# Interrogatories of the Association of Power Producers of Ontario (APPrO) to Enbridge

Enbridge 2014-2018 Rate Case

EB-2012-0459

November 13, 2013

## Reference:

Exhibit C1 Tab 2, C3 Tab 2 Schedule 3, C4 Tab 2 Schedule 3.

# Preamble:

APPrO would better like to understand the changing contract market.

#### Issue:

23. Is the 2014 gas volume forecast appropriate?

- a) For each year from 2008 to 2013, please provide by rate class:
  - i. The forecasted contract customer count used to set rates
  - ii. The actual customer count
  - iii. The forecasted contract volume used to set rates
  - iv. The actual contract volume
- b) For each year from 2008 to 2013 please provide a matrix illustrating the number and the respective volumes that have migrated among customer classes.
- c) For each year from 2014 to 2016 please provide a matrix illustrating the number and the respective volumes that are forecasted to migrate among customer classes.
- d) For those customers that have migrated to a different rate class, please confirm that the respective volumes have been specifically included in the targeted rate class.
- e) Enbridge indicates that it forecasts contract volumes individually on grass roots approach in consultation with the customers.
  - i. Please explain the decline of 10 Rate 110 customers (combined sales and T-Service) in 2014 compared to 2013
  - ii. Please explain the decline of 3 Rate 115 customers (combined sales and T-Service) in 2014 compared to 2013

- Please explain the decline of 6 Rate 145 customers (combined sales and T-Service) in 2014 compared to 2013, and a further 1 customer in 2015
- iv. Please explain the decline of 4 Rate 170 customers (combined sales and T-Service) in 2014 compared to 2013
- v. Please explain the approximate 26% volumetric increase in Rate 110 volumes between 2013 and 2014 in light of a 5% decline in contract numbers.
- vi. Does Enbridge provide its assessment of its volume forecast to each customer for each year 2014-2016. Please explain if customers are given the opportunity to agree with the forecast. In the event that there is a difference between Enbridge's forecast and the customers' expectation, what is included in the volumetric forecast?

# **Reference:**

Exhibit C1 Tab 2, and Exhibit C2 Tab 1 Schedule 1

# Preamble:

Enbridge is predicting a very marginal increase in contract volumes in light of significantly improving economic conditions. Specifically the Ontario Economic Outlook is improving in 2014, 2015 and 2016 over 2013 shows:

- Real GDP increasing from 2.0% to 2.8%
- Unemployment declining from 7.8% to 6.4%
- Employment Growth increasing from 1.1% to 1.5%

These trends generally are a reversal of the trends that existed between 2008-2012.

#### Issue:

23. Is the 2014 gas volume forecast appropriate?

- a) Please identify the specific economic indicators that were used to develop the contract customer and volume forecast.
- b) What methodology does Enbridge use to forecast new contract customers and their respective volumes for 2015 and 2016?
- c) In light of these improving economic indicators, please indicate why there are no new contract customers forecasted in 2015 and 2016.

# **Reference:**

Exhibit C1 Tab 2 Table 3

# Preamble:

Enbridge is illustrating unbundled contract demand volumes.

#### Issue:

23. Is the 2014 gas volume forecast appropriate?

- a) Please identify the unbundled CD volumes by rate class.
- b) Please confirm that the volumes in the table are annual billing determinants rather than the sum of contract demands among contract customers.

## Reference:

Exhibit C3 Tab 2, C4 Tab 2, C5 Tab 2 and Exhibit A2 Tab 3 Schedule 1 paragraphs 18 and 21.

# Preamble:

It is not clear how Enbridge will be adjusting for contract volumes in each of 2015 and 2016.

#### Issue:

23. Is the 2014 gas volume forecast appropriate?

- a) In paragraph 18 of the last reference, Enbridge indicates that it will be using customer additions to determine volume forecast. Also in paragraph 21 of the last reference, Enbridge also indicates that it will be using "other volume forecast". Please explain how Enbridge will adjust for contract volumes in 2015 and 2016.
- b) Is it Enbridge's intention to refresh its forecast contract volume forecast in its 2015 and 2016 rate filings and use these to set 2015 and 2016 rates?

## **Reference:**

Exhibit D3 Tab 4 and EB-2011-0354 Exhibit D3 Tab 4 Schedule 1

# Preamble:

Paragraph 11 and 12 in the first reference illustrate that UAF volumes have been continuously increasing since 2002, and have increased from 0.6% in 2013 to the proposed 0.7% for 2014 (a 16.6% increase in UAF volumes). APPrO would like to better understand the relative impact of various factors that influence UAF and Enbridge's plans to further mitigate UAF.

The Company states in the second reference:

In summary, the Company either already embraces or has work in progress related to sixteen out of twenty steps identified from the industry benchmarking best practices in measuring, controlling the variability and managing the UAF. In some cases, the Company goes beyond the best practices and undertakes additional steps to minimize the measurement variations when possible.

#### Issue:

26. Is the 2014 level of Unaccounted For ("UAF") volume appropriate?

- a) In light of statements made in EB-2011-0354 about meeting or exceeding best practices to manage UAF, please explain why UAF volumes are forecasted to increase by 16% from 2013 to 2014 (i.e. from 0.6% to 0.7%). Please include the major contributing factors to the increase.
- b) Please provide the actual UAF as a percentage of throughputs for the years 2002-2012. Please include for reference purposes the percentage of UAF proposed for 2013 and projected percentage for each year of the Customized IR period.
- c) Please list in order of descending order the top 5 factors contributing to UAF and an estimate of their relative contribution in percentage terms to the overall UAF.

- d) Please discuss how each of these 5 factors is accounted for in the UAF Forecast Model.
- e) Please discuss how varying heat content of gas supplies entering the Enbridge system is impacting the UAF volumes.
- f) Please provide the weighted average monthly heating value of the gas entering the Enbridge system for the years 2008 to 2012. Please make these heating values available in an Excel spreadsheet capable of analysis upon request.
- g) Please state the weighted average forecasted heat content assumption used to produce Enbridge's volume forecast in each of 2008 to 2013.
- Please provide Enbridge's weighted average heat content used to produce Enbridge's volume forecast for each year of the Customized IR period.
- In light of the proposed increase in UAF, what steps is Enbridge proposing to reduce UAF during the Customized IR period? Please provide the cost to implement each of these steps.
- j) Please list the specific initiatives undertaken in each of 2012 and 2013 to reduce UAF, the cost to implement these initiatives and the estimated benefit.
- k) Please confirm that potential losses (or gains) in unaccounted for volumes at Tecumseh storage, including metering differences at Dawn between Union and Tecumseh do not contribute to UAF distribution volumes.
- Please confirm that fuel gas required to be supplied to Union and TransCanada to transport storage and other gas from Dawn to Enbridge's franchise do not form part of the UAF volumes.

#### **Reference:**

Exhibit B2, Tab 10, Schedule 1, pages 41 to 49

#### Preamble:

APPrO would like to better understand the XHP system, how it is defined by Enbridge and how it is used in the Cost Allocation Methodology

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) Please describe in detail what assets are included in the XHP system and include what is the minimum size and minimum pressure to qualify to be an XHP asset. Please state all pipe sizes that are included in XHP assets.
- b) Please separately highlight on the system maps illustrated in the reference those gas mains that meet the XHP definition. Please also include pipe sizes and maximum allowable operating pressures.

## Reference:

Exhibit G2, Tab 1, Schedule 1, page 25

# Preamble:

APPrO would like to better understand the TP Capacity definition used by Enbridge and how it is used in the Cost Allocation Methodology

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) Please provide a full definition of 'TP Capacity'
- b) Please provide a description of how 'TP Capacity' is classified and allocated in Enbridge's Cost Allocation Methodology

#### **Reference:**

Exhibit G2, Tab 4, Schedule 1

# Preamble:

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

#### **Questions:**

a) In Exhibit G2, Tab 4, Schedule 1 Page 1, row 4 Enbridge refers to 'Distribution Reg.". Please explain what this item is and how it relates to 'TP Capacity'.

#### **Reference:**

Exhibit G2, Tab 1, Schedule 1

# Preamble:

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

#### **Questions:**

a) Are the costs of the regulator stations that reduce pressure between the XHP system and the downstream system, allocated to the XHP system or the downstream distribution system?

## **Reference:**

Exhibit G2, Tab 1, Schedule 1, page 4

# Preamble:

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) Does Enbridge agree that the Cost Allocation Methodology is based on the cost causality principle and that customer classes should only be allocated the share of costs that they impose on Enbridge's system? If not, please explain why not.
- b) Given the peak flow that typically or on average exists in a XHP system (for a system that includes a Rate 125 customer along with other customer volumes), what minimum pipe size would be capable of reasonably serving an embedded Rate 125 customer along with other customers' loads? Please provide a complete explanation.
- c) Based on the responses to the questions above:
  - i. Please provide the XHP rate bases by size and maximum pressure range
  - ii. Please identify the specific assets and the value of the XHP rate base and expenses that are reasonably capable of serving Rate 125 customers (or do serve those Rate 125 customers on dedicated pipelines) from the remaining XHP assets and expenses included in Enbridge's Cost Allocation Methodology reflecting the reasonable minimum size and pressure required to meet the criteria to be grouped as a rate 125 customer.
  - iii. Based on the response to part b), re-run Enbridge's Cost Allocation Model filed in this proceeding for the period 2014 to 2018 by allocating to rate 125 customers only those XHP system assets that are reasonably capable to supply service to them and provide the results

of the model run in the same format as shown for the exhibits from Exhibit G2, Tab 2, Schedule 1 to Exhibit G2, Tab 6, Schedule 1.

- iv. Based on the results of c) above please provide the rates and proposed rate increases to all customer classes for the years 2014, 2015, 2016, 2017 and 2018.
- d) Please provide a live Excel model of Enbridge's Cost Allocation Methodology

# **Reference:**

Exhibit B2, Tab 3, Schedules 1 and 2

# Preamble:

APPrO would like to understand the need for the Ottawa Reinforcement, the GTA Reinforcement, the Allison Reinforcement, the Harmony Conlin Reinforcement and the York Region Reinforcement Project and the impact of these and other reinforcement projects on Rate 125 customers based on Enbridge's Cost Allocation Methodology. APPrO is using the term Advance Capacity to mean that portion of XHP distribution capacity that is being added as a result of a reinforcement project that will not be used in the test year. The Advance Capacity that is being added is usually the result of economies of scale of pipeline construction and based on a long term market forecast for an area.

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) With regard to reinforcement projects or other new XHP projects:
  - i. Please explain how the costs of providing the Advance Capacity have been allocated to rate classes in Enbridge's Cost Allocation Methodology.
  - ii. For each of the 5 above noted reinforcement projects please provide:
    - The market growth additions by rate class for the 2015 to 2025 period, or the projection period specified in the respective facility applications
    - 2. The peak hour and peak day capacities that are being added.
    - 3. The Advance Capacity that will exist in each project in each of 2014, 2015, 2016, 2017, and 2018.
  - iii. Please confirm that the effect of the current allocation methodology is that the annual costs of this Advance Capacity is borne by all rate classes, including Rate 125, in proportion to the allocator until such

time as the test year market demand grows to the point such that it equals the capacity that was added.

- iv. Please provide Enbridge's views on the appropriateness of allocating the cost of this Advance Capacity only to the respective rate classes requiring such growth from the in-service date of the Advance Capacity, rather than the projected year that such Advance Capacity will be utilized.
- v. Please provide the amount of Advance Capacity that exists (or is being proposed) by system in all other XHP systems not referred to in this question (see maps illustrated in Exhibit B2 Tab10 Schedule 1 pages 41-49)
- vi. Please explain how the Ottawa Reinforcement Project enhances security of supply and provides operational flexibility.
- b) Re-run Enbridge's Cost Allocation Model filed in this proceeding for the period 2014 to 2018 by allocating the costs of Advance Capacity to those distribution customers that directly benefit from the use of such Advance Capacity and provide the results of the model run in the same format as shown for the exhibits from Exhibit G2, Tab 2, Schedule 1 to Exhibit G2, Tab 6, Schedule 1.
- c) Based on the results above please provide the rates and proposed rate increases to all customers for the years 2014, 2015, 2016, 2017 and 2018

## **Reference:**

Exhibit B1 Tab2 Schedule 1

# Preamble:

APPrO would like to understand Enbridge's customer connection policy

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) With respect to Enbridge's customer connection policy:
  - Please confirm that all new Rate 125 customers must undergo an economic feasibility study to evaluate the costs and revenues that will be realized to serve the new customer
  - Please confirm that all costs for new Rate 125 customers are incorporated in the economic analysis including the costs of adding the full capacity in the XHP system (as opposed to just the incremental XHP capacity required to serve the customer)
  - iii. Please confirm that in the event that the Profitability Index of the economic feasibility is <1.0, that the customer is required to pay a contribution in aid of construction by an amount that results in the Profitability Index being raised to 1.0.
  - iv. Which other rate classes include the incremental costs of adding XHP system capacity when a new customer from that class undergoes an economic feasibility analysis prior to being serviced?
  - Please confirm that Enbridge is required to maintain a rolling
    Profitability Index =1.1 to take into account the periodic costs of adding
    XHP system capacity. If not confirmed, please explain.

## Reference:

EB-2012-0451, Ex I.A1.EGD.APPrO 1i) and EB-2012-0451 (Filed: 2012-12-21) Exhibit A Tab 3 Schedule 1 paragraph 9.

In the first reference, EB-2012-0451, Enbridge indicates that the GTA reinforcement will result in reserve capacity. As an example of such reserve capacity Enbridge notes that the reserve capacity at Station B will be 130 TJ/d by 2025. Furthermore Enbridge indicates in the second reference that:

In general, the reserve or unutilized capacity in the existing XHP infrastructure is used to accommodate necessary pressure and/or flow reductions required to mitigate downstream vulnerabilities, manage day-to-day maintenance, integrity programs, unplanned events, and balance system flows. Without such capacity, the Company is concerned that significant outages to customers may result from these downstream vulnerabilities.

#### Preamble:

Some of the reinforcement projects result in Reserve Capacity. Using the above definition, APPrO would like to understand how the costs of this Reserve Capacity are allocated.

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) Please confirm that Reserve Capacity in distribution system is in excess of Advance Capacity. If not explain.
- b) Please explain how the costs of providing this Reserve Capacity have been allocated to rate classes.
- c) Please provide the amount of reserve capacity that exists or is being proposed in each of the XHP systems referred to in Exhibit B2 Tab 10 Schedule 1 pages 41-49

- d) Please provide Enbridge's views on the appropriateness of allocating the cost of this capacity to rate classes that utilize this type of capacity using an allocator that adds the Reserve Capacity to the respective peak day volumes capacity allocator by rate class or alternatively collects the cost of such Reserve Capacity on a per customer charge basis.
- e) Re-run Enbridge's Cost Allocation Model filed in this proceeding for the period 2014 to 2018 by allocating the costs of Reserve Capacity to those distribution customers that directly benefit from the use of such Reserve Capacity and provide the results of the model run in the same format as shown for the exhibits from Exhibit G2, Tab 2, Schedule 1 to Exhibit G2, Tab 6, Schedule 1. Based on the results above please provide the rates and proposed rate increases to all customers for the years 2014, 2015, 2016, 2017 and 2018
- f) With respect to the GTA reinforcement project please confirm that Rate 125 customers receive point to point service between the City Gate Station and its Terminal Location as specified in their contract, and that such customers have no contractual right to access supplies from alternate Gate Stations into the system as is contemplated by the GTA reinforcement project.

#### **Reference:**

Exhibit G2, Tab 1, Schedule 1

#### Preamble:

APPrO would like to better understand the XHP system capacity allocators used in Enbridge's Cost Allocation Methodology

#### Issue:

30. Is Enbridge's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to 2014 Fiscal Year rates, appropriate?

- a) In Exhibit G2, Tab1, Schedule 1, page 27 Appendix B, it shows that the allocation factor used for TP Demand is "Peak throughput on the transmission pressure system".
  - i. Please confirm that the allocators used for TP Demand are those shown as "2.1 Delivery Demand TP" in Exhibit G2, Tab 6, Schedule 3, page 1 and that these allocators reflect peak daily throughput.
  - ii. Please confirm that distribution mains are designed and modeled from a network analysis perspective, on a peak hour basis. If not please explain in full.
  - iii. For each rate class or groups of rate classes, please explain in detail the methodology used to determine the peak daily demand. Please explain how the peak hour load is converted to a peak daily load for calculation of the peak daily load.
  - iv. For heat sensitive loads, please confirm that the peak hour and peak daily loads have been adjusted to reflect Enbridge's current approved design day temperature standard for each region.
  - Please provide the typical hourly load profile graph over a 24 hour period of Enbridge's heat sensitive market by rate class and in aggregate on a design day. On this graph, please illustrate the peak hourly demand, average hourly demand, and the Delivery Demand TP ÷ 24.

- b) TP Demand
  - Please re-run the Cost Allocation Methodology for the period 2014 to 2018 by allocating the TP Demand to customer classes using the peak hour load and not the peak daily throughput and provide the results of the model run in the same format as shown for the exhibits from Exhibit G2, Tab 2, Schedule 1 to Exhibit G2, Tab 6, Schedule 1.
  - Based on the results of a) above please provide the rates and proposed rate increases to all customers for the years 2014, 2015, 2016, 2017 and 2018
- c) Please re-run the Cost Allocation Methodology for the period 2014 to 2018 incorporating the Cost Allocation Methodology changes outlines in the above interrogatories and provide the results of the model run in the same format as shown for the exhibits from Exhibit G2, Tab 2, Schedule 1 to Exhibit G2, Tab 6, Schedule:
  - i. Allocating to rate 125 customers only those XHP system assets that are reasonably capable to supply service to them
  - ii. Allocating the costs of Advance Capacity to those distribution customers that directly benefit from the use of such Advance Capacity
  - iii. Allocating the costs of Reserve Capacity to those distribution customers that directly benefit from the use of such Reserve Capacity
  - iv. Allocating the TP Demand to customer classes using the peak hour load and not the peak daily throughput
- d) Based on the results of c) above please provide the rates and proposed rate increases to all customers for the years 2014, 2015, 2016, 2017 and 2018

## **Reference:**

Exhibit H1 Schedule 2

# Preamble:

Enbridge is looking to make very significant changes to Rate 100. Enbridge states that customers are not using this service to date as those with higher load factors use either Rate 110 or 115, or generally take service under Rate 6. Enbridge further indicates that any new customer may have to pay a capital contribution. APPrO is interested in understanding the implications of this proposed change.

#### Issue:

42. Are the proposed changes to Rate 100 and Rate 110 appropriate?

#### **Questions:**

- a) Please provide the derivation of the individual components of the proposed rate.
- b) Please do an annual cost comparison (showing the costs for individual rate components) for 3 hypothetical customers having a load factor of 20% under Rate 6 (existing), Rate 100 (existing) and Rate 100 (proposed) with a CD of:
  - i. 20,000 m<sup>3</sup>/d
  - ii.  $80,000 \text{ m}^3/\text{d}$
  - iii. 130,000 m<sup>3</sup>/d

Ignore any potential capital contributions that may be required from a new customer. If other assumptions are required to complete the calculations, please make such reasonable assumptions and so indicate.

- c) Enbridge indicates that about 33 general service customers and 2 potential customers could use this option.
  - i. Please confirm that substantially more existing customers could use this service than new customers
  - ii. One of the stated reasons to make the proposed change is the level of capital contribution that may be required from a new customer. Please state Enbridge's policy with respect to the

requirement for economic feasibility and potential capital contribution for an existing customer

d) Please confirm that there may be customers with a low load factor that makes them ineligible for rate 110 or rate 115 and that Enbridge may also be unwilling for them to use rate 6 under certain circumstances, which may be forced to use rate 100, with its proposed high demand charges.

## **Reference:**

Exhibit H1 Tab 2 Schedule 1 plus Attachment Section P

#### Preamble:

Enbridge is proposing to make it mandatory to require customers using more than 1,000,000 m<sup>3</sup> annually to provide to the Company their expected annual consumption, peak demand and emergency contact information

#### Issue:

43. Are the proposed changes to the Rate Handbook appropriate?

- a) Enbridge states that change will not have undue impact on the 275 customers that receive service under a contract, and further that this information is updated and refreshed annually through the contract renewal process. Please confirm that some contracts are long term in nature and do not require annual renewal.
- b) For those contract customers not subject to annual renewal where this information is embedded in the contract, are all provisions of Section P intended to apply. Explain.
- c) Enbridge states that this information is required to have the best information available for gas distribution planning and day-to-day safe and reliable operation of the system.
  - a. Please state which departments within the Company will have access to this information, and specifically how and under what circumstances it will be used.
  - b. Please state how having the projected annual consumption and peak demand information for unbundled and other long term, large volume contract customers that supply their own gas contributes to gas distribution planning and safe and reliable operation of the system.
  - c. Please confirm that if any of this information is provided by a customer to the Company that it will not in any way reduce a customer's rights under its contract.

d. Volume information may be considered privileged and commercially sensitive by some customers. Please state what safeguards are currently in place to protect this information.

## **Reference:**

Exhibit C1 Tab 5 Schedule 1, and EB-2012-0451 Exhibit A Tab 3 Schedule 9 paragraph 30. And EB-2012-0451 Exhibit C Tab 2 Schedule 1 (2013-07-22)

# Preamble:

The evidence may be out of date. It is understood from the second reference, that 1,200 TJ (60%) of the total capacity of 2,000 TJ of Segment A will be used to accommodate transmission services under Rate 332.

#### Issue:

44. Is Enbridge's rate design for the proposed Rate 332 appropriate?

- a) Please confirm that it is the Company's intention to allocate 60% of the cost of Segment A to Rate 332 rather than the 50% referenced in paragraph 4 of the first reference.
- b) Please explain how costs that are common to both Segment A and Segment B such as project management, regulatory, administration, etc., are allocated to each segment.
- c) Please confirm that 60% of the line pack gas required to pressurize and operate Segment A will also be allocated to Rate 332.
- d) In light of the Settlement Agreement between TransCanada, Enbridge, Union and GMi dated October 31, 2013 does any of the evidence regarding Rate 332 require updating? If so please revise accordingly.
- e) The third reference shows a total estimated capital cost of the GTA project as \$686.5 million. The first reference (which is less recent than the third reference) shows that the combined rate base for 2015 and 2016 as \$692.3 million. Is Enbridge intending to update this section based on the more recent capital cost estimate? Explain.