

**O & M OTHER
EVIDENCE IN CHIEF**

Panelists

Doug Lapp, Director, Operations Strategy and Logistics

Mina Torriano, Senior Manager, Operational Finance

Sagar Kancharla; Director, Business Performance

Samir Chhelavda, Assistant Controller

Sheila Trozzi, Senior Manager Human Resources Business Support

1. Mr. Kancharla, I understand that this panel will be dealing primarily with the Other O&M bucket of expenses with Mr. Chhelavda being available to speak to RCAM. Can you please advise what this is and why it has been separated from the balance of the O&M expenses?
 - A. As identified in the evidence, there are five buckets of O&M expenses. Four of these buckets are the result of other processes and applications. These are:
 - (i) Customer Care (CIS), the costs of which are the subject of a complete settlement with intervenors and was approved by the Board.
 - (ii) Demand Side Management (DSM) which is the subject of a separate Application process.
 - (iii) Pension OPEB costs which are the subject of a variance account.
 - (iv) The fourth bucket is the amount determined for Corporate cost allocations using the regulatory cost allocation methodology (RCAM) which is the methodology approved by the Board which has been consistently used by the Company since 2007 and which was the subject of a detailed reviewed just last year.
 - (v) This leaves the balance of the O&M budget, which is called the "Other O&M" bucket. These are the costs which relate to such significant items as employee related costs and outside services. These are the costs that this panel will be dealing with.
2. Mr. Kancharla, I understand that the Company recently filed an update to its O&M evidence at D1, Tab 3, Schedule 1, pages 27 and 28, providing the 2013 actuals. Can you please advise the panel what is the relevance of the 2013 actuals from the perspective of this proceeding.

- A. The Other O&M 2013 actuals total just under \$225 million versus the Board-approved 2013 of \$219.2 million. When one compares the other O&M 2013 actuals with the 2014 Other O&M budget of \$228 million, which involves an increase of only \$3.3 million or 1.47 percent, the Company is in fact seeking an increase in the Other O&M bucket of less than inflation.

The primary driver behind the increased year end numbers are related to Distribution Operations activities, which include the condition monitoring and repair work on the distribution system Enbridge certainly would have preferred to have incurred lower costs but the extraordinary cost pressures on the Company resulted in the 2013 Other O&M actuals exceeding the Board-approved 2013 budget.

3. Mr. Kancharla, how does the recent past experience of Other O&M costs compare to 2013 experience?

- A. The Company has been managing Other O&M costs very well. This is demonstrated by reviewing the Other O&M numbers for the years 2011 actuals to 2014 requested amount. The average growth rate is 1%, much lower than inflation during these years.

	2011	2012	2013	2014	
Other O&M Actuals	221.4	224.0	224.7	228.0	\$millions
Growth (year over year)		1.17%	0.31%	1.47%	
					Simple 0.99% average

Note: 2013 Board approved was \$219.2m

Sources: Exhibit I.B17.EGDI.Staff.50
Exhibit D1, Tab 3, S1, p. 27

4. An earlier panel has stated that the O&M panel can provide some additional details about how productivity is embedded in your request for O&M for the IR term. Mr. Kancharla, can you please assist the Board in this regard.

- A. All businesses face inflationary pressures, but Enbridge is under additional cost pressures in a number of areas, which include, as noted in evidence, continued significant growth in customers, and the significant expansion of regulatory requirements.

For this, the Company needs to prioritize and be productive. We have been and are continuing to do this. We believe that the fact that 2014 O&M Other budget is only 1.47% above 2013 actuals is evidence of this.

5. Mr. Lapp, can you please provide some examples and/or particulars of how productivity has been embedded into the Other O&M budget from the perspective of operations?

- A. In the operations area, there are substantial cost pressures associated with the operations and maintenance of the distribution system. As heard earlier in this proceeding, new regulations and legislation are driving increased requirements for the Company to assess for potential failures of all operating assets, including increasing the level of condition monitoring activities for these assets, including leak and corrosion surveys, depth of cover surveys, in-line inspections etc.

The Distribution system infrastructure at Enbridge is also aging. Although the Company has replaced its very early vintage assets such as cast iron and bare steel, the remainder of the infrastructure will require increased maintenance or ultimately repair or replacement as it ages and deteriorates. The Company operates steel assets, for example, that are 60 years old. These assets were designed for a service life of approximately 50 years, so we would expect them to require increasing levels of maintenance and repair.

Through the course of time, and through the life of these assets the urban environment has changed, with development, roads and municipal infrastructure. Where mains and services may have initially been installed in unimproved or grassed areas, these have since been developed, or even re-developed and in many cases the distribution system infrastructure are now directly under roads, driveways, sidewalks etc. This requires more extensive excavation practices, involving traffic control and

elaborate shoring, as well as reinstatement costs that are now governed by municipal by-laws and surface cover or paving standards.

Along with the existing distribution plant cost drivers above, the organic growth of the distribution system due to customer additions is projected to occur at a rate of approximately 1.7% to 1.8% per year. This growth is directly proportional to the expansion of the distribution system, including mains, services, valves, meters, regulator stations etc. With this additional infrastructure also comes the requirement for the condition monitoring and regulated compliance activities described above on these new assets.

One would have expected, given all of these pressures, that it would be necessary for the Company to hire additional staff to manage the growth and these additional obligations over the coming years. The Company has decided instead to embed productivity by committing to the holding of its FTEs flat. To meet this commitment, the Company has and will continue to need to generate productivity savings. I would like to highlight several at this time.

The Two Uses of GPS Technology

In the Operations area, the use of GPS in the office and the field enhances productivity in O&M. Similar to what was discussed by Ms. McCowan on the Capital panel, where the implementation of GPS on the assets produces Capital productivity in the record keeping area, there are also O&M efficiencies that can be realized.

For example in the case of a distribution emergency such as a third party damage or an escape call, the Company will need to dispatch a crew to the site to shut off the gas and “make safe”. Currently the Company will field a finite number of crews in a given geography to both complete the operations and maintenance activities in that area as well as provide “coverage” in order to respond to emergencies. This is usually managed by designating a “runner” which is a crew that would be easily mobilized to respond to any emergencies.

Depending on the geography this crew could be located anywhere, so in the case of an emergency, the dispatcher would contact the “runner” and dispatch them to the

emergency, which could in the worst case be on the other side of the city or area that they are currently working. The use of GPS in the field for operations crews enables the dispatcher to contact the closest crew to respond to the emergency versus the “runner” as described above. This enables a more efficient utilization of the field forces, minimizing travel time to get to the job site, in addition to improving the response time to the emergency.

A second benefit of GPS Technology is in the precise identification of assets in the ground. Once the crew arrives on site of the emergency, their first task is usually to locate the valve on the pipeline and shut off the gas. Often these emergencies occur in the winter time where the ground is covered in snow or ice. Traditionally, prior to the implementation of GPS, the crew would need to access the records on their field computer, which would tell them the location of the valve in relation to physical features such as curb lines or fire hydrants. Once the crew has the measurements, they would need to clear the snow or ice and then attempt to find the valve using a measuring tape and a metal detector. If the valve has been buried over time in overburden, this task takes longer, assuming that the measurements in the records are easily repeatable by the crew from when they were originally recorded.

The implementation of GPS in the field would greatly simplify locating the valve asset using a portable GPS device and accessing the coordinates. In this case the crew would know exactly where to clear the snow, and where to dig down to locate the valve to close the valve and shut off the gas, reducing their response time to make safe significantly. Therefore productivity is achieved through reduced time to arrive on site, locate the valve and make the site safe, in addition to improving public and employee safety by shutting off the gas quicker.

The magnitude of the savings in these instances could be in the order of 1 hour for dispatching the closest crew, and up to 2 or 3 hours for the actual field response to make the area safe. At a crew rate of approximately \$100.00 per hour the savings are in the order of \$300 to \$400 per call if this occurs during regular hours, and double this in the case of after hours response due to paying double time.

Increasing Locate Volumes

In the Pipeline Integrity & Engineering area, a critical function is the Damage Prevention area, where the primary field activity performed is locates. As described at Exhibit D1; Tab 17; Schedule 1 on page 8, third party damages to the natural gas plant is the largest operational threat to the Company.

The historic trend for locates over the past several years has been steady year over year increases of between 2% - 3%, as illustrated on Figure 2 at Exhibit D1; Tab 17; Schedule 1 on page 9. The increase is due to increased construction activity in the EGD franchise area, coupled with the increased excavating community awareness through our internal Damage Prevention Programs as well as industry associations including the Ontario Regional Common Ground Alliance (ORCGA). The benefits of increasing excavator awareness and locate volumes is the decrease in third party damages that is apparent and indicated on Figure 1 on page 8 of the same exhibit.

The fact is that locate volumes are expected to continue to increase year over year due not only for the reasons stated above, but also due to the recent passage of Bill 8 in 2012 as described in the same exhibit. Bill 8 states that underground facility owners must become members of Ontario One Call by June 2013 and municipalities by June 2014. This is reflected in the actual 2013 year-end locate volumes which are over 32,000 units or 6.5% higher than the 2013 budget estimate.

Despite the reality that locate volumes are expected to most likely increase beyond what is forecast in the budget, as outlined in Board Staff Interrogatory 19 at Exhibit I.A2.EGDI.Staff.19, the Company is supportive as increased locate volumes reflect higher excavator community awareness of the requirement to Call Before you Dig, improving public safety. The increase in locate volumes over the IR term are forecast above inflation, however the costs have been held at or near inflation levels, notwithstanding the reality that locate volumes are expected to increase beyond these levels based on the 2013 actual numbers.

This increase in locate activity, coupled with the limit of cost increases to inflation levels, will force the Company to seek productivity and productivity enhancing activities and processes. One of the Damage Prevention processes that will improve productivity is a

process called Alternate Locate Agreements or “ALA’s”. ALA’s are a method of avoiding the need to send out a field locator to locate buried facilities for excavators. The benefits to the Company are reduced locate costs, while the benefits for excavators are eliminating the need for them to wait for the field locates to be completed prior to their excavation. The Company has a well defined criteria for excavators to follow prior to entering these agreements. The primary requirement for excavators is that their work is “non-intrusive” to the buried gas plant and their excavation is no more than 8”-12” in depth. If this is the case the excavators will sign an agreement with Enbridge certifying that their work is in accordance with these requirements, and will be audited for compliance. The excavator is given an “ALA number” which will indicate to the One Call Centre that a field locate is not required and they will in turn issue a clearance number, thereby eliminating the need to send out a technician to perform the field locate.

A further productivity initiative is expanding the Locate Alliance Consortium or “LAC” concept. Field locates are currently completed by contractors for Enbridge. The LAC initiative enables the same field locator to provide locates for more than 1 utility in a single visit. This requires cooperation and collaboration with other utilities to approve of both the concept as well as the locate service provider. By increasing the number of utilities located by a particular locate service provider, productivity savings in the 10%-15% can be achieved.

6. Ms. Torriano, can you please start and provide a brief summary of the details of the productivity being embedded in the other O&M request?
- A. The Other O&M budget does not account for known and expected cost increases, which include contractor unit rate increases and benefits which are forecast to exceed the rate of inflation and the rate of increase used for the Other O&M budget. The Company contracts with outside contractors using a RFP or negotiations process.

When the Company uses a RFP process to select outside contractors, we have found that the cost increases over prior contractors often exceed the rate of inflation. This is because many of the outside contractors utilize a unionized work force whose wage

increases are a matter of collective agreements which provide for wage increases above inflation.

The Company has not included in its Other O&M budget any costs which are reflective of the expected significant increase in incremental customer additions over the term of the IR.

7. Ms. Torriano, what has the Company done in respect of Bad Debt?
- A. Over the previous IR term, bad debt expense has averaged approx. \$14M per year, however the Company is taking the risk by keeping the levels in the next IR period close to the 2013 Actuals of \$9.5M. Indeed the amount of bad debt included in the O&M Budget is the lowest actual of the previous 6 years.

Bad Debt Expense is driven by Gas Costs, which have risen quite significantly, the health of the economy and weather so the expectation is for Bad Debt to increase.

8. Ms. Trozzi, I understand that you are the Senior Manager of the Human Resources Department. Can you please provide some particulars in respect of how productivity has been embedded into the Other O&M budget?
- A. Benefits have been budgeted at an increase of 2%; however they are expected to increase by 6%, due mostly to an increase in employee utilization, and higher prescription and dental costs.

Salary increases have been budgeted at a 2% increase; however in order to remain competitive in the market and be successful in attracting and retaining the best employees, a 3% salary adjustment may be necessary.

The Short Term Incentive Program (STIP) is budgeted for the Company to meet its financial and operational goals; however STIP is performance driven and typically is paid out above target.

9. Mr. Lapp, can you please describe the bottom-up approach that was used by the Company to develop its O&M budget?

The operations and maintenance budget for Distribution Operations to execute and complete the activities required to run the day to day operations of the distribution system has been established from “the trenches” using labour, equipment and material historical trends for unit costs and projecting these across the distribution system over the IR period, considering geography, pipeline material vintages, historic maintenance trends, procedures development, site restoration and system growth.

10. Mr. Kancharla, is there any evidence which helps confirm the reasonableness of the Company's O&M requests over the 5-year IR period?

A. At D1, Tab 3, Schedule 1, pages 21 and 22 of the pre-filed evidence, the Company includes evidence about the costs per customer for the period 2007 through 2016 on constant dollar and nominal dollar basis.

What the evidence shows is that the Company's total O&M expense on a cost per customer basis has been going down (using the 2016 constant dollar) or has been relatively flat when viewed from a nominal dollar's perspective.

This evidence demonstrates that the O&M amounts requested for the IR term are reasonable on a cost per customer basis.

The important point is to recognize that the costs per customer will be declining over the 5-year IR term relative to the 2013 base year.