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### **REVENUE FORECAST**

- 1. The purpose of this evidence is to summarize the revenue forecast for 2014 to 2018 provided in this application.
- 2. A summary of the revenue forecast for 2014 to 2018 is provided in Table 1 below.

	Reve (:	enue Forecas \$ millions)	t			
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
	2013	2014	2015	2016	2017	2018
	Board Approved	<u>Budget</u>	Forecast	Forecast	Forecast	Forecast
1.0 Gas Sales	2,043.8	2,253.5	2,404.3	2,464.5	2,480.3	2,496.2
2.0 Transportation of Gas	318.6	242.8	229.6	217.1	211.1	205.0
3.0 Transmission, Compression and Storage	1.7	1.8	1.8	1.8	1.8	1.8
4.0 Other Operating Revenue	45.0	40.6	41.0	41.3	41.3	41.3
5.0 Total Operating Revenue	2,409.1	2,538.7	2,676.7	2,724.7	2,734.5	2,744.3

Table 1

- The 2014 Revenue Budget is \$2,538.7 million as shown at Exhibit C3, Tab 1, Schedule 1. This represents a \$129.6 million increase over the 2013 Board Approved of \$2,409.1 million. A comparison of the 2014 Budget of Utility Operating Revenues to the 2013 Board Approved Budget is provided at Exhibit C3, Tab 1, Schedule 2.
- The 2015 Revenue Forecast is \$2,676.7 million as shown at Exhibit C4, Tab 1, Schedule 1. This represents a \$138.0 million increase over the 2014 Budget of \$2,538.7 million. A comparison of the 2015 Forecast of Utility Operating Revenues to the 2014 Budget is provided at Exhibit C4, Tab 1, Schedule 2.

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- The 2016 Revenue Forecast is \$2,724.7 million as shown at Exhibit C5, Tab 1, Schedule 1. This represents a \$48.0 million increase over the 2015 Revenue Forecast. A comparison of the 2016 Forecast of Utility Operating Revenues to the 2015 Forecast is provided at Exhibit C5, Tab 1, Schedule 2.
- The 2017 Revenue Forecast is \$2,734.5 million as shown at Exhibit C6, Tab 1, Schedule 1. This represents a \$9.8 million increase over the 2016 Revenue Forecast. A comparison of the 2016 Forecast of Utility Operating Revenues to the 2016 Forecast is provided at Exhibit C6, Tab 1, Schedule 2.
- The 2018 Revenue Forecast is \$2,744.3 million as shown at Exhibit C7, Tab 1, Schedule 1. This represents a \$9.8 million increase over the 2017 Revenue Forecast. A comparison of the 2016 Forecast of Utility Operating Revenues to the 2017 Forecast is provided at Exhibit C7, Tab 1, Schedule 2.
- 8. The year over year variances are further explained by the revenue categories in the following paragraphs.

### Gas Sales and Transportation of Gas Revenues

- Gas sales and transportation of gas revenues for the 2014 Budget are updated on the basis of Q4 2013 rates that can be found in the Board Decision and Order for EB-2013-0295. Gas sales and transportation of gas revenues for 2015 Forecast, 2016 Forecast, 2017 Forecast and 2018 Forecast are developed based on the Q2 2013 rates that can be found in the Board Decision and Order for EB-2013-0045.
- 10. A breakdown of the 2014 Budget, 2015 Forecast, 2016 Forecast, 2017 Forecast and 2018 Forecast gas sales and transportation of gas revenues by rate class is

provided at Exhibit C3, Tab 2, Schedule 1, Exhibit C4, Tab 2, Schedule 1, Exhibit C5, Tab 2, Schedule 1, Exhibit C6, Tab 2, Schedule 1 and Exhibit C7, Tab 2, Schedule 1, respectively.

- 11. The increase in gas sales and transportation of gas revenues of \$133.9 million from the 2013 Board Approved Budget to the 2014 Budget is primarily due to higher QRAM commodity rates, general service customer growth, partially offset by continuing decline in average use for general service customers and lower gas demand forecast resulting from a forecast of lower degree days. Please refer to Exhibit C3, Tab 2, Schedule 1 for the details of the 2014 volume forecast. Also please refer to Exhibit C3, Tab 2, Schedule 3 for a comparison of the 2014 Budget volume forecast to the 2013 Board Approved. The forecast for weather is described in the degree day forecast found at Exhibit C2, Tab 1, Schedule 2.
- 12. The increase in gas sales and transportation of gas revenues of \$137.6 million from the 2015 Forecast to the 2014 Budget is primarily due to general service customer growth, higher QRAM commodity rates, partially offset by the continued decline in average use for residential customers. Please refer to Exhibit C4, Tab 2, Schedule 3 for a comparison of the 2015 Forecast volume forecast to the 2014 Budget.
- 13. The increase in gas sales and transportation of gas revenues of \$ 47.7 million from the 2016 Forecast to the 2015 Forecast is primarily attributable to general service customer growth, partially offset by the continued decline in average use for residential customers. Please refer to Exhibit C5, Tab 2, Schedule 3 for a comparison of the 2016 Forecast volume to the 2015 Forecast.

- 14. The increase in gas sales and transportation of gas revenues of \$15.9 million from the 2017 Forecast to the 2016 Forecast is primarily attributable to general service customer growth. Please refer to Exhibit C6, Tab 2, Schedule 3 for a comparison of the 2017 Forecast volume to the 2016 Forecast.
- 15. The increase in gas sales and transportation of gas revenues of \$15.8 million from the 2018 Forecast to the 2017 Forecast is primarily attributable to general service customer growth. Please refer to Exhibit C7, Tab 2, Schedule 3 for a comparison of the 2018 Forecast volume to the 2017 Forecast.

### Transmission, Compression and Storage

16. Transmission, Compression and Storage revenues for the 2014 Budget are also developed on the basis of Final Rate Order in EB-2011-0354. There are no significant variances from the 2014 Budget of \$1.8 million compared to the 2013 Board Approved of \$1.7 million.

### Other Operating Revenues

- Other Operating Revenues for the 2014 Budget of the revenue items identified at Exhibit C3, Tab 3, Schedule 1, are developed based on the Company's final rate set out in EB-2011-0354.
- 18. The decrease in Other Operating Revenues of \$4.4 million from the 2013 Board Approved Budget to the 2014 Budget is primarily due to lower late payment penalties (LPP) in 2014, which are held at the 2012 level. In comparison, 2013 Board Approved was higher because it underestimated the LPP reduction resulting from the implementation of customer service rules; and 2013 Board Approved also assumed higher billed receivables driven by colder weather. A comparison of the

2014 Budget of Other Operating Revenues to the 2013 Budget is provided at Exhibit C3, Tab 3, Schedule 1.

- 19. The increase in Other Operating Revenues of \$0.4 million from the 2015 Forecast to the 2014 Budget is primarily due to slightly higher NGV revenues driven by expected growth in NGV customers. A comparison of the 2015 Forecast of Other Operating Revenues to the 2014 Budget is provided at Exhibit C4, Tab 3, Schedule 1.
- 20. The increase in other Operating Revenues of \$0.3 million from the 2016 Forecast to the 2015 Forecast is primarily due to slightly higher NGV revenues driven by continued growth in the number of NGV customers. A comparison of the 2016 Forecast Other Operating Revenues to the 2015 Forecast is provided at Exhibit C5, Tab 3, Schedule 1.
- Evidence on the NGV program is presented at Exhibit C3, Tab 5, Schedule 1.
   Evidence on Transactional Services is presented at Exhibit C1, Tab 3, Schedule 1.
   Evidence on Other Service Charges, Administrative and Late Payment Penalty
   Revenue is presented at Exhibit C1, Tab 4, Schedule 1.
- 22. There is no change in other Operating Revenues from the 2017 Forecast to the 2016 Forecast as the 2017 Forecast other Operating Revenues remain at the 2016 Forecast Operating Revenues.
- 23. There is no change in other Operating Revenues from the 2018 Forecast to the 2017 Forecast as the 2018 Forecast other Operating Revenues remain at the 2017 Forecast Operating Revenues.

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### GAS VOLUME BUDGET

- The purpose of this evidence is to present the 2014 forecast of volumes and the preliminary volume forecast for 2015 to 2018, which will be subject to annual adjustments to reflect updated forecast assumptions. Due to the annual adjustments, 2017 and 2018 volumes are assumed at the same level as 2016. The evidence describes the forecasting methodology and the key assumptions used to develop the volumes forecast for the General Service and Large Volume Budgets. The volume forecasts for 2014 to 2018 have been prepared based on the methodology applied in prior rate case filings.
- A summary of the volumes forecast for the years from 2013 to 2018 is provided below. Further rate class detail and explanation for all gas volumes and related items are provided at Exhibit C3, Tab 2, Schedule 3; Exhibit C4, Tab 2, Schedule 1; Exhibit C5, Tab 2, Schedule 1; Exhibit C6, Tab 2, Schedule 1 and Exhibit C7, Tab 2, Schedule 1.

Summai	ך <u>y of Gas Sales (</u> Volum) ערושי	Fable 1 <u>and Transpor</u> es in 10 <sup>6</sup> m <sup>3</sup> )	tation Volumes	<u>.</u>		
	2013 Board Approved Budget	2014 Budget	2015 _Forecast	2016 Forecast	2017 Forecast	2018 Forecast
General Service Volumes	9 558.9	9 190.0	9 272.2	9 369.1	9 369.1	9 369.1
Contract Market Volumes	1 945.5	1 966.0	1 977.3	1 979.3	1 979.3	1 979.3
Total Volumes, Gas Sales and Transportation	<u>11 504.4</u>	<u>11 156.0</u>	<u>11 249.5</u>	<u>11 348.4</u>	<u>11 348.4</u>	<u>11 348.4</u>

 Total customers are reported on an annual average of monthly customer numbers. This annual average customer methodology has been used to develop Board Approved annual average customer numbers for more than ten years.

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Table 2 illustrates the annual average number of general service and contract market customers for the forecast years. The methodology used to develop the customer budget can be found at Appendix B of this evidence.

Sumn	nary of Total Av	Table 2 erage Number	of Customers			
	2013 Board Approved Budget	2014 Budget	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
General Service Customers	2 025 038	2 059 216	2 094 900	2 131 485	2 168 070	2 204 654
Contract Market Customers	424	403	402	402	402	402
Total Number of Customers (Average)	2 025 462	2 059 619	2 095 302	2 131 887	2 168 472	2 205 056

### General Service Demand Forecast Methodology

- 4. The general service volume forecast is derived using the general service customer budget and the normalized average use per customer forecast generated from the average use forecasting models. The 2014 volume budget incorporates calendar 2012 actual billing data.
- The average use forecasting models are the Company developed regression models, which are described in detail in the evidence at Exhibit C2, Tab 1, Schedule 3. The forecast incorporates economic assumptions from the Economic Outlook, Spring 2013. Key economic assumptions can be found at Exhibit C2, Tab 1, Schedule 1. The average use regression models forecast also includes 2012 actual billing consumption information.

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- 6. The major variables in Rate 1 and Rate 6 models are heating degree days, vintage (Rate 1 only), employment, Ontario real gross domestic product, vacancy rates (Rate 6 only), real energy prices, and time trend. Annual econometric models are employed to model and quantify the impact of different variables on average use per customer. The vintage variable is constructed to reflect the impact that new homes, associated with more energy efficient gas equipment and enhanced building codes, have on average use. The time trend, including the dynamic variable in the regression model, captures the historical actual average trend of the sectoral average use, conservation initiatives originated by customers themselves or promoted by government programs, stock turnover and other historical impact not reflected in the mentioned driver variables.
- 7. The forecast of average use per customer is prepared based upon the analysis of weather-normalized volumes data. Normalization is the process that allows the Company to compare average use per customer by removing the influence of the weather. The Company's weather normalization methodology has been approved by the Board and utilized for more than ten years.
- 8. Consistent with previous rate cases, the Company continues to report the results that the models would generate using the actual data and driver variable information to allow parties to compare the results to the prior year's forecast. The Rate 1 average in-sample forecast error of regression models is 0.8% and the Rate 6 average in-sample forecast error is about 1.0% on average during 2003 to 2012. Overall, the regression model continues to be an excellent predictor of general service average use.

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### Contract Market Volume Forecast Methodology

- 9. The contract market volume budget was generated using the established grass roots approach. Volumes are forecasted on an individual customer basis by account executives in consultation with customers during the budget process. Specifically, the account executive review the contract attributes for each contract in order to ensure that the customer can meet the contracted rate class minimum volume and load factor requirements. Current economic and industry conditions and budgeted degree days, are factored into the budget determination.
- 10. Figure 1 below shows the trend of historical actual contract market unlocks between 2006 and 2012 and the projection for the years from 2013 to 2018.



Witnesses: R. Cheung S. Qian

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- 11. As the above graph illustrates, approximately 2,000 contract market customers migrated to general service over the period 2006 through 2010. As shown in Figure 3, this customer migration drove up the average use per customer in Rate 6 during that period. In the past few years, contract market customers have remained at the same level.
- 12. As a consequence of the implementation of the Natural Gas Electricity Interface Review ("NGEIR") in 2007, the Company experienced customer migration from bundled rate classes that bill distribution volumes volumetrically, reported in Table 1, to unbundled rate classes (e.g., Rate 125, Rate 300 Firm) that do not bill distribution volumes volumetrically. Unbundled customers incur monthly contract demand volumes and generate fixed contract demand revenues. Table 3 below presents a summary of these contract demand volumes.

<u>ourinary or </u>	(Volu	mes in 10 <sup>6</sup> m	<sup>3</sup> )			
	2013 Board Approved Budget	2014 Budget	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast
Total Contract Demand Volumes	119.5	119.4	119.4	119.4	119.4	119.4

## Table 3 Summary of Unbundled Customers Contract Demand Volumes

### 2014 Volume Budget

13. The 2014 Budget volumes reflect the meter reading heating degree days forecast for the Central Region of 3,517. The 2014 Budget is comprised of General Service volumes of 9,190.0 10<sup>6</sup>m<sup>3</sup> and Contract Market volumes of 1,966.0 10<sup>6</sup>m<sup>3</sup>. Detailed breakdown of gas volumes by rate class is provided at Exhibit C3, Tab 2,

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Schedule 1. Monthly meter reading heating degree days are determined by combining the Gas Supply heating degree day forecasts with the billing schedules. Evidence related to the forecast of degree days is presented at Exhibit C2, Tab 1, Schedule 2.

- 14. Appendix A of this evidence presents the historical normalized actual and Board approved general service average uses. In addition, in order to eliminate the weather impact for year over year comparison, normalized average uses are also normalized to the 2014 test year forecast degree days at Appendix A.
- 15. Residential average use per customer has declined steadily over the period of 2004 through 2012, average at a rate of 1.5% per year. Figure 2 depicts this trend.

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- 16. Residential average use is forecast to decline in 2014 primarily due to the following reasons:
  - Replacement of older, less efficient appliances with newer high efficient units by customers;
  - Home improvements by customer, e.g., upgrades to insulation, windows and doors;
  - Conservation initiatives originated by customers and also government policies and programs aimed at improving efficiencies;
  - The 2006 Building Code includes enhance requirements for houses came into force in December 31, 2006. New requirements for near-full-height basement

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insulated came into force December 31, 2008. In 2012, new houses were required to meet standards in accordance with the national guideline, EnerGuide 80.

17. From 2006 to 2010, the small apartment, commercial and industrial (Rate 6) average use per customer has increased by an average of 6.7% per year during this period. The increase in actual usage was largely attributable to the rate switching from contract market customers to general service, which began in the fall of 2006. However, the rate migration has stabilized since 2010 and the Rate 6 average use decreased in 2012 compared to 2011, which is primarily driven by the customer volatility in the industrial sector, as well as efficiency improvements in apartment sectors. The following Figure 3 shows the normalized actual average use per customer for Rate 6 from 2004 to 2012, and the projection for 2013 to 2014, as filed at Table 2 and Table 3 of Appendix A of this evidence.

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18. From the figure above, there is a clear upward trend in usage per customer from 2006 to 2010. It is largely attributable to the customer migration from contract market to general service as described in Figure 1. Rate design changes to include contract demand charges for Rate 100 and Rate 145, which became effective April, 2007, prompted much of this rate migration. Approximately 2,000 contract market customers have migrated to general service over the period from 2006 through 2010. Over the past few years, the rate migration has stabilized and the Rate 6 average use per customer has reflected a relatively flat or downward trend. Based on the driver variables in the updated regression models which incorporate 2012

Witnesses: R. Cheung S. Qian

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actual billing data and latest economic assumptions, it is expected that the Rate 6 average use per customer will decrease in 2014 compared to 2013 Board Approved Budget. Compared to 2012 actual, the Rate 6 average use in 2014 is relatively flat.

### Comparison of 2014 Budget and 2013 Board Approved Budget

- The 2014 Budget volumes reflect the heating degree days forecast for the Central Region of 3,517, a decrease of 151 degree days compared to the 2013 Budget level of 3,668.
- 20. The 2014 Budget volumes of 11 156.0 10<sup>6</sup>m<sup>3</sup> forecast to be 348.4 10<sup>6</sup>m<sup>3</sup>, or 3.0%, below the 2013 Board Approved Budget of 11 504.4 10<sup>6</sup>m<sup>3</sup>. The decrease is primarily attributable to the lower degree days forecast and other factors discussed below. On a weather-normalized basis, the 2014 Budget volumes are forecast to be 87.0 10<sup>6</sup>m<sup>3</sup> lower than the 2013 Budget. The volume decrease on a normalized basis is made up of a decrease in General Service of 111.9 10<sup>6</sup>m<sup>3</sup>, partially offset by an increase in contract market volumes of 24.9 10<sup>6</sup>m<sup>3</sup>. Further rate class detail and explanations are provided at Exhibit C3, Tab 2, Schedule 3.
- 21. The decrease in the general service volumes of 111.9 10<sup>6</sup>m<sup>3</sup> on a weathernormalized basis is primarily due to lower average use per customer in Rate 1 totaling 105.5 10<sup>6</sup>m<sup>3</sup> and lower average use per customer in Rate 6 totaling 106.6 10<sup>6</sup>m<sup>3</sup>, partially offset by net customer growth of 105.7 10<sup>6</sup>m<sup>3</sup>. Continuous home improvements and conservation initiatives are assumed to be the primary drivers of the decline in residential average use per customer.
- 22. The 2014 large volume budget is expected to see an increase of 24.9 10<sup>6</sup>m<sup>3</sup> compared to the 2013 Budget on a weather-normalized basis. The variance is

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mainly due to the increase in the industrial sector of 22.9 10<sup>6</sup>m<sup>3</sup>, Rate 200 of 1.8 10<sup>6</sup>m<sup>3</sup> and the apartment sector of 0.4 10<sup>6</sup>m<sup>3</sup>, partially offset by the decrease of commercial sector of 0.2 10<sup>6</sup>m<sup>3</sup>. Table 4 below illustrates the major drivers contributing to the increase in contract market volumes between the 2014 Budget and the 2013 Budget.

Table 4 - Comparison of Contract Market Volumes
2014 Budget and 2013 Board Approved Budget
6.2

(10<sup>6</sup>m<sup>3</sup>)

	Col. 1	Col. 2	Col. 3
	2014	2013 Borad Approved	2014 Budget Over (Under)
	Budget	Budget	2013 Budget
			(1-2)
Contract Market - Total Gas Sales and Transportation Volumes	1,966.0	1,945.5	20.5
Major Variance Factors:			
Weather Normalization, Exhibit C3, Tab 2, Schedule 3, Page 2, Col. 4, Item No. 4			(4.4)
Transfer gains - net migration of customers from general service rate 6 to contract rates			71.5
Transfer losses - net migration of customers from contract rates to general service rate 6			(67.4)
Wholesale customer			1.8
Non-Metallic Mineral Products			8.2
Transportation Equipment			6.4
Primary Metal & Machinery			4.7
Impact of price spread between Hydro and Gas on Distributed Energy customers			4.5
Chemical and Chemical Products			(5.0)
Other			0.2
Total Major Variance Factors:			20.5

### 2015 and 2016 Gas Volume Forecast

23. As explained in Exhibit A2, Tab 1, Schedule 1, the Gas Volume Budget for 2015 and 2016 will be updated within annual rate adjustment proceedings. The forecasts presented here are provided in order to provide estimated rate impacts for 2015 and 2016. As explained at Exhibit A2, Tab 3, Schedule 1, the 2016 Gas Volume Budget

Witnesses: R. Cheung S. Qian

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is used to set preliminary Allowed Revenue amounts for 2017 and 2018. The forecasts will be updated within 2017 and 2018 Rate Adjustment proceedings.

- 24. Similar to 2014 Budget, both 2015 and 2016 Forecast volumes also reflect the heating degree days forecast for the Central Region of 3,517. The methodology used to forecast the volumes and the number of customers for 2015 and 2016 are consistent to the one used in preparation of 2014 Budget. Detailed breakdown of gas volumes by rate class are provided at Exhibit C4, Tab 2, Schedule 1 for 2015 forecast and Exhibit C5, Tab 2, Schedule 1 for 2016 forecast.
- 25. Total volumes forecast between the years 2015 and 2016 are expected to increase by an average of 0.8% each year. The Company expects to increase its distribution customer base by 1.7% during both forecast years. Customer growth is anticipated to offset the declining demand of residential customers as a result of continuing trend of declining residential average use per customer in both 2015 and 2016 Forecast.
- 26. Residential normalized average use per customer is forecast to decline by an average of 0.85% from the years 2015 to 2016. Efficiency improvements continue to be the key driver of the decline in residential average use per customer. On the other hand, the total Rate 6 normalized average use per customer is projected to be flat over the forecast years.

### Comparison of 2015 Forecast and 2014 Budget

27. The 2015 Forecast volumes of the 11 249.5 10<sup>6</sup>m<sup>3</sup> are 93.5 10<sup>6</sup>m<sup>3</sup>, above the 2014 Budget of 11 156 10<sup>6</sup>m<sup>3</sup>. This variance is made up of increase in the general service volumes of 82.2 10<sup>6</sup>m<sup>3</sup> and the increase in the contract market of

Witnesses: R. Cheung S. Qian

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11.3 10<sup>6</sup>m<sup>3</sup>. Further rate class detail and explanations are provided at Exhibit C4, Tab 2, Schedule 3.

- 28. The increase in the volumes demand of 93.5 10<sup>6</sup>m<sup>3</sup> is primarily due to the following factors:
  - Additional 35,684 general service customers, as stated at Exhibit C4, Tab 2, Schedule 2, result an increase in volume demands of 110.1 10<sup>6</sup>m<sup>3</sup>;
  - Lower residential average use per customer results a forecast decrease in total volumes demand of 39.5 10<sup>6</sup>m<sup>3</sup>;
  - Slightly higher average use per customer in small apartment, commercial and industrial sector results a forecast increase in volume demand of 11.0 10<sup>6</sup>m<sup>3</sup>;
  - A modest increase from the contract market customers of 11.3 10<sup>6</sup>m<sup>3</sup> is primarily due to the improved economic conditions in contract market.

### Comparison of 2016 Forecast and 2015 Forecast

- 29. The 2016 Forecast volumes of the 11 348.4 10<sup>6</sup>m<sup>3</sup> are forecast to be 98.9 10<sup>6</sup>m<sup>3</sup>, above the 2015 Budget of 11 249.5 10<sup>6</sup>m<sup>3</sup>. The variance is made up of increase in the general service volumes of 96.9 10<sup>6</sup>m<sup>3</sup> and the increase in the contract market of 2.0 10<sup>6</sup>m<sup>3</sup>. Further rate class detail and explanations are provided at Exhibit C5, Tab 2, Schedule 3.
- 30. Key drivers and the offsetting factors that contribute to the increase in volumes demand of 98.9 10<sup>6</sup>m<sup>3</sup> are as follows:
  - Additional 36,585 general service customers, as stated at Exhibit C5, Tab 2, Schedule 2, result an increase in volume demands of 117.0 10<sup>6</sup>m<sup>3</sup>;

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- Lower residential average use per customer by 20 m<sup>3</sup>, which results a forecast decrease in total volumes demand of 39.5 10<sup>6</sup>m<sup>3</sup>;
- Higher average use per customer in small apartment, commercial and industrial sector results a forecast increase in volume demand of 19.4 10<sup>6</sup>m<sup>3</sup>;
- A modest increase from the contract market customers of 2.0 10<sup>6</sup>m<sup>3</sup>.

# Evaluation of Forecast Accuracy – Historical Normalized Actual vs. Board Approved Budget

- 31. Historical Board Approved volumes were developed and approved based upon fiscal year information. For the periods prior to 2006 September 30 is fiscal year end whereas for the years 2006 and beyond the fiscal year is the calendar year.
- 32. The key factor used to evaluate the accuracy of the general service volumetric demand is the variance of normalized residential average use per customer. The General Service Average Use Table 1 of the Appendix A at this evidence illustrates a 10-Year history of Normalized Actual vs. Board Approved volumes. The average normalized percentage variances between 2003 and 2012 was less than 0.8% for Rate 1 and about 1.2% for Rate 6. Hence, the general service average use forecasting methodology continues to be a reasonable predictor for general service average use.
- 33. For the contract market, customer migration has had a significant impact between 2006 and 2010. In addition, the contract market volumes are primarily driven by economic factors. The Table 4 at Appendix A of this evidence illustrates a 10-Year history of Normalized Actual vs. Board Approved volumes for contract market customers to evaluate accuracy of forecast volumes.

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### Weather Normalization Methodology

- 34. The Company's weather normalization methodology has been approved by the Board and utilized for more than ten years. Consistent with the previous rate case, this section explains the Board approved normalization methodology of normalizing actual consumption for general service rate classes.
- 35. General Service normalization is carried out taking customers at a group level. The Company's General Service customers are grouped together into homogenous classes of gas usage within the three delivery areas (and six operating regions) of the Company's franchise area. Only the heat sensitive portion of consumption is normalized for heat sensitive or balance point degree days.
- 36. Firstly, the total load per customer of a customer group is calculated by dividing the group's consumption by the total customers within this group. Then, base-load per customer is calculated by taking an average of the two non-weather sensitive summer months' total load. Base-load represents non-weather sensitive load, such as water heating and other non-heating uses. Thereafter, heat-load per customer is calculated by subtracting the base-load per customer from the total load per customer. This heat-load represents the heat sensitive portion of consumption. By dividing the heat-load per customer by Actual Heating Degree Days, an Actual Use per Degree Day is generated. The Actual Use per Degree Days. Consequently, total normalized average use per customer is defined as an aggregate sum of base-load use per customer and normalized heat-load per customer.

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37. For contract market customers who consume more than 340,000 m<sup>3</sup> annually, a similar process is followed to determine the actual base-load for each contract. Actual heat-load is obtained by removing the base-load and the process load from the total consumption, which is then adjusted to reflect normal weather. The actual volumes are also adjusted, where necessary, to the budgeted level of curtailment.

Witnesses: R. Cheung S. Qian

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### GENERAL SERVICE AVERAGE USES HISTORICAL NORMALIZED ACTUAL AND BOARD APPROVED FISCAL AND CALENDAR YEARS

- In order to compare the year over year variance between actual and Board Approved average uses on the same basis, the actual results have to be normalized to the corresponding Board Approved degree days for that fiscal year. Prior to 2006 the historical Board Approved degree days and average uses were developed based on the Company's fiscal-year ending September 30. From 2006 onwards, the fiscal year is the calendar year.
- 2. The actual average uses in Table 1 on the following page have been normalized to the corresponding Board Approved degree days for the respective year.
- The normalized average uses on page 3 and 4 are different from those presented in Table 1. These normalized average uses are all presented on a calendar-year basis and they are all normalized to the 2014 forecast degree days in order to eliminate the weather impact.

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#### TABLE 1 GENERAL SERVICE AVERAGE USE

				Col.	1	(	Col. 2	Co	ol. 3		Col. 4
	Te Y	est ear	Rate Classes	Actu Normal <u>Average</u>	al ized <u>Use</u>	Board Nor <u>Ave</u> r	l Approved malized rage Use	Var Nom <u>Avera</u>	iance nalized ige Use	%V Nor <u>Ave</u>	/ariance rmalized rage Use
	~ 20	003	Rate 1	2,87	7	2	2,892	('	15)		-0.5%
			Rate 6	21,59	93	2	1,685	(9	92)		-0.4%
			Total General Service	4,54	1	4	,579	(:	38)		-0.8%
FISCAL	20	004*	Rate 1	2,84	3	2	2,857	('	14)		-0.5%
YEAR	$\prec$		Rate 6	21,47	72	2	1,612	(1	40)		-0.6%
			Total General Service	4,46	1	4	,502	(4	41)		-0.9%
	20	005	Rate 1	2,89	0	2	2,953	(6	63)		-2.1%
			Rate 6	22,24	11	2	2,507	(2	266)		-1.2%
			Total General Service	4,54	7	4	,646	(9	99)		-2.1%
	20	006	Rate 1	2,79	6	2	2,850	(!	54)		-1.9%
	(		Rate 6	22,27	72	2	1,999	2	73		1.2%
			Total General Service	4,44	4	4	4,438		6		0.1%
	20	007	Rate 1	2,72	6	2	2,687	3	39		1.5%
			Rate 6	22,78	33	2	1,010	1,	773		8.4%
			Total General Service	4,41	2	4	l,200	2	12		5.0%
	20	800	Rate 1	2,63	6	2	2,647	(*	11)		-0.4%
			Rate 6	24,86	69	2	4,204	6	65		2.7%
			Total General Service	4,49	3	4	1,449	2	14		1.0%
	) 20	009	Rate 1	2,60	4	2	2,637	(:	33)		-1.3%
CALENDAR	$\prec$		Rate 6	27,28	31	2	8,165	8)	384)		-3.1%
YEAR			Total General Service	4,65	9	4	l,770	(1	11)		-2.3%
	20	010	Rate 1	2,57	9	2	2,622	(4	43)		-1.6%
			Rate 6	29,10	)6	2	7,949	1,1	157		4.1%
			Total General Service	4,40	3	4	,705	(3	302)		-6.4%
	20	011	Rate 1	2,59	4	2	2,643	(4	49)		-1.8%
			Rate 6	29,47	71	2	8,029	1,4	442		5.1%
			Total General Service	4,76	4	4	,726	3	38		0.8%
	20	012	Rate 1	2,52	9	2	2,510	1	18		0.7%
			Rate 6	28,94	11	3	0,122	(1,	182)		-3.9%
	$\sim$		Total General Service	4,64	2	4	l,715	(7	73)		-1.5%

\* 2004 Bridge Year Estimate from RP-2003-0203 was reported at column 2 because Board Approved numbers are not available since there was no 2004 Board Approved Volumes Budget due to the nature of the 2004 Rate Application. Please see RP-2003-0048, Exhibit A, Tab 3, Schedule 1 for the rationale for implementing this new approach.

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				Change % Change	8 Change % Change	l Change % Change	5 Change % Change
		Col. 1	2004	2,815	2,544	7,078	1,232
	S	Col. 2	2005	2,745 (70) -2.49%	79,234 (3,310) -4.01%	16,688 (390) -2.28%	52,178 946 1.85%
	'STEM-\	Col. 3	2006	2,682 (63) -2.30%	85,675 6,441 8.13%	16,623 (65) -0.39%	53,945 1,767 3.39%
	NIDE TO	Col. 4	2007	2,666 (16) -0.60%	99,208 13,533 15.80%	17,038 415 2.50%	58,775 4,830 8.95%
ΤA	GENERA	Col. 5	2008	2,632 (34) -1.28%	123,437 24,229 24.42%	17,872 834 4.89%	73,753 14,978 25.48%
<b>VBLE 2</b>	AL SERV	Col. 6	2009	2,594 (38) -1.44%	141,842 18,405 14.91%	18,539 667 3.73%	88,297 14,544 19.72%
	/ICE IZED A/	Col. 7	2010	2,548 (46) -1.77%	160,549 18,707 13.19%	18,946 407 2.20%	105,297 17,000 19.25%
	/ERAGE	Col. 8	2011	2,512 (36) -1.41%	150,410 (10,139) -6.32%	19,374 428 2.26%	108,745 3,448 3.27%
	LSE*	Col. 9	2012	2,496 (16) -0.64%	146,756 (3,654) -2.43%	19,489 115 0.59%	105,108 (3,637) -3.34%
		Col. 10	<u>2013</u> <u>Board</u> <u>Budget</u>	2,488 (8) -0.32%	152,184 5,428 3.70%	19,667 178 0.91%	108,598 3,490 3.32%
		Col. 11	2014 Budget	2,433 (55) -2.21%	145,576 (6,608) -4.34%	19,346 (321) -1.63%	105,840 (2,758) -2.54%
		Col. 12	2015 Forecast	2,412 (21) -0.86%	145,840 264 0.18%	19,376 30 0.16%	106,690 850 0.80%
		Col. 13	<u>2016</u> Forecast	2,392 (20) -0.83%	146,660 820 0.56%	19,426 50 0.26%	107,680 990 0.93%

\* All historical average uses are on a calendar-year basis and have been normalized to the 2014 Budget degree days.

Witnesses: R. Cheung S. Qian

TABLE 3 GENERAL SERVICE SYSTEM-WIDE TOTAL NORMALIZED AVERAGE USE\*

Col. 13	<u>2016</u> Forecast	2,392 (20) -0.83%	28,420 54 0.19%
Col. 12	<u>2015</u> Forecast	2,412 (21) -0.86%	28,366 (17) -0.06%
Col. 11	2014 Budget	2,433 (55) -2.21%	28,383 (821) -2.81%
Col. 10	2013 Board Approved Budget	2,488 (8) -0.32%	29,204 540 1.88%
Col. 9	2012	2,496 (16) -0.64%	28,664 (246) -0.85%
Col. 8	2011	2,512 (36) -1.41%	28,910 362 1.27%
Col. 7	2010	2,548 (46) -1.77%	28,548 1,844 6.91%
Col. 6	2009	2,594 (38) -1.44%	26,704 1,907 7.69%
Col. 5	2008	2,632 (34) -1.28%	24,797 2,588 11.65%
Col. 4	2007	2,666 (16) -0.60%	22,209 1,223 5.83%
Col. 3	2006	2,682 (63) -2.30%	20,986 269 1.30%
Col. 2	2005	2,745 (70) -2.49%	20,717 (496) -2.34%
Col. 1	2004	2,815	21,213
		Change % Change	Change % Change
		Rate 1	Rate 6

\* All historical average uses are on a calendar-year basis and have been normalized to the 2014 Budget degree days.

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Witnesses: R. Cheung S. Qian

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			Col. 1	Col. 2	Col. 3	Col. 4
		Test Year	Actual Normalized <u>Consumption</u> (10 <sup>6</sup> m <sup>3</sup> )	Board Approved Normalized <u>Consumption</u> (10 <sup>6</sup> m <sup>3</sup> )	Variance Normalized <u>Consumption</u> (1-2)	%Variance Normalized <u>Consumption</u> (3/2)*100
	(	2003	4,380.7	4,400.2	(19.5)	-0.4%
FISCAL	$\left\{ \right.$	2004*	4,275.7	4,309.7	(34.0)	-0.8%
YEAR	2005	4,199.2	4,334.2	(135.0)	-3.1%	
	(	<a> <li>✓ 2006</li> </a>	4,119.1	4,387.9	(268.8)	-6.1%
		2007	3,739.8	4,134.3	(394.5)	-9.5%
		2008	3,099.6	3,355.2	(255.6)	-7.6%
YEAR	$\left  \right\rangle$	2009	2,191.4	2,316.6	(125.2)	-5.4%
	2010	2,191.5	2,008.6	182.9	9.1%	
		2011	2,081.8	2,022.9	58.9	2.9%
		2012	2,072.6	1,943.4	129.2	6.6%

TABLE 4 CONTRACT CUSTOMERS NORMALIZED VOLUME

\* 2004 Bridge Year Estimate from RP-2003-0203 was reported at column 2 because Board Approved numbers are not available since there was no 2004 Board Approved Volumes Budget due to the nature of the 2004 Rate Application. Please see RP-2003-0048, Exhibit A, Tab 3, Schedule 1 for the rationale for implementing this new approach.

\*\*2013 Bridge Year Estimate was reported at column 1 because actual numbers are not available.

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### TABLE 4 CONTRACT CUSTOMERS NORMALIZED VOLUME

		Col. 1	Col. 2	Col. 3	Col. 4
	Test Year	Actual Normalized <u>Consumption</u> (10 <sup>6</sup> m <sup>3</sup> )	Board Approved Normalized <u>Consumption</u> (10 <sup>6</sup> m <sup>3</sup> )	Variance Normalized <u>Consumption</u> (1-2)	%Variance Normalized <u>Consumption</u> (3/2)*100
	2003	4,380.7	4,400.2	(19.5)	-0.4%
FISCAL	2004*	4,275.7	4,309.7	(34.0)	-0.8%
YEAR	2005	4,199.2	4,334.2	(135.0)	-3.1%
	2006	4,119.1	4,387.9	(268.8)	-6.1%
	2007	3,739.8	4,134.3	(394.5)	-9.5%
	2008	3,099.6	3,355.2	(255.6)	-7.6%
YEAR	2009	2,191.4	2,316.6	(125.2)	-5.4%
	2010	2,191.5	2,008.6	182.9	9.1%
	2011	2,081.8	2,022.9	58.9	2.9%
	2012	2,072.6	1,943.4	129.2	6.6%

\* 2004 Bridge Year Estimate from RP-2003-0203 was reported at column 2 because Board Approved numbers are not available since there was no 2004 Board Approved Volumes Budget due to the nature of the 2004 Rate Application. Please see RP-2003-0048, Exhibit A, Tab 3, Schedule 1 for the rationale for implementing this new approach.

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### AVERAGE NUMBER OF CUSTOMERS

- The purpose of this exhibit is to present the calculation of the 2014 annual average customers underpinning the 2014 volume budget as well as the preliminary customer forecast 2015 to 2018. The annual average customer methodology used by the Company has been applied to calculate Board Approved annual average customer for more than ten years.
- 2. The 2014 Customer Budget of 2,059,619 is forecast to be 34,157, or 1.7%, above the 2013 Board Approved Budget of 2,025,462. The increase in customers is primarily attributable to the customer additions in the 2014 Budget. The total customer additions forecast for 2014 are 36,647. The customer additions forecast underpins the new customer volumes of 105.7 10<sup>6</sup>m<sup>3</sup> added between 2014 Budget and 2013 Budget as stated at Exhibit C3, Tab 2, Schedule 3.
- The 2015 Customer Forecast of 2,095,302 is forecast to be 35,683, or 1.7%, above the 2014 Budget. The increase in customers is primarily attributable to the forecast of customer additions in 2015 of 38,489. The customer additions forecast contributes to the volumes demand increase of 110.1 10<sup>6</sup>m<sup>3</sup> between 2015 Forecast and 2014 Budget as stated at Exhibit C4, Tab 2, Schedule 3.
- The 2016 Customer Forecast of 2,131,887 is forecast to be 36,585, or 1.7%, above the 2015 Forecast. The increase in customers is primarily attributable to the forecast of customer additions in 2016 of 39,645. The customer additions forecast contributes to the volumes demand increase of 117.0 10<sup>6</sup>m<sup>3</sup> between 2016 Forecast and 2015 Forecast as stated at Exhibit C5, Tab 2, Schedule 3.

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- 5. The 2017 Customer Forecast of 2,168,472 is forecast to be 36,585, or 1.7%, above the 2016 Forecast. The increase in customers is primarily attributable to the forecast of customer additions in 2017.
- The 2018 Customer Forecast of 2,205,056 is forecast to be 36,584, or 1.7%, above the 2017 Forecast. The increase in customers is primarily attributable to the forecast of customer additions in 2018.

### Underlying Forecast Methodology

7. Consistent with previous rate proceedings, each year's customer numbers are reported on an annual average of monthly customer numbers. Every month customer numbers are measured by number of active meters (or unlock meters)<sup>1</sup>. As a result, each month's customer number is an aggregate sum of the total active meters for that particular month. Specifically, each year's annual average is calculated as follows:

annual average\_customer = (1/12)\*(january\_customer + february\_customer +
march\_customer + april\_customer + may\_customer + june\_customer +
july\_customer + august\_customer + september\_customer
+ october\_customer + november\_customer + december\_customer)

8. Consistent with the contract demand forecast methodology discussed in the Gas Volume Budget evidence, contract customer counts in the contract market are generated through the grass root approach between account executives and customers. The formula for forecasting the total number of contract market customers is as follows:

<sup>&</sup>lt;sup>1</sup> Unlock meter is defined as customer whose gas meter is unlocked, allowing gas to flow through the meter to a premise.

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forecast contract market customers = year end customers (2013 Estimate)

- + forecast new customer additions
- + forecast replacement customer additions

- forecast lost customers

+ forecast transfer gains (i.e. customer migration from general service Rate 6 to contract market rate class)

– forecast transfer losses (i.e. customer migration from contract market rate class to general service Rate 6)

9. The forecast of total number of general service customers is obtained by adding the forecast customer additions along with a time lag between customer additions and unlock meters to the number of customers recorded at the end of the prior year's forecast. Historical average monthly change in actual lock meters or customers are then added to these numbers. Transfer gains or losses between contract rate class and general service Rate 6 obtained from account executives are then layered onto general service Rate 6 customers. The formula for forecasting the total number of general service customers is as follows:

forecast general service customers = year end customers

+ forecast new construction customer additions\*new construction time lag

- + forecast replacement customer additions\*replacement time lag
- + historical average monthly change in actual lock customers

+ forecast transfer gains (i.e. customer migration from contract market rate class to general service Rate 6)

- forecast transfer losses (i.e. customer migration from general service Rate 6 to contract market rate class)

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10. Lock meters are defined as customers whose gas meters are locked and no gas is flowing through the meter to a premise. These can result from vacant premises (e.g., new construction, move-in/move out, bankruptcies, etc.), customer switching off gas to an alternate energy source, payment or credit reasons and seasonal usage. Company has experienced an increase in lock meters, which has resulted in reduced net customer growth. Unfavorable economic conditions, e.g., vacancy or bankruptcy, may lead to an increase in locked meters and this factor has been incorporated into the customer forecast. Table 1 below presents the historical annual actual lock customer data.

Table 1 - Historical Anr	ual Average Lock	s Customers
--------------------------	------------------	-------------

Calendar Year	Lock Customers		
2010	40,518		
2011	41,170		
2012	43,575		
2012	43,575		

- 11. There is always a time lag between when the service line is installed (that underpins capital expenditures and customer additions) and the flow of gas which occurs when the customer moves into the premise and calls to have their meter unlocked by field staff, gas service and their account (that underpins billed revenues and volumes) is activated. This time lag is incorporated into the customer number calculation.
- 12. Similar to lock customers, this time lag is challenging to predict. Therefore, the latest available historical actual data is used in order to obtain an objective forecast of lock meters for the budget. Table 2 below, presents a summary of the 2014 budgeted time lag. It is expected the average time lag (i.e., number of months) for

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replacement customer additions will be shorter than new construction or subdivision customer additions. Also, the average time lag for commercial buildings or offices is anticipated to be longer than residential homes.

Sector	New Construction	<u>Replacement</u>	
Residential	6	3	
Apartment	7	7	
Commercial	12	11	
Industrial	7	7	

### Table 2 - 2014 Budget Time Lag (i.e. Number of Months)

### Evaluation of Forecast Accuracy - Historical Actual vs. Board Approved Budget

- 13. Historical Board Approved customer numbers are set out on Table 3. The information for periods prior to 2006 shown in this Exhibit is presented on a September 30 fiscal year end whereas the fiscal-year for 2006 and beyond is the calendar year.
- 14. Table 3 on the following page illustrates 18 years of Historical Actual vs. Board Approved customer numbers. The average percentage error variances over the past 18 years were 516 customers or around 0.1%. Overall, the existing methodology has continued to be a good predictor of actual customers.

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		TABLE 3 - GENERAL SERVICE AND CONTRACT MARKET CUSTOMERS				
		Col. 1	Col. 2	Col. 3	Col. 4	
	Test Year	Actual <u>Customers</u>	Board Approved Customers	Variance <u>Customers</u> (1-2)	%Variance <u>Customers</u> (3/2)*100	
FISCAL YEAR	1995	1,222,293	1,216,511	5,782	0.5%	
	1996	1,263,290	1,262,815	475	0.0%	
	1997	1,312,434	1,309,752	2,682	0.2%	
	1998	1,364,350	1,353,178	11,172	0.8%	
	1999	1,414,788	1,417,832	(3,044)	-0.2%	
	2000	1,464,738	1,468,915	(4,177)	-0.3%	
	2001	1,519,039	1,514,710	4,329	0.3%	
	2002	1,566,710	1,565,017	1,693	0.1%	
	2003	1,622,016	1,615,037	6,979	0.4%	
	2004*	1,676,380	1,672,586	3,794	0.2%	
	2005	1,724,716	1,718,766	5,950	0.3%	
CALENDAR YEAR	2006	1,782,813	1,792,615	(9,802)	-0.5%	
	2007	1,824,789	1,823,258	1,531	0.1%	
	2008	1,865,020	1,864,047	973	0.1%	
	2009	1,887,605	1,906,437	(18,832)	-1.0%	
	2010	1,926,294	1,931,528	(5,234)	-0.3%	
	2011	1,960,378	1,965,538	(5,160)	-0.3%	
	2012	1,994,903	1,984,734	10,169	0.5%	

\* 2004 Bridge Year Estimate from RP-2003-0203 was reported at column 2 because Board Approved numbers are not available since there was no 2004 Board Approved Volumes Budget due to the nature of the 2004 Rate Application. Please see RP-2003-0048, Exhibit A, Tab 3, Schedule 1 for the rationale for implementing this new approach.

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### TRANSACTIONAL SERVICES

- The purpose of this evidence is to provide an update on the Company's Transactional Services ("TS") business, an overview of prevailing market forces impacting the business.
- 2. A number of market factors have arisen recently which directly impact the value attributable to TS business. Storage values continue to be depressed and are expected to remain so for the foreseeable future. The Company's ability to generate Transportation Optimization revenues over the term of the next Incentive Regulation ("IR") term is also in question. On March 27, 2013 the National Energy Board ("NEB") issued its decision in TransCanada Pipelines Limited ("TransCanada") Compliance Filing RH-003-2011. Subsequent to that decision TransCanada filed a Review and Variance Application for 2013 to 2017 with the NEB on May 1, 2013 in relation to RH-003-2011. On June 11, 2013 the NEB rendered its decision dismissing in its entirety TransCanada's Review and Variance Application. On June 12, 2013 TransCanada issued a news release stating their disappointment with the NEB decision and that they were considering all their options including the potential for an appeal. The June 11, 2013 NEB decision also stated that TransCanada must re-file its Tariff Amendments by June 17, 2013 and that they will be considered as a separate application which will be heard as part of an oral hearing to commence September 3, 2013. The uncertainty regarding the outcome of that proceeding brings into question the ability of the Company to generate Transportation Optimization revenues.

Witnesses: J. Denomy J. LeBlanc D. Small

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- 3. As part of the Settlement Agreement in the 2013 Rate Proceeding (EB-2011-0354) all parties agreed that all revenues (less associated costs) be shared 90/10 between ratepayers and Enbridge shareholders and that Enbridge would include a credit of \$12 million in revenue requirement for 2013 related to an anticipated ratepayer share of TS net revenues with a guarantee of \$8 million in ratepayer share.
- 4. The Company does not believe a change in either the 90/10 sharing mechanism or the \$12 million in revenue requirement credit is warranted at this time. However, the Company believes it is necessary to remove the \$8 million guarantee. Given the uncertainty regarding TCPL's Tariff Amendments and whether shippers will be able to continue to have the flexibility of diversions on TCPL's system, the Company believes its ability to generate TS revenue will be impacted in the future. Therefore in the event that the ratepayer's share of TS revenue is less than \$12 million, then Enbridge proposes to credit back to the shareholder the entire difference between the actual ratepayer share and the \$12 million included in rates and that this amount should therefore not be capped at \$4 million.

Witnesses: J. Denomy J. LeBlanc D. Small

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### OTHER SERVICE AND LATE PAYMENT PENALTY REVENUE

- Other Service Revenue is the product of charges billed by the Company to customers in order to recover costs that are not recovered through the application of the Company's gas distribution rates schedules. Typically, these charges apply to the delivery of one-time customer specific services. As such, it is more appropriate to recover the costs associated with such services from those customers requiring them from time to time, as opposed to recovering these costs from all customers as a component of gas distribution rates.
- The purpose of this evidence is to present the Company's forecast of revenue generated through the delivery of a number of services provided to customers that relate to the provision of gas distribution services. The Company's evidence with respect to policies and service charges can be found at Exhibit A1, Tab 5, Schedules 1 and 2.

### Nature of Other Service Revenues

3. Other Service Revenues are the product of service charges that pertain to non-routine customer specific services provided by the Company. Some of these services are provided at the customer's request, such as street service alterations and meter relocations, while other charges arise as a result of ongoing business activities, such as charges for NSF cheques and restoration of gas service after the termination of service for non-payment. The Direct Purchase Administration Charge ("DPAC") is also included in this revenue category. The rationale for separate charges for such services is that the cost of providing these services are more reasonably recovered from those customers that give rise to such costs.
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## 2014 Budget versus 2013 Board Approved

4. Other service revenues for 2014 Budget and 2013 Board Approved are set-out in Table 1. In total the Company's 2014 other service revenues are forecast to decrease by \$0.7 million in 2014. The 2013 Board Approved was based upon estimates for 2012, which were based upon best information at a point in time. Overall, the 2012 estimate proved to be too optimistic when compared to 2012 actual results. Therefore 2014 Budget has been adjusted to be consistent with the 2012 actual experience. This also applies to the decline in DPAC revenue where the loss of direct purchase customers was underestimated. In recent years very low gas commodity prices and the implementation of the Province's *Energy Consumer Protection Act* have resulted in large numbers of direct purchase customers returning to System Gas.

					Board		
Line		E	Budget	Α	pproved		
<u>No.</u>	Particulars (\$ 000's)		2014		<u>2013</u>	V	'ariance
			(a)		(b)		(c)
1.1	New Account Charge	\$	5,509	\$	5,576	\$	(67)
1.2	Statement of Account & Lawyer Letters Charge		16		52		(36)
1.3	Cheques Returned Non-Negotiable Charge		158		159		(1)
1.4	Gas Termination Charge for Collection		2,539		2,638		(99)
1.	Total Credit to Customer Support O&M	\$	8,222	\$	8,425	\$	(203)
2.1	Safety Inspection Revenue		495		489		6
2.2	Meter Testing Revenue		1,049		813		236
2.3	Street Service Alteration Revenue		722		936		(214)
2.		\$	2,266	\$	2,238	\$	28
3.	Total	\$	10,488	\$	10,663	\$	(175)
4.	DPAC		1,647		2,125		(478)
5.	Total Service Charge & DPAC	\$	12,135	\$	12,788	\$	(653)
4. 5.	DPAC Total Service Charge & DPAC	\$	1,647 12,135	\$	2,125 12,788	\$	(478 (653

# Table 1Other Service RevenuesVariance between 2014 and 2013

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### 2015 Budget versus 2014 Budget

5. The 2015 and 2014 other service revenues are presented in Table 2. In total, the Company's estimate of other service revenues for 2015 is forecast to be flat, increasing by less than \$0.1 million as compared to 2014. Small increases due to higher customer additions and higher customer base are mostly offset by lower DPAC revenue. The decline in DPAC revenue is due to loss of direct purchase customers as low commodity price has customers switching from direct purchase to system gas.

#### Table 2 Other Service Revenues Variance between 2015 and 2014

Line					
No.	Particulars (\$ 000's)	2015	2014	V	ariance
		(a)	(b)		(c)
1.1	New Account Charge	\$ 5,609	\$ 5,509	\$	100
1.2	Statement of Account & Lawyer Letters Charge	16	16		-
1.3	Cheques Returned Non-Negotiable Charge	161	158		3
1.4	Gas Termination Charge for Collection	2,586	2,539		47
1.	Total Credit to Customer Support O&M	\$ 8,372	\$ 8,222	\$	150
2.1	Safety Inspection Revenue	501	495		6
2.2	Meter Testing Revenue	1,062	1,049		13
2.3	Street Service Alteration Revenue	730	722		8
2.		\$ 2,293	\$ 2,266	\$	27
3.	Total	\$ 10,665	\$ 10,488	\$	177
4.	DPAC	 1,512	1,647		(135)
5.	Total Service Charge & DPAC	\$ 12,177	\$ 12,135	\$	42

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### 2016 Budget versus 2015 Budget

line

6. The 2016 and 2015 other service revenues are presented in Table 3. In total, the Company's estimate of other service revenues for 2016 is forecast to increase by \$0.1 million as compared to 2015. Small increases due to higher customer additions and customer base are mostly offset by lower DPAC revenue. The decline in DPAC revenue is due to loss of direct purchase customers as low commodity price has customers switching from direct purchase to system gas.

No.	Particulars (\$ 000's)	2016	2015	V	ariance
		(a)	(b)		(c)
1.1	New Account Charge	\$ 5,713	\$ 5,609	\$	104
1.2	Statement of Account & Lawyer Letters Charge	17	16		1
1.3	Cheques Returned Non-Negotiable Charge	164	161		3
1.4	Gas Termination Charge for Collection	2,633	2,586		47
1.	Total Credit to Customer Support O&M	\$ 8,527	\$ 8,372	\$	155
2.1	Safety Inspection Revenue	507	501		6
2.2	Meter Testing Revenue	1,074	1,062		12
2.3	Street Service Alteration Revenue	739	730		9
2.		\$ 2,320	\$ 2,293	\$	27
3.	Total	\$ 10,847	\$ 10,665	\$	182
4.	DPAC	 1,420	1,512		(92)
5.	Total Service Charge & DPAC	\$ 12,267	\$ 12,177	\$	90

#### Table 3 Other Service Revenues Variance between 2016 and 2015

## Late Payment Penalty ("LPP") Revenues

7. LPP is calculated at the OEB prescribed monthly interest payment of 1.5%. Please refer to Table 4 below for the LPP revenue amounts.

Witnesses: S. McGill M. Torriano

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- The Company has made the decision to hold budgeted 2014 to 2016 LPP revenues at the 2012 actual level of \$10.1 million, commensurate with the treatment for Provision for Uncollectibles.
- 9. The 2014 to 2016 budgeted LPP revenue applicable to the utility is \$2.8 million lower than 2013 Board Approved. As stated, the 2014 to 2016 budgeted LPP revenues are held at the 2012 level. Therefore, this variance is truly the variance between 2012 actual experience and 2013 Board Approved and is primarily due to 2013 Board Approved underestimating the LPP reduction resulting from the implementation of customer service rules; and due to 2013 Board Approved assuming higher billed receivables due to higher gas cost and normal weather. 2013 LPP revenue experience to date indicates a year-end result significantly lower than 2013 Board Approved.

# Table 4 Late Payment Penalty Revenues 2013 - 2016

Line <u>No.</u>	Particulars (\$ 000's)	Budget <u>2016</u> (a)	Budget <u>2015</u> (b)	Budget <u>2014</u> (c)	Board Approved <u>2013</u> (d)
1	Late Payment Penalty Revenues	10,100	10,100	10,100	12,942

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## GTA PROJECT REVENUE REQUIREMENT AND REVENUE REQUIREMENT FOR SHARED PIPELINE WITH TRANSCANADA PIPELINES

- This evidence provides derivation of the GTA project revenue requirements for 2015 and 2016 (Appendix A). The 2015 and 2016 revenue requirements for the project are also presented separately for the GTA project's Segment A (Appendix C) and Segment B (Appendix B). Further, Appendix D provides 2015 and 2016 revenue requirements for the Segment A shared pipeline with TransCanada Pipelines ("TCPL"), and Appendix E provides revenue requirements for Segment A element pertaining to EGD only.
- 2. The revenue requirement impacts of both Segment A and Segment B of the total GTA project are included within EGD's overall Allowed Revenue amounts. All of the forecast tax rates and allowed treatments, allowed accounting treatments, as well as, the forecast capital structure ratios and cost rates applicable to EGD on an overall basis are also assumed to be applicable to the GTA project and are, therefore, used within the GTA project revenue requirement calculations.
- 3. As noted above, Appendix D provides the total revenue requirement for each of fiscal years 2015 and 2016 in relation to the Segment A shared pipeline with TCPL. The background and support for the forecast aspects and costs of the Segment A shared pipeline are indicated and provided within Appendices C through J, as indicated in Exhibit D1, Tab 8, Schedule 2.
- 4. As per the Company's proposal in the GTA project Leave-to-Construct ("LTC") application (EB-2012-0451/ EB-2012-0433/ EB-2012-0074), 50% of the annual

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revenue requirement for the shared pipeline (Segment A) will be recovered from TCPL through the proposed Rate 332 transportation service. Please see Appendix D, page 1, Line 13, Columns 3 and 6 for the 2015 and 2016 revenue requirement amounts to be recovered from TCPL. The proposed Rate 332 monthly charge will recover TCPL's share of the revenue requirement amounts. Please see Exhibit H3, Tab 1, Schedule 1, for the details regarding the derivation of Rate 332 monthly charge.

#### CAPITAL STRUCTURE TOTAL GTA PROJECT (2015 - 2016 Cap. Structure)

	(Excluding CIS) Fiscal 201		Fiscal 2015	15 Fiscal 2016			
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Line No.		Component	Indicated Cost Rate	Return Component	Component	Indicated Cost Rate	Return Component
		%	%	%	%	%	%
1.	Long-term debt	61.41	5.39	3.31	61.31	5.33	3.27
2.	Short-term debt	<u>0.49</u>	2.75	<u>0.01</u>	<u>0.87</u>	3.35	<u>0.03</u>
3.		61.90		3.32	62.18		3.30
4.	Preference shares	2.10	3.68	0.08	1.82	4.32	0.08
5.	Common equity	<u>36.00</u>	9.72	<u>3.50</u>	<u>36.00</u>	10.12	<u>3.64</u>
6.	Required Return on Rate Base	100.00		<u>6.90</u>	100.00		<u>7.02</u>

(\$000's)			
	(+	2015	2016
7.	Ontario Utility Income	3,214.1	(3,148.0)
8.	Rate base	120,820.6	571,382.6
9.	Indicated rate of return	2.66 %	(0.55)%
10.	(Def.) / suff. in rate of return	(4.24)%	(7.57)%
11.	Net (def.) / suff.	(5,122.8)	(43,253.7)
12.	Gross (def.) / suff.	( <u>6,969.8</u> )	( <u>58,848.6</u> )

#### RATE BASE TOTAL GTA PROJECT (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Property, plant, and equipment		
1.	Cost or redetermined value	121,018.7	580,889.8
2.	Accumulated depreciation	(198.1)	(9,507.2)
3.		120,820.6	571,382.6
	Allowance for working capital		
4.	Accounts receivable merchandise finance plan	-	-
5.	Accounts receivable rebillable projects	<u>-</u>	-
6.	Materials and supplies	-	-
7.	Mortgages receivable	-	-
8.	Customer security deposits	-	-
9.	Prepaid expenses	-	-
10.	Gas in storage	-	-
11.	Working cash allowance	<u> </u>	-
12.		<u> </u>	
13.	Ontario utility rate base	120,820.6	571,382.6

#### INCOME TOTAL GTA PROJECT (2015 - 2016 Cap. Structure)

	(\$000's)		
Line			
No.		2015	2016
	-		
	Revenue		
1.	Gas sales	-	-
2.	I ransportation of gas	-	-
3.	Transmission and compression	-	-
4.	Other operating revenue	-	-
5.	Other income	<u> </u>	-
6.	Total revenue	<u> </u>	-
_	Costs and expenses		
7.	Gas costs	-	-
8.	Operation and Maintenance	285.6	1,398.4
9.	Depreciation and amortization	2,376.8	14,260.8
10.	Municipal and other taxes	370.4	1,795.5
11.	Total costs and expenses	3,032.8	17,454.7
12	Utility income before inc. taxes	(3 032 8)	(17 /5/ 7)
12.	ounty meene before me. taxes	(0,002.0)	(17,404.7)
	Income taxes		
13.	Excluding interest shield	(5,183.9)	(9,310.0)
14.	Tax shield on interest expense	(1,063.0)	(4,996.7)
15.	Total income taxes	(6,246.9)	(14,306.7)
16	Ontario utility net income	3 214 1	(3 148 0)
10.		5,214.1	(0,140.0)

#### TAXABLE INCOME AND INCOME TAX EXPENSE TOTAL GTA PROJECT (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
1.	Utility income before income taxes	(3,032.8)	(17,454.7)
	Add Backs		
2.	Depreciation and amortization	2,376.8	14,260.8
3.	Large corporation tax	-	-
4.	Other non-deductible items	-	-
5.	Any other add back(s)	<u> </u>	-
6.	Total added back	2,376.8	14,260.8
7.	Sub total - pre-tax income plus add backs	(656.0)	(3,193.9)
	Deductions		
8.	Capital cost allowance - Federal	14,213.9	27,574.8
9.	Capital cost allowance - Provincial	14,213.9	27,574.8
10.	Items capitalized for regulatory purposes	-	-
11.	Deduction for "grossed up" Part V1.1 tax	-	-
12.	Amortization of share and debt issue expense	-	-
13. 14	Amortization of CDE & COGPE	4,091.0	4,303.4
15.	Any other deduction(s)	<del>-</del>	-
16	Total Deductions - Federal	18,905.7	31,938,2
17.	Total Deductions - Provincial	18,905.7	31,938.2
19	Tavable income Enderel	(10 561 7)	(25 122 1)
10.	Taxable income - Provincial	(19,501.7)	(35, 132, 1) (35, 132, 1)
15.		(13,301.7)	(00,102.1)
20.	Income tax provision - Federal	(2,934.3)	(5,269.8)
21.	Income tax provision - Provincial	(2,249.6)	(4,040.2)
22.	Income tax provision - combined	(5,183.9)	(9,310.0)
23.	Part V1.1 tax	-	-
24.	Investment tax credit	<u>-</u>	-
25.	Total taxes excluding tax shield on interest expense	(5,183.9)	(9,310.0)
	Tax shield on interest expense		
26.	Rate base as adjusted	120,820.6	571,382.6
27.	Return component of debt	3.32%	3.30%
28.	Interest expense	4,011.2	18,855.6
29.	Combined tax rate	<u>26.500</u> %	<u>26.500</u> %
30.	Income tax credit	(1,063.0)	(4,996.7)
31.	Total income taxes	(6,246.9)	(14,306.7)

#### ALLOWED REVENUE TOTAL GTA PROJECT (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Cost of capital		
1.	Rate base	120,820.6	571,382.6
2.	Required rate of return	<u>6.90%</u>	7.02%
3.	Cost of capital	8,336.6	40,111.1
	Cost of service		
4.	Gas costs	-	-
5.	Operation and Maintenance	285.6	1,398.4
6.	Depreciation and amortization	2,376.8	14,260.8
7.	Municipal and other taxes		1,795.5
8.	Cost of service	3,032.8	17,454.7
_	Misc. & Non-Op. Rev		
9.	Other operating revenue	-	-
10.	Other Income	<u>-</u>	-
11.	Misc, & Non-operating Rev.	-	-
	Income taxes on earnings	(=	
12.	Excluding tax shield	(5,183.9)	(9,310.0)
13.	rax shield provided by interest expense	(1,063.0)	(4,996.7)
14.	Income taxes on earnings	(6,246.9)	(14,306.7)
	Taxes on (def) / suff.	(	/
15.	Gross (def.) / suff.	(6,969.8)	(58,848.6)
16.	Net (def.) / suff.	(5,122.8)	(43,253.7)
17.	Taxes on (der.) / sun.	1,847.0	15,594.9
18.	Allowed Revenue	6,969.5	58,854.0
	Revenue at existing Rates		
19.	Gas sales	0.0	0.0
20.	Transportation service	0.0	0.0
21.	Transmission, compression and storage	0.0	0.0
22.	Rounding adjustment	(0.3)	5.4
23.	Revenue at existing rates	(0.3)	5.4
24	Gross rovonuo (dof.) / suff		(59 949 6)
∠4.	Gioss ievende (del.) / Sull.	(0,909.0)	(30,040.0)

#### CAPITAL STRUCTURE Segment B Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(Excluding CIS)		Fiscal 2015			Fiscal 2016		
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	
Line No.		Component	Indicated Cost Rate	Return Component	Component	Indicated Cost Rate	Return Component	
		%	%	%	%	%	%	
1.	Long-term debt	61.41	5.39	3.31	61.31	5.33	3.27	
2.	Short-term debt	<u>0.49</u>	2.75	<u>0.01</u>	<u>0.87</u>	3.35	<u>0.03</u>	
3.		61.90		3.32	62.18		3.30	
4.	Preference shares	2.10	3.68	0.08	1.82	4.32	0.08	
5.	Common equity	<u>36.00</u>	9.72	<u>3.50</u>	<u>36.00</u>	10.12	<u>3.64</u>	
6.	Required Return on Rate Base	<u>100.00</u>		<u>6.90</u>	<u>100.00</u>		<u>7.02</u>	
	(\$000's)							

		2015	2016
7.	Ontario Utility Income	1,758.5	(1,400.2)
8.	Rate base	61,453.6	290,717.1
9.	Indicated rate of return	2.86 %	(0.48)%
10.	(Def.) / suff. in rate of return	(4.04)%	(7.50)%
11.	Net (def.) / suff.	(2,482.7)	(21,803.8)
12.	Gross (def.) / suff.	( <u>3,377.8</u> )	( <u>29,665.0</u> )

#### RATE BASE Segment B Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Property, plant, and equipment		
1.	Cost or redetermined value	61,552.3	295,450.7
2.	Accumulated depreciation	(98.7)	(4,733.6)
3.		61,453.6	290,717.1
	Allowance for working capital		
4.	Accounts receivable merchandise finance plan	<u>-</u>	<u>-</u>
5.	Accounts receivable rebillable projects	-	-
6.	Materials and supplies	-	-
7.	Mortgages receivable	-	-
8.	Customer security deposits	-	-
9.	Prepaid expenses	-	-
10.	Gas in storage	-	-
11.	Working cash allowance	<u> </u>	-
12.		<u> </u>	
13.	Ontario utility rate base	61,453.6	290,717.1

#### INCOME Segment B Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line			
No.		2015	2016
	Revenue		
1.	Gas sales	<u>-</u>	-
2.	Transportation of gas	-	-
3.	Transmission and compression	-	-
4.	Other operating revenue	-	-
5.	Other income	<u> </u>	-
6.	Total revenue	<u> </u>	-
	Costs and expenses		
7.	Gas costs	-	-
8.	Operation and Maintenance	122.4	599.5
9.	Depreciation and amortization	1,183.4	7,100.4
10.	Municipal and other taxes	188.4	913.2
11.	Total costs and expenses	1,494.2	8,613.1
12.	Utility income before inc. taxes	(1,494.2)	(8,613.1)
	Income taxes		
13.	Excluding interest shield	(2,712.0)	(4,670.6)
14.	Tax shield on interest expense	(540.7)	(2,542.3)
15.	Total income taxes	(3,252.7)	(7,212.9)
16.	Ontario utility net income	1,758.5	(1,400.2)

#### TAXABLE INCOME AND INCOME TAX EXPENSE Segment B Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
1.	Utility income before income taxes	(1,494.2)	(8,613.1)
	Add Backs		
2.	Depreciation and amortization	1,183.4	7,100.4
3.	Large corporation tax	-	-
4.	Other non-deductible items	-	-
5.	Any other add back(s)	<u> </u>	-
6.	Total added back	1,183.4	7,100.4
7.	Sub total - pre-tax income plus add backs	(310.8)	(1,512.7)
	Deductions		
8.	Capital cost allowance - Federal	6,815.5	13,222.1
9.	Capital cost allowance - Provincial	6,815.5	13,222.1
10.	Items capitalized for regulatory purposes	-	-
11.	Deduction for "grossed up" Part V1.1 tax	-	-
12.	Amortization of share and debt issue expense	-	-
13.	Amortization of CDE & COG PE	3,107.6	2,890.0
14.	Anonization of C.D.E. & C.O.G.F.E.		-
16	Total Deductions - Federal	0 023 1	16 112 1
10.	Total Deductions - Tederal	0.022.1	16 112 1
17.	Total Deductions - Provincial	9,923.1	10,112.1
18.	Taxable income - Federal	(10,233.9)	(17,624.8)
19.	Taxable income - Provincial	(10,233.9)	(17,624.8)
20.	Income tax provision - Federal	(1,535.1)	(2,643.7)
21.	Income tax provision - Provincial	(1,176.9)	(2,026.9)
22.	Income tax provision - combined	(2,712.0)	(4,670.6)
23.	Part V1.1 tax	-	-
24.	Investment tax credit	<u> </u>	-
25.	Total taxes excluding tax shield on interest expense	(2,712.0)	(4,670.6)
	Tax shield on interest expense		
26.	Rate base as adjusted	61,453.6	290,717.1
27.	Return component of debt	3.32%	3.30%
28.	Interest expense	2,040.3	9,593.7
29.		<u>26.500</u> %	26.500%
30.	Income tax credit	(540.7)	(2,542.3)
31.	Total income taxes	(3,252.7)	(7,212.9)

#### ALLOWED REVENUE Segment B Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Cost of capital		
1.	Rate base	61,453.6	290,717.1
2.	Required rate of return	<u>6.90%</u>	<u>7.02%</u>
3.	Cost of capital	4,240.3	20,408.3
	Cost of service		
4.	Gas costs	-	-
5.	Operation and Maintenance	122.4	599.5
6.	Depreciation and amortization	1,183.4	7,100.4
7.		100.4	913.2
8.	Cost of service	1,494.2	8,613.1
	Misc. & Non-Op. Rev		
9.	Other operating revenue	-	-
10.	Other income		-
11.	Misc, & Non-operating Rev.	-	-
	Income taxes on earnings		
12.	Excluding tax shield	(2,712.0)	(4,670.6)
13.	Tax shield provided by interest expense	(540.7)	(2,542.3)
14.	Income taxes on earnings	(3,252.7)	(7,212.9)
	Taxes on (def) / suff.		
15.	Gross (def.) / suff.	(3,377.8)	(29,665.0)
16.	Net (def.) / suff.	<u>(2,482.7)</u>	<u>(21,803.8)</u>
17.	Taxes on (def.) / suff.	895.1	7,861.2
18.	Allowed Revenue	3,376.9	29,669.7
	Revenue at existing Rates		
19.	Gas sales	0.0	0.0
20.	Transportation service	0.0	0.0
21.	Transmission, compression and storage	0.0	0.0
22.	Rounding adjustment	(0.9)	4.7
23.	Revenue at existing rates	(0.9)	4.7
24.	Gross revenue (def.) / suff.	( <u>3,377.8</u> )	( <u>29,665.0</u> )

280,665.5

(0.62)%

(7.64)%

(21,442.8)

(29,173.9)

#### CAPITAL STRUCTURE Segment A Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

(Excluding CIS)			Fiscal 2015			Fiscal 2016			
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6		
Line No.		Component	Indicated Cost Rate	Return Component	Component	Indicated Cost Rate	Return Component		
		%	%	%	%	%	%		
1.	Long-term debt	61.41	5.39	3.31	61.31	5.33	3.27		
2.	Short-term debt	<u>0.49</u>	2.75	<u>0.01</u>	<u>0.87</u>	3.35	<u>0.03</u>		
3.		61.90		3.32	62.18		3.30		
4.	Preference shares	2.10	3.68	0.08	1.82	4.32	0.08		
5.	Common equity	<u>36.00</u>	9.72	<u>3.50</u>	<u>36.00</u>	10.12	<u>3.64</u>		
6.	Required Return on Rate Base	<u>100.00</u>		<u>6.90</u>	<u>100.00</u>		<u>7.02</u>		
	(\$000's)			2015			2016		
7.	Ontario Utility Income			1,455.6			(1,747.8)		

59,366.9

2.45 %

(4.45)%

(2,641.8)

(3,594.3)

Witnesses: K. Culbert C. Fernandes A. Kacicnik

8. Rate base

11. Net (def.) / suff.

12. Gross (def.) / suff.

9. Indicated rate of return

10. (Def.) / suff. in rate of return

#### RATE BASE Segment A Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Property, plant, and equipment		
1.	Cost or redetermined value	59,466.5	285,439.1
2.	Accumulated depreciation	(99.6)	(4,773.6)
3.		59,366.9	280,665.5
	Allowance for working capital		
4.	Accounts receivable merchandise finance plan	-	-
5.	Accounts receivable rebillable projects	<u>-</u>	-
6.	Materials and supplies	-	-
7.	Mortgages receivable	-	-
8.	Customer security deposits	-	-
9.	Prepaid expenses	-	-
10.	Gas in storage	-	-
11.	Working cash allowance	<u> </u>	-
12.		<u> </u>	
13.	Ontario utility rate base	59,366.9	280,665.5

INCOME				
Segment A Portion of TOTAL GTA (2015 - 2016 Cap. Structure)				

	(\$000's)		
Line			
No.		2015	2016
	Revenue		
1.	Gas sales	-	-
2.	Transportation of gas	-	-
3.	Transmission and compression	-	-
4.	Other operating revenue	-	-
5.	Other income	<u> </u>	-
6.	Total revenue	<u> </u>	-
	Costs and expenses		
7.	Gas costs	-	-
8.	Operation and Maintenance	163.2	798.9
9.	Depreciation and amortization	1,193.4	7,160.4
10.	Municipal and other taxes	182.0	882.3
11.	Total costs and expenses	1,538.6	8,841.6
12.	Utility income before inc. taxes	(1.538.6)	(8.841.6)
	·····, ·····	(,,=====,	(0,0)
	Income taxes		
13.	Excluding interest shield	(2,471.9)	(4,639.4)
14.	Tax shield on interest expense	(522.3)	(2,454.4)
15.	Total income taxes	(2,994.2)	(7,093.8)
			<u>,</u>
16.	Ontario utility net income	1,455.6	(1,747.8)
16.	Untario utility net income	1,455.6	(1,747.8)

#### TAXABLE INCOME AND INCOME TAX EXPENSE Segment A Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
1.	Utility income before income taxes	(1,538.6)	(8,841.6)
	Add Backs		
2.	Depreciation and amortization	1,193.4	7,160.4
3.	Large corporation tax	- -	-
4.	Other non-deductible items	-	-
5.	Any other add back(s)	<u> </u>	-
6.	Total added back	1,193.4	7,160.4
7.	Sub total - pre-tax income plus add backs	(345.2)	(1,681.2)
	Deductions		
8.	Capital cost allowance - Federal	7,398.3	14,352.7
9.	Capital cost allowance - Provincial	7,398.3	14,352.7
10.	Items capitalized for regulatory purposes	-	-
11.	Deduction for "grossed up" Part V1.1 tax	-	-
12.	Amortization of share and debt issue expense	-	-
13.	Amortization of cumulative eligible capital	1,584.2	1,473.3
14.	Amortization of C.D.E. & C.O.G.P.E.	-	-
15.	Any other deduction(s)		
16.	Total Deductions - Federal	8,982.5	15,826.0
17.	Total Deductions - Provincial	8,982.5	15,826.0
18.	Taxable income - Federal	(9,327.7)	(17,507.2)
19.	Taxable income - Provincial	(9,327.7)	(17,507.2)
20.	Income tax provision - Federal	(1,399.2)	(2,626.1)
21.	Income tax provision - Provincial	(1,072.7)	(2,013.3)
22.	Income tax provision - combined	(2,471.9)	(4,639.4)
23.	Part V1.1 tax	-	-
24.	Investment tax credit	<u> </u>	-
25.	Total taxes excluding tax shield on interest expense	(2,471.9)	(4,639.4)
	Tax shield on interest expense		
26.	Rate base as adjusted	59,366.9	280,665.5
27.	Return component of debt	3.32%	3.30%
28.	Interest expense	1,971.0	9,262.0
29.	Combined tax rate	<u>26.500</u> %	<u>26.500</u> %
30.	Income tax credit	(522.3)	(2,454.4)
31.	Total income taxes	(2,994.2)	(7,093.8)

#### ALLOWED REVENUE Segment A Portion of TOTAL GTA (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Cost of capital		
1	Rate hase	59 366 9	280 665 5
2.	Required rate of return	6.90%	7.02%
3.	Cost of capital	4,096.3	19,702.7
	Cost of service		
4.	Gas costs	-	-
5.	Operation and Maintenance	163.2	798.9
6.	Depreciation and amortization	1,193.4	7,160.4
7.	Municipal and other taxes	182.0	882.3
8.	Cost of service	1,538.6	8,841.6
	Misc. & Non-Op. Rev		
9.	Other operating revenue	-	-
10.	Other Income	<u>-</u>	
11.	Misc, & Non-operating Rev.	-	-
40	Income taxes on earnings	(0.474.0)	(4,000,4)
12.	Excluding tax shield	(2,471.9)	(4,639.4)
13.	Tax shield provided by interest expense	(322.3)	(2,454.4)
14.	income taxes on earnings	(2,994.2)	(7,093.8)
	Taxes on (def) / suff.	()	<i>(</i> )
15.	Gross (def.) / suff.	(3,594.3)	(29,173.9)
16.	Net (der.) / suff.	<u>(2,641.8)</u>	(21,442.8)
17.	Taxes on (del.) / suit.	952.5	7,731.1
18.	Allowed Revenue	3,593.2	29,181.6
	Revenue at existing Rates		
19.	Gas sales	0.0	0.0
20.	Transportation service	0.0	0.0
21.	Transmission, compression and storage	0.0	0.0
22.	Rounding adjustment	( <u>1.1</u> )	7.7
23.	Revenue at existing rates	(1.1)	7.7
24.	Gross revenue (def.) / suff.	(3,594.3)	(29,173.9)
			<u> </u>

#### CAPITAL STRUCTURE Segment A Shared GTA Pipeline with TCPL

(Excluding CIS)			Fiscal 2015			Fiscal 2016	
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Line No.		Component	Indicated Cost Rate	Return Component	Component	Indicated Cost Rate	Return Component
		%	%	%	%	%	%
1.	Long-term debt	61.41	5.39	3.31	61.31	5.33	3.27
2.	Short-term debt	<u>0.49</u>	2.75	<u>0.01</u>	<u>0.87</u>	3.35	<u>0.03</u>
3.		61.90		3.32	62.18		3.30
4.	Preference shares	2.10	3.68	0.08	1.82	4.32	0.08
5.	Common equity	<u>36.00</u>	9.72	<u>3.50</u>	<u>36.00</u>	10.12	<u>3.64</u>
6.	Required Return on Rate Base	<u>100.00</u>		<u>6.90</u>	<u>100.00</u>		7.02
	(\$000's)			2015			2016
7.	Ontario Utility Income			1,262.6			(1,324.2)
8.	Rate base			48,721.5			230,219.8
9.	Indicated rate of return			2.59 %			(0.58)%
10.	(Def.) / suff. in rate of return			(4.31)%			(7.60)%

11.	Net (def.) / suff.	(2,099.9)	(17,496.7)
12.	Gross (def.) / suff.	( <u>2,857.0</u> )	( <u>23,805.0</u> )
13.	TCPL / EGD 50% of Gross (def.) / suff.	(1,428.5)	<u>(11,902.5)</u>

#### RATE BASE Segment A Shared GTA Pipeline with TCPL

	(\$000's)		
Line No.		2015	2016
	Property, plant, and equipment		
1.	Cost or redetermined value	48,805.8	234,267.8
2.	Accumulated depreciation	(84.3)	(4,048.0)
3.		48,721.5	230,219.8
	Allowance for working capital		
4.	Accounts receivable merchandise finance plan	-	-
5.	Accounts receivable rebillable projects	-	-
6.	Materials and supplies	-	-
7.	Mortgages receivable	-	-
8.	Customer security deposits	-	-
9.	Prepaid expenses	-	-
10.	Gas in storage	-	-
11.	Working cash allowance		-
12.		<u> </u>	
13.	Ontario utility rate base	48,721.5	230,219.8

#### INCOME Segment A Shared GTA Pipeline with TCPL

	(\$000's)		
Line			
No.		2015	2016
	_		
	Revenue		
1.	Gas sales	-	-
2.	Transportation of gas	-	-
3.	Transmission and compression	-	-
4.	Other operating revenue	-	-
5.	Other income	<u> </u>	-
6.	Total revenue	<u> </u>	-
	Costs and expenses		
7.	Gas costs	-	-
8.	Operation and Maintenance	48.0	234.8
9.	Depreciation and amortization	1.012.0	6.072.0
10.	Municipal and other taxes	149.4	724.1
11.	Total costs and expenses	1,209.4	7,030.9
12.	Utility income before inc. taxes	(1,209,4)	(7.030.9)
		(1,2001)	(1,00010)
	Income taxes		
13.	Excluding interest shield	(2,043.3)	(3,693.4)
14.	Tax shield on interest expense	(428.7)	(2,013.3)
15.	Total income taxes	(2,472.0)	(5,706.7)
16.	Ontario utility net income	1,262.6	(1,324.2)

#### TAXABLE INCOME AND INCOME TAX EXPENSE Segment A Shared GTA Pipeline with TCPL

	(\$000's)		
Line			
No.		2015	2016
1.	Utility income before income taxes	(1,209.4)	(7,030.9)
	Add Backs		
2.	Depreciation and amortization	1,012.0	6,072.0
3.	Large corporation tax	-	-
4.	Other non-deductible items	-	-
5.	Any other add back(s)	<u> </u>	-
6.	Total added back	1,012.0	6,072.0
7.	Sub total - pre-tax income plus add backs	(197.4)	(958.9)
	Deductions		
8.	Capital cost allowance - Federal	5,932.4	11,508.8
9.	Capital cost allowance - Provincial	5,932.4	11,508.8
10.	Items capitalized for regulatory purposes	-	-
11.	Amortization of abore and debt issue expanse	-	-
12.	Amortization of cumulative eligible capital	- 1 580 6	- 1 469 9
14.	Amortization of C.D.E. & C.O.G.P.F.	-	-
15.	Any other deduction(s)	-	-
16.	Total Deductions - Federal	7,513.0	12,978.7
17.	Total Deductions - Provincial	7,513.0	12,978.7
19	Taxable income Enderel	(7 710 4)	(12 027 6)
10. 10	Taxable income - Provincial	(7,710.4)	(13,937.0)
13.		(7,710.4)	(10,907.0)
20.	Income tax provision - Federal	(1,156.6)	(2,090.6)
21.	Income tax provision - Provincial	(886.7)	(1,602.8)
22.	Income tax provision - combined	(2,043.3)	(3,693.4)
23.	Part V1.1 tax	-	-
24.	Investment tax credit	<u> </u>	-
25.	Total taxes excluding tax shield on interest expense	(2,043.3)	(3,693.4)
	Tax shield on interest expense		
26.	Rate base as adjusted	48,721.5	230,219.8
27.	Return component of debt	3.32%	3.30%
28.	Interest expense	1,617.6 26 50.09	7,597.3
29. 20	Linearra tay aradit	<u>20.300</u> %	$\frac{20.300}{(2.042.2)}$
30.	Income tax credit	(428.7)	(2,013.3)
31.	Total income taxes	(2,472.0)	(5,706.7)

#### ALLOWED REVENUE Segment A Shared GTA Pipeline with TCPL

	(\$000's)		
Line No.		2015	2016
	Cost of capital		
1.	Rate base	48.721.5	230.219.8
2.	Required rate of return	6.90%	7.02%
3.	Cost of capital	3,361.8	16,161.4
	Cost of service		
4.	Gas costs	-	-
5.	Operation and Maintenance	48.0	234.8
6.	Depreciation and amortization	1,012.0	6,072.0
7.		149.4	724.1
8.	Cost of service	1,209.4	7,030.9
_	Misc. & Non-Op. Rev		
9.	Other operating revenue	-	-
10.	Other Income		-
11.	Misc, & Non-operating Rev.	-	-
	Income taxes on earnings		
12.	Excluding tax shield	(2,043.3)	(3,693.4)
13.	l ax shield provided by interest expense	(428.7)	(2,013.3)
14.	Income taxes on earnings	(2,472.0)	(5,706.7)
	Taxes on (def) / suff.		
15.	Gross (def.) / suff.	(2,857.0)	(23,805.0)
16.	Net (def.) / suff.	<u>(2,099.9)</u>	<u>(17,496.7)</u>
17.	laxes on (def.) / suff.	757.1	6,308.3
18.	Allowed Revenue	2,856.3	23,793.9
	Revenue at existing Rates		
19.	Gas sales	0.0	0.0
20.	Transportation service	0.0	0.0
21.	Transmission, compression and storage	0.0	0.0
22.	Rounding adjustment	( <u>0.</u> 7)	( <u>11.</u> 1)
23.	Revenue at existing rates	(0.7)	(11.1)
24.	Gross revenue (def.) / suff.	( <u>2,857.0</u> )	( <u>23,805.0</u> )

#### CAPITAL STRUCTURE Segment A GTA EGD not shared with TCPL (2015 - 2016 Cap. Structure)

	(Excluding CIS)		Fiscal 2015			Fiscal 2016				
		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6			
Line No.		Component	Indicated Cost Rate	Return Component	Component	Indicated Cost Rate	Return Component			
		%	%	%	%	%	%			
1.	Long-term debt	61.41	5.39	3.31	61.31	5.33	3.27			
2.	Short-term debt	<u>0.49</u>	2.75	<u>0.01</u>	<u>0.87</u>	3.35	<u>0.03</u>			
3.		61.90		3.32	62.18		3.30			
4.	Preference shares	2.10	3.68	0.08	1.82	4.32	0.08			
5.	Common equity	<u>36.00</u>	9.72	<u>3.50</u>	<u>36.00</u>	10.12	<u>3.64</u>			
6.	Required Return on Rate Base	100.00		<u>6.90</u>	<u>100.00</u>		7.02			

(\$000's)			
	((******)	2015	2016
7.	Ontario Utility Income	193.1	(423.6)
8.	Rate base	10,645.5	50,445.8
9.	Indicated rate of return	1.81 %	(0.84)%
10.	(Def.) / suff. in rate of return	(5.09)%	(7.86)%
11.	Net (def.) / suff.	(541.9)	(3,965.0)
12.	Gross (def.) / suff.	( <u>737.3</u> )	( <u>5,394.6</u> )

#### RATE BASE

#### Segment A GTA EGD not shared with TCPL (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Property, plant, and equipment		
1.	Cost or redetermined value	10,660.7	51,171.4
2.	Accumulated depreciation	(15.2)	(725.6)
3.		10,645.5	50,445.8
	Allowance for working capital		
4.	Accounts receivable merchandise finance plan	-	-
5.	Accounts receivable rebillable projects	-	-
6.	Materials and supplies	-	-
7.	Mortgages receivable	-	-
8.	Customer security deposits	-	-
9.	Prepaid expenses	-	-
10.	Gas in storage	-	-
11.	vvorking cash allowance	<u> </u>	-
12.		<u>-</u>	
13.	Ontario utility rate base	10,645.5	50,445.8

#### INCOME

#### Segment A GTA EGD not shared with TCPL (2015 - 2016 Cap. Structure)

	(\$000's)		
Line			
No.		2015	2016
	Revenue		
1.	Gas sales	-	-
2.	Transportation of gas	-	-
3.	Transmission and compression	-	-
4.	Other operating revenue	-	-
5.	Other income		-
6.	Total revenue		-
	Costs and expenses		
7.	Gas costs	-	-
8.	Operation and Maintenance	115.2	564.1
9.	Depreciation and amortization	181.4	1,088.4
10.	Municipal and other taxes	32.6	158.2
11.	Total costs and expenses	329.2	1,810.7
40		(220.2)	(4 040 7)
12.	Utility income before inc. taxes	(329.2)	(1,810.7)
	Income taxes		
13.	Excluding interest shield	(428.6)	(946.0)
14.	Tax shield on interest expense	(93.7)	(441.1)
15.	Total income taxes	(522.3)	(1,387.1)
40	Out only out little wet have seen	400.4	(400.0)
16.	Untario utility net income	193.1	(423.6)

#### TAXABLE INCOME AND INCOME TAX EXPENSE Segment A GTA EGD not shared with TCPL (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
1.	Utility income before income taxes	(329.2)	(1,810.7)
	Add Backs		
2.	Depreciation and amortization	181.4	1,088.4
3.	Large corporation tax	-	-
4.	Other non-deductible items	-	-
5.	Any other add back(s)	<u> </u>	-
6.	Total added back	181.4	1,088.4
7.	Sub total - pre-tax income plus add backs	(147.8)	(722.3)
	Deductions		
8.	Capital cost allowance - Federal	1,466.0	2,844.0
9.	Capital cost allowance - Provincial	1,466.0	2,844.0
10.	Items capitalized for regulatory purposes	-	-
11.	Deduction for "grossed up" Part V1.1 tax	-	-
12.	Amortization of snare and debt issue expense	- 27	-
13. 14	Amortization of CDE & COGPE		- 3.4
15.	Any other deduction(s)	-	-
16	Total Deductions - Federal	1.469.7	2.847.4
17.	Total Deductions - Provincial	1,469.7	2,847.4
40	Tauahla inaana - Fadaral	(4 047 5)	(2 5 6 0 7)
18.	Laxable Income - Federal	(1,617.5)	(3,569.7)
19.		(1,017.3)	(3,509.7)
20.	Income tax provision - Federal	(242.6)	(535.5)
21.	Income tax provision - Provincial	(186.0)	(410.5)
22.	Income tax provision - combined	(428.6)	(946.0)
23.	Part V1.1 tax	-	-
24.	Investment tax credit		-
25.	Total taxes excluding tax shield on interest expense	(428.6)	(946.0)
	Tax shield on interest expense		
26.	Rate base as adjusted	10,645.5	50,445.8
27.	Return component of debt	3.32%	3.30%
28.	Interest expense	353.4	1,664.7
29.		<u>26.500</u> %	26.500%
30.	Income tax credit	(93.7)	(441.1)
31.	Total income taxes	(522.3)	(1,387.1)

#### ALLOWED REVENUE Segment A GTA EGD not shared with TCPL (2015 - 2016 Cap. Structure)

	(\$000's)		
Line No.		2015	2016
	Cost of capital		
1.	Rate base	10,645.5	50,445.8
2.	Required rate of return	6.90%	7.02%
3.	Cost of capital	734.5	3,541.3
	Cost of service		
4.	Gas costs	-	-
5.	Operation and Maintenance	115.2	564.1
6.	Depreciation and amortization	181.4	1,088.4
7.	Municipal and other taxes	32.6	158.2
8.	Cost of service	329.2	1,810.7
	Misc. & Non-Op. Rev		
9.	Other operating revenue	-	-
10.	Other income	<u> </u>	-
11.	Misc, & Non-operating Rev.	-	-
	Income taxes on earnings		
12.	Excluding tax shield	(428.6)	(946.0)
13.	l ax shield provided by interest expense	(93.7)	(441.1)
14.	Income taxes on earnings	(522.3)	(1,387.1)
	Taxes on (def) / suff.		
15.	Gross (def.) / suff.	(737.3)	(5,394.6)
16.	Net (def.) / suff.	<u>(541.9)</u>	<u>(3,965.0)</u>
17.	Taxes on (def.) / suff.	195.4	1,429.6
18.	Allowed Revenue	736.8	5,394.5
	Revenue at existing Rates		
19.	Gas sales	0.0	0.0
20.	Transportation service	0.0	0.0
21.	Transmission, compression and storage	0.0	0.0
22.	Rounding adjustment	(0.5)	(0,1)
23	Revenue at existing rates	( <u>0.5</u> )	( <u>0 1</u> )
20.		(0.0)	(0.1)
24.	Gross revenue (def.) / suff.	( <u>737.3</u> )	( <u>5,394.6</u> )

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## **KEY ECONOMIC ASSUMPTIONS\***

CALENDAR YEAR	2008	2009	2010	2011	2012F	2013F	2014F	2015F	2016F
CANADA	07	-2.8	32	24	2.0	19	25	2.6	22
U.S.	-0.3	-3.5	2.8	1.8	2.5	2.4	3.0	3.0	3.0
CANADA REAL EXPORTS (% CHANGE)	-4.7	-13.8	6.4	4.6	1.7	2.7	5.5	4.0	3.6
CANADA REAL IMPORTS (% CHANGE)	1.5	-13.4	13.1	7.0	2.6	2.8	4.4	3.6	3.1
CANADA HOUSING STARTS (000's)	211.1	149.1	189.9	194.0	217.5	194.0	189.1	228.0	234.0
CANADA UNEMPLOYMENT RATE (%)	6.1	8.3	8.0	7.6	7.3	7.2	6.9	6.4	6.0
CANADA EMPLOYMENT GROWTH (% CHANGE)	1.7	-1.6	1.4	1.6	1.1	1.2	1.4	1.6	1.4
CONSUMER PRICES (% CHANGE)									
CANADA	2.4	0.3	1.8	2.9	1.7	1.8	2.1	2.0	2.0
U.S.	3.8	-0.4	1.7	3.1	2.0	1.8	2.1	2.0	2.2

## ECONOMIC OUTLOOK: CANADA & U.S.

## **ECONOMIC OUTLOOK: ONTARIO**

CALENDAR YEAR	2008	2009	2010	2011	2012F	2013F	2014F	2015F	2016F
	2000	2000	2010	2011	20121	20101	20141	20101	20101
REAL GDP (% CHANGE)	-0.7	-3.8	3.0	2.7	1.9	2.0	2.6	2.9	2.8
REAL MANUFACTURING OUTPUT (% CHANGE)	-8.9	-15.7	6.5	2.4	3.2	3.8	3.2	2.5	2.2
HOUSING STARTS (000's)	75.1	50.4	60.4	67.8	76.6	64.4	61.8	72.8	74.3
UNEMPLOYMENT RATE (%)	6.5	9.0	8.6	7.8	7.9	7.8	7.5	6.7	6.4
EMPLOYMENT GROWTH (% CHANGE)	1.5	-2.4	1.6	1.8	0.7	1.1	1.5	1.6	1.5
CONSUMER PRICES (% CHANGE)	2.3	0.4	2.4	3.1	1.7	1.9	2.1	2.0	2.0
RETAIL SALES (% CHANGE)	3.9	-2.5	5.4	3.6	2.4	3.2	4.0	4.2	3.9
WAGE RATE (% CHANGE)	5.8	6.5	5.3	1.6	1.7	2.6	2.8	2.8	2.8
REAL RESIDENTIAL NATURAL GAS PRICE (% CHANGE)	1.5	-17.8	-13.2	-11.5	-10.2	13.0	4.6	1.6	2.1
REAL COMMERCIAL NATURAL GAS PRICE (% CHANGE)	1.6	-19.8	-14.5	-12.8	-12.1	16.1	5.6	2.2	2.7

\* The forecasts have been updated to reflect the Q1 2013 Economic Outlook.

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## ECONOMIC OUTLOOK: REGIONS

Economic Outlook

REGIONS										
CALENDAR YEAR	2008	2009	2010	2011	2012	2013F	2014F	2015F	2016F	
FRANCHISE HOUSING STARTS (000's)	50.8	32.7	38.8	47.9	55.4	41.7	39.9	47.1	48.2	
GTA										
HOUSING STARTS (000's)	42.4	25.8	30.9	40.5	48.0	34.7	33.1	39.2	39.9	
SINGLES	11.9	8.4	12.0	12.1	11.8	13.0	12.1	13.9	13.9	
MULTIPLES	30.4	17.4	18.9	28.5	36.2	21.7	21.0	25.3	26.0	
CONSUMER PRICES (% CHANGE)	2.4	0.5	2.5	3.0	1.6	1.8	1.9	1.9	1.9	
EMPLOYMENT GROWTH (% CHANGE)	1.8	-1.7	2.1	2.1	0.8	1.3	1.9	1.9	1.9	
COMMERCIAL VACANCY RATE (%)	5.4	6.9	7.9	7.0	6.8	6.8	6.8	6.8	6.8	
INDUSTRIAL VACANCY RATE (%)	5.9	7.0	6.5	6.1	6.1	6.1	6.1	6.1	6.1	
VINTAGE METRO REGION CENTRAL WEATHER ZONE (% CHANGE)	-0.9	-0.9	-1.1	-1.0	-1.0	-1.0	-1.0	-0.9	-0.9	
VINTAGE WESTERN REGION CENTRAL WEATHER ZONE (% CHANGE)	-2.1	-2.1	-3.3	-2.9	-2.8	-2.7	-2.7	-2.7	-2.6	
VINTAGE CENTRAL REGION CENTRAL WEATHER ZONE (% CHANGE)	-2.7	-2.7	-2.9	-2.0	-1.8	-1.7	-1.7	-1.7	-1.6	
VINTAGE NORTHERN REGION CENTRAL WEATHER ZONE (% CHANGE)	-3.1	-3.1	-5.0	-3.8	-3.6	-3.5	-3.5	-3.4	-3.4	
CENTRAL HEATING DEGREE DAYS**	2919	2922	2659	2856	2388	2818	2679	2679	2679	
EASTERN										
HOUSING STARTS (000's)	7.2	6.0	6.6	6.0	6.2	5.7	5.6	6.6	6.9	
SINGLES	3.1	2.6	2.4	2.2	1.7	2.4	2.3	2.7	2.8	
MULTIPLES	4.1	3.4	4.2	3.8	4.5	3.3	3.3	3.9	4.1	
CONSUMER PRICES (% CHANGE)	2.2	0.6	2.5	3.0	1.4	1.6	1.7	1.7	1.7	
EMPLOYMENT GROWTH (% CHANGE)	4.0	-1.4	1.3	0.1	2.5	1.7	1.8	1.8	1.8	
VINTAGE EASTERN WEATHER ZONE (% CHANGE)	-3.1	-3.1	-2.0	-2.6	-2.6	-2.6	-2.6	-2.6	-2.5	
EASTERN HEATING DEGREE DAYS **	3458	3526	3092	3261	3160	3318	3275	3275	3275	
NIAGARA										
HOUSING STARTS (000's)	1.3	1.0	1.3	1.3	1.2	1.3	1.2	1.4	1.4	
SINGLES	0.8	0.7	0.9	0.7	0.7	0.8	0.8	0.9	0.9	
MULTIPLES	0.5	0.3	0.4	0.6	0.5	0.4	0.4	0.5	0.5	
EMPLOYMENT GROWTH (% CHANGE)	2.9	-6.0	1.8	2.5	2.7	1.7	1.9	1.9	1.9	
VINTAGE NIAGARA WEATHER ZONE (% CHANGE)	-1.1	-1.1	-0.3	-0.9	-0.8	-0.8	-0.8	-0.7	-0.7	
NIAGARA HEATING DEGREE DAYS **	2761	2821	2650	2737	2318	2690	2667	2667	2667	

\* The forecasts have been updated to reflect the Q1 2013 Economic Outlook.

\*\*Balance Point Heating Degree Days are adjusted for billing cycles. The 2013 Degree Day forecasts are generated by the methods contained in the Settlement Agreement dated October 26, 2012 (EB-2011-0354). The 2014 Degree Day forecasts for all weather zones represent the Company's proposed Degree Day methodologies for 2014-2016 (EB-2012-0459 Exhibit C, Tab 2, Schedule 1). Degree Day forecasts for 2015 and 2016 will be updated.

Witnesses: H. Sayyan M. Suarez

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## HEATING DEGREE DAYS

 The purpose of this evidence is to provide the forecast of degree days for the 2014 Fiscal Year and the forecast methodologies for each of the Central, Eastern, and Niagara weather zones within the Company's franchise area for the 2014 Fiscal Year and over the Customized IR term to 2016.

## Background:

- 2. In the Settlement Agreement dated October 26, 2012, which was accepted by the Board in its Decision on Revised Settlement Agreement dated November 2, 2012, the Company settled the 2013 degree day forecast and degree day methodologies for all of its weather zones (EB-2011-0354, Exhibit N1, Tab 1, Schedule 1, page 15). The Company agreed to apply the 10-year Moving Average to forecast 2013 degree days for the Central Delivery Area and the Niagara Delivery Area, and to use the de Bever with Trend methodology for the Eastern Delivery Area. The selection of forecast methodology was based on the Board-Approved evaluation framework which was first set out in EB-2006-0034 for the 2007 Test Year. The evaluation framework involves the assessment of nine different forecasting methodologies<sup>1</sup> to determine the most appropriate method using a consistent set of criteria. The methodology that ranks best is used to produce the forecast.
- 3. In its original 2013 application (EB-2011-0354 Exhibit C2, Tab 3, Schedule 1 filed January 31, 2012), the Company first applied the evaluation framework using data up to and including 2010, as that was the latest full year of actual data. The results indicated that the 20-year Trend consistently ranked first for the Central region.

<sup>&</sup>lt;sup>1</sup> The nine methodologies are: the Naïve, 10-Year Moving Average, 20-Year Moving Average, 20-Year Trend, 30-Year Moving Average, 50/50 (Average of 20-Year Trend and 30-Year Moving Average), de Bever, de Bever with Trend, and the Energy Probe.

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- 4. In its Evidence Update filed June 1, 2012, data up to and including 2011 were used in the evaluation framework. With the inclusion of one additional year of data, results had changed and showed that the 10-year Moving Average was the top performing method.
- 5. The same evaluation framework was carried out for both Eastern and Niagara regions. Using data up to and including 2010, the scores supported the use of the de Bever with Trend and 10-year Moving Average for the Eastern and Niagara regions, respectively. Updating the evaluation framework with data up to and including 2011 showed no change to the results from the original 2013 application.
- 6. The close results between the 10-year Moving Average and 20-year Trend methodologies for the Central region prompted the Company to carry out the evaluation framework beyond only the test year to determine the long term consistency of each methodology's ranking over time. This evaluation suggested that the 20-year Trend methodology performed best (most consistent high score) over the long term. As set out in the Settlement Agreement for the 2013 Test Year, however, parties settled to adhere to the ranking results of the 2013 evaluation framework only, which showed that the 10-year Moving Average had the best score for 2013 based on ranking criteria.

## Methodology for Customized IR Period:

7. Guided by this Settlement Agreement and the Board's Decision, the Company carried out the evaluation framework with actual data to 2012, to determine the methodology with which to generate the 2014 test year forecast of degree days for each of the Central, Eastern, and Niagara regions. The methods determined

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through the analyses are proposed to apply for the Customized IR term from 2014 to 2016. Tables with data and results follow in pages 3 to 5.

## Table 1:

**CENTRAL** Actual and Predicted Central weather zone Environment Canada Degree Days ('out-of-sample'), 1990 to 2012

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 11	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
Calendar Year	Actual	Naïve	10-yr MA	20-yr MA	20-yr Trend	30-yr MA	50/50	de Bever	de Bever with Trend	Energy Probe
1990	3,631	4,076	4,110	4,188	4,003	4,179	4,091	4,019	3,964	3,981
1991	3,686	4,250	4,111	4,186	4,029	4,187	4,108	4,088	4,098	4,176
1992	4,112	3,631	4,036	4,152	3,927	4,174	4,050	3,984	3,878	3,918
1993	4,180	3,686	3,990	4,128	3,829	4,166	3,997	3,930	3,692	3,689
1994	4,115	4,112	3,982	4,105	3,883	4,166	4,025	3,996	3,831	3,830
1995	4,040	4,180	3,994	4,117	3,879	4,168	4,023	4,067	3,962	3,943
1996	4,177	4,115	3,991	4,111	3,894	4,166	4,030	4,087	4,017	4,019
1997	4,026	4,040	3,984	4,113	3,865	4,155	4,010	4,109	4,032	4,029
1998	3,220	4,177	4,003	4,098	3,926	4,152	4,039	4,140	4,067	4,074
1999	3,539	4,026	4,029	4,090	3,922	4,143	4,032	4,120	4,037	4,031
2000	3,826	3,220	3,944	4,027	3,787	4,107	3,947	3,928	3,829	3,768
2001	3,420	3,539	3,873	3,992	3,710	4,082	3,896	3,834	3,768	3,688
2002	3,630	3,826	3,892	3,964	3,727	4,065	3,896	3,814	3,779	3,762
2003	3,982	3,420	3,866	3,928	3,634	4,041	3,837	3,693	3,557	3,570
2004	3,798	3,630	3,817	3,900	3,604	4,009	3,807	3,640	3,548	3,603
2005	3,797	3,982	3,797	3,896	3,644	4,010	3,827	3,813	3,711	3,775
2006	3,378	3,798	3,766	3,878	3,656	3,996	3,826	3,848	3,737	3,802
2007	3,722	3,797	3,741	3,863	3,668	3,989	3,828	3,860	3,739	3,831
2008	3,837	3,378	3,662	3,832	3,581	3,952	3,766	3,748	3,655	3,650
2009	3,836	3,722	3,631	3,830	3,548	3,937	3,742	3,745	3,670	3,648
2010	3,501	3,837	3,693	3,818	3,582	3,915	3,749	3,777	3,703	3,716
2011	3,648	3,836	3,722	3,798	3,642	3,902	3,772	3,813	3,739	3,768
2012	3,215	3,501	3,690	3,791	3,557	3,873	3,715	3,745	3,674	3,696
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### Table 2:

CENTRAL Out of sample forecast performance all available years (1990-2012)

Col. 1	Col. 2	C3	Col. 4	C5	Col. 6	C7	Col. 8	C9	Col. 10	C11	Col. 12	Col. 13
		Accuracy				Sym	Imetry		Stability			
	MADE		DMSDE		MDE		Percent		Standard		Score	Overall
			KWOF L				Overforecast		Deviation		Scole	Rank
Naïve	8.7%	8	11.0%	8	2.3%	3	61%	3	286	9	31	7
10-yr MA	6.5%	1	8.9%	2	4.0%	5	61%	3	148	4	15	2
20-yr MA	7.3%	6	10.4%	7	6.9%	8	74%	8	137	3	32	8
20-yr Trend	6.6%	3	8.0%	1	0.7%	1	39%	3	153	6	14	1
30-yr MA	9.0%	9	11.8%	9	8.9%	9	91%	9	104	1	37	9
50% 20-yr Trend / 50% 30-yr MA	6.6%	2	9.2%	3	4.8%	7	61%	3	126	2	17	3
de Bever	7.2%	4	9.8%	6	4.6%	6	65%	7	152	5	28	6
de Bever with Trend	7.3%	5	9.4%	4	2.2%	2	57%	2	164	7	20	4
Energy Probe	7.5%	7	9.5%	5	2.5%	4	52%	1	166	8	25	5
									1		I	

### Table 3:

*EASTERN* Actual and Predicted Eastern weather zone Environment Canada Degree Days ('out-of-sample'), 1990 to 2012

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 11	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
Calendar Year	Actual	Naïve	10-yr MA	20-yr MA	20-yr Trend	30-yr MA	50/50	de Bever	de Bever with Trend	Energy Probe
1990	4,250	4,640	4,579	4,670	4,483	4,688	4,585	4,620	4,490	4,472
1991	4,303	4,931	4,613	4,682	4,543	4,695	4,619	4,674	4,639	4,648
1992	4,861	4,250	4,546	4,649	4,479	4,688	4,583	4,599	4,524	4,525
1993	4,780	4,303	4,533	4,625	4,424	4,679	4,551	4,538	4,453	4,453
1994	4,730	4,861	4,554	4,617	4,526	4,680	4,603	4,628	4,549	4,548
1995	4,585	4,780	4,579	4,635	4,535	4,675	4,605	4,665	4,585	4,579
1996	4,603	4,730	4,598	4,635	4,567	4,680	4,624	4,687	4,567	4,533
1997	4,786	4,585	4,591	4,639	4,540	4,673	4,607	4,687	4,538	4,531
1998	3,828	4,603	4,601	4,618	4,581	4,670	4,626	4,673	4,541	4,546
1999	4,137	4,786	4,647	4,628	4,614	4,667	4,641	4,678	4,604	4,611
2000	4,543	3,828	4,566	4,572	4,484	4,635	4,559	4,512	4,515	4,417
2001	4,115	4,137	4,486	4,550	4,392	4,617	4,504	4,570	4,420	4,395
2002	4,381	4,543	4,515	4,531	4,440	4,605	4,522	4,566	4,446	4,447
2003	4,715	4,115	4,497	4,515	4,338	4,582	4,460	4,408	4,341	4,357
2004	4,637	4,381	4,449	4,501	4,327	4,561	4,444	4,380	4,339	4,412
2005	4,421	4,715	4,442	4,510	4,377	4,571	4,474	4,538	4,430	4,530
2006	4,037	4,637	4,433	4,516	4,408	4,568	4,488	4,586	4,436	4,525
2007	4,447	4,421	4,416	4,504	4,406	4,565	4,485	4,572	4,427	4,503
2008	4,488	4,037	4,360	4,480	4,306	4,532	4,419	4,490	4,394	4,357
2009	4,534	4,447	4,326	4,486	4,279	4,527	4,403	4,506	4,426	4,401
2010	3,973	4,488	4,392	4,479	4,299	4,512	4,406	4,510	4,430	4,430
2011	4,144	4,534	4,432	4,459	4,370	4,510	4,440	4,528	4,442	4,462
2012	4,072	3,973	4,375	4,445	4,239	4,479	4,359	4,437	4,372	4,382

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### Table 4:

EASTERN Out of sample forecast performance all available years (1990-2012)

Col. 1	Col. 2	C3	Col. 4	C5	Col. 6	C7	Col. 8	C9	Col. 10	C11	Col. 12	Col. 13
		Accuracy				Syn	nmetry		Stabi	lity		·
	MAPE		RMSPF		MPF		Percent		Standard		Score	Overall
			ranor E				Overforecast		Deviation		000.0	Rank
Naïve	8.4%	9	10.1%	9	1.8%	2	57%	4	298	9	33	7
10-yr MA	5.7%	3	7.3%	3	2.6%	5	52%	1	92	7	19	4
20-yr MA	5.8%	5	7.8%	6	4.0%	7	65%	6	75	2	26	6
20-yr Trend	5.7%	2	7.1%	1	1.0%	1	43%	4	106	8	16	2
30-yr MA	6.2%	7	8.4%	7	5.0%	9	70%	9	70	1	33	7
50% 20-yr Trend / 50% 30-yr MA	5.7%	1	7.5%	5	3.0%	6	65%	6	86	5	23	5
de Bever	6.5%	8	8.4%	8	4.1%	8	65%	6	90	6	36	9
de Bever with Trend	5.7%	4	7.3%	2	2.0%	3	52%	1	83	4	14	1
Energy Probe	6.1%	6	7.4%	4	2.1%	4	52%	1	81	3	18	3
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### Table 5:

### NIAGARA

Actual and Predicted Niagara weather zone Environment Canada Degree Days ('out-of-sample'), 1990 to 2012

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 11	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
Calendar Year	Actual	Naïve	10-yr MA	20-yr MA	20-yr Trend	30-yr MA	50/50	de Bever	de Bever with Trend	Energy Probe
1990	3,307	3,693	3,693	3,703	3,685	3,705	3,695	3,633	3,651	3,679
1991	3,343	3,845	3,697	3,721	3,686	3,711	3,698	3,683	3,733	3,827
1992	3,759	3,307	3,635	3,697	3,607	3,697	3,652	3,619	3,585	3,623
1993	3,878	3,343	3,596	3,681	3,526	3,687	3,607	3,582	3,462	3,464
1994	3,780	3,759	3,600	3,677	3,562	3,692	3,627	3,640	3,568	3,568
1995	3,703	3,878	3,623	3,699	3,576	3,693	3,635	3,688	3,661	3,670
1996	3,786	3,780	3,630	3,701	3,598	3,701	3,650	3,697	3,693	3,731
1997	3,669	3,703	3,635	3,711	3,571	3,693	3,632	3,705	3,705	3,727
1998	2,980	3,786	3,653	3,704	3,615	3,704	3,659	3,708	3,754	3,736
1999	3,338	3,669	3,676	3,701	3,612	3,699	3,656	3,694	3,740	3,710
2000	3,596	2,980	3,605	3,649	3,500	3,670	3,585	3,624	3,639	3,539
2001	3,239	3,338	3,554	3,626	3,453	3,665	3,559	3,613	3,577	3,492
2002	3,415	3,596	3,583	3,609	3,486	3,659	3,573	3,617	3,580	3,586
2003	3,799	3,239	3,573	3,584	3,423	3,645	3,534	3,585	3,475	3,531
2004	3,632	3,415	3,538	3,569	3,405	3,631	3,518	3,575	3,468	3,589
2005	3,653	3,799	3,530	3,577	3,464	3,642	3,553	3,626	3,547	3,657
2006	3,163	3,632	3,516	3,573	3,494	3,639	3,566	3,636	3,558	3,633
2007	3,296	3,653	3,511	3,573	3,521	3,644	3,583	3,650	3,547	3,664
2008	3,480	3,163	3,448	3,551	3,437	3,619	3,528	3,607	3,511	3,484
2009	3,565	3,296	3,411	3,544	3,368	3,604	3,486	3,576	3,490	3,414
2010	3,344	3,480	3,461	3,533	3,374	3,586	3,480	3,564	3,483	3,464
2011	3,458	3,565	3,484	3,519	3,422	3,578	3,500	3,572	3,481	3,513
2012	3,021	3,344	3,458	3,521	3,357	3,559	3,458	3,545	3,490	3,543

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### Table 6:

Col. 1	Col. 2	C3	Col. 4	C5	Col. 6	C7	Col. 8	C9	Col. 10	C11	Col. 12	Col. 13
		Accuracy				Syn	nmetry		Stability			
	MAPE		RMSPE		MPE		Percent Overforecast		Standard Deviation		Score	Overall Rank
Naïve	9.0%	9	11.0%	9	1.9%	2	61%	4	246	9	33	8
10-yr MA	6.3%	1	8.2%	2	2.9%	3	52%	1	82	5	12	1
20-yr MA	6.4%	3	8.8%	4	4.5%	7	61%	4	72	4	22	4
20-yr Trend	6.6%	4	8.0%	1	1.2%	1	43%	3	98	7	16	3
30-yr MA	6.8%	5	9.3%	7	5.4%	9	65%	8	45	1	30	7
50% 20-yr Trend / 50% 30-yr MA	6.4%	2	8.4%	3	3.3%	4	52%	1	70	3	13	2
de Bever	6.8%	6	9.1%	5	4.6%	8	65%	8	49	2	29	6
de Bever with Trend	7.0%	7	9.2%	6	3.3%	5	61%	4	96	6	28	5
Energy Probe	7.0%	8	9.5%	8	3.9%	6	61%	4	107	8	34	9

NIAGARA Out of sample forecast performance all available years (1990-2012)

- 8. The addition of 2012 actual degree days in the Eastern and Niagara regions do not show any deviation from the methods previously proposed and approved for 2013. The de Bever with Trend and 10-year Moving Average continue to rank first in the Eastern and Niagara weather zones, respectively. No further validation was carried out for these regions because of the consistent results.
- 9. Results of the evaluation framework for Central region show that the addition of the 2012 latest actual has yet again flipped the ranking of methodologies, this time from the 10-year Moving Average in 2013 in favor of the 20-year Trend in 2014. As before, the rank is separated by a single point in score.
- 10. Since 1993, scores between the 10-year Moving Average and 20-year Trend methodologies have converged using the evaluation framework as the 10-year Moving Average started to include the warmer years of 1998 and 1999. The scores and ranks have been consistently close since 2000. With the conversion of actual data to calendar years for the 2008 test year, both methods have alternated ranks, closely separated by only one to two points in each year. The 50:50 method (50% 20-year Trend and 50% 30-year Moving Average) is a close third; its inclusion in the top three methods further supporting the strong performance of the 20-year

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Trend for this region. The remaining six methodologies (including the 30-year Moving Average on its own) have scores which do not approach the performance of the top three, hence are not shown in the following table.

		20-yr Tren	d	10-yr MA		50:50 (30-yr MA	50:50 (30-yr MA & 20-yr Trend)		
Test Year	Actual Data to	rank	score	rank	score	rank	score		
1993	1991	1	9	4	20	4	20		
1994	1992	1	11	5	23	4	18		
1995	1993	3	19	4	20	1	14		
1996	1994	2	17	4	21	2	17		
1997	1995	3	20	5	23	2	16		
1998	1996	6	26	4	20	3	19		
1999	1997	9	31	3	21	2	18		
2000	1998	1	18	1	18	1	18		
2001	1999	2	16	1	15	1	15		
2002	2000	3	18	2	18	1	13		
2003	2001	1	13	3	15	2	14		
2004	2002	1	9	2	15	2	15		
2005	2003	3	14	1	12	3	15		
2006	2004	3	16	1	13	2	15		
2007	2005	3	17	1	14	2	16		
2008	2006	1	13	2	15	3	17		
2009	2007	1	13	2	14	3	17		
2010	2008	2	16	1	15	3	15		
2011	2009	2	19	1	15	1	15		
2012	2010	1	16	1	15	1	16		
2013	2011	2	16	1	15	3	17		
2014	2012	1	14	2	15	3	15		

### Table 7:

- 11. Scores and ranks in the preceding table show the superior predictive ability of the 10-year Moving Average and 20-year Trend methods in forecasting degree days for the Central region. Since 1993, the 20-year Trend and 10-year Moving Average methodologies have ranked first equal times and have averaged scores of 16 and 17, respectively.
- 12. The 20-year Trend picks up weather patterns since 1993 when the Central zone had actual heating degree days in excess of 4000, to more recent weather in 2012 where heating degree days hit their lowest mark in 20 years. As a result, the trend

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captures a deeper decline than the 10-year moving average which only takes into account weather since 2003.

 Chart 1 shows how actual degree days have tracked against 10-year Moving Average forecasts and the forecasts from the 20-year Trend methodology in each test year.



Chart 1: Actual and Forecast HDD for Central Region, Environment Canada DD

14. Forecasts from the 10-year Moving Average have been higher than the 20-year Trend forecasts by 125 degree days on average since 1993. Further, there is almost equal likelihood of actual degree days being higher or lower than either the 10-year Moving Average or the 20-year Trend. As shown in Table 7, since 1993,

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ranks and scores between the two methods have converged and are now fairly close.

- 15. Results of these analyses contributed to the expectation that the close-tracking capabilities of the two models could continue and that each would continue to score similarly with each additional year of actual data included in the evaluation framework analysis. Taking it further, the results seemed to indicate that a combination of the two best-ranking methodologies could achieve even better results than either methodology alone.
- 16. To test this hypothesis, the Company carried out the evaluation framework with the addition of a 10<sup>th</sup> methodology: a 50:50 Hybrid of the 10-year Moving Average and the 20-year Trend methodologies. The results are shown in Table 8.

Col. 1	Col. 2	C3	Col. 4	C5	Col. 6	C7	Col. 8	C9	Col. 10	C11	Col. 12	Col. 13
		Accuracy				Sym	nmetry		Stability			
	MAPE		RMSPE		MPE		Percent Overforecast		Standard Deviation		Score	Overall Rank
Naïve	8.7%	9	11.0%	9	2.3%	3	61%	4	286	10	35	8
10-yr MA	6.5%	2	8.9%	3	4.0%	6	61%	4	148	4	19	3
20-yr MA	7.3%	7	10.4%	8	6.9%	9	74%	9	137	3	36	9
20-yr Trend	6.6%	4	8.0%	1	0.7%	1	39%	4	153	7	17	2
30-yr MA	9.0%	10	11.8%	10	8.9%	10	91%	10	104	1	41	10
50% 20-yr Trend / 50% 30-yr MA	6.6%	3	9.2%	4	4.8%	8	61%	4	126	2	21	4
de Bever	7.2%	5	9.8%	7	4.6%	7	65%	8	152	6	33	7
de Bever with Trend	7.3%	6	9.4%	5	2.2%	2	57%	3	164	8	24	5
Energy Probe	7.5%	8	9.5%	6	2.5%	5	52%	1	166	9	29	6
50:50 Hybrid	6.5%	1	8.3%	2	2.4%	4	48%	1	149	5	13	1

Table 8: Evaluation Framework with 10 Methods, Actuals to 2012

CENTRAL with 50:50 Hybrid Methodology Out of sample forecast performance all available years (1990-2012)

17. As shown in Column 13, not only is the Company's expectation upheld in that the 50:50 Hybrid ranks first over the 10-year Moving Average and the 20-year Trend, but the score of the Hybrid method is vastly superior compared to each of its component methodologies.

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18. Testing the evaluation framework over time to validate the persistence of the 50:50Hybrid using all available data further supports the superiority of the Hybrid over the 10-year Moving Average and the 20-year Trend. Results are shown in Table 9:

		20 yr trend		10 yr MA		50/50 Hyb	orid
Test Year	Actual Data to	rank	score	rank	score	rank	score
1993	1991	1	10	4	23	3	17
1994	1992	1	12	5	26	3	19
1995	1993	2	21	3	22	2	21
1996	1994	2	19	5	23	4	21
1997	1995	5	23	6	25	3	18
1998	1996	6	30	4	22	2	19
1999	1997	10	35	4	23	3	20
2000	1998	1	20	1	20	2	21
2001	1999	2	18	1	17	1	17
2002	2000	3	21	2	20	1	15
2003	2001	2	16	3	18	1	15
2004	2002	1	10	3	18	2	15
2005	2003	2	17	1	15	1	15
2006	2004	4	19	1	15	2	16
2007	2005	4	20	1	16	2	17
2008	2006	1	16	2	18	1	16
2009	2007	1	16	2	17	1	16
2010	2008	3	19	1	17	2	18
2011	2009	3	22	1	17	2	20
2012	2010	2	19	2	18	1	18
2013	2011	3	19	2	18	1	15
2014	2012	2	17	3	19	1	13

	Т	ab	le	9:
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19. Over the last few years, the 20-year Trend and 10-year Moving Average methods were indiscernibly close in performance, resulting in one method being selected over another by a single point in score. The Hybrid's performance shows marked improvement over both of its methodology components, scoring six points better than the 10-year Moving Average and four points better than the 20-year Trend using data to 2012.

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- 20. The Company went on to test various combinations of a hybrid method (varying percentages of both the 10-year Moving Average and 20-year Trend). The results showed that some combinations result in scores that are even better than the 50:50 Hybrid. However, given the erratic weather that could emerge in any given period which could potentially skew prevailing weather trends and results, varying combinations may become more or less preferred depending on the timeframe of the analysis. As weather continues to be volatile, it is expected that the 50:50 Hybrid will be able to combine longer-term dynamics from the 20-year Trend and more recent weather experiences with the 10-year Moving Average to respond to warmer or colder scenarios in the next few years. By taking an even split of the best methods proven for the Central region, the Company is assured that rate impacts are mitigated while maintaining the most accurate, reliable, and consistent forecasts over time.
- 21. The Company proposes to use the 50:50 Hybrid method to forecast degree days for the Central weather zone, the de Bever with Trend method for the Eastern weather zone, and the 10-year Moving Average for the Niagara weather zone for the 2014 Fiscal Year, and over the term of the Customized IR.

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### 2014 Degree Day Forecasts:

### Table 10:

Summary of 2014 Proposed Degree Days & Methodology										
	2014 Proposed Degree Day Methodology <i>Actuals to 2012</i>	Environment Canada Degree Days	Gas Supply Degree Days							
Central Eastern Niagara	50% 10-yr MA & 50% 20-yr Trend de Bever with Trend 10-year Moving Average	3,552 4,278 3,441	3,517 4,243 3,386							

### 2015 and 2016 Degree Day Forecasts:

22. For the purpose of generating rate impact estimates for 2015 and 2016, degree days were assumed at the proposed 2014 level. It is the Company's intent to update its 2015 degree day forecast as part of the 2015 volumetric update using the same proposed methodologies in Table 10 to incorporate actual data to 2013. Similarly, the 2016 degree day forecast will be updated as part of the 2016 volumetric update using the same proposed methodologies that will include actual data to 2014. Please refer to evidence at Exhibit A2, Tab 3, Schedule 1 relating to the Company's annual rate adjustment proposal for the 2015 and 2016 fiscal years.

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### AVERAGE USE FORECASTING MODEL

- The purpose of this evidence is to present the forecasting methodology used to forecast average use for Rate 1 revenue class 20 and Rate 6 revenue classes 12, 48 and 73<sup>1</sup>. Rate 1 is the Company's residential rate class and Rate 6 is the Company's small apartment, commercial and industrial rate class. The forecasting methodologies for the other revenue classes in Rate 1 and Rate 6 are very similar to the models presented in this exhibit.
- Revenue class 20 is forecast to comprise 88% of Rate 1 volumes while revenue classes 12, 48 and 73 are forecast to collectively comprise 92% of Rate 6 volumes in each of 2014<sup>2</sup>, 2015, and 2016.
- 3. For the 2001 budget, the Company moved to a more objective forecasting methodology in order to address the Board's concern with the systematic bias attributed to the grassroots forecasting process. This forecasting methodology would remove systematic or subjective bias by developing regression models to forecast average use for the Company's Rate 1 general service customers and Rate 6 general service customers. The econometric methodology has been in place since 2001 and the forecasts produced have been accepted in settlement

<sup>&</sup>lt;sup>1</sup> Rate 1 is comprised of: revenue class 10 - residential heating, revenue class 20 - residential space heating and water heating, revenue class 50 - space heating, water heating and pool heating, revenue class 60 – residential general service and revenue class 61 – residential water heating. Rate 6 is comprised of: revenue class 12 – apartment heating and other uses, revenue class 48 commercial heating and other uses, revenue class 73 industrial heating and other uses, revenue class 79 commercial general service, revenue class 83 – industrial general service, revenue class 86 – apartment general service, revenue class 90 – commercial air conditioning and space heating.

<sup>&</sup>lt;sup>2</sup> All data, models and forecasts are calculated using a calendar (i.e., December) year end.

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proposals and Board decisions since. As shown in Tables 1 to 3, 5 and 8, the models exhibit a high R<sup>2</sup> and low Root Mean Squared Percentage Error ("RMSPE") indicating the regression model is a good predictor of average use.

- 4. The year-over-year growth rates in average use for all revenue classes are used as the basis for the average use forecast for Rate 1 and Rate 6 as shown at Exhibit C1, Tab 2, Schedule 1, Appendix A. Factors influencing overall average use include new customers (both new construction and replacement customers), the timing of new customer additions to the system, rate migration, gas prices, economic conditions and the Company's DSM programs. While average use changes for Rate 1 are fairly reflective of regression model results because of the homogenous nature of customers within this class, modeled Rate 6 average uses may be adjusted to account for rate migration or specific changes in usage patterns for customers within this class. Please refer to Exhibit C1, Tab 2, Schedule 1 for a detailed explanation of the derivation of the Company's gas volume budget.
- 5. Average use is defined as gas volume per unlock customer. The econometric models presented here utilize historical data and relationships to derive a top down forecast of average use. The models presented in the exhibit incorporate updated driver variables and historical data obtained from federal and provincial statistical agencies and the Company's database. Maintaining an econometric model is an ongoing process; consequently, the models must be monitored and refined to ensure they are valid and produce accurate forecasts of general service average use.
- 6. While the regression models generate changes in average use for 2014 to 2016 which form the basis for volumetric projections for these periods, it is the Company's intent to update the driver variables, the models, and the average use

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growth rates each subsequent year so as to accurately capture contributing factors that influence changes in average use and ultimately volumes. The updated average use would be normalized to the degree days proposed for that year. Please refer to evidence at Exhibit A2, Tab 3, Schedule 1 relating to the Company's annual rate adjustment proposal for the 2015 and 2016 fiscal years.

### Error Correction Model

- 7. The Company uses the Error Correction Model ("ECM") to forecast the average use for Rate 1 and Rate 6. The ECM and the two step estimation procedure are described more fully in Engle and Granger (1987).<sup>3</sup> The ECM uses the concept of co-integration or long-run association between variables. In other words, variables hypothesized to be linked by some theoretical economic relationship should not diverge from each other in the long run. Such variables may drift apart in the short run; however, if they were to diverge without bound, an equilibrium relationship among such variables could not be said to exist. The ECM methodology has been used extensively in the energy field for modeling electricity sales<sup>4</sup> and natural gas prices<sup>5</sup>.
- 8. The major difference between the ECM approach and the standard dynamic singleequation model is the ECM approach explicitly takes into account both long-run equilibrium and short-run dynamic relationships in the determination of average use. It is known that economic theory can provide useful information about the variables relevant in the long-run. However, it is relatively silent on the short-run dynamics between variables.

<sup>&</sup>lt;sup>3</sup> Engle, R.F. and Granger, C.W.J (1987), "Cointegration and Error Correction: Representation, Estimation and Testing," *Econometrica*, Vol. 55, No.2.

<sup>&</sup>lt;sup>4</sup> Engle, R.F., Granger, C.W.J. and Hallman, J.J. (1989), "Merging Short- and Long-Run Forecasts: An Application to Monthly Electricity Sales Forecasting," *Journal of Econometrics*, Vol.40.

<sup>&</sup>lt;sup>5</sup> Bopp, A.E. (1990), "An Analytical Approach to Forecasting Natural Gas Prices," *AGA Forecasting Review*: American Gas Association.

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The ECM approach allows the historical data to determine the lag structures and short run dynamics.

9. The estimated models are used to generate a normalized forecast of average use. The main purpose of the normalized forecast is to compute average use such that the weather impact has been taken out. Using the estimated coefficients, weather normalized average use data are obtained by replacing actual degree days in the model with proposed degree days for 2014.

### Average Use Forecasting Methodology

- 10. The model's specification is based on an objective criterion: to minimize both in-sample and out-of-sample forecast error. The discrepancy between actual average use and the model's forecast can be segregated into three major sources of uncertainty: (1) model specification, (2) forecast error from the driver variables used in the model, and (3) unexpected shocks or structural breaks. Sources (2) and (3) are not within the Company's control and will inevitably occur regardless of which forecasting methodology is adopted. Therefore the objective of the modeling procedure, described below, is to minimize the controllable source of error, the model's specification.
- 11. The main criterion for assessing the model's predictive ability is the model's forecast accuracy. A comparison of actual un-normalized average use versus the forecasts produced by the model is used to assess predictive ability. Forecast accuracy for the 2014 Fiscal Year is measured using both in-sample and out-of-sample Mean Percentage Error ("MPE") and RMSPE. In-sample, or ex-post, means that the estimated model incorporates the entire sample, in this case 1985 to 2012. Out-of-sample, or ex-ante, means that the model incorporates only a portion of the sample, in this case 1985 to 2010. Forecasts of average use are

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produced under both approaches and measured against actual average use from 2011 to 2012 quantitatively via MPE and RMSPE. A two year "hold out" sample is used to compute the out-of-sample forecast accuracy statistics since the forecasting horizon for volumetric budgeting purposes is two years. Although volumetric forecasts are provided for 2014, 2015, and 2016, volumes for the two latter years will be updated annually during the Customized IR period using the latest actual data available at that time to assess forecast accuracy. Fiscal Year model selections are guided by the accuracy of forecasts for 2014 so that the same models are used to generate forecasts for 2015 and 2016 until they are reassessed as part of the annual rate applications for those years.

12. Table 1 presents the forecast accuracy statistics for Rate 1 and Rate 6. The smaller the MPE and RMSPE, the better model's forecast performance.

TABLE 1 FORECAST ERRORS - PERCENT VARIANCE & ROOT MEAN SQUARED PERCENTAGE ERROR								
Col 1.	Col 2.	Col 3.						
Forecast Error Method	Rate 1	Rate 6						
In-Sample % Variance (2 Years)	-0.20%	0.42%						
In-Sample RMSPE (2 Years)	0.43%	0.89%						
Out-of-Sample % Variance (2 Years)	0.70%	1.55%						
Out-of-Sample RMSPE (2 Years)	1.03%	1.77%						

$$MPE = \frac{1}{N} \sum_{i=1}^{N} \left( \frac{Forecast_i - Actual_i}{Actual_i} \right)$$

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13. Consistent with the settlement of Issue 1.1 in the RP-2000-0040 Settlement Agreement, Tables 2 and 3 report the results that the models would generate using actual data to allow parties to compare results to the prior year's forecast. Tables 2 and 3 show the results that the models would have produced had all actual data been available at the time the forecast was produced. The tables are not updated for 2004 since there are no Board approved average use forecasts for this particular test year. In order to compare the variance between actual and Board Approved average use on the same basis, the actual results for each year have been normalized to the corresponding Board Approved degree days for each year. The results in Tables 2 and 3 show the regression model is a good predictor of general service average use.

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	RATE1 IN-SAMPLE FORECAST COMPARISON									
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.			
Fiscal Year	Actual Normalized Average Use Per Customer	Board Approved Normalized Average Use Per Customer <sup>1,3</sup>	Variance Normalized Average Use Per Customer	% Variance Normalized Average Use Per Customer	Model's Normalized Average Use Per Customer <sup>2</sup>	Variance Normalized Average Use Per Customer	% Variance Normalized Average Use Per Customer			
	(m3)	m(3)	(2-3)	100*((2-3)/3)	(m3)	(2-6)	100*((2-6)/6)			
2001	3.014	3.044	(30)	-1.0%	3.022	(8)	-0.26%			
2002	2,980	2,970	10	0.3%	2,963	17	0.57%			
2003	2.877	2.892	(15)	-0.5%	2.897	(20)	-0.69%			
2004	2.843	n/a	n/a	n/a	2.864	(21)	-0.73%			
2005	2,890	2,953	(63)	-2.1%	2,929	(39)	-1.33%			
2006	2,796	2,850	(54)	-1.9%	2,816	(20)	-0.71%			
2007	2,726	2,687	39	1.5%	2,695	31	1.15%			
2008	2,636	2,647	(11)	-0.4%	2,611	25	0.97%			
2009	2,616	2,637	(21)	-0.8%	2,623	(6)	-0.24%			
2010	2,579	2,622	(43)	-1.6%	2,550	29	1.15%			
2011	2,594	2,643	(49)	-1.9%	2,607	(13)	-0.51%			
2012	2,529	2,510	18	0.7%	2,528	1	0.02%			

TABLE 2

<sup>1</sup>Board approved normalized average use from RP-2000-0040, RP-2001-0032, RP-2002-0133, RP-2003-0203, EB-2005-000, EB-2006-0034, EB-2007-0615, EB-2008-0219, EB-2009-0172, EB-2010-0146 and EB-2011-0277 for 2001, 2002, 2003, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012 respectively.

<sup>2</sup>Model's normalized average use is generated by running the model using actual data and driver variable information.

<sup>3</sup>There is no Board approved normalized average use for 2004.

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		RATE 6	IN-SAMPLE FO	RECAST COMP	ARISON		
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.
Fiscal Year	Actual Normalized Average Use Per Customer	Board Approved Normalized Average Use Per Customer <sup>1,3</sup>	Variance Normalized Average Use Per Customer	% Variance Normalized Average Use Per Customer	Model's Normalized Average Use Per Customer <sup>2</sup>	Variance Normalized Average Use Per Customer	% Variance Normalized Average Use Per Customer
	(m3)	m(3)	(2-3)	100*((2-3)/3)	(m3)	(2-6)	100*((2-6)/6)
2001	22,510	22,643	(133)	-0.6%	22,706	(196)	-0.86%
2002	22,097	22,125	(28)	-0.1%	21,957	140	0.64%
2003	21,593	21,685	(92)	-0.4%	21,613	(20)	-0.09%
2004	21,472	n/a	n/a	n/a	21,377	95	0.44%
2005	22,241	22,507	(266)	-1.2%	22,334	(93)	-0.42%
2006	22,272	21,999	273	1.2%	22,149	123	0.55%
2007	22,783	21,010	1773	8.4%	22,973	(190)	-0.83%
2008	24,869	24,204	665	2.7%	25,273	(404)	-1.60%
2009	27,654	28,165	(512)	-1.8%	27,875	(222)	-0.79%
2010	29,106	27,949	1157	4.1%	29,691	(585)	-1.97%
2011	29,471	28,029	1442	5.1%	30,240	(769)	-2.54%
2012	28,941	30,122	(1182)	-3.9%	28,634	307	1.07%

TABLE 3

<sup>1</sup>Board approved normalized average use from RP-2000-0040, RP-2001-0032, RP-2002-0133, RP-2003-0203, EB-2005-000, EB-2006-0034, EB-2007-0615, EB-2008-0219, EB-2009-0172, EB-2010-0146 and EB-2011-0277 for 2001, 2002, 2003, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012 respectively.

<sup>2</sup>Model's normalized average use is generated by running the model using actual data and driver variable information. <sup>3</sup>There is no Board approved normalized average use for 2004.

14. The primary goal of the average use forecast is to be accurate and objective. Ideally, the forecast error should be small in magnitude and distributed in a random fashion. Although the forecast errors in Tables 1, 2, and 3 are small in magnitude, forecast accuracy is conditional on driver variable forecast accuracy and the absence of any structural break between the historical period and the upcoming forecast period. Consequently, besides testing forecast accuracy, the models were subjected to a battery of diagnostic tests. These tests were run on the model to check for incorrect functional forms, parameter instability, structural breaks, omitted variables and randomness of residuals. Overall the models have been thoroughly tested and are statistically valid. The following diagnostic tests were run on each model (results are shown in Tables 6 and 9):

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### Breusch-Godfrey Serial Correlation LM Test<sup>6</sup>

This test is used to test for autocorrelation in the residuals. Autocorrelation occurs when disturbances in a regression equation are serially correlated. The test is set up as follows:

Null Hypothesis: No serial correlation Alternative Hypothesis: Serial correlation

### ARCH Test

This test is used to test for Autoregressive Conditional Heteroskedasticity ("ARCH"). ARCH occurs when the variance of disturbances in a regression equation are not constant and are serially correlated. The test is set up as follows: Null Hypothesis: No ARCH Alternative Hypothesis: ARCH

## Chow Forecast Test

This test is used to test for stability of a regression model. A regression model is not stable if the estimated coefficients change (and consequently the model's predictions) when estimated over various sample ranges. The test is set up as follows:

Null Hypothesis: No structural change Alternative Hypothesis: Structural change

<sup>&</sup>lt;sup>6</sup> The Durbin-Watson test is not used since it is not valid when there are lagged dependent variables in a regression equation. The Durbin Watson test is biased toward the finding of no serial correlation if there are lagged values of the dependent variable in the regression equation.

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### Ramsey RESET Test

This is a general test which tests for omitted variables, incorrect functional form and correlation between the independent variables and disturbances. The test is set up as follows:

Null Hypothesis: Normally distributed disturbances (zero mean, constant variance) Alternative Hypothesis: Non- normally distributed disturbances (non-zero mean, constant variance)

15. The following tables present the mnemonics used in the models (Tables 4 and 7), the regression equations for each model (Tables 5 and 8), and the diagnostic tests results run on the models (Tables 6 and 9). For the t tests in the regression equations, the p-values in Tables 5 and 8 show the probability of obtaining a forecast at least as extreme as one that was actually observed, assuming that the null hypothesis (coefficient is not significant) is true. The p-value is compared to a significance level which is often 0.05 or 0.10, so that if its value is smaller, the null hypothesis is rejected at the 95% or 90% confidence level, respectively. The smaller the p-value, the more strongly the test rejects the null hypothesis, thereby supporting the statistical significance of the coefficient. In any instance where insignificant variables were retained within the models, it was for the purposes of (1) improving the significance of other coefficients or (2) optimizing forecast accuracy. For the diagnostic test results shown in Tables 6 and 9, the null hypotheses tested are the desired outcomes. In each case, to support the null hypothesis, p-values in excess of 0.10 are preferred. Overall, diagnostic test results in Table 6 and 9 show that the models in Table 5 and 8 are statistically valid and no assumptions appear to be violated at 95% confidence level.

Balance Point Heating Degree Days for Central, Eastern and Nagara Weather Zones Vintage Variable for the Northern Region, Central Weather Zone Real Residential Natural Gas Price for the Eastern Weather Zone Real Residential Natural Gas Price for the Niagara Weather Zone LOG(X<sub>t</sub>) - LOG(X<sub>t-1</sub>), First Difference of Logarithm of Variable X Vintage Variable for the Western Region, Central Weather Zone Real Residential Natural Gas Price for the Central Weather Zone Vintage Variable for the Central Region, Central Weather Zone Vintage Variable for the Metro Region, Central Weather Zone Vintage Variable for the Eastern Weather Zone Vintage Variable for the Niagara Weather Zone Dummy Variables for Recession Impact Error Correction Term for Each Region Central Weather Zone Employment Logarithm of Variable X Constant Term Definition DUM2008-DUM2009 CDD, EDD, NDD REALCRCRPG REALERCRPG REALNRCRPG ECM\_Region MET20V INT WES20VINT **CEN20VINT** NOR20VINT ERC20VINT NRC20VINT Mnem onic DLOG(X) CENTEMP LOG(X) U

# TABLE 4 - RATE 1 MODEL MNEMONICS

Witnesses: H. Sayyan M. Suarez Filed: 2013-06-28 EB-2012-0459 Exhibit C2 Tab 2 Schedule 1 Page 11 of 23

<u> Metro Region - Centr</u> á	<u>al Weather Zon€</u>	e l		<u> Western Region - Cen</u>	tral Weather Zo	ne		<u> Central Region - Centr</u>	tral Weather Zon	9	
Long Run Equation				Long Run Equation				Long Run Equation			
Variable	Coefficient	t-Statistic	p-Value	Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statistic	p-Valu
	0000			(				(	000	0000	000
5	2.36	6.68	0.00		0.84	0.92	0.37		2.39	0.93	0.36
LOG(CDD)	0.73	16.89	0.00	LOG(CDD)	0.74	20.33	0.00	LOG(CDD)	0.72	17.16	0.00
LOG(REALCRCRPG)	-0.02	-1.22	0.23	LOG(REALCRCRPG)	-0.08	-4.98	0.00	LOG(REALCRCRPG)	-0.03	-1.12	0.28
LOG(MET20VINT)	0.61	10.45	0.00	LOG(WES20VINT)	0.26	5.02	0.00	LOG(CRC20VINT)	0.32	8.00	0.00
DUM2008	-0.07	-5.59	00.00	LOG(CENTEMP) DUM2008	0.16 -0.07	1.59 -6.70	0.13 0.00	DUM2008	-0.06	2.02	0.06
R-squared	0.99			R-squared	0.99			R-squared	0.99		
Adjusted R-squared	0.98			Adjusted R-squared	0.99			Adjusted R-squared	0.99		
S.E. of regression	0.02			S.E. of regression	0.01			S.E. of regression	0.01		
F-statistic	431.76		0.00	F-statistic	463.79		0.00	F-statistic	774.66		0.00
Short Run Equation				Short Run Equation				Short Run Equation			
Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Valu
U	0.00	-0.37	0.71	U	0.00	-2.30	0.03	O	0.00	-0.40	0.69
DLOG(CDD)	0.76	28.93	0.00	DLOG(CDD)	0.73	37.95	0.00	DLOG(CDD)	0.72	30.11	0.00
DLOG(MET20VINT)	0.65	1.67	0.11	DLOG(REALCRCRPG)	-0.07	-4.47	0.00	DLOG(REA LCRCRPG)	-0.04	-1.82	0.08
ECM_MET20(-1)	-0.30	-1.79	0.09	DUM2008	-0.01	-2.79	0.01	DLOG(CRC20VINT)	0.24	1.36	0.19
				ECM_WES20(-1)	-0.62	-3.89	0.00	DUM2008 FCM CRC20(-1)	-0.01	-1.80 -2.70	0.09
										i	-
R-squared	0.97			<b>R-squared</b>	0.99			<b>R-squared</b>	0.98		
Adjusted R-squared	0.97			Adjusted R-squared	0.98			Adjusted R-squared	0.97		
S.E. of regression	0.01			S.E. of regression	0.01			S.E. of regression	0.01		
F-statistic	298.75		0.00	F-statistic	387.02		0.00	F-statistic	202.92		0.00

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<u> Northern Region - Cer</u>	<u>ntral Weather Z</u>	one		<u>Eastern Weather Zon€</u>	ol			<u>Niagara Weather Zone</u>			
Long Run Equation				Long Run Equation				Long Run Equation			
Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Value
C LOG(CDD) LOG(REALCRCRPG) LOG(NOR20VNT) LOG(CENTEMP)	0.93 0.71 0.26 0.18	1.08 20.07 -5.88 7.54 1.93	0.29 0.00 0.00 0.00	C LOG(EDD) LOG(REALERCRPG) LOG(RRCZOVINT) DUM2009	1.40 0.81 -0.05 -0.08	3.16 14.96 -2.46 13.75 -5.77	0.00 0.00 0.00 0.00	C LOG(NDD) LOG(NRC20VINT) DUM2008	2.23 0.73 0.88 -0.07	4.70 12.32 14.76 -5.16	0.00 0.00 0.00 0.00
DLM2009 R-squared Adjusted R-squared S.E of regression F-statistic	-0.07 0.99 0.01 678.72	- 0.58	0.00	R-squared Adjusted R-squared S.E. of regression F-statistic	0.99 0.98 0.02 436.76		0.00	R-squared Adjusted R-squared S.E. of regression F-statistic	0.98 0.98 0.02 372.38		0.00
Short Run Equation				Short Run Equation				Short Run Equation			
Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statistic	p-Value
C DLOG(CDD) DLOG(REALCBFCRPG) DLOG(NOF20VINT) DLOG(NOF20VINT) ECM_NOF20(-1)	0.00 0.70 -0.05 0.24 -0.64	0.01 23.28 -1.81 1.85 -2.53	0.99 0.00 0.08 0.03 0.02	C DLOG(EDD) DLOG(REALERCRPG) DLM2008 ECM_ERC20(-1)	-0.01 0.78 -0.05 -0.02 -0.55	-2.37 21.51 -1.68 -2.48 -2.35	0.03 0.00 0.11 0.02 0.03	C DLOG(NDD) ECM_NRC20(-1)	-0.01 0.74 -0.48	-3.82 21.78 -2.96	0.00 0.00 0.01
R-squared Adjusted R-squared S.E. of regression F-statistic	0.96 0.96 0.01 140.54		0.00	R-squared Adjusted R-squared S.E of regression F-statistic	0.96 0.95 0.02 130.90		0.00	R-squared Adjusted R-squared S.E. of regression F-statistic	0.95 0.95 0.02 251.11		0.00

TABLE 5 CONTINUED - RATE 1 REVENUE CLASS 20 REGRESSION EQUATIONS

Witnesses: H.

H. Sayyan M. Suarez Filed: 2013-06-28 EB-2012-0459 Exhibit C2 Tab 2 Schedule 1 Page 13 of 23 TABLE6 - RATE1

Model Diagnostic Tests

		)					
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.
Test		Metro Region	Western Region	Central Region	Northern Region	Eastern Weather Zone	Niagara Weather Zone
Breusch-Godfrey Serial	Test Statistic	0.01	0.70	0.39	0.45	1.37	0.26
Correlation LM Test	P Value	0.91	0.40	0.53	0.50	0.24	0.61
A DCH Toot	Test Statistic	0.57	0.06	0.82	0.22	0.02	0.23
	P Value	0.45	0.80	0.36	0.64	0.89	0.63
Chow Forecast Test: Forecast	Test Statistic	0.23	0.48	0.03	0.03	0.32	3.81
from 2012 to 2012	P Value	0.64	0.50	0.86	0.85	0.58	0.07
Domeon, DECET Toet	Test Statistic	2.60	0.69	0.77	0.43	1.09	0.00
	P Value	0.12	0.42	0.39	0.52	0.31	0.96

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Balance Point Heating Degree Days for Central, Eastern and Nagara Weather Zones  $\mathsf{LOG}(X_t)$  -  $\mathsf{LOG}(X_{t\cdot 1}),$  First Difference of Logarithm of Variable X Real Commercial Gas Price for the Eastern Weather Zone Real Natural Gas Price for the Niagara Weather Zone Dummy Variable for Migration Impact Dummy Variable for the Break in the Year XXXX pth-order Autoregressive Process Term Error Correction Term for Each Region Ontario Real Gross Domestic Product GTA Commercial Vacancy Rate Eastern Weather Zone Employment Niagara Weather Zone Employment Central Weather Zone Employment Logarithm of Variable X Constant Term Time Trend Definition REALERCCPG REALNRCCPG CDD, EDD, NDD CRCCOMVAC DUMRegion DUMXXXX ECM\_Region Mnem onic DLOG(X) CENTEMP EASTEMP **NIA GEMP** ONTGDP LOG(X) AR(p) TIME ပ

TABLE7 - RATE6 MODEL MNEMONICS

### Witnesses: H. Sayyan M. Suarez

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t)	
12 (Apartmen	
evenue Class	
Central Re	

Wit	TABLE8 - RATE6 REVE	<b>INUE CLASS 12 F</b>	<b>REGRESSION F</b>	EQUATIONS								
tne	Central Revenue Class	s 12 (Apartment	U U		Eastern Revenue Clas	ss 12 (Apartmer	<del>n</del>		Niagara Revenue Clas	s 12 (Apartmer	Ţ	
556	Single Equation Model	_			Long Run Equation				Long Run Equation			
<i>ک</i> د.	Variable	Coefficient	t-Statistic	p-Value	Variable	Coefficient	t-Statistic	p-Value	Variable	Coefficient	t-Statistic	p-Valu
	U	1.76	1.65	0.12	U	7.32	14.19	0.00	U	5.05	3.80	0.00
н	LOG(CDD)	0.67	6.83	0.00	LOG(EDD)	0.44	7.05	0.00	(NDD)	0.62	11.05	0.00
	LOG(CENTEMP)	0.55	7.94	0.00	LOG(TME)	-0.03	-5.47	0.00	LOG(TME)	-0.02	-4.58	0.00
S	DUM1996	-0.08	-4.85	0.00	DUMERC12	0.32	28.07	0.00	LOG(NIA GEMP)	0.14	-3.12	0.01
2	DUM2008	0.24	7.55	0.00	DUM2011	-0.11	-5.76	0.00	DUMNRC12	-0.08	3.89	0.00
	AR(4)	-0.60	-2.71	0.01	LOG(REALERCOPG)	-0.03	-2.51	0.02	AR(1)	-0.46	-8.54	0.00
(00					AR(1)	-0.48	-2.43	0.02				
	R-squared Adjusted R-squared	0.97 0.96			R-squared Adjusted R-squared	0.96 0.95			R-squared Adjusted R-squared	0.86 0.82		
	S.E. of regression F-statistic	0.04 99.962		0.00	S.E. of regression F-statistic	0.02 80.61		0.00	S.E. of regression F-statistic	0.03 24.81		00.00

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p-Value p-Value 0.65 0.00 0.00 0.03 0.00 0.00 Coefficient t-Statistic t-Statis tic -0.46 11.48 3.81 -3.30 -2.29 -0.88 11.91 -4.86 3.90 3.53 Niagara Revenue Class 48 (Commercial) Coefficient -1.39 0.72 -0.09 0.42 0.11 0.92 0.90 0.02 40.24 0.00 0.76 0.13 -0.12 0.89 0.87 0.03 46.20 R-squared Adjusted R-squared S.E. of regression F-statistic Adjusted R-squared S.E. of regression F-statistic Short Run Equation Long Run Equation LOG(REALNRCCPG) ECM\_NRC48(-1) LOG(ONTGDP) DUMNRC48 DLOG(NDD) DUMNRC48 R-squared LOG(NDD) LOG(TME) **DUM2010** DUM2010 Variable Variable ပ с p-Value p-Value 0.14 0.00 0.00 0.00 0.00 0.32 0.00 0.02 0.04 0.00 0.00 Coefficient t-Statistic Coefficient t-Statistic 1.55 9.05 -12.28 3.43 4.87 4.84 1.02 8.47 -2.58 -2.13 Eastern Revenue Class 48 (Commercial) 0.96 0.95 0.02 106.05 1.69 0.75 -0.16 0.19 0.10 0.01 0.71 -0.13 -0.76 0.78 0.75 0.04 27.37 R-squared Adjusted R-squared S.E. of regression F-statistic Adjusted R-squared S.E. of regression F-statistic Long Run Equation Short Run Equation DLOG(EDD) DLOG(TIME) ECM\_ERC48(-1) LOG(TME) LOG(ONTGDP) DUMERC48 DUM2010 C LOG(EDD) R-squared Variable Variable с p-Value p-Value 0.00 0.00 t-Statistic Coefficient t-Statistic 0.24 14.83 -8.78 -3.99 4.18 8.91 0.15 29.69 -3.23 -4.37 3.50 -5.01 Central Revenue Class 48 (Commercial) Coefficient 0.97 0.96 0.02 122.84 0.98 0.97 0.01 182.79 0.22 0.83 -0.12 -0.07 0.26 0.11 0.00 0.84 -0.06 0.03 -0.77 LOG(TME) LOG(CRCOM/AC) LOG(ONTGDP) DUM2009 R-squared Adjusted R-squared S.E. of regression F-statistic DLOG(CRCCOMVAC) Long Run Equation Short Run Equation Adjusted R-squared S.E. of regression ECM\_CRC48(-1) DLOG(CDD) DLOG(TIME) LOG(CDD) **R-squared** Variable DUM2009 F-statistic Variable υ с

TABLE 8 CONTINUED - RATE 6 REVENUE CLASS 48 REGRESSION EQUATIONS

Witnesses: H. Sayyan

M. Suarez

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Central Revenue Clas	s 73 (Industrial	7		Eastern Revenue Cla	<u>ss 73 (Industrial</u>			Niagara Revenue Clas	ss 73 (Industrial)		
Long Run Equation				Long Run Equation				Long Run Equation			
Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Value	Variable	Coefficient	t-Statis tic	p-Valı
O	4.58	1.59	0.13	O	-276,147.70	-4.33	0.00	C	-0.92	-0.23	0.82
LOG(CDD)	0.26	1.37	0.19	EDD	14.45	1.35	0.19	(UDD)	0.73	2.77	0.01
LOG(TME)	-0.14	-3.74	0.00	DUM2003	64,887.41	5.30	0.00	DUM2002	-0.36	-3.94	0.00
LOG(ONTGDP)	0.36	2.23	0.04	DUM2004	-164,110.90	-10.44	0.00	DUM2007	0.46	4.03	0.00
DUM2008	0.48	11.48	0.00	DUM2009	109,130.40	13.41	0.00	DUM2010	0.38	3.21	0.00
				EASTEMP	743.59	7.62	0.00	LOG(NIA GEMP)	1.24	2.26	0.04
				TIME	-6,590.55	-8.24	0.00	AR(1)	0.64	3.13	0.01
R-squared Adiusted R-squared	0.89			R-squared Adjinted R-sourcered	0.96			R-squared Adiinstad R-squared	0.94		
S.F. of regression	0.07		000	S F of regression	10 931 44			S F of regression	0 11		
F-statistic	44.57			F-statistic	93.16		0.00	F-statistic	52.43		0.00
Short Run Equation											
Variable	Coefficient	t-Statistic	p-Value								
U	-0.02	-2.10	0.05								
DLOG(CDD)	0.48	6.30	0.00								
DLOG(ONTGDP)	0.63	2.23	0.04								
DUM2008	0.25	6.48	0.00								
DUM2009	-0.16	-3.96	0.00								
ECM_CRC73(-1)	-0.64	-5.44	0.00								

0.00

0.86 0.83 0.04 26.77

R-squared Adjusted R-squared S.E. of regression F-statistic

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			. <b>A</b>	TABLE 9-RATE ( odel Diagnosti	6 c Tests					
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.	Col 9.	Col 10.	Col 11.
		Re venue Mode	Class 12 (A I Diagnostic	.partment) Tests	Revenue ( Mode	Class 48 (Co I Diagnostic	om mercial) : Tests	Revenue Mode	e Class 73 ( el Diagnosti	Industrial) c Tests
Test		Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone	Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone	Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone
	Tant Oterintia	00 7		<u> </u>	00	C L	07.7			0
Deuscri-Gouney Serial Correlation LM Test	P Value	0.17	0.41	0.78	0.30	0.21	0.22	2.03 0.10	0.35	2.43 0.12
ARCH Test	Test Statistic P Value	0.03 0.86	0.43 0.51	0.26 0.61	0.46 0.50	0.02 0.88	2.44 0.12	0.86 0.35	0.14 0.71	0.30 0.58
Chow Forecast Test: Forecast from 2012 to 2012	Test Statistic P Value	0.07 0.80	0.13 0.72	2.32 0.14	0.02 0.90	3.18 0.09	0.93 0.35	1.05 0.32	0.57 0.46	0.85 0.37
Ramsey RESET Test	Test Statistic P Value	1.09 0.31	0.40 0.53	0.33 0.57	0.02 0.90	1.96 0.18	0.89 0.36	2.89 0.10	0.93 0.35	2.56 0.13

Witnesses: H. Sayyan M. Suarez

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- 16. Major driver variables in the models are balance point heating degree days adjusted for billing cycles, vintage, time trend, real natural gas prices and economic variables. Driver variable assumptions are shown in the Economic Outlook at Exhibit C2, Tab 1, Schedule 1.
- 17. Natural gas prices have an important impact on average use. Sharp increases typically have two effects. First, they influence customers' fuel use habits, for example, the lowering of thermostat settings. Second, price increases likely factor in customers' decision-making around the purchase of more efficient furnaces and other appliances. In addition, homeowners may also respond by retrofitting older residences in order to reduce energy consumption. In the models, real natural gas prices are used. The Consumer Price Index ("CPI") is used to convert nominal gas prices to real gas prices. Nominal energy price forecasts for 2014 to 2016 are based on the consensus Henry Hub price forecast produced in January 2013.
- 18. A linear time trend is used as a proxy measure for energy conservation. However, a linear time trend only reflects constant annual changes in appliance efficiency; it will not be able to reflect the time varying impact of new residential construction on appliance efficiency. Consequently, a vintage variable serves as either a supplementary or complementary variable to the time trend in the model.
- 19. The vintage variable (for revenue class 20 only) is employed as a proxy measure of gas space heating and gas water heating efficiency gains and residential thermal efficiency. Newer homes with improved thermal envelope characteristics and older homes adding insulation and storm windows/doors reduce the typical amount of gas needed for space heating. Residential thermal efficiency will continue to improve as newer, better-insulated residences account for a larger portion of the

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housing stock. The vintage variable captures the impact of both furnace efficiency and new home thermal efficiency on average use.

- 20. Vintage is defined as the fiscal year in which the customer became a customer (new gas service main date) and is not based on the age of the building. This data includes both new construction and conversion customer additions. As space heating efficiency gains have a greater impact on average use than thermal improvements to homes, customers by vintage is a better variable than age of the building in terms of explaining the percentage decline in residential average use.
- 21. An illustration of the vintage ratio for 1992 follows:

$$V_{1992} = \frac{\sum_{y=1987}^{1991} V_{y}}{\sum_{yy=1987}^{1992} V_{yy}} \text{ where } V \text{ denotes vintage.}$$

22. Calendar 1992 is used as the reference year for the vintage ratio since the Energy Efficiency Act prohibited selling of the conventional low-efficiency furnace in January 1992.<sup>7</sup> Consequently, this ratio will capture the increasing market share of high-efficiency furnaces at the expense of declining market share of mid-efficiency furnaces over time. Generally, regions with stronger new construction additions experience a sharper decline in the ratio than established

<sup>&</sup>lt;sup>7</sup> During the 1970s natural gas furnaces averages about 65% Annual Fuel Utilization Efficiency ("AFUE"). The Energy Efficiency Act imposed 78% AFUE as a minimum for gas furnaces manufactured after January 1, 1992.

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regions like Metro Toronto. As more new customers are added to the revenue class the declining ratio leads to lower average use over time. Thus the sign of this variable's coefficient is positive.

23. Economic variables such as employment, vacancy rates, and gross domestic product can impact demand for new gas appliances as well as impact demand for natural gas for space heating and manufacturing processes. Stronger employment and demand for products both domestically and abroad will generally increase natural gas demand.

### Risks to the Forecast

- 24. The impact of customer mix on average use is not static and changes over time. New customers may have different gas use characteristics than existing customers and may be influenced by builder specifications for inclusion/exclusion of new gas appliances. Thus, aggregate average use will be affected even if customers take no actions that could affect their average use. Advances in the future penetration of gas appliances above historical penetration levels implicit in the model could result in increased average use. Conversely, builder specification of non-gas water and/or space heating equipment represents a risk to the forecast as it could result in lower gas consumption than forecast.
- 25. Use of more efficient water heaters across the franchise area and/or the loss of natural gas water heating to other fuels could result in a permanent decrease in baseload usage and natural gas consumption relative to the forecast.

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- 26. Gas consumption for space heating is very sensitive to thermostat settings. Customers may set their thermostats lower under extremely warm weather like that experienced in 1998, 2001, 2006, and most recently in 2012.
- 27. Economic activity can impact both demand for appliances and natural gas. If the economy slows more significantly and natural gas prices are higher than indicated in the Economic Outlook (Exhibit C2, Tab 1, Schedule 1), average use will decline further.
- 28. A structural break in the historical estimated relationship between average use and the driver variables will increase forecast risk as will forecast uncertainty in the driver variables.

### **Conclusion**

29. The model employed by the Company passes a battery of statistical tests and is valid given current and historical information. Continual evaluation and testing is required, as new information becomes available. The model has been estimated over a volatile period in history – recent years of unexpected warm weather, historically high energy prices and increased energy price volatility. In light of these increasingly volatile economic and weather conditions the model will be evaluated continuously.

### UTILITY OPERATING REVENUE 2014 FISCAL YEAR

		Col. 1	Col. 2	Col. 3
Line No.		Utility Revenue (\$Millions)	Normalizing and Other Adjustments (\$Millions)	Adjusted Utility Revenue (\$Millions)
1.	Gas sales	2,253.5	(91.8)	2,161.7
2.	Transportation of gas	242.8	(18.4)	224.4
3.	Transmission, compression & storage	1.8	-	1.8
4.	Other operating revenue	40.5	-	40.5
5.	Interest and property rental	-	-	-
6.	Other income	0.1	-	0.1
7.	Total operating revenue	2,538.7	(110.2)	2,428.5

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# EXPLANATION OF ADJUSTMENTS TO UTILITY REVENUE 2014 FISCAL YEAR

Line No.	Adjustment Increase	
Adjusted	(Decrease) (\$Millions)	Explanation
1.	(91.8)	Gas sales
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).
2.	(18.4)	Transportation of gas
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).

### UTILITY REVENUE 2014 FISCAL YEAR

		Col. 1	Col. 2	Col. 3
		EGDI Ont.		
Line		Corporate		Utility
No.		Revenue	Adjustment	Revenue
		(\$Millions)	(\$Millions)	(\$Millions)
1.	Residential	1,422.8	-	1,422.8
2.	Commercial	/05.1	-	/05.1
3.		100.0	-	100.0
4.	Wholesale	25.6	-	25.6
F		2 252 5		2 252 5
э.	Gas sales	2,203.0	-	2,253.5
6	Transportation of gas	242.8		242.8
0.	Transportation of gas	242.0	-	242.0
7	Transmission compression & storage	18	-	18
/.	Transmission, compression a storage	1.0		1.0
8.	Service charges & DPAC	12.1	-	12.1
9.	Rent from NGV rentals	0.6	-	0.6
10.	Late payment penalties	10.1	-	10.1
11.	Transactional services	13.4	(1.4)	12.0
12.	Open bill revenue	6.6	(1.2)	5.4
13.	Dow Moore recovery	0.3	-	0.3
14.	Affiliate asset use revenue	0.2	(0.2)	-
15.	ABC T-service (net)	1.5	(1.5)	-
	· ·			
16.	Other operating revenue	44.8	(4.3)	40.5
17.	Income from investments	-	-	-
18.	Interest during construction	12.3	(12.3)	-
19.	Interest income from affiliates	-	-	-
20.	Interest on (net) deferral accounts	-	-	-
21.	Property/asset use revenue 3rd party	1.1	(1.1)	-
22.	Interest and property rental	13.4	(13.4)	-
23.	Miscellaneous	14.6	(14.5)	0.1
24.	Dividend income	62.7	(62.7)	-
25.	Protit on sale of property	-	-	-
26.	NGV merchandising revenue (net)	-	-	-
27.	Other income	77.3	(77.2)	0.1
00	Table	0 000 0		0 500 5
28.	i otai revenue	2,633.6	(94.9)	2,538.7

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2014 FISCAL YEAR

	Adjustment	
Line No.	Increase	
Adjusted	(Decrease)	Explanation
	(\$Millions)	
11.	(1.4)	Transactional services
		To eliminate transactional services revenues above the proposed base amount to be included in rates. Ratepayer and shareholder amounts above the base will be treated outside of utility results and returns.
12.	(1.2)	Open bill revenue
		To eliminate the Open Bill shareholder incentive.
14.	(0.2)	Affiliate asset use revenue
		To reflect the elimination of asset use revenue in conjunction with the removal of affiliate use asset values from rate base and all related cost of service elements. (RP-2002-0133)
15.	(1.5)	ABC T-Service (net)
		To eliminate the net revenue from ABC T-Service considered to be non-utility. (RP-1999-0001)
#### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2014 FISCAL YEAR

Line No.	Adjustment Increase		
Adjusted	(Decrease)	Explanation	
	(\$Millions)		
18.	(12.3)	Interest during construction	
		To eliminate interest calculated on funds used for purposes of construction during the year.	
21.	(1.1)	Property/asset use revenue 3rd party	
		To eliminate asset use revenue (RP-2002-0133) and rental revenue from Tecumseh farm properties considered to be non-utility. (EBRO 464 & 365)	
23.	(14.5)	Miscellaneous	
		To eliminate net revenue from the Company's oil & gas and unregulated storage divisions.	(8.4)
		To eliminate Electric CDM net revenues. Ratepayer amounts will be transferred to the 2014 EPESDA and shareholder amounts are eliminated from utility results.	(0.6)
		To eliminate the shareholders' incentive income recorded as a result of calculating the DSMIVA amount.	(5.5) (14.5)
24.	(62.7)	Dividend income	
		To eliminate non-utility inter-company dividend income from	

the financing transaction (EBO 179-16).

Witness: K. Culbert

## COMPARISON OF UTILITY OPERATING REVENUE 2014 BUDGET AND 2013 BOARD APPROVED

		Col. 1	Col. 2	Col. 3
ltem No.		2014 Budget	2013 Board Approved	2014 Budget Over/(Under) 2013 Board Approved
		(\$Millions)	(\$Millions)	(\$Millions)
1.1	Gas Sales	2,253.5	2,043.8	209.7
1.2	Transportation of Gas	242.8	318.6	(75.7)
1.3	Transmission, Compression and Storage	1.8	1.7	0.1
1.4	Other Revenue	40.6	45.0	(4.4)
1.1	Total Operating Revenue	2,538.7	2,409.1	129.6

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# CUSTOMER METERS AND VOLUMES BY RATE CLASS 2014 BUDGET

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		<u>Customers</u> (Average)	<u>Volumes</u> (10 <sup>6</sup> m <sup>3</sup> )	<u>Revenues</u> (\$Millions)
~				
Gener	al Service	1 700 270	4 4 0 4 4	4 444 6
1.1.1	Rate 1 - Sales Rate 1 - T-Service	1 700 370	4 131.1	1 4 1 4.0 Q1 Q
1.1.2	Total Pate 1	1 800 632	4 621 3	1 506 5
1.1		1 099 032	4 02 1.5	1 300.3
1.2.1	Rate 6 - Sales	139 229	2 942.6	776.5
1.2.2	Rate 6 - T-Service	20 347	<u>1 625.5</u>	<u>118.1</u>
1.2	Total Rate 6	159 576	<u>4 568.1</u>	894.6
131	Rate 9 - Sales	7	0.5	0.2
1.3.2	Rate 9 - T-Service	1	0.0	0.0 **
1.3	Total Rate 9	8	0.6	0.2
1.0			0.0	0.2
1.	Total General Service Sales & T-Service	<u>2 059 216</u>	<u>9 190.0</u>	<u>2 401.3</u>
Contra	act Sales			
2.1	Rate 100	0	0.0	0.0
2.2	Rate 110	33	92.1	17.7
2.3	Rate 115	1	0.9	0.2
2.4	Rate 135	1	1.2	0.2
2.5	Rate 145	11	22.0	4.1
2.6	Rate 170	5	37.3	6.2
2.7	Rate 200	<u>_1</u>	<u>164.9</u>	25.6
2.	Total Contract Sales	_52	<u>318.4</u>	54.0
Contra	act T-Service			
3.1	Rate 100	0	0.0	0.0
3.2	Rate 110	158	525.6	14.5
3.3	Rate 115	26	470.1	6.2
3.4	Rate 125	5	0.0 *	10.9
3.5	Rate 135	40	55.3	1.5
3.6	Rate 145	91	141.0	3.5
3.7	Rate 170	29	425.6	( 0.4)
3.8	Rate 300	2	30.0	0.2
3.9	Rate 315		0.0	0.0
3.	Total Contract T-Service	351	<u>1 647.6</u>	36.4
4.	Total Contract Sales & T-Service	403	<u>1 966.0</u>	90.4
5.	Total	2 059 619	<u>11 156.0</u>	2 491.7

\* There is no distribution volume for Rate 125 customers.

\*\* Less than \$50,000.

#### COMPARISON OF AVERAGE CUSTOMER METERS BY RATE CLASS 2014 BUDGET AND 2013 BOARD APPROVED BUDGET

		Col. 1	Col. 2	Col. 3
Item <u>No.</u>		2014 Budget	2013 Board Approved <u>Budget</u>	2014 Budget Over (Under) <u>2013 Budget</u> (1-2)
<u>Gener</u> 1.1.1 1.1.2 1.1	<u>al Service</u> Rate 1 - Sales Rate 1 - T-Service Total Rate 1	1 700 370 <u>199 262</u> <u>1 899 632</u>	1 595 083 <u>271 451</u> <u>1 866 534</u>	105 287 <u>( 72 189)</u> <u>33 098</u>
1.2.1 1.2.2 1.2	Rate 6 - Sales Rate 6 - T-Service Total Rate 6	139 229 <u>20 347</u> <u>159 576</u>	132 728 <u>25 767</u> <u>158 495</u>	6 501 <u>( 5 420)</u> <u>1 081</u>
1.3.1 1.3.2 1.3	Rate 9 - Sales Rate 9 - T-Service Total Rate 9	7 _1 _8	8 _1 _9	(1) <u>0</u> (1)
1.	Total General Service Sales & T-Service	<u>2 059 216</u>	<u>2 025 038</u>	<u>34 178</u>
Contra 2.1 2.2 2.3 2.4 2.5 2.6 2.7	act Sales Rate 100 Rate 110 Rate 115 Rate 135 Rate 145 Rate 170 Rate 200	0 33 1 1 11 5 _1	0 36 2 1 13 6 _1	$ \begin{array}{c} 0\\(3)\\(1)\\0\\(2)\\(1)\\\underline{0}\\(7)\end{array} $
2.	Total Contract Sales	_52	_ 59	<u>(7)</u>
Contra 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9	act 1-Service         Rate 100         Rate 110         Rate 115         Rate 125         Rate 135         Rate 145         Rate 170         Rate 300         Rate 315	0 158 26 5 40 91 29 2 2 0	0 165 28 5 37 95 32 3 0	0 (7) (2) 0 3 (4) (3) (1) <u>0</u>
з.		<u>351</u>	<u> </u>	<u>(14)</u>
4.	Total Contract Sales & T-Service	403	424	<u>(21)</u>
5.	Total	<u>2 059 619</u>	2 025 462	<u>34 157</u>

Witnesses: R. Cheung S. Qian

Col. 3

#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2014 BUDGET AND 2013 BOARD APPROVED BUDGET (10<sup>6</sup>m<sup>3</sup>)

(10<sup>6</sup>m<sup>3</sup>)

Col. 1 Col. 2

ltem <u>No.</u>		2014 <u>Budget</u>	2013 Board Approved <u>Budget</u>	2014 Budget Over (Under) <u>2013 Budget</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	4 131.1	4 096.0	35.1
1.1.2	Rate 1 - T-Service	490.2	<u>696.1</u>	<u>(205.9)</u>
1.1	Total Rate 1	<u>4 621.3</u>	<u>4 792.1</u>	<u>(170.8)</u>
1.2.1	Rate 6 - Sales	2 942.6	2 785.3	157.3
1.2.2	Rate 6 - T-Service	<u>1 625.5</u>	<u>1 979.5</u>	<u>(354.0)</u>
1.2	Total Rate 6	<u>4 568.1</u>	<u>4 764.8</u>	(196.7)
1.3.1	Rate 9 - Sales	0.5	1.8	(1.3)
1.3.2	Rate 9 - T-Service	0.1	0.2	<u>(0.1)</u>
1.3	Total Rate 9	0.6	2.0	<u>(1.4)</u>
1.	Total General Service Sales & T-Service	<u>9 190.0</u>	<u>9 558.9</u>	<u>(368.9)</u>
<u>Contra</u>	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	92.1	66.8	25.3
2.3	Rate 115	0.9	2.8	(1.9)
2.4	Rate 135	1.2	0.6	0.6
2.5	Rate 145	22.0	24.8	(2.8)
2.6	Rate 170	37.3	54.8	(17.5)
2.7	Rate 200	<u>164.9</u>	<u>163.1</u>	<u>1.8</u>
2.	Total Contract Sales	318.4	<u>312.9</u>	5.5
<u>Contra</u>	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	525.6	420.8	104.8
3.3	Rate 115	470.1	536.6	(66.5)
3.4	Rate 125	0.0 *	0.0 *	0.0
3.5	Rate 135	55.3	54.6	0.7
3.6	Rate 145	141.0	128.0	13.0
3.7	Rate 170	425.6	461.6	(36.0)
3.8	Rate 300	30.0	31.0	(1.0)
3.9	Rate 315	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 647.6</u>	<u>1 632.6</u>	<u>    15.0</u>
4.	Total Contract Sales & T-Service	<u>1 966.0</u>	<u>1 945.5</u>	20.5
5.	Total	<u>11 156.0</u>	<u>11 504.4</u>	( <u>348.4</u> )

\* There is no distribution volume for Rate 125 customers.

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#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2014 BUDGET AND 2013 BOARD APPROVED BUDGET

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
ltem <u>No.</u>		2014 <u>Budget</u>	2013 Board Approved <u>Budget</u>	2014 Budget Over (Under) <u>2013 Budget</u> (1-2)	2013* <u>Adjustments</u>	2014 Budget Over (Under) 2013 Budget with Adjustments (3-4)
Gener	al Service					
1.1.1	Rate 1 - Sales	4 131.1	4 096.0	35.1	(127.4)	162.5
1.1.2	Rate 1 - T-Service	490.2	696.1	<u>(205.9)</u>	<u>(21.8)</u>	<u>(184.1)</u>
1.1	Total Rate 1	<u>4 621.3</u>	<u>4 792.1</u>	<u>(170.8)</u>	<u>(149.2)</u>	<u>(21.6)</u>
1.2.1	Rate 6 - Sales	2 942.6	2 785.3	157.3	(67.2)	224.5
1.2.2	Rate 6 - T-Service	<u>1 625.5</u>	<u>1 979.5</u>	<u>(354.0)</u>	(40.6)	<u>(313.4)</u>
1.2	Total Rate 6	<u>4 568.1</u>	4 764.8	<u>(196.7)</u>	<u>(107.8)</u>	<u>(88.9)</u>
1.3.1	Rate 9 - Sales	0.5	1.8	(1.3)	0.0	(1.3)
1.3.2	Rate 9 - T-Service	<u>0.1</u>	0.2	<u>(0.1)</u>	0.0	<u>(0.1)</u>
1.3	Total Rate 9	0.6	2.0	<u>(1.4)</u>	0.0	<u>(1.4)</u>
1.	Total General Service Sales & T-Service	<u>9 190.0</u>	<u>9 558.9</u>	<u>(368.9)</u>	<u>(257.0)</u>	<u>(111.9)</u>
Contra	act Sales					
2.1	Rate 100	0.0	0.0	0.0	0.0	0.0
2.2	Rate 110	92.1	66.8	25.3	0.0 **	25.3
2.3	Rate 115	0.9	2.8	(1.9)	0.0	(1.9)
2.4	Rate 135	1.2	0.6	0.6	0.0	0.6
2.5	Rate 145	22.0	24.8	(2.8)	(0.3)	(2.5)
2.6	Rate 170	37.3	54.8	(17.5)	(0.2)	(17.3)
2.7	Rate 200	164.9	<u>163.1</u>	<u>1.8</u>	0.0	<u>1.8</u>
2.	Total Contract Sales	318.4	312.9	5.5	<u>(0.5)</u>	6.0
Contra	act T-Service					
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	525.6	420.8	104.8	(0.6)	105.4
3.3	Rate 115	470.1	536.6	(66.5)	0.0 **	(66.5)
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	54.6	0.7	0.0	0.7
3.6	Rate 145	141.0	128.0	13.0	(0.8)	13.8
3.7	Rate 170	425.6	461.6	(36.0)	(2.5)	(33.5)
3.8	Rate 300	30.0	31.0	(1.0)	0.0	(1.0)
3.9	Rate 315	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 647.6</u>	<u>1 632.6</u>	<u> </u>	<u>(3.9)</u>	<u>18.9</u>
4.	Total Contract Sales & T-Service	<u>1 966.0</u>	<u>1 945.5</u>	20.5	<u>(4.4)</u>	24.9
5.	Total	<u>11 156.0</u>	<u>11 504.4</u>	( <u>348.4</u> )	( <u>261.4</u> )	( <u>87.0</u> )

\*Note: Weather normalization adjustments have been made to the 2013 Board Approved Budget utilizing the 2014 Budget degree days in order to place the two years on a comparable basis.

\*\* Less than 50,000 m<sup>3</sup>.

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#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2014 BUDGET AND 2013 BOARD APPROVED BUDGET (10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
Item <u>No.</u>		2014 <u>Budget</u>	2013 Board Approved <u>Budget</u>	2014 Budget Over (Under) 2013 Budget (1-2)	Change in <u>Use</u>	Weather	New <u>Customers</u>	Transfer <u>Gains</u>	Transfer <u>Losses</u>	Lost <u>Customers</u>	Added <u>Load</u>
Gene	ral Service		1 000 0	05.4	(22.2)	(107.1)					
1.1.1	Rate 1 - Sales	4 131.1	4 096.0	35.1	(98.6)	(127.4)	83.9	177.2	0.0	0.0	0.0
1.1.2	Rate 1 - I-Service	490.2	<u>696.1</u>	(205.9)	(105.5)	<u>(21.8)</u>	0.0	0.0	(177.2)	0.0	0.0
1.1	Total Rate 1	<u>4 621.3</u>	<u>4 792.1</u>	<u>(170.8)</u>	(105.5)	<u>(149.2)</u>	83.9	177.2	<u>(177.2)</u>	0.0	0.0
1.2.1	Rate 6 - Sales	2 942.6	2 785.3	157.3	28.3	(67.2)	21.8	210.6	(36.2)	0.0	0.0
1.2.2	Rate 6 - T-Service	<u>1 625.5</u>	<u>1 979.5</u>	(354.0)	<u>(134.9)</u>	<u>(40.6)</u>	0.0	35.5	(214.0)	0.0	0.0
1.2	Total Rate 6	<u>4 568.1</u>	4 764.8	<u>(196.7)</u>	<u>(106.6)</u>	<u>(107.8)</u>	21.8	246.1	(250.2)	0.0	0.0
1.3.1	Rate 9 - Sales	0.5	1.8	(1.3)	(1.2)	0.0	0.0	0.0	0.0	(0.1)	0.0
1.3.2	Rate 9 - T-Service	0.1	0.2	(0.1)	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0
1.3	Total Rate 9	0.6	2.0	(1.4)	(1.3)	0.0	0.0	0.0	0.0	(0.1)	0.0
1.	Total General Service Sales & T-Service	<u>9 190.0</u>	<u>9 558.9</u>	<u>(368.9)</u>	<u>(213.4)</u>	(257.0)	105.7	423.3	<u>(427.4)</u>	<u>(0.1)</u>	0.0
Contr	act Sales										
2.1	Rate 100	0.0	0.0	0.0	1.8	0.0	0.0	0.0	(1.8)	0.0	0.0
2.2	Rate 110	92.1	66.8	25.3	(6.2)	0.0 *	0.0	36.2	(4.7)	0.0	0.0
2.3	Rate 115	0.9	2.8	(1.9)	(1.9)	0.0	0.0	0.0	0.0	0.0	0.0
2.4	Rate 135	1.2	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
2.5	Rate 145	22.0	24.8	(2.8)	3.8	(0.3)	0.0	0.0	(6.3)	0.0	0.0
2.6	Rate 170	37.3	54.8	(17.5)	1.4	(0.2)	0.0	4.0	(22.7)	0.0	0.0
2.7	Rate 200	164.9	163.1	<u>1.8</u>	1.8	0.0	0.0	0.0	0.0	0.0	0.0
2.	Total Contract Sales	318.4	312.9	5.5	1.3	<u>(0.5)</u>	0.0	40.2	<u>(35.5)</u>	0.0	0.0
Contr	act T-Service										
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	525.6	420.8	104.8	10.6	(0.6)	0.0	134.1	(39.3)	0.0	0.0
3.3	Rate 115	470.1	536.6	(66.5)	25.1	0.0 *	0.0	19.9	(111.5)	0.0	0.0
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	54.6	0.7	(0.8)	0.0	0.0	2.9	(1.4)	0.0	0.0
3.6	Rate 145	141.0	128.0	13.0	6.5	(0.8)	0.0	14.0	(6.7)	0.0	0.0
3.7	Rate 170	425.6	461.6	(36.0)	(20.7)	(2.5)	0.0	0.0	(12.8)	0.0	0.0
3.8	Rate 300	30.0	31.0	(1.0)	(1.0)	0.0	0.0	0.0	0.0	0.0	0.0
3.9	Rate 315	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 647.6</u>	<u>1 632.6</u>	15.0	19.7	<u>(3.9)</u>	0.0	170.9	<u>(171.7)</u>	0.0	0.0
4.	Total Contract Sales & T-Service	<u>1 966.0</u>	<u>1 945.5</u>	20.5	21.0	<u>(4.4)</u>	0.0	<u>211.1</u>	<u>(207.2)</u>	0.0	0.0
5.	Total	11 156.0	11 504.4	( <u>348.4</u> )	( <u>192.4</u> )	( <u>261.4</u> )	105.7	634.4	( <u>634.6</u> )	( <u>0.1</u> )	0.0

\* Less than 50,000 m<sup>3</sup>.

The principal reasons for the variances contributing to the weather normalized decrease of 87.0 10<sup>6</sup>m<sup>3</sup> in the 2014 Budget over the 2013 Budget are as follows:

- 1. The volumetric decrease of 21.6 10<sup>6</sup>m<sup>3</sup> in Rate 1 is due to lower average use per customer totalling 105.5 10<sup>6</sup>m<sup>3</sup>; partially offset by customer growth of 83.9 10<sup>6</sup>m<sup>3</sup>;
- The volumetric decrease of 88.9 10<sup>6</sup>m<sup>3</sup> in Rate 6 is due to a lower average use per customer totalling 106.6 10<sup>6</sup>m<sup>3</sup>, the net customer migration to Contract Sales and T-Service of 4.1 10<sup>6</sup>m<sup>3</sup>; partially offset by the net customer growth of 21.8 10<sup>6</sup>m<sup>3</sup>;
- 3. The volumetric decrease of 1.4 10<sup>6</sup>m<sup>3</sup> in Rate 9 is due to lower average use per station of 1.3 10<sup>6</sup>m<sup>3</sup> and the loss of a station of 0.1 10<sup>6</sup>m<sup>3</sup>;
- 4. The volumetric increase for Contract Sales and T-Service of 24.9 10<sup>6</sup>m<sup>3</sup> is due to the increases in the apartment sector of 0.4 10<sup>6</sup>m<sup>3</sup>, the industrial sector of 22.9 10<sup>6</sup>m<sup>3</sup> and the Rate 200 of 1.8 10<sup>6</sup>m<sup>3</sup>; partially offset by the decrease of commercial sector of 0.2 10<sup>6</sup>m<sup>3</sup>.

#### COMPARISON OF GAS SALES AND TRANSPORTATION REVENUE BY RATE CLASS 2014 BUDGET AND 2013 BOARD APPROVED BUDGET (\$ MILLIONS)

		Col. 1	Col. 2	Col. 3
			2013	2014 Budget
Item		2014	Board Approved	Over (Under)
No.		Budget	Budget	2013 Budget
				(1-2)
Gener	al Service		4 000 0	100.0
1.1.1	Rate 1 - Sales	1 414.6	1 308.3	106.3
1.1.2	Total Rate 1	<u>91.9</u> 1 506 5	1 438 9	<u>(30.7)</u> 67.6
1.1		1 000.0	1 400.0	
1.2.1	Rate 6 - Sales	776.5	685.4	91.1
1.2.2	Rate 6 - T-Service	<u>118.1</u>	<u> </u>	<u>(35.2)</u>
1.2	Total Rate 6	894.6	838.7	<u> </u>
1.3.1	Rate 9 - Sales	0.2	0.5	(0.3)
1.3.2	Rate 9 - T-Service	<u>0.0</u> *	0.0 *	0.0 *
1.3	Total Rate 9	0.2	0.5	<u>(0.3)</u>
1.	Total General Service Sales & T-Service	2 401.3	2 278.1	123.2
Contra	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	17.7	11.7	6.0
2.3	Rate 115	0.2	0.5	(0.3)
2.4	Rate 135	0.2	0.1	0.1
2.5	Rate 145	4.1	4.2	(0.1)
2.0	Rate 200	25.6	23.5	(1.9)
2.7				<u></u>
2.	Total Contract Sales	54.0	48.1	5.9
Contra	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	14.5	13.3	1.2
3.3	Rate 115	6.2	6.9	(0.7)
3.4	Rate 125	10.9	10.9	0.0
3.5	Rate 145	3.5	33	(0.1)
3.7	Rate 170	(0.4)	(0.6)	0.2
3.8	Rate 300	0.2	0.2	0.0 *
3.9	Rate 315	0.0	0.0	0.0
3.	Total Contract T-Service	36.4	35.6	0.8
4.	Total Contract Sales & T-Service	90.4	83.7	6.7
5.	Total	2 491.7	2 361.8	129.9

\* Less than \$50,000.

Witnesses: R. Cheung S. Qian

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## DETAILS OF OTHER REVENUE 2014 FISCAL YEAR AND 2013 BOARD APPROVED

		Col. 1	Col. 2	Col. 3
Item No.		2014 Budget (\$Millions)	2013 Board Approved (\$Millions)	2014 Budget Over/(Under) 2013 Board Approved (\$Millions)
1.1	Service Charges & DPAC	12.1	12.9	(0.8)
1.2	Rental Revenue - NGV Program	0.6	0.8	(0.2)
1.3	Late Payment Penalties	10.1	12.9	(2.8)
1.4	Dow Moore Recovery	0.3	0.3	-
1.5	Transactional Services (net)	12.0	12.0	-
1.6	Miscellaneous	0.1	0.7	(0.6)
1.7	Open Bill Revenue	5.4	5.4	
1.8	Total Other Revenue	40.6	45.0	(4.4)

#### RATE OF RETURN ON CAPITAL EMPLOYED IN THE NATURAL GAS VEHICLES PROGRAM YEAR ENDED DECEMBER 31, 2014, 2015 and 2016

Item N	0.	Total 2014	Total 2015	Total 2016
		(\$000)	(\$000)	(\$000)
	Operating Income			
1.1.1	Gas Distribution Margin	829.8	848.7	886.7
1.1.2	Other Revenue	1,115.3	1,771.2	2,427.2
1.1	Total Revenue	1,945.1	2,619.9	3,313.9
	Expenses			
1.2.1	O&M	604.4	619.6	638.7
1.2.2	Depreciation	732.0	1,132.6	1,356.1
1.2	Total Expenses	1,336.4	1,752.3	1,994.8
1.3	Operating Income before Income Tax	608.7	867.6	1,319.1
1.4	Income Tax Provision (Recovery)	89.8	(86.4)	(223.5)
1	Operating Income after Income Taxes	518.9	954.0	1,542.6
	Investment			
2.1	Average Net Plant & Equipment	5,292.6	10,908.5	16,314.2
2.2	Allocated Capital	94.7	86.6	78.9
2.3	Working Capital	28.3	30.2	33.0
2	Net Utility Investment	5,415.6	11,025.4	16,426.1
3	Rate of Return on Investment	9.58%	8.65%	9.39%
4	Requested Rate of Return	6.74%	6.96%	7.01%
5.1	After Tax Sufficiency / (Deficiency)	153.9	186.6	391.1
5.2	Pre Tax Sufficiency / (Deficiency)	209.4	253.9	532.2

Witnesses:

F. Ahmad K. Culbert

M. Tremayne

#### UTILITY OPERATING REVENUE 2015 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		Utility Revenue (\$Millions)	Normalizing and Other Adjustments (\$Millions)	Adjusted Utility Revenue (\$Millions)
		(*)	(+)	(*/
1.	Gas sales	2,404.3	(91.8)	2,312.5
2.	Transportation of gas	229.6	(18.4)	211.2
3.	Transmission, compression & storage	1.8	-	1.8
4.	Other operating revenue	40.9	-	40.9
5.	Interest and property rental	-	-	-
6.	Other income	0.1	_	0.1
7.	Total operating revenue	2,676.7	(110.2)	2,566.5

#### EXPLANATION OF ADJUSTMENTS TO UTILITY REVENUE 2015 FORECAST YEAR

Line No. Adjusted	Adjustment Increase (Decrease)	Explanation
	(\$Millions)	
1.	(91.8)	Gas sales
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).
2.	(18.4)	Transportation of gas
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).

#### UTILITY REVENUE 2015 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		EGDI Ont. Corporate Revenue	Adjustment	Utility Revenue
		(\$Millions)	(\$Millions)	(\$Millions)
1.	Residential	1,502.8	-	1,502.8
2.	Commercial	763.5	-	763.5
3.	Industrial	107.2	-	107.2
4.	Wholesale	30.8	-	30.8
5.	Gas sales	2,404.3	-	2,404.3
6.	Transportation of gas	229.6	-	229.6
7.	Transmission, compression & storage	1.8	-	1.8
8	Service charges & DPAC	12.2	_	12.2
9.	Rent from NGV rentals	0.9	-	0.9
10.	Late payment penalties	10.1	-	10.1
11.	Transactional services	13.4	(1.4)	12.0
12.	Open bill revenue	6.8	(1.4)	5.4
13.	Dow Moore recovery	0.3	-	0.3
14.	Affiliate asset use revenue	0.2	(0.2)	-
15.	ABC T-service (net)	1.3	(1.3)	<u> </u>
16.	Other operating revenue	45.2	(4.3)	40.9
17.	Income from investments	-	-	-
18.	Interest during construction	20.9	(20.9)	-
19.	Interest income from affiliates	-	-	-
20.	Interest on (net) deferral accounts	-	-	-
21.	Property/asset use revenue 3rd party	1.1	(1.1)	-
~~				
22.	Interest and property rental	22.0	(22.0)	<u> </u>
23.	Miscellaneous	13.9	(13.8)	0.1
24.	Dividend income	62.7	(62.7)	-
25.	Profit on sale of property	-	-	-
26.	NGV merchandising revenue (net)	-	-	-
27.	Other income	76.6	(76.5)	0.1
28.	Total revenue	2,779.5	(102.8)	2,676.7

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2015 FORECAST YEAR

Line No. Adiusted	Adjustment Increase (Decrease)	Explanation
	(\$Millions)	
11.	(1.4)	Transactional services
		To eliminate transactional services revenues above the proposed base amount to be included in rates. Ratepayer and shareholder amounts above the base will be treated outside of utility results and returns.
12.	(1.4)	Open bill revenue
		To eliminate the Open Bill shareholder incentive.
14.	(0.2)	Affiliate asset use revenue
		To reflect the elimination of asset use revenue in conjunction with the removal of affiliate use asset values from rate base and all related cost of service elements. (RP-2002-0133)
15.	(1.3)	ABC T-Service (net)
		To eliminate the net revenue from ABC T-Service considered to be non-utility. (RP-1999-0001)

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE <u>2015 FORECAST YEAR</u>

	Adjustment		
Line No.	Increase		
Adjusted	(Decrease)	Explanation	
	(\$Millions)		
18.	(20.9)	Interest during construction	
		To eliminate interest calculated on funds used for purposes of construction during the year.	
21.	(1.1)	Property/asset use revenue 3rd party	
		To eliminate asset use revenue (RP-2002-0133) and rental revenue from Tecumseh farm properties considered to be non-utility. (EBRO 464 & 365)	
23.	(13.8)	Miscellaneous	
		To eliminate net revenue from the Company's oil & gas and unregulated storage divisions.	(8.4)
		To eliminate the shareholders' incentive income recorded as a result of calculating the DSMIVA amount.	(5.4) (13.8)
24.	(62.7)	Dividend income	
		To eliminate non-utility inter-company dividend income from the financing transaction (EBO 179-16).	

## COMPARISON OF UTILITY OPERATING REVENUE 2015 FORECAST AND 2014 BUDGET

		Col. 1	Col. 2	Col. 3
ltem No.		2015 Forecast	2014 Budget	2015 Forecast Over/(Under) 2014 Budget
		(\$Millions)	(\$Millions)	(\$Millions)
1.1	Gas Sales	2,404.3	2,253.5	150.9
1.2	Transportation of Gas	229.6	242.8	(13.2)
1.3	Transmission, Compression and Storage	1.8	1.8	-
1.4	Other Revenue	41.0	40.6	0.4
1.1	Total Operating Revenue	2,676.7	2,538.7	138.0

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## CUSTOMER METERS AND VOLUMES BY RATE CLASS 2015 FORECAST

		Col. 1	Col. 2	Col. 3
14				
No		Customers	Volumes	Revenues
<u>INU.</u>		(Average)	$\sqrt{010110000000000000000000000000000000$	(\$Millions)
		(Average)	(10 m)	(aiviiiions)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 763 160	4 251.0	1 496.7
1.1.2	Rate 1 - T-Service	170 652	413.2	79.7
1.1	Total Rate 1	<u>1 933 812</u>	<u>4 664.2</u>	<u>1 576.4</u>
1.2.1	Rate 6 - Sales	143 233	3 097.5	840.7
1.2.2	Rate 6 - T-Service	17 847	<u>1 509.7</u>	114.2
1.2	Total Rate 6	161 080	<u>4 607.2</u>	954.9
1.3.1	Rate 9 - Sales	7	0.7	0.2
1.3.2	Rate 9 - T-Service	1	<u>0.1</u>	0.0 **
1.3	Total Rate 9	_8	0.8	0.2
1.	Total General Service Sales & T-Service	<u>2 094 900</u>	<u>9 272.2</u>	<u>2 531.5</u>
Contra	act Sales			
2.1	Rate 100	0	0.0	0.0
2.2	Rate 110	33	92.9	18.6
2.3	Rate 115	1	0.9	0.2
2.4	Rate 135	1	1.2	0.2
2.5	Rate 145	11	22.0	4.3
2.6	Rate 170	5	37.3	6.5
2.7	Rate 200	<u> </u>	<u>183.9</u>	30.8
2.	Total Contract Sales	_52	338.2	60.6
Contra	act T-Service			
3.1	Rate 100	0	0.0	0.0
3.2	Rate 110	158	526.8	15.3
3.3	Rate 115	26	470.7	6.4
3.4	Rate 125	5	0.0 *	10.9
3.5	Rate 135	40	55.3	1.7
3.6	Rate 145	90	140.6	3.6
3.7	Rate 170	29	415.7	( 0.2)
3.8	Rate 300	2	30.0	0.2
3.9	Rate 315	_0	0.0	0.0
3.	Total Contract T-Service	350	<u>1 639.1</u>	<u> </u>
4.	Total Contract Sales & T-Service	402	<u>1 977.3</u>	98.5
5.	Total	2 095 302	11 249.5	2 630.0

\* There is no distribution volume for Rate 125 customers.

\*\* Less than \$50,000.

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## COMPARISON OF AVERAGE CUSTOMER METERS BY RATE CLASS 2015 FORECAST AND 2014 BUDGET

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		2015 <u>Forecast</u>	2014 <u>Budget</u>	2015 Forecast Over (Under) <u>2014 Budget</u> (1-2)
Gener	al Service			
1.1.1 1.1.2 1.1	Rate 1 - Sales Rate 1 - T-Service Total Rate 1	1 763 160 <u>170 652</u> <u>1 933 812</u>	1 700 370 <u>199 262</u> <u>1 899 632</u>	62 790 <u>( 28 610)</u> <u>34 180</u>
1.2.1 1.2.2 1.2	Rate 6 - Sales Rate 6 - T-Service Total Rate 6	143 233 <u>17 847</u> <u>161 080</u>	139 229 <u>20 347</u> <u>159 576</u>	4 004 ( 2 500) <u>1 504</u>
1.3.1	Rate 9 - Sales	7	7	0
1.3.2	Rate 9 - T-Service	<u>    1</u>	<u>    1</u>	<u>0</u>
1.3	Total Rate 9	_8	8	<u>0</u>
1.	Total General Service Sales & T-Service	<u>2 094 900</u>	<u>2 059 216</u>	<u>35 684</u>
Contra	act Sales			
2.1	Rate 100	0	0	0
2.2	Rate 110	33	33	0
2.3	Rate 115	1	1	0
2.4	Rate 135	1	1	0
2.5	Rate 145	11	11	0
2.6	Rate 170	5	5	0
2.7	Rate 200	<u>_1</u>	<u>_1</u>	<u>0</u>
2.	Total Contract Sales	52	52	<u>0</u>
Contra	act T-Service			
3.1	Rate 100	0	0	0
3.2	Rate 110	158	158	0
3.3	Rate 115	26	26	0
3.4	Rate 125	5	5	0
3.5	Rate 135	40	40	0
3.6	Rate 145	90	91	(1)
3.7	Rate 170	29	29	0
3.8 3.9	Rate 300 Rate 315	<u>0</u>	<u>0</u>	0 _0
3.	Total Contract T-Service	350	351	<u>(1)</u>
4.	Total Contract Sales & T-Service	402	403	<u>(1)</u>
5.	Total	2 095 302	<u>2 059 619</u>	<u>35 683</u>

## COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2015 FORECAST AND 2014 BUDGET

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		2015 <u>Forecast</u>	2014 <u>Budget</u>	2015 Forecast Over (Under) <u>2014 Budget</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	4 251.0	4 131.1	119.9
1.1.2	Rate 1 - T-Service	413.2	490.2	<u>(77.0)</u>
1.1	Total Rate 1	<u>4 664.2</u>	<u>4 621.3</u>	42.9
1.2.1	Rate 6 - Sales	3 097.5	2 942.6	154.9
1.2.2	Rate 6 - T-Service	<u>1 509.7</u>	<u>1 625.5</u>	<u>(115.8)</u>
1.2	Total Rate 6	<u>4 607.2</u>	<u>4 568.1</u>	<u>39.1</u>
1.3.1	Rate 9 - Sales	0.7	0.5	0.2
1.3.2	Rate 9 - T-Service	0.1	<u>0.1</u>	0.0
1.3	Total Rate 9	<u>0.8</u>	<u>0.6</u>	0.2
1.	Total General Service Sales & T-Service	<u>9 272.2</u>	<u>9 190.0</u>	82.2
<u>Contra</u>	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	92.9	92.1	0.8
2.3	Rate 115	0.9	0.9	0.0
2.4	Rate 135	1.2	1.2	0.0
2.5	Rate 145	22.0	22.0	0.0
2.6	Rate 170	37.3	37.3	0.0
2.7	Rate 200	<u>183.9</u>	<u>164.9</u>	<u>19.0</u>
2.	Total Contract Sales	338.2	318.4	<u>19.8</u>
Contra	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	526.8	525.6	1.2
3.3	Rate 115	470.7	470.1	0.6
3.4	Rate 125	0.0 *	0.0 *	0.0
3.5	Rate 135	55.3	55.3	0.0
3.6	Rate 145	140.6	141.0	(0.4)
3.7	Rate 170	415.7	425.6	(9.9)
3.8	Rate 300	30.0	30.0	0.0
3.9	Rate 315	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 647.6</u>	<u>(8.5)</u>
4.	Total Contract Sales & T-Service	<u>1 977.3</u>	<u>1 966.0</u>	<u>11.3</u>
5.	Total	<u>11 249.5</u>	<u>11 156.0</u>	<u>93.5</u>

\* There is no distribution volume for Rate 125 customers.

#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2015 FORECAST AND 2014 BUDGET

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
ltem <u>No.</u>		2015 Forecast	2014 <u>Budget</u>	2015 Forecast Over (Under) <u>2014 Budget</u> (1-2)	2014* <u>Adjustments</u>	2015 Forecast Over (Under) 2014 Budget with Adjustments (3-4)
Gene	al Service					
1.1.1	Rate 1 - Sales	4 251.0	4 131.1	119.9	0.0	119.9
1.1.2	Rate 1 - T-Service	413.2	490.2	<u>(77.0)</u>	0.0	(77.0)
1.1	Total Rate 1	<u>4 664.2</u>	<u>4 621.3</u>	42.9	0.0	42.9
1.2.1	Rate 6 - Sales	3 097.5	2 942.6	154.9	0.0	154.9
1.2.2	Rate 6 - T-Service	<u>1 509.7</u>	<u>1 625.5</u>	<u>(115.8)</u>	0.0	<u>(115.8)</u>
1.2	Total Rate 6	<u>4 607.2</u>	<u>4 568.1</u>	<u>39.1</u>	0.0	<u>39.1</u>
1.3.1	Rate 9 - Sales	0.7	0.5	0.2	0.0	0.2
1.3.2	Rate 9 - T-Service	0.1	0.1	0.0	0.0	0.0
1.3	Total Rate 9	0.8	0.6	0.2	0.0	0.2
1.	Total General Service Sales & T-Service	<u>9 272.2</u>	<u>9 190.0</u>	82.2	0.0	82.2
Contra	act Sales					
2.1	Rate 100	0.0	0.0	0.0	0.0	0.0
2.2	Rate 110	92.9	92.1	0.8	0.0	0.8
2.3	Rate 115	0.9	0.9	0.0	0.0	0.0
2.4	Rate 135	1.2	1.2	0.0	0.0	0.0
2.5	Rate 145	22.0	22.0	0.0	0.0	0.0
2.6	Rate 170	37.3	37.3	0.0	0.0	0.0
2.7	Rate 200	183.9	164.9	<u>19.0</u>	0.0	<u>19.0</u>
2.	Total Contract Sales	338.2	318.4	<u>19.8</u>	0.0	<u>19.8</u>
Contra	act T-Service					
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	526.8	525.6	1.2	0.0	1.2
3.3	Rate 115	470.7	470.1	0.6	0.0	0.6
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	55.3	0.0	0.0	0.0
3.6	Rate 145	140.6	141.0	(0.4)	0.0	(0.4)
3.7	Rate 170	415.7	425.6	(9.9)	0.0	(9.9)
3.8	Rate 300	30.0	30.0	0.0	0.0	0.0
3.9	Rate 315	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 647.6</u>	<u>(8.5)</u>	0.0	<u>(8.5)</u>
4.	Total Contract Sales & T-Service	<u>1 977.3</u>	<u>1 966.0</u>	<u>11.3</u>	0.0	<u>11.3</u>
5.	Total	<u>11 249.5</u>	<u>11 156.0</u>	<u>93.5</u>	0.0	<u>93.5</u>

\*Note: As 2015 Forecast degree days are same as 2014 Budget Degree Days, normalization adjustment is not required in order to place the two years on a comparable basis.

Witnesses: R. Cheung S. Qian

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### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2015 FORECAST AND 2014 BUDGET

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
Item <u>No.</u>		2015 Forecast	2014 <u>Budget</u>	2015 Forecast Over (Under) <u>2014 Budget</u> (1-2)	Change in <u>Use</u>	<u>Weather</u>	New <u>Customers</u>	Transfer <u>Gains</u>	Transfer <u>Losses</u>	Lost <u>Customers</u>	Added <u>Load</u>
<u>Gener</u> 1 1 1	<u>al Service</u> Rate 1 - Sales	4 251 0	4 131 1	119.9	(36.7)	0.0	82.4	74.2	0.0	0.0	0.0
1.1.2	Rate 1 - T-Service	413.2	490.2	(77.0)	(2.8)	0.0	0.0	0.0	(74.2)	0.0	0.0
1.1	Total Rate 1	4 664.2	4 621.3	42.9	(39.5)	0.0	82.4	74.2	(74.2)	0.0	0.0
1.2.1	Rate 6 - Sales	3 097.5	2 942.6	154.9	51.9	0.0	27.7	75.3	0.0	0.0	0.0
1.2.2	Rate 6 - T-Service	1 509.7	1 625.5	(115.8)	(40.9)	0.0	0.0	0.4	(75.3)	0.0	0.0
1.2	Total Rate 6	<u>4 607.2</u>	<u>4 568.1</u>	39.1	11.0	0.0	27.7	75.7	<u>(75.3)</u>	0.0	0.0
1.3.1	Rate 9 - Sales	0.7	0.5	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
1.3.2	Rate 9 - T-Service	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.3	Total Rate 9	0.8	0.6	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
1.	Total General Service Sales & T-Service	<u>9 272.2</u>	<u>9 190.0</u>	82.2	<u>(28.3)</u>	0.0	110.1	149.9	<u>(149.5)</u>	0.0	0.0
Contra	act Sales										
2.1	Rate 100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.2	Rate 110	92.9	92.1	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
2.3	Rate 115	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.4	Rate 135	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5	Rate 145	22.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.6	Rate 170	37.3	37.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.7	Rate 200	183.9	164.9	<u>19.0</u>	19.0	0.0	0.0	0.0	0.0	0.0	0.0
2.	Total Contract Sales	338.2	318.4	<u>19.8</u>	<u>19.8</u>	0.0	0.0	0.0	0.0	0.0	0.0
Contra	act T-Service										
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	526.8	525.6	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0
3.3	Rate 115	470.7	470.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.6	Rate 145	140.6	141.0	(0.4)	0.0	0.0	0.0	0.0	(0.4)	0.0	0.0
3.7	Rate 170	415.7	425.6	(9.9)	(9.9)	0.0	0.0	0.0	0.0	0.0	0.0
3.8	Rate 300	30.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.9	Rate 315	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 647.6</u>	<u>(8.5)</u>	<u>(8.1)</u>	0.0	0.0	0.0	<u>(0.4)</u>	0.0	0.0
4.	Total Contract Sales & T-Service	<u>1 977.3</u>	<u>1 966.0</u>	11.3	<u>11.7</u>	0.0	0.0	0.0	<u>(0.4)</u>	0.0	0.0
5.	Total	<u>11 249.5</u>	<u>11 156.0</u>	93.5	( <u>16.6</u> )	0.0	<u>110.1</u>	149.9	( <u>149.9</u> )	0.0	0.0

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The principal reasons for the variances contributing to the weather normalized decrease of 93.5 10<sup>6</sup>m<sup>3</sup> in the 2015 Forecast over the 2014 Budget are as follows:

- 1. The volumetric increase of 42.9 10<sup>6</sup>m<sup>3</sup> in Rate 1 is due to customer growth of 82.4 10<sup>6</sup>m<sup>3</sup>; partially offset by a lower average use per customer totalling 39.5 10<sup>6</sup>m<sup>3</sup>;
- The volumetric increase of 39.1 10<sup>6</sup>m<sup>3</sup> in Rate 6 is due to a higher average use per customer totalling 11.0 10<sup>6</sup>m<sup>3</sup>, net customer growth of 27.7 10<sup>6</sup>m<sup>3</sup> and the net customer migration from Contract Sales and T-Service of 0.4 10<sup>6</sup>m<sup>3</sup>;
- 3. The volumetric increase of 0.2 10<sup>6</sup>m<sup>3</sup> in Rate 9 is due to a higher average use per station;
- 4. The volumetric increase for Contract Sales and T-Service of 11.3 10<sup>6</sup>m<sup>3</sup> is due to increase in Rate 200 of 19.0 10<sup>6</sup>m<sup>3</sup>; partially offset by the decrease in the industrial sector of 7.7 10<sup>6</sup>m<sup>3</sup>.

#### COMPARISON OF GAS SALES AND TRANSPORTATION REVENUE BY RATE CLASS <u>2015 FORECAST AND 2014 BUDGET</u> (\$ MILLIONS)

		Col. 1	Col. 2	Col. 3
Item <u>No.</u>		2015 <u>Forecast</u>	2014 <u>Budget</u>	2015 Forecast Over (Under) <u>2014 Budget</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 496.7	1 414.6	82.1
1.1.2	Rate 1 - T-Service	79.7	<u>91.9</u>	<u>(12.2)</u>
1.1	Total Rate 1	1 576.4	1 506.5	69.9
1.2.1	Rate 6 - Sales	840.7	776.5	64.2
1.2.2	Rate 6 - T-Service	<u>114.2</u>	<u>118.1</u>	<u>(3.9)</u>
1.2	Total Rate 6	954.9	<u>    894.6</u>	60.3
1.3.1	Rate 9 - Sales	0.2	0.2	0.0 *
1.3.2	Rate 9 - T-Service	0.0 *	0.0 *	0.0 *
1.3	Total Rate 9		0.2	0.0
1.	Total General Service Sales & T-Service	<u>2 531.5</u>	2 401.3	130.2
<u>Contra</u>	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	18.6	17.7	0.9
2.3	Rate 115	0.2	0.2	0.0
2.4	Rate 135	0.2	0.2	0.0
2.5	Rate 145	4.3	4.1	0.2
2.0	Rate 170	20.9	0.2	0.3
2.1	Rate 200		23.0	
2.	Total Contract Sales	60.6	54.0	6.6
<u>Contra</u>	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	15.3	14.5	0.8
3.3	Rate 115	6.4	6.2	0.2
3.4	Rate 125	10.9	10.9	0.0
3.5	Rate 135	1.7	1.5	0.2
3.0	Rate 145	3.0	3.5	0.1
3.7 3.8	Rate 170 Rate 300	(0.2)	(0.4)	0.2
3.9	Rate 315	0.2	0.0	0.0
3.	Total Contract T-Service	37.9	36.4	1.5
4.	Total Contract Sales & T-Service	_98.5	_90.4	<u>8.1</u>
5.	Total	2 630.0	2 491.7	<u>   138.3</u>

\* Less than \$50,000.

## DETAILS OF OTHER REVENUE 2015 FORECAST AND 2014 BUDGET

		Col. 1	Col. 2	Col. 3
Item No.		2015 Forecast (\$Millions)	2014 Budget (\$Millions)	2015 Forecast Over/(Under) 2014 Budget (\$Millions)
1.1	Service Charges & DPAC	12.2	12.1	0.1
1.2	Rental Revenue - NGV Program	0.9	0.6	0.3
1.3	Late Payment Penalties	10.1	10.1	-
1.4	Dow Moore Recovery	0.3	0.3	-
1.5	Transactional Services (net)	12.0	12.0	-
1.6	Miscellaneous	0.1	0.1	-
1.7	Open Bill Revenue	5.4	5.4	-
1.8	Total Other Revenue	41.0	40.6	0.4

#### UTILITY OPERATING REVENUE 2016 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		Utility Revenue	Normalizing and Other Adjustments	Adjusted Utility Revenue
		(aminons)	(aiviiiions)	(aminoris)
1.	Gas sales	2,464.5	(91.8)	2,372.7
2.	Transportation of gas	217.1	(18.4)	198.7
3.	Transmission, compression & storage	1.8	-	1.8
4.	Other operating revenue	41.2	-	41.2
5.	Interest and property rental	-	-	-
6.	Other income	0.1	-	0.1
7.	Total operating revenue	2,724.7	(110.2)	2,614.5

#### EXPLANATION OF ADJUSTMENTS TO UTILITY REVENUE 2016 FORECAST YEAR

Line No. Adjusted	Adjustment Increase (Decrease)	Explanation
	(\$Millions)	
1.	(91.8)	Gas sales
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).
2.	(18.4)	Transportation of gas
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).

#### UTILITY REVENUE 2016 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		EGDI Ont. Corporate Revenue	Adjustment	Utility Revenue
		(\$Millions)	(\$Millions)	(\$Millions)
1.	Residential	1,532.9	-	1,532.9
2.	Commercial	790.6	-	790.6
3.	Industrial	109.8	-	109.8
4.	Wholesale	31.2	-	31.2
5.	Gas sales	2,464.5	-	2,464.5
6.	Transportation of gas	217.1	-	217.1
7.	Transmission, compression & storage	1.8	-	1.8
8	Service charges & DPAC	12.3	_	12.3
9. 9	Rent from NGV rentals	12.5	_	1 1
10	Late payment penalties	10.1	_	10.1
11	Transactional services	13.4	(1 4)	12.0
12.	Open bill revenue	6.7	(1.3)	5.4
13.	Dow Moore recovery	0.3	(1.0) -	0.3
14.	Affiliate asset use revenue	0.2	(0.2)	-
15.	ABC T-service (net)	1.1	(1.1)	
16	Other operating revenue	45.2	(4 0)	41.2
10.		40.2	(4.0)	71.2
17.	Income from investments	-	-	-
18.	Interest during construction	7.4	(7.4)	-
19.	Interest income from affiliates	-	-	-
20.	Interest on (net) deferral accounts	-	-	-
21.	Property/asset use revenue 3rd party	1.1	(1.1)	-
22.	Interest and property rental	8.5	(8.5)	-
23.	Miscellaneous	16.7	(16.6)	0.1
24.	Dividend income	62.7	(62.7)	-
25.	Profit on sale of property	-	-	-
26.	NGV merchandising revenue (net)	-	-	
27.	Other income	79.4	(79.3)	0.1
28.	Total revenue	2,816.5	(91.8)	2,724.7

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE <u>2016 FORECAST YEAR</u>

Line No. Adjusted	Adjustment Increase (Decrease)	Explanation
rajuotou	(\$Millions)	
11.	(1.4)	Transactional services
		To eliminate transactional services revenues above the proposed base amount to be included in rates. Ratepayer and shareholder amounts above the base will be treated outside of utility results and returns.
12.	(1.3)	Open bill revenue
		To eliminate the Open Bill shareholder incentive.
14.	(0.2)	Affiliate asset use revenue
		To reflect the elimination of asset use revenue in conjunction with the removal of affiliate use asset values from rate base and all related cost of service elements. (RP-2002-0133)
15.	(1.1)	ABC T-Service (net)
		To eliminate the net revenue from ABC T-Service considered to be non-utility. (RP-1999-0001)

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE <u>2016 FORECAST YEAR</u>

Line No.	Adjustment Increase		
Adjusted	(Decrease)	Explanation	
	(\$Millions)		
18.	(7.4)	Interest during construction	
		To eliminate interest calculated on funds used for purposes of construction during the year.	
21.	(1.1)	Property/asset use revenue 3rd party	
		To eliminate asset use revenue (RP-2002-0133) and rental revenue from Tecumseh farm properties considered to be non-utility. (EBRO 464 & 365)	
23.	(16.6)	Miscellaneous	
		To eliminate net revenue from the Company's oil & gas and unregulated storage divisions.	(11.2)
		To eliminate the shareholders' incentive income recorded as a result of calculating the DSMIVA amount.	(5.4) (16.6)
24.	(62.7)	Dividend income	
		To eliminate non-utility inter-company dividend income from the financing transaction (EBO 179-16).	

# COMPARISON OF UTILITY OPERATING REVENUE 2016 FORECAST AND 2015 FORECAST

		Col. 1	Col. 2	Col. 3
Item No.		2016 Forecast (\$Millions)	2015 Forecast (\$Millions)	2016 Forecast Over/(Under) 2015 Forecast (\$Millions)
1.1	Gas Sales	2,464.5	2,404.3	60.2
1.2	Transportation of Gas	217.1	229.6	(12.5)
1.3	Transmission, Compression and Storage	1.8	1.8	-
1.4	Other Revenue	41.3	41.0	0.3
1.1	Total Operating Revenue	2,724.7	2,676.7	48.0

# CUSTOMER METERS AND VOLUMES BY RATE CLASS 2016 FORECAST

		Col. 1	Col. 2	Col. 3
Item		-		_
<u>No.</u>		<u>Customers</u>	Volumes	<u>Revenues</u>
		(Average)	(10°m³)	(\$Millions)
Cana	vel Convice			
	Al Service	1 915 626	4 244 0	1 500 0
1.1.1	Rale I - Sales Poto 1 - T-Sonvico	153 324	4 341.0	1 552.5
1.1.2	Tatal Data 4	1000 000	<u> </u>	<u>1 COD E</u>
1.1	Total Rate T	1 968 960	<u>4 708.7</u>	1 603.5
121	Rate 6 - Sales	146 220	3 215 9	870 4
122	Rate 6 - T-Service	16 297	1 443 7	108.2
1.2	Total Rate 6	162 517	4 659 6	978.6
1.2		102 317	4 059.0	970.0
1.3.1	Rate 9 - Sales	7	0.7	0.2
1.3.2	Rate 9 - T-Service	<u>1</u>	0.1	0.0 **
1.3	Total Rate 9	8	0.8	0.2
			/	
1.	Total General Service Sales & T-Service	<u>2 131 485</u>	<u>9 369.1</u>	<u>2 582.3</u>
Contra	act Sales			
2.1	Rate 100	0	0.0	0.0
2.2	Rate 110	33	92.9	18.6
2.3	Rate 115	1	0.9	0.2
2.4	Rate 135	1	1.2	0.2
2.5	Rate 145	11	22.0	4.3
2.6	Rate 170	5	37.3	6.5
2.7	Rate 200	<u>_1</u>	185.9	<u>31.2</u>
2	Total Contract Salas	50	240.2	61.0
Ζ.	Total Contract Sales	52	<u>340.2</u>	01.0
Contra	act T-Service			
3.1	Rate 100	0	0.0	0.0
3.2	Rate 110	158	526.8	15.3
3.3	Rate 115	26	470.7	6.4
3.4	Rate 125	5	0.0 *	10.9
3.5	Rate 135	40	55.3	1.7
3.6	Rate 145	90	140.6	3.6
3.7	Rate 170	29	415.7	( 0.2)
3.8	Rate 300	2	30.0	0.2
3.9	Rate 315	_0	0.0	0.0
3.	Total Contract T-Service	350	<u>1 639.1</u>	<u>37.9</u>
4.	Total Contract Sales & T-Service	402	<u>1 979.3</u>	98.9
5.	Total	2 131 887	<u>11 348.4</u>	<u>2 681.2</u>

\* There is no distribution volume for Rate 125 customers.

\*\* Less than \$50,000.

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## COMPARISON OF AVERAGE CUSTOMER METERS BY RATE CLASS 2016 FORECAST AND 2015 FORECAST

		Col. 1	Col. 2	Col. 3
Item <u>No.</u>		2016 <u>Forecast</u>	2015 <u>Forecast</u>	2016 Forecast Over (Under) <u>2015 Forecast</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 815 636	1 763 160	52 476
1.1.2	Rate 1 - T-Service	<u>153 324</u>	170 652	<u>( 17 328)</u>
1.1	Total Rate 1	<u>1 968 960</u>	<u>1 933 812</u>	<u>35 148</u>
1.2.1	Rate 6 - Sales	146 220	143 233	2 987
1.2.2	Rate 6 - T-Service	<u>16 297</u>	<u>17 847</u>	<u>( 1 550)</u>
1.2	Total Rate 6	<u>162 517</u>	<u>   161  080  </u>	<u>1 437</u>
1.3.1	Rate 9 - Sales	7	7	0
1.3.2	Rate 9 - I - Service	<u>_1</u>	<u>_1</u>	<u>0</u>
1.3	Total Rate 9	<u>_8</u>	8	<u>    0</u>
1.	Total General Service Sales & T-Service	<u>2 131 485</u>	<u>2 094 900</u>	<u>36 585</u>
Contra	act Sales			
2.1	Rate 100	0	0	0
2.2	Rate 110	33	33	0
2.3	Rate 115	1	1	0
2.4	Rate 135	1	1	0
2.5	Rate 145	11	11	0
2.6	Rate 170	5	5	0
2.7	Rate 200	<u>    1</u>	_1	_0
2.	Total Contract Sales	52	_52	<u>0</u>
Contra	act T-Service			
3.1	Rate 100	0	0	0
3.2	Rate 110	158	158	0
3.3	Rate 115	26	26	0
3.4	Rate 125	5	5	0
3.5	Rate 135	40	40	0
3.6	Rate 145	90	90	0
3.7	Rate 1/0	29	29	0
3.8	Rate 300	2	2	0
3.9	Rate 315	<u>     0</u>	_0	<u> </u>
3.	Total Contract T-Service	350	350	<u>0</u>
4.	Total Contract Sales & T-Service	402	402	<u>0</u>
5.	Total	<u>2 131 887</u>	<u>2 095 302</u>	<u>36 585</u>

## COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2016 FORECAST AND 2015 FORECAST

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		2016 <u>Forecast</u>	2015 Forecast	2016 Forecast Over (Under) <u>2015 Forecast</u> (1-2)
Gener	ral Service			
1.1.1	Rate 1 - Sales	4 341.8	4 251.0	90.8
1.1.2	Rate 1 - T-Service	<u>366.9</u>	413.2	<u>(46.3)</u>
1.1	Total Rate 1	<u>4 708.7</u>	<u>4 664.2</u>	44.5
1.2.1	Rate 6 - Sales	3 215.9	3 097.5	118.4
1.2.2	Rate 6 - T-Service	<u>1 443.7</u>	<u>1 509.7</u>	<u>(66.0)</u>
1.2	Total Rate 6	<u>4 659.6</u>	<u>4 607.2</u>	52.4
1.3.1	Rate 9 - Sales	0.7	0.7	0.0
1.3.2	Rate 9 - T-Service	<u>0.1</u>	<u>0.1</u>	0.0
1.3	Total Rate 9	0.8	<u>0.8</u>	0.0
1.	Total General Service Sales & T-Service	<u>9 369.1</u>	<u>9 272.2</u>	96.9
<u>Contra</u>	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	92.9	92.9	0.0
2.3	Rate 115	0.9	0.9	0.0
2.4	Rate 135	1.2	1.2	0.0
2.5	Rate 145	22.0	22.0	0.0
2.6	Rate 170	37.3	37.3	0.0
2.7	Rate 200	185.9	<u>183.9</u>	2.0
2.	Total Contract Sales	340.2	<u>338.2</u>	2.0
Contra	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	526.8	526.8	0.0
3.3	Rate 115	470.7	470.7	0.0
3.4	Rate 125	0.0 *	0.0 *	0.0
3.5	Rate 135	55.3	55.3	0.0
3.6	Rate 145	140.6	140.6	0.0
3.7	Rate 170	415.7	415.7	0.0
3.8	Rate 300	30.0	30.0	0.0
3.9	Rate 315	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 639.1</u>	0.0
4.	Total Contract Sales & T-Service	<u>1 979.3</u>	<u>1 977.3</u>	2.0
5.	Total	<u>11 348.4</u>	<u>11 249.5</u>	98.9

\* There is no distribution volume for Rate 125 customers.

#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2016 FORECAST AND 2015 FORECAST (10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
ltem <u>No.</u>		2016 <u>Forecast</u>	2015 Forecast	2016 Forecast Over (Under) <u>2015 Forecast</u> (1-2)	2015* <u>Adjustments</u>	2016 Forecast Over (Under) 2015 Forecast with Adjustments (3-4)
Gener	ral Service					
1.1.1	Rate 1 - Sales	4 341.8	4 251.0	90.8	0.0	90.8
1.1.2	Rate 1 - T-Service	366.9	413.2	<u>(46.3)</u>	0.0	<u>(46.3)</u>
1.1	Total Rate 1	<u>4 708.7</u>	<u>4 664.2</u>	44.5	0.0	44.5
1.2.1	Rate 6 - Sales	3 215.9	3 097.5	118.4	0.0	118.4
1.2.2	Rate 6 - T-Service	<u>1 443.7</u>	<u>1 509.7</u>	<u>(66.0)</u>	0.0	<u>(66.0)</u>
1.2	Total Rate 6	<u>4 659.6</u>	<u>4 607.2</u>	52.4	0.0	<u>52.4</u>
1.3.1	Rate 9 - Sales	0.7	0.7	0.0	0.0	0.0
1.3.2	Rate 9 - T-Service	<u>0.1</u>	<u>0.1</u>	0.0	0.0	0.0
1.3	Total Rate 9	<u>0.8</u>	<u>0.8</u>	0.0	0.0	0.0
1.	Total General Service Sales & T-Service	<u>9 369.1</u>	<u>9 272.2</u>	96.9	0.0	96.9
Contra	act Sales					
2.1	Rate 100	0.0	0.0	0.0	0.0	0.0
2.2	Rate 110	92.9	92.9	0.0	0.0	0.0
2.3	Rate 115	0.9	0.9	0.0	0.0	0.0
2.4	Rate 135	1.2	1.2	0.0	0.0	0.0
2.5	Rate 145	22.0	22.0	0.0	0.0	0.0
2.6	Rate 170	37.3	37.3	0.0	0.0	0.0
2.7	Rate 200	185.9	<u>183.9</u>	2.0	0.0	2.0
2.	Total Contract Sales	340.2	338.2	2.0	0.0	2.0
Contra	act T-Service					
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	526.8	526.8	0.0	0.0	0.0
3.3	Rate 115	470.7	470.7	0.0	0.0	0.0
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	55.3	0.0	0.0	0.0
3.6	Rate 145	140.6	140.6	0.0	0.0	0.0
3.7	Rate 170	415.7	415.7	0.0	0.0	0.0
3.0 3.0	Rate 300 Poto 315	30.0	30.0	0.0	0.0	0.0
5.9	Nate 515	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 639.1</u>	0.0	0.0	0.0
4.	Total Contract Sales & T-Service	<u>1 979.3</u>	<u>1 977.3</u>	2.0	0.0	2.0
5.	Total	<u>11 348.4</u>	<u>11 249.5</u>	<u>98.9</u>	<u>0.0</u>	<u>98.9</u>

\*Note: As 2015 Forecast degree days are same as 2014 Budget Degree Days, normalization adjustment is not required in order to place the two years on a comparable basis.

Witnesses: R. Cheung S. Qian

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#### COMPARISON OF GAS SALES AND TRANSPORTATION VOLUME BY RATE CLASS 2016 FORECAST AND 2015 FORECAST

(10<sup>6</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10
ltem <u>No.</u>		2016 <u>Forecast</u>	2015 <u>Forecast</u>	2016 Forecast Over (Under) <u>2015 Forecast</u> (1-2)	Change in <u>Use</u>	Weather	New <u>Customers</u>	Transfer <u>Gains</u>	Transfer <u>Losses</u>	Lost <u>Customers</u>	Added <u>Load</u>
Gener	al Service										
1.1.1	Rate 1 - Sales	4 341.8	4 251.0	90.8	(37.1)	0.0	84.0	43.9	0.0	0.0	0.0
1.1.2	Rate 1 - T-Service	<u>366.9</u>	413.2	<u>(46.3)</u>	( <u>2.4)</u>	0.0	0.0	0.0	(43.9)	0.0	0.0
1.1	Total Rate 1	4 708.7	4 664.2	44.5	(39.5)	0.0	84.0	43.9	<u>(43.9)</u>	0.0	0.0
1.2.1	Rate 6 - Sales	3 215.9	3 097.5	118.4	40.4	0.0	33.0	45.0	0.0	0.0	0.0
1.2.2	Rate 6 - T-Service	<u>1 443.7</u>	<u>1 509.7</u>	(66.0)	<u>(21.0)</u>	0.0	0.0	0.0	(45.0)	0.0	0.0
1.2	Total Rate 6	<u>4 659.6</u>	<u>4 607.2</u>	52.4	19.4	0.0	33.0	45.0	<u>(45.0)</u>	0.0	0.0
1.3.1	Rate 9 - Sales	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.3.2	Rate 9 - T-Service	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.3	Total Rate 9	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.	Total General Service Sales & T-Service	<u>9 369.1</u>	<u>9 272.2</u>	96.9	<u>(20.1)</u>	0.0	117.0	88.9	<u>(88.9)</u>	0.0	0.0
Contra	act Sales										
2.1	Rate 100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.2	Rate 110	92.9	92.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.3	Rate 115	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.4	Rate 135	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5	Rate 145	22.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.6	Rate 170	37.3	37.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.7	Rate 200	185.9	183.9	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
2.	Total Contract Sales	340.2	338.2	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Contra	act T-Service										
3.1	Rate 100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.2	Rate 110	526.8	526.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.3	Rate 115	470.7	470.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.4	Rate 125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.5	Rate 135	55.3	55.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.6	Rate 145	140.6	140.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.7	Rate 170	415.7	415.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.8	Rate 300	30.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.9	Rate 315	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.	Total Contract T-Service	<u>1 639.1</u>	<u>1 639.1</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.	Total Contract Sales & T-Service	<u>1 979.3</u>	<u>1 977.3</u>	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
5.	Total	11 348.4	<u>11 249.5</u>	<u>98.9</u>	( <u>18.1</u> )	0.0	<u>117.0</u>	88.9	( <u>88.9</u> )	0.0	0.0
Filed: 2013-06-28 EB-2012-0459 Exhibit C5 Tab 2 Schedule 3 Page 4 of 4

The principal reasons for the variances contributing to the weather normalized decrease of 98.9  $10^{6}$ m<sup>3</sup> in the 2016 Forecast over the 2015 Forecast are as follows:

- 1. The volumetric increase of 44.5 10<sup>6</sup>m<sup>3</sup> in Rate 1 is due to customer growth of 84.0 10<sup>6</sup>m<sup>3</sup>; partially offset by a lower average use per customer totalling 39.5 10<sup>6</sup>m<sup>3</sup>;
- 2. The volumetric increase of 52.4 10<sup>6</sup>m<sup>3</sup> in Rate 6 is due to a higher average use per customer totalling 19.4 10<sup>6</sup>m<sup>3</sup> and net customer growth of 33.0 10<sup>6</sup>m<sup>3</sup>;
- 4. The volumetric increase for Contract Sales and T-Service of 2.0 10<sup>6</sup>m<sup>3</sup> is due to increase in Rate 200.

Witnesses: R. Cheung S. Qian

#### COMPARISON OF GAS SALES AND TRANSPORTATION REVENUE BY RATE CLASS <u>2016 FORECAST AND 2015 FORECAST</u> (\$ MILLIONS)

		Col. 1	Col. 2	Col. 3
Item <u>No.</u>		2016 <u>Forecast</u>	2015 <u>Forecast</u>	2016 Forecast Over (Under) <u>2015 Forecast</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 532.3	1 496.7	35.6
1.1.2	Rate 1 - T-Service	71.2	79.7	<u>(8.5)</u>
1.1	Total Rate 1	<u>1 603.5</u>	<u>1 576.4</u>	_27.1
1.2.1	Rate 6 - Sales	870.4	840.7	29.7
1.2.2	Rate 6 - T-Service	108.2	114.2	<u>(6.0)</u>
1.2	Total Rate 6	978.6	954.9	23.7
1.3.1	Rate 9 - Sales	0.2	0.2	0.0
1.3.2	Rate 9 - T-Service	0.0 *	<u>0.0</u> *	0.0
1.3	Total Rate 9	0.2	0.2	0.0
1.	Total General Service Sales & T-Service	2 582.3	2 531.5	_50.8
<u>Contra</u>	act Sales			
2.1	Rate 100	0.0	0.0	0.0
2.2	Rate 110	18.6	18.6	0.0
2.3	Rate 115	0.2	0.2	0.0
2.4	Rate 135	0.2	0.2	0.0
2.5	Rate 145	4.3	4.3	0.0
2.6	Rate 170	6.5	6.5 20.9	0.0
2.7	Rate 200	31.2	30.8	0.4
2.	Total Contract Sales	61.0	60.6	0.4
<u>Contra</u>	act T-Service			
3.1	Rate 100	0.0	0.0	0.0
3.2	Rate 110	15.3	15.3	0.0
3.3	Rate 115	6.4	6.4	0.0
3.4	Rate 125	10.9	10.9	0.0
3.5	Rate 135	1./	1./	0.0
3.6	Rate 145	3.6	3.6	0.0
3.7	Rate 170	(0.2)	(0.2)	0.0
3.8	Rate 300	0.2	0.2	0.0
3.9	Rate 315	0.0	0.0	0.0_
3.	Total Contract T-Service	37.9	<u> </u>	0.0
4.	Total Contract Sales & T-Service	98.9	98.5	0.4
5.	Total	<u>2 681.2</u>	2 630.0	<u>51.2</u>

\* Less than \$50,000.

# DETAILS OF OTHER REVENUE 2016 FORECAST AND 2015 FORECAST

		Col. 1	Col. 2	Col. 3
Item No.		2016 Forecast (\$Millions)	2015 Forecast (\$Millions)	2016 Forecast Over/(Under) 2015 Forecast (\$Millions)
1.1	Service Charges & DPAC	12.3	12.2	0.1
1.2	Rental Revenue - NGV Program	1.1	0.9	0.2
1.3	Late Payment Penalties	10.1	10.1	-
1.4	Dow Moore Recovery	0.3	0.3	-
1.5	Transactional Services (net)	12.0	12.0	-
1.6	Miscellaneous	0.1	0.1	-
1.7	Open Bill Revenue	5.4	5.4	-
1.8	Total Other Revenue	41.3	41.0	0.3

#### UTILITY OPERATING REVENUE 2017 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		Utility Revenue (\$Millions)	Normalizing and Other Adjustments (\$Millions)	Adjusted Utility Revenue (\$Millions)
1.	Gas sales	2,480.3	(91.8)	2,388.5
2.	Transportation of gas	211.1	(18.4)	192.7
3.	Transmission, compression & storage	1.8	-	1.8
4.	Other operating revenue	41.2	-	41.2
5.	Interest and property rental	-	-	-
6.	Other income	0.1	-	0.1
7.	Total operating revenue	2,734.5	(110.2)	2,624.3

# EXPLANATION OF ADJUSTMENTS TO UTILITY REVENUE 2017 FORECAST YEAR

Line No. Adjusted	Adjustment Increase (Decrease)	Explanation
	(\$Millions)	
1.	(91.8)	Gas sales
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).
2.	(18.4)	Transportation of gas
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).

#### UTILITY REVENUE 2017 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		EGDI Ont. Corporate Revenue	Adjustment	Utility Revenue
		(\$IVIIIIOIIS)	(aminoris)	(JIVIIIIOIIS)
1. 2. 3. 4.	Residential Commercial Industrial Wholesale	1,545.8 793.5 109.8 31.2	- - -	1,545.8 793.5 109.8 31.2
5.	Gas sales	2,480.3	-	2,480.3
6.	Transportation of gas	211.1	-	211.1
7.	Transmission, compression & storage	1.8	-	1.8
8. 9. 10. 11. 12. 13. 14. 15.	Service charges & DPAC Rent from NGV rentals Late payment penalties Transactional services Open bill revenue Dow Moore recovery Affiliate asset use revenue ABC T-service (net)	12.3 1.1 10.1 13.4 6.7 0.3 0.2 1.1	(1.4) (1.3) (0.2) (1.1)	12.3 1.1 10.1 12.0 5.4 0.3 -
16.	Other operating revenue	45.2	(4.0)	41.2
17. 18. 19. 20. 21.	Income from investments Interest during construction Interest income from affiliates Interest on (net) deferral accounts Property/asset use revenue 3rd party	- 7.4 - 1.1	(7.4)	- - - -
22.	Interest and property rental	8.5	(8.5)	-
23. 24. 25. 26. 27.	Miscellaneous Dividend income Profit on sale of property NGV merchandising revenue (net) Other income	16.7 62.7 - - 79.4	(16.6) (62.7) - - (79.3)	0.1 - - - 0.1
28.	Total revenue	2,826.3	(91.8)	2,734.5

#### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2017 FORECAST YEAR

Line No.	Adjustment Increase	Evaluation
Aujusteu	(Decrease)	Explanation
	(\$MINONS)	
11.	(1.4)	Transactional services
		To eliminate transactional services revenues above the proposed base amount to be included in rates. Ratepayer and shareholder amounts above the base will be treated outside of utility results and returns.
12.	(1.3)	Open bill revenue
		To eliminate the Open Bill shareholder incentive.
14.	(0.2)	Affiliate asset use revenue
		To reflect the elimination of asset use revenue in conjunction with the removal of affiliate use asset values from rate base and all related cost of service elements. (RP-2002-0133)
15.	(1.1)	ABC T-Service (net)
		To eliminate the net revenue from ABC T-Service considered to be non-utility. (RP-1999-0001)

#### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2017 FORECAST YEAR

	Adjustment		
Line No. Adjusted	Increase (Decrease)	Explanation	
	(\$Millions)		
18.	(7.4)	Interest during construction	
		To eliminate interest calculated on funds used for purposes of construction during the year.	
21.	(1.1)	Property/asset use revenue 3rd party	
		To eliminate asset use revenue (RP-2002-0133) and rental revenue from Tecumseh farm properties considered to be non-utility. (EBRO 464 & 365)	
23.	(16.6)	Miscellaneous	
		To eliminate net revenue from the Company's oil & gas and unregulated storage divisions.	(11.2)
		To eliminate the shareholders' incentive income recorded as a result of calculating the DSMIVA amount.	(5.4) (16.6)
24.	(62.7)	Dividend income	
		To eliminate non-utility inter-company dividend income from the financing transaction (EBO 179-16).	

# COMPARISON OF UTILITY OPERATING REVENUE 2017 FORECAST AND 2016 FORECAST

		Col. 1	Col. 2	Col. 3
Item No.		2017 Forecast (\$Millions)	2016 Forecast (\$Millions)	2017 Forecast Over/(Under) 2016 Forecast (\$Millions)
1.1	Gas Sales	2,480.3	2,464.5	15.8
1.2	Transportation of Gas	211.1	217.1	(6.0)
1.3	Transmission, Compression and Storage	1.8	1.8	-
1.4	Other Revenue	41.3	41.3	(0.0)
1.1	Total Operating Revenue	2,734.5	2,724.7	9.8

# CUSTOMER METERS AND VOLUMES BY RATE CLASS 2017 FORECAST

		Col. 1	Col. 2	Col. 3
ltem				
No		Customers	Volumes	Revenues
		(Average)	$(10^{6} \text{m}^{3})$	(\$Millions)
		(/Weidge/	(10 111)	(¢Miniorio)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 868 112	4 341.8	1 545.2
1.1.2	Rate 1 - T-Service	135 997	366.9	67.0
1.1	Total Rate 1	2 004 109	<u>4 708.7</u>	<u>1 612.2</u>
1.2.1	Rate 6 - Sales	149 208	3 215.9	873.4
1.2.2	Rate 6 - T-Service	14 745	<u>1 443.7</u>	106.4
1.2	Total Rate 6	<u>163 953</u>	<u>4 659.6</u>	979.8
1.3.1	Rate 9 - Sales	7	0.7	0.2
1.3.2	Rate 9 - T-Service	<u>1</u>	0.1	0.0 **
1.3	Total Rate 9	_8	0.8	0.2
1.	Total General Service Sales & T-Service	<u>2 168 070</u>	<u>9 369.1</u>	<u>2 592.2</u>
Contra	act Sales			
2.1	Rate 100	0	0.0	0.0
2.2	Rate 110	33	92.9	18.6
2.3	Rate 115	1	0.9	0.2
2.4	Rate 135	1	1.2	0.2
2.5	Rate 145	11	22.0	4.3
2.6	Rate 170	5	37.3	6.5
2.7	Rate 200	<u>_1</u>	<u>185.9</u>	<u>31.2</u>
2.	Total Contract Sales	_52	340.2	<u>61.0</u>
Contra	act T-Service			
3.1	Rate 100	0	0.0	0.0
3.2	Rate 110	158	526.8	15.3
3.3	Rate 115	26	470.7	6.4
3.4	Rate 125	5	0.0 *	10.9
3.5	Rate 135	40	55.3	1.7
3.6	Rate 145	90	140.6	3.6
3.7	Rate 170	29	415.7	( 0.2)
3.8	Rate 300	2	30.0	0.2
3.9	Rate 315	_0	0.0	0.0
3.	Total Contract T-Service	350	<u>1 639.1</u>	37.9
4.	Total Contract Sales & T-Service	402	<u>1 979.3</u>	<u>98.9</u>
5.	Total	2 168 472	<u>11 348.4</u>	<u>2 691.1</u>

\* There is no distribution volume for Rate 125 customers.

\*\* Less than \$50,000.

Filed: 2013-12-11 EB-2012-0459 Exhibit C6 Tab 2 Schedule 2 Page 1 of 1

## COMPARISON OF AVERAGE CUSTOMER METERS BY RATE CLASS 2017 FORECAST AND 2016 FORECAST

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		2017 <u>Forecast</u>	2016 <u>Forecast</u>	2017 Forecast Over (Under) <u>2016 Forecast</u> (1-2)
<u>Gener</u>	ral Service			
1.1.1	Rate 1 - Sales	1 868 112	1 815 636	52 476
1.1.2	Rate 1 - T-Service	<u>135 997</u>	<u>153 324</u>	<u>( 17 327)</u>
1.1	Total Rate 1	<u>2 004 109</u>	<u>1 968 960</u>	<u>35 149</u>
1.2.1	Rate 6 - Sales	149 208	146 220	2 988
1.2.2	Rate 6 - T-Service	<u>14 745</u>	<u>16 297</u>	<u>( 1 552)</u>
1.2	Total Rate 6	<u>163 953</u>	<u>162 517</u>	<u>1 436</u>
1.3.1	Rate 9 - Sales	7	7	0
1.3.2	Rate 9 - T-Service	<u>_1</u>	<u>_1</u>	<u>0</u>
1.3	Total Rate 9	_8	_8	_0
1.	Total General Service Sales & T-Service	<u>2 168 070</u>	<u>2 131 485</u>	<u>36 585</u>
<u>Contra</u>	act Sales			
2.1	Rate 100	0	0	0
2.2	Rate 110	33	33	0
2.3	Rate 115	1	1	0
2.4	Rate 135	1	1	0
2.5	Rate 145	11	11	0
2.6	Rate 170	5	5	0
2.7	Rate 200	<u>    1</u>	<u>    1</u>	_0
2.	Total Contract Sales	_52	52	<u>0</u>
Contra	act T-Service			
3.1	Rate 100	0	0	0
3.2	Rate 110	158	158	0
3.3	Rate 115	26	26	0
3.4	Rate 125	5	5	0
3.5	Rate 135	40	40	0
3.6	Rate 145	90	90	0
3.7	Rate 170	29	29	0
3.8	Rate 300	2	2	0
3.9	Rate 315	_0	_0	_0
3.	Total Contract T-Service	350	_350	<u>0</u>
4.	Total Contract Sales & T-Service	402	_402	<u>0</u>
5.	Total	2 168 472	2 131 887	36 585

#### UTILITY OPERATING REVENUE 2018 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		Utility Revenue (\$Millions)	Normalizing and Other Adjustments (\$Millions)	Adjusted Utility Revenue (\$Millions)
1.	Gas sales	2,496.2	(91.8)	2,404.4
2.	Transportation of gas	205.0	(18.4)	186.6
3.	Transmission, compression & storage	1.8	-	1.8
4.	Other operating revenue	41.2	-	41.2
5.	Interest and property rental	-	-	-
6.	Other income	0.1	-	0.1
7.	Total operating revenue	2,744.3	(110.2)	2,634.1

# EXPLANATION OF ADJUSTMENTS TO UTILITY REVENUE 2018 FORECAST YEAR

Line No. Adjusted	Adjustment Increase (Decrease)	Explanation
	(\$Millions)	
1.	(91.8)	Gas sales
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).
2.	(18.4)	Transportation of gas
		To remove Customer Care and CIS impacts embedded and approved in 2013 rates (EB-2011-0354).

#### UTILITY REVENUE 2018 FORECAST YEAR

		Col. 1	Col. 2	Col. 3
Line No.		EGDI Ont. Corporate Revenue (\$Millions)	Adjustment (\$Millions)	Utility Revenue (\$Millions)
1. 2. 3. 4.	Residential Commercial Industrial Wholesale	1,558.7 796.4 109.9 31.2		1,558.7 796.4 109.9 31.2
5.	Gas sales	2,496.2	-	2,496.2
6.	Transportation of gas	205.0	-	205.0
7.	Transmission, compression & storage	1.8	-	1.8
8. 9. 10. 11. 12. 13. 14. 15.	Service charges & DPAC Rent from NGV rentals Late payment penalties Transactional services Open bill revenue Dow Moore recovery Affiliate asset use revenue ABC T-service (net)	12.3 1.1 10.1 13.4 6.7 0.3 0.2 1.1	(1.4) (1.3) (0.2) (1.1)	12.3 1.1 10.1 12.0 5.4 0.3 -
16.	Other operating revenue	45.2	(4.0)	41.2
17. 18. 19. 20. 21.	Income from investments Interest during construction Interest income from affiliates Interest on (net) deferral accounts Property/asset use revenue 3rd party	- 7.4 - 1.1	(7.4) - (1.1)	- - -
22.	Interest and property rental	8.5	(8.5)	
23. 24. 25. 26. 27.	Miscellaneous Dividend income Profit on sale of property NGV merchandising revenue (net) Other income	16.7 62.7  79.4	(16.6) (62.7) 	0.1 - - 0.1
28.	Total revenue	2,836.1	(91.8)	2,744.3

### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2018 FORECAST YEAR

Line No.	Adjustment Increase (Decrease)	Explanation
Aujusteu	(\$Millions)	
	(¢lviiliono)	
11.	(1.4)	Transactional services
		To eliminate transactional services revenues above the proposed base amount to be included in rates. Ratepayer and shareholder amounts above the base will be treated outside of utility results and returns.
12.	(1.3)	Open bill revenue
		To eliminate the Open Bill shareholder incentive.
14.	(0.2)	Affiliate asset use revenue
		To reflect the elimination of asset use revenue in conjunction with the removal of affiliate use asset values from rate base and all related cost of service elements. (RP-2002-0133)
15.	(1.1)	ABC T-Service (net)
		To eliminate the net revenue from ABC T-Service considered to be non-utility. (RP-1999-0001)

#### EXPLANATION OF ADJUSTMENTS TO EGDI CORPORATE REVENUE 2018 FORECAST YEAR

	Adjustment		
Line No.	Increase		
Adjusted	(Decrease)	Explanation	
	(\$Millions)		
18.	(7.4)	Interest during construction	
		To eliminate interest calculated on funds used for purposes of construction during the year.	
21.	(1.1)	Property/asset use revenue 3rd party	
		To eliminate asset use revenue (RP-2002-0133) and rental revenue from Tecumseh farm properties considered to be non-utility. (EBRO 464 & 365)	
23.	(16.6)	Miscellaneous	
		To eliminate net revenue from the Company's oil & gas and unregulated storage divisions.	(11.2)
		To eliminate the shareholders' incentive income recorded as a result of calculating the DSMIVA amount.	(5.4) (16.6)
24.	(62.7)	Dividend income	
		To eliminate non-utility inter-company dividend income from the financing transaction (EBO 179-16).	

## COMPARISON OF UTILITY OPERATING REVENUE 2018 FORECAST AND 2017 FORECAST

		Col. 1	Col. 2	Col. 3
Item No.		2018 Forecast	2017 Forecast	2018 Forecast Over/(Under) 2017 Forecast
		(\$Millions)	(\$Millions)	(\$Millions)
1.1	Gas Sales	2,496.2	2,480.3	15.9
1.2	Transportation of Gas	205.0	211.1	(6.1)
1.3	Transmission, Compression and Storage	1.8	1.8	-
1.4	Other Revenue	41.3	41.3	(0.0)
1.1	Total Operating Revenue	2,744.3	2,734.5	9.8

# Filed: 2013-12-11 EB-2012-0459 Exhibit C7 Tab 2 Schedule 1 Page 1 of 1

# CUSTOMER METERS AND VOLUMES BY RATE CLASS 2018 FORECAST

		Col. 1	Col. 2	Col. 3
ltem <u>No.</u>		<u>Customers</u> (Average)	<u>Volumes</u> (10 <sup>6</sup> m <sup>3</sup> )	<u>Revenues</u> (\$Millions)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 920 588	4 341.8	1 558.1
1.1.2	Rate 1 - T-Service	118 669	366.9	62.7
1.1	Total Rate 1	2 039 257	4 708.7	1 620.8
1.2.1	Rate 6 - Sales	152 195	3 215.9	876.3
1.2.2	Rate 6 - T-Service	<u>13 194</u>	<u>1 443.7</u>	<u>104.6</u>
1.2	Total Rate 6	<u>165 389</u>	<u>4 659.6</u>	980.9
1.3.1	Rate 9 - Sales	7	0.7	0.2
1.3.2	Rate 9 - 1-Service	<u> </u>	<u>0.1</u>	0.0
1.3	Total Rate 9	_8	0.8	_0.2
1.	Total General Service Sales & T-Service	<u>2 204 654</u>	<u>9 369.1</u>	<u>2 601.9</u>
Contra	act Sales			
2.1	Rate 100	0	0.0	0.0
2.2	Rate 110	33	92.9	18.6
2.3	Rate 115	1	0.9	0.2
2.4	Rate 135	1	1.2	0.2
2.5	Rate 145	11	22.0	4.3
2.6	Rate 170	5	37.3	6.5
2.7	Rate 200	<u>_1</u>	<u>185.9</u>	<u>31.2</u>
2.	Total Contract Sales	_52	340.2	<u>61.0</u>
Contra	act T-Service			
3.1	Rate 100	0	0.0	0.0
3.2	Rate 110	158	526.8	15.3
3.3	Rate 115	26	470.7	6.4
3.4	Rate 125	5	0.0 *	10.9
3.5	Rate 135	40	55.3	1.7
3.6	Rate 145	90	140.6	3.6
3.1	Rate 170	29	415.7	( 0.2)
3.0 2.0	Rate 300	2	30.0	0.2
3.9	Rale 315		0.0	0.0
3.	Total Contract T-Service	350	<u>1 639.1</u>	<u>37.9</u>
4.	Total Contract Sales & T-Service	402	<u>1 979.3</u>	98.9
5.	Total	2 205 056	<u>11 348.4</u>	2 700.8

\* There is no distribution volume for Rate 125 customers.

\*\* Less than \$50,000.

Witnesses: R. Cheung S. Qian

Filed: 2013-12-11 EB-2012-0459 Exhibit C7 Tab 2 Schedule 2 Page 1 of 1

# COMPARISON OF AVERAGE CUSTOMER METERS BY RATE CLASS 2018 FORECAST AND 2017 FORECAST

		Col. 1	Col. 2	Col. 3
Item <u>No.</u>		2018 <u>Forecast</u>	2017 <u>Forecast</u>	2018 Forecast Over (Under) <u>2017 Forecast</u> (1-2)
Gener	al Service			
1.1.1	Rate 1 - Sales	1 920 588	1 868 112	52 476
1.1.2	Rate 1 - T-Service	<u>118 669</u>	<u>135 997</u>	<u>( 17 328)</u>
1.1	Total Rate 1	<u>2 039 257</u>	<u>2 004 109</u>	<u>35 148</u>
1.2.1	Rate 6 - Sales	152 195	149 208	2 987
1.2.2	Rate 6 - T-Service	<u>13 194</u>	<u>14 745</u>	<u>(1551)</u>
1.2	Total Rate 6	<u> 165 389</u>	<u>163 953</u>	<u>1 436</u>
1.3.1	Rate 9 - Sales	7	7	0
1.3.2	Rate 9 - T-Service	<u>_1</u>	<u>_1</u>	<u>0</u>
1.3	Total Rate 9	_8	_8	<u>    0</u>
1.	Total General Service Sales & T-Service	<u>2 204 654</u>	<u>2 168 070</u>	<u>36 584</u>
Contra	act Sales			
2.1	Rate 100	0	0	0
2.2	Rate 110	33	33	0
2.3	Rate 115	1	1	0
2.4	Rate 135	1	1	0
2.5	Rate 145	11	11	0
2.6	Rate 170	5	5	0
2.7	Rate 200	<u>_1</u>	_1	<u>0</u>
2.	Total Contract Sales	52	52	<u>0</u>
Contra	act T-Service			
3.1	Rate 100	0	0	0
3.2	Rate 110	158	158	0
3.3	Rate 115	26	26	0
3.4	Rate 125	5	5	0
3.5	Rate 135	40	40	0
3.6	Rate 145	90	90	0
3.7	Rate 170	29	29	0
3.8	Rate 300	2	2	0
3.9	Rate 315	_0	_0	<u>0</u>
3.	Total Contract T-Service	_350	_350	<u>0</u>
4.	Total Contract Sales & T-Service	402	_402	<u>0</u>
5.	Total	2 205 056	2 168 472	<u>36 584</u>