 transportation service and the methodology that will be applied to develop the monthly charge (i.e. rate) for Rate 332 transportation service within this application. Enbridge is not seeking approval of a specific monthly charge (i.e. rate) for Rate 332 transportation service within this application. Enbridge will ask for such an approval within a future annual rate adjustment application.

- f) Please see response to Environmental Defence Interrogatory #32 at Exhibit I.A3.EGD.ED.32.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
GAZ METRO INTERROGATORY #5

INTERROGATORY

*Issue A3: Are the costs of the facilities and rate impacts to customers appropriate?*

Reference: Enbridge's Evidence  
Exhibit E, Tab 1, Schedule 1, p. 1

Preamble: In its amendment dated May 15, 2015 Enbridge states that the Annual

Average

Transportation Savings in dollars is 160,773, 122. In its Application amended April 15, 2013, the same amount was estimated at 38, 279,028 dollars.  
Request:

- (a) Please provide detailed information on why the Annual Average Transportation Savings amount has more than quadruple since the last amendment.
- (b) Would that increased amount in savings be reflected in the new transportation rate that will be charged to TransCanada or to in-franchise customers. If yes, please provide the details.

RESPONSE

- a) The primary reason for the increase in the expected gas supply benefits is the assumption that Enbridge will now contract for approximately 300,000 GJ/d of long haul FT with TransCanada rather than STFT in addition to the assumption that Direct Purchase customers would also seek to firm up their supply portfolios by contracting for long haul FT. This change in baseline contracting assumptions is predicated on the NEB Decision in RH-003-2011 which grants TransCanada pricing discretion, TransCanada's Review and Variance Application which seeks to amend its Tariff and the expectation that the Energy East Pipeline will proceed. Since STFT is a discretionary service and based on the events previously listed, Enbridge believes it is no longer prudent to continue to rely on

Witness: J. Denomy

this service as there is no guarantee it will be available when required and there will be no price certainty associated with this service.

- b) Any gas supply savings related to the GTA project would be passed onto Enbridge's in-franchise customers through lower gas supply costs. Gas supply savings would not impact the proposed transportation rate to be charged to TransCanada.

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO  
GEC INTERROGATORY #30

INTERROGATORY

Enbridge, Issue A.3. Costs and Rates, Issue A.5. Timing

Ref: EB-2012-0451, ExC, T2, S1

EB-2006-0305, "Post-Construction Financial Report on Costs and Variances"  
report dated January 7, 2010

- a) Please describe the similarities and differences between the proposed north-south portion of the proposed Segment B facilities, and the north section of the transmission project that was approved by the Board in EB-2006-0305, which looped 6.5 km of the NPS 30 Don Valley line with NPS 36 XHP pipeline.
- b) Please provide a side-by-side comparison of the estimated cost per km of the north-south portion of the Segment B facilities and the north section of the EB-2006-0305 project, with the EB-2006-0305 project costs adjusted to 2013\$.
- c) Enbridge reported that actual Construction Labour costs for the EB-2006-0305 project were \$13.4 million higher than the original estimate, and that this variance was "primarily attributed to increased construction costs in 2007 and 2009, a period of intense activity and limited labour supply in the pipeline construction industry." Given Enbridge's experience with the EB-2006-0305 project, please explain how Enbridge has accounted for the fact that other major projects that have been proposed for 2015 could cause the costs of materials, equipment, and labor for the GTA Project to be significantly higher than they would be in a typical construction year.

RESPONSE

- a) The EB-2006-0305 project installed 6.5 km of NPS 36 (north section) through the Buttonville Hydro corridor extending south from Sheppard Avenue to Jonesville Station for added capacity for the Portlands Energy Center (PEC). At the time of screening options for EB-2006-0305, the north-south route of Segment B was evaluated and determined to be more challenging than the chosen north section of

Witness: T. Horton

EB-2006-0305. The north-south section of Segment B is an extension of the north section of EB-2006-0305 and is 7.6 km of NPS 36 extending from Sheppard Avenue to Hwy 407 in the same Buttonville Hydro corridor.

Details of the proposed facilities for Segment B can be found in Exhibit A, Tab 3, Schedule 6. Scope details for EB-2006-0305 can be found in the public LTC filing of EB-2006-0305.

b)

	<b>EB-2006-0305 (North Section)</b>	<b>Segment B (North-South)</b>
Cost / km (\$millions 2013)	8	

Cost breakdown information is available only to those who have signed a Declaration and Undertaking as the information is confidential.

c) Please refer to Exhibit C, Tab 2, Schedule 3, pages 1 to 2 for an explanation of the project management framework that has since been implemented from when EB-2006-0305 was submitted. Additional to the project management framework for managing large capital projects, the estimated costs within this LTC include escalation, which accounts for market fluctuations in labour and material costs. Please refer to Exhibit C, Tab 2, Schedule 1, paragraph 5, starting on page 2.