500 Consumers Road
North York, Ontario M2J 1P8
PO Box 650
Scarborough ON M1K 5E3

**Lorraine Chiasson**
Regulatory Coordinator
Regulatory Affairs
phone: (416) 495-5499
fax: (416) 495-6072
Email: egdregulatoryproceedings@enbridge.com

March 6, 2014

**VIA RESS, EMAIL and COURIER**

Ms. Kirsten Walli
Ontario Energy Board
2300 Yonge Street
Suite 2700
Toronto, Ontario
M4P 1E4

**Re: EB-2012-0459 - Enbridge Gas Distribution Inc. ("Enbridge")**
**2014 – 2018 Rate Application**
**Undertaking Responses**

Further to Enbridge Gas Distribution's earlier filing of March 6, 2014, enclosed please find the following undertaking responses:

Exhibit J3.1;
Exhibits J5.7, J5.12, J5.13, J5.15, J5.16, and J5.18;
Exhibit J6.7 and;
Exhibit J7.11.
.

This submission was filed through the Board's RESS and is available on the Company's website at www.enbridgegas.com/ratecase.

Yours truly,

(original signed)

Lorraine Chiasson
Regulatory Coordinator

cc: Mr. F. Cass, Aird & Berlis
EB-2012-0459 Intervenors

# UNDERTAKING J3.1

## UNDERTAKING

TR 8

To provide EGDI's productivity analysis, if available.

## RESPONSE

EGD provided a working draft productivity analysis to Concentric for its evaluation and review at the outset of the engagement in February 2011. That working draft was referenced in Mr. Coyne's comments in response to Mr. Shepherd, and is attached. Several points must be understood to put the document in context:

1. This was a working draft, and not of sufficient rigor to be shared publicly
2. The data required rigorous review, assessment, and updating
3. A significant number of assumptions were required that required validation
4. The model and approach were derived from a combination of PEG and Brattle analysis submitted in the Ist Generation IR process in 2007, and could not be independently verified by EGD

Concentric examined the model, data and underlying assumptions, and after independent development of its productivity analyses, made the determination that the EGD approach did not accurately reflect EGD's productivity profile over this 2000-2009 period. Among the differences between EGD's and Concentric's approaches included:

1. Concentric relied upon updated data through 2011
2. The output index derived by EGD was based on a weighted average of both volume and customer growth rates; whereas the output index derived by Concentric was based entirely on customer growth rates. Concentric's approach avoided problems associated with more volatile volumes and delinked the output analysis from programs designed to reduce consumption, which could signal lower productivity than that measured by customers alone.
3. The capital quantity input developed by Concentric included a more complex analysis of the various vintages of EGD's capital; whereas EGD extrapolated based on a 2000 net plant starting point
4. Concentric developed a more robust estimate of capital price, including the effects of taxes, and capital gains & losses.

Witnesses: J. Coyne – Concentric
M. Lister

As a result of these material differences, and Concentric's greater expertise with the measurement of productivity, EGD relied entirely on the Concentric analysis for estimation of the company's TFP productivity over the historic period, and placed no weight on this draft analysis.

Witnesses: J. Coyne – Concentric
M. Lister

# UNDERTAKING J5.7

## UNDERTAKING

TR 48

To provide documentation showing the allocation was greater than 386.6.

## RESPONSE

Enbridge's 2013 Core Capital Budget was set at $386.6 million, consistent with the amount included within the 2013 Settlement Agreement. While Enbridge recognized that it would be very difficult to keep its spending to that level, the Company did not create any different capital budget. Enbridge Gas Distribution's Board of Directors approved the Company's 2013 Core Capital Budget at the $387 million level. Given these circumstances, there is no documentation related to the approved 2013 Core Capital Budget that shows a different level of spend.

Witness: P. Squires

# UNDERTAKING J5.12

## UNDERTAKING

TR 161

Identify each item of over $5 million that passes the materiality limit in changes, and identify the reason for the change and when it happened.

## RESPONSE

The following table identifies the projects listed within the corrected Exhibit I.B18.EGDI.SEC91 (filed as Exhibit K6.1) which had budget changes of $5 million or more over the course of six stages of review. The response to Board Staff Interrogatory #62 at Exhibit I.B18.EGDI.STAFF.62 illustrates the review criterion applied at each review iteration. Please note that some projects were re-named or grouped together within the budget review process, such that it might appear that there were large budget changes when in fact there was simply a re-grouping of forecast costs.

Witness: J. Sanders

**Projects with Materiality Change Greater Than $5 Million**
**Changes Review 6 vs. Review 1**
**(000's)**

| Line Number | PLANT GROUP | PROGRAM DETAIL | F2014 | F2015 | F2016 | Sum(14-16) | REASON FOR THE CHANGE |
|---|---|---|---|---|---|---|---|
| 1 | **1. CUST GROWTH** | Customer Growth | (13,943) | (15,579) | (18,710) | (48,231) | Reduced unit cost to pre-2012 actual unit costs for 2014, with assumed productivity improvements, at Review 3 |
| 2 | **4. SYSTEM INTEGRITY RELIABILITY** | Plastic Mains (Incl Services) Study | - | (12,485) | (21,224) | (33,709) | Removed, awaiting results from Gas Technology Institute study, at Review 4 |
| 3 | **4. SYSTEM INTEGRITY RELIABILITY** | AMP Fitting Replacement | (1,657) | (18,112) | (1,790) | (21,559) | Combination of units and unit costs reviews and consideration for pace based on contractor and staff capacity changes at every review |
| 4 | **4. SYSTEM INTEGRITY RELIABILITY** | Verification of MAOP | (11,130) | (4,603) | (4,805) | (20,538) | Reduced to target vital pipelines operating above 20% SMYS, based on risk perspective and pace. Changes occurred at all reviews |
| 5 | **4. SYSTEM INTEGRITY RELIABILITY** | Sombra Tecumseh Redundancy | (2,000) | (17,850) | - | (19,850) | Deferred pending further study at Review 3 |
| 6 | **4. SYSTEM INTEGRITY RELIABILITY** | Operate Gas Network - SMART System | (3,570) | (6,763) | (6,898) | (17,230) | Removed, not considered priority at this time, at Review 2 and Review 3 |
| 7 | **4. SYSTEM INTEGRITY RELIABILITY** | Relays | (4,737) | (5,049) | (5,381) | (15,167) | Reduced to reflect efficiencies with other System Integrity & Reliability programs, such as AMP, in Review 2 |
| 8 | **4. SYSTEM INTEGRITY RELIABILITY** | Don River Bridge Crossing Replacement | (9,700) | - | - | (9,700) | Recognized as a risk, but additional study required, at Review 6 |
| 9 | **4. SYSTEM INTEGRITY RELIABILITY** | 20-Inch Lakeshore Line Replacement | (5,610) | - | - | (5,610) | Recognized as a risk, but additional study required -Vintage Steel Mains at Review 6 |
| 10 | **4. SYSTEM INTEGRITY RELIABILITY** | Gate Station Equipment Replacement | 7,060 | 5,238 | 1,754 | 14,052 | Original came from Asset Plan, did not include risk assessment on gate stations or specific growth requirements. Changes made at all reviews |
| 11 | **4. SYSTEM INTEGRITY RELIABILITY** | Envision Extension | 8,000 | 8,000 | - | 16,000 | Increased, based on decision to extend Envision system, at Review 6 |
| 12 | **4. SYSTEM INTEGRITY RELIABILITY** | District/Header Station Equipment Replacement | 6,477 | 9,728 | 10,984 | 27,189 | Mitigation to address risk identified through Asset Plan not initiated until Review 3, and finalized in Review 6 |
| 13 | **6. GENERAL PLANT** | Natural Gas Transportation - Customer Compressor Stations | (5,612) | (5,612) | (5,612) | (16,836) | Reduced based on customer forecast, at Review 3 |
| 14 | **7. IT** | Customer Care Improvement Initiative | 5,500 | 3,600 | - | 9,100 | Previously identified as Extranet (at Review 1-5) and Best Customers Initiative (at Review 3-5) , consolidated in Review 6 |
| 15 | **Grand Total** | | **(30,921)** | **(59,486)** | **(51,683)** | **(142,090)** | |

# UNDERTAKING J5.13

## UNDERTAKING

TR 187

To provide the actual number for 2013, and the average for the period 2008 to 2012.

## RESPONSE

| 2008-2012 Actual, Five Year Average, 2013 Actual | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | Col 6 | Col 7 |
| | | | | | | | |
| | Actual | Actual | Actual | Actual | Actual | 2008-12 | Actual |
| | 2008 | 2009 | 2010 | 2011 | 2012 | Average | 2013 |
| Station Replacement | 8,019 | 6,161 | 7,599 | 10,246 | 12,015 | 8,808 | 9,200 |
| | | | | | | | |

Witness: C. Moore

# UNDERTAKING J5.15

## UNDERTAKING

TR 197

To divide the $29.7 million by total number of stations to be worked on in the next three years.

## RESPONSE

The undertaking as stated does not reflect the nature of the evidence filed at Exhibit B2, Tab 5, Schedule 4, Attachment 1. The evidence identifies, at page 2, that the Company will undertake fairly significant work at the Cookstown Gate Station in 2014, of about $2.9 million, and at the Barrie Gate Station in 2015, of about $3.2 million. The evidence also details the need for and cost of the Gas Preheat System Risk Mitigation project. As noted at page 20, the Company proposes to install a new heat exchanger and actuation retrofit to replace the oldest heat exchanger. It will also retrofit the next two oldest heat exchangers and it will add a pressure relief valve at 39 stations over the years 2014 through 2016, at a cost of approximately $55,000 per station. Finally, the evidence also includes a list of the projects that will be undertaken in the 2014 to 2016 years, at a cost of under $2 million per project. There are a total of 25 projects identified which vary in cost from $59,000 to $1.8 million. The last 9 projects listed on Table 7 at pages 27 and 28 are projects that will be undertaken at multiple stations.

Accordingly, it is inappropriate to simply divide the total capital costs for the 2014 through 2017 period ($29.7 million) by the number of pressure regulating stations as this would not provide a result which is reflective of the work contemplated and the appropriate forecast cost.

Witness: S. Surdu

# UNDERTAKING J5.16

## UNDERTAKING

TR 202

To provide the composition of the account and to provide the specific significant code changes that are driving the incremental investment over the next three years.

## RESPONSE

### Gate and Select District Stations

In November 2012, the TSSA issued CAD Amendment FS-196-12. As described in the response to Undertaking J5.11, CSA Z662-11, Clause 3.2 outlines the mandatory requirements for assessing current potential risks,, identifying risk reduction approaches and corrective actions, and monitoring results. Process Hazard Assessments (PHA) are conducted to meet these regulatory requirements and result in the development of proposed risk mitigation projects.

In addition, CAD FS-196-12 brought into effect CSA Z246.1-09. Within CSA Z246.1-09, Section 9.3.7 and 9.3.9 identify requirements to monitor and control access within operator determined critical facilities. EGD meets these requirements by identifying critical facilities and implementing security measures to monitor the site and control access.

Turning to the projects identified in the evidence more specifically, there are aspects of the work proposed for the Barrie and Cookstown Gate Stations which are driven by the new integrity management standards in addition to capacity needs. In terms of the heat exchangers, one of the primary drivers is the requirements of CSA Z662, at Clause 3.2.

In respect of the projects identified at Table 7 of the evidence, the drivers for each of the projects have already been identified. Where a driver is listed as “compliance”, this indicates that the project is being undertaken, at least in part, in response to the requirements of CSA Z662-11. Where the driver is referred to as “security”, the project is being driven, at least in part, by the requirements of CSA Z246.1-09.

A summary of the incremental investment over the next three years resulting from these code changes is described in the response to Undertaking J5.3.

Witness: C. Moore

# UNDERTAKING J5.18

## UNDERTAKING

TR 214

To provide a ballpark estimate of dollar savings achieved by combining the capacity upgrade with the other tasks being done simultaneously.

## RESPONSE

In comparing the case presented in evidence with respect to the Cambellford Gate Station rebuild, productivity savings are achieved by completing additional program projects at the same time as the station rebuild project. Compared to the alternative where no productivity savings would be achieved, the proposed rebuild saves an estimated $15,000. Achieving these productivity savings represents an approximate 11% decrease in the cost associated with these additional program projects when compared to completing them individually.

These additional costs are avoided in the proposed rebuild project through the synchronization of common project aspects including computer programing, electrical installation, excavation methods, and site supervision.

There are other productivities realized given the remote location of the site. These are challenging to quantify financially, and are in addition to the amount outlined above.

There are other productivities gained in the planning and approvals stages of the project that are also challenging to quantify financially.

Witness: S. Surdu

# UNDERTAKING J6.7

## UNDERTAKING

TR 66

To provide an aggregated contractor cost for 2012 and 2013 of abandonment for a steel service versus a plastic service.

## RESPONSE

The base aggregated Contractor cost for the abandonment of a steel service is $1,398.75 in 2012, and the same Contractor cost in 2013.

The base aggregated Contractor cost for the abandonment of a plastic service is $1,348.75 in 2012, and the same Contractor cost in 2013.

There are several possible escalators to that cost including winter premiums, restoration to roads, sidewalks, driveways or sod in addition to other factors.

Witness: C. Moore

# UNDERTAKING J7.11

## UNDERTAKING

TR 157

To explain why oil and gas operations, ABC and donations do not increase at the same rate as other expenses.

## RESPONSE

As stated in evidence at TR 7 / 157, line 29 of Exhibit K7.2, Non-Utility Allocations include oil and gas operations, ABC and donations. Non-Utility Allocations have not increased at the same rate as other expenses for the following reasons.

Oil and gas operations continue to decline because some wells are abandoned. As a result, both production volumes and costs are expected to go down during the IR period.

The number of ABC T-service customers is expected to continue to decline and remain at relatively low levels throughout the IR period.

Donations are kept flat during the IR period.

Witness: M. Torriano