ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO APPrO INTERROGATORY #13

INTERROGATORY

RELATED ISSUES

A.2 *Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013 and E.B.O. 188 as applicable?*

Reference: EB-2012-0451Exhibit E Tab 1 Schedule 1 Paragraph 12 Updated 2013-07-22

Preamble: Enbridge indicates the PI of the new project is 1.73, with an NPV of $667.4 million. This is well above the PI threshold of 1.0, and an NPV >0 normally used by the Board to support the economic justification of capital projects.

a) Using the assumption that the Board were to find that no GTA project costs were to be allocated to unbundled customers, please recalculate the PI and the NPV of the project.

RESPONSE

a) The economic feasibility reflects incremental project revenues and costs in isolation of the gas distribution network. Additionally, no unbundled customers were included in the project's customer additions forecast. As such, there would be no impact to the PI or NPV.

Witness: S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORY #89

INTERROGATORY

Issue A2 - Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013 and E.B.O. 188 as applicable?

Ref: Exhibit A, Tab 3, Schedule 5 &
Updated Exhibit E, Tab1, S1 Attachment

Please provide the (updated) analysis that leads to the gas cost savings described in Exhibit A, Tab 3, Schedule 5, and calculated in Updated Exhibit E, Tab1, Schedule 1, Attachment.

RESPONSE

The updated expected gas supply benefits calculations can be found in Exhibit A, Tab 3, Schedule 9, pages 8 to 11 and associated attachments.

Witness: J. Denomy

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORY #90

INTERROGATORY

Issue A2 - Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013 and E.B.O. 188 as applicable?

Ref: EB-2012-0451 Exhibit A, Tab 3 Schedule 9 page 14 and Attachment 3 & Updated Exhibit E, Tab1, Schedule 1, Attachment.

a) Please explain the transportation savings cited in the references.

b) Please provide the assumptions underlying the range of savings.

c) Please provide a schedule that shows the capacity on Segment A related to the range of transportation savings

RESPONSE

a) Exhibit A, Tab 3, Schedule 9 page 14 and Attachment 3 – Table in paragraph 31 describes Economic Sensitivities summarized in Attachment 3. The Base Case (Column 2) transportation savings is explained in Exhibit A, Tab 3, Schedule 9 under Gas Supply Benefits section, paragraph 18 b) on page 9. This Base Case is used for Updated Exhibit E, Tab 1, Schedule 1 and Attachments.

The other scenarios shown on Exhibit A, Tab 3, Schedule 9, Attachment 3 were intended to demonstrate the sensitivity to changes in various parameters or inputs into the economic feasibility. Column 3 and 4, showing 75% and 50% Transportation savings, depict scenarios where the upstream gas transportation savings (part of gas supply benefits) are only 75% and 50% of the base case forecast. These scenarios were previously requested by Intervenors and were included in the update for completeness with the previous record.

b) Please refer to a) – there are no assumptions other than a ‘what if’ scenario of the upstream transportation savings (part of gas supply benefits) are 75% or 50% of the base case forecast.

Witnesses: J. Denomy
C. Fernandes

c) Exhibit A, Tab 3, Schedule 9, Attachment 3, Column 5 shows a scenario with 0% transportation services charges (revenue from providing transportation services to third party shippers on the Albion line). This scenario is intended to demonstrate a scenario with no revenue, and does not involve upstream supply savings. As can be seen in the analysis, the project is feasible even if there is no shipper on the Albion pipeline.

Witnesses: J. Denomy
C. Fernandes

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO
ENERGY PROBE RESEARCH FOUNDATION INTERROGATORY #91

INTERROGATORY

Issue A2 - Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013 and E.B.O. 188 as applicable?

Ref: EB-2012-0451 Exhibit A, Tab 3, Schedule 9 Attachment 3 &
Updated Exhibit E, Tab 1, Schedule 1 plus Attachment and TCR JT2.13

a) Provide all input assumptions and calculations underlying the 10 year Incremental Operating Cash Flows before Taxes (lines 16-23 of Schedule).

b) Show specifically the changes related to the reduction in the TCPL toll from Parkway to Bram West.

c) Reconcile to Attachment Page 1.

d) Please provide a populated live Excel Spreadsheet for Profitability Analysis corresponding to the Attachment Pages 2-5 and including Tabs and linkages for all input assumptions/calculations corresponding to E Tab1 Schedule 1 pages 8 and 9 and Attachment page 1.

e) Please provide a sample of sensitivity analyses similar to those provided in JT2.13 covering Capital, commodity price change, Annual volumes and Transportation service charges assumptions. Chose realistic appropriate ranges for analyses.

RESPONSE

a) Please see the response to GEC Interrogatory #43 found at Exhibit I.A1.EGD.GEC.43 for a breakdown of Gas Distribution Revenue.

Please see Exhibit E, Tab 1, Schedule 2, Attachment 1, for a breakdown of the Transportation Services Charge. Enbridge proposes to charge 60% of this fully

Witness: S. Murray

allocated revenue requirement for the Albion Pipeline through the new Rate 332 transportation services charge.

Please see Exhibit A, Tab 3, Schedule 9, Attachment 1, page 5 of 6 for a breakdown of the expected gas supply benefits (referred to as the Transportation Savings at Line 18 in the DCF schedule).

Please refer to the attachment filed with the response to Energy Probe Interrogatory # 11 found at Exhibit I.A2.EGD.EP.11 for the breakdown of Gas Costs.

Please see Attachment 1 for a breakdown of O&M Expenses.

Net Operating Cash (Before Taxes) is the sum of Lines 16 to 20 in the referred schedule.

PV of Net Operating Cash (Before Taxes) at Project Outset is the Net Operating Cash (Before Taxes) discounted using the Company's 2013 after-tax weighted average cost of capital, per the periods defined in the notes section in Exhibit E, Tab 1, Schedule 1, Attachment, pages 2 to 5.

Accumulated PV of Net Operating Cash (Before Taxes) is a rolling accumulation by year of Line 22 in the referred schedule.

b) Please see the response to Board Staff Interrogatory #1 at Exhibit I.A3.EGD(Update).STAFF.1 b).

c) The reduction in the TCPL toll from Parkway to Bram West is reflected in the Annual Average Transportation Savings, at Line 11 of Exhibit E, Tab 1, Schedule 1, Attachment, page 1.

d) Enbridge will provide the Intervenor with the electronic spreadsheet in confidence under the signed Declaration and Undertaking. Please refer to Exhibit E, Tab 1, Schedule 1, Attachment for a hard copy. The electronic spreadsheet and the hard copy include all pages (1 to 5).

In regards to Exhibit E, Tab 1, Schedule 1, pages 8 and 9, these are hard-coded inputs into the DCF model. For this reason the live spreadsheets for pages 8 and 9 are not included. For further inputs:

- Please see Exhibit A, Tab 3, Schedule 4, supporting the forecasted Incremental Customer Additions.

- Please see EB-2011-0354, Exhibit C2, Tab 2, Schedule 1 for the Average Use Forecasting Model supporting evidence updated June 1, 2012.

- Please see the attachment supporting I.A1.EGD.GEC.43 for a breakdown of the Total Cumulative Volumes.

- Please see Exhibit A, Tab 3, Schedule 9, Attachment 1, page 5 of 6 for a breakdown of Transportation Savings.

e) Please refer to Exhibit A, Tab 3, Schedule 9, Attachment 3 and the response to CCC Interrogatory #33 found at Exhibit I.A.3.EGD(Update).CCC.33.

Witness: S. Murray

IR#: EP 91 (a)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Incremental O&M per Customer												
Residential	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69
Commercial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Apartment	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Industrial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Customers Additions	**13,642**	**14,008**	**14,355**	**14,472**	**14,651**	**14,865**	**15,086**	**15,086**	**15,086**	**15,086**		
Residential	12,277	12,607	13,034	13,148	13,331	13,535	13,748	13,748	13,748	13,748		
Commercial	1,291	1,327	1,250	1,253	1,250	1,261	1,269	1,269	1,269	1,269		
Apartment	71	71	69	69	68	67	67	67	67	67		
Industrial	3	3	2	2	2	2	2	2	2	2		
Cumulative Customers - year end	**13,642**	**27,650**	**42,005**	**56,477**	**71,128**	**85,993**	**101,079**	**116,165**	**131,251**	**146,337**	**146,337**	**146,337**
Residential	12,277	24,884	37,918	51,066	64,397	77,932	91,680	105,428	119,176	132,924	132,924	132,924
Commercial	1,291	2,618	3,868	5,121	6,371	7,632	8,901	10,170	11,439	12,708	12,708	12,708
Apartment	71	142	211	280	348	415	482	549	616	683	683	683
Industrial	3	6	8	10	12	14	16	18	20	22	22	22
Cumulative Customers - with effectivity	**6,821**	**20,646**	**34,828**	**49,241**	**63,803**	**78,561**	**93,536**	**108,622**	**123,708**	**138,794**	**146,337**	**146,337**
Residential	6,139	18,581	31,401	44,492	57,732	71,165	84,806	98,554	112,302	126,050	132,924	132,924
Commercial	646	1,955	3,243	4,495	5,746	7,002	8,267	9,536	10,805	12,074	12,708	12,708
Apartment	36	107	177	246	314	382	449	516	583	650	683	683
Industrial	2	5	7	9	11	13	15	17	19	21	22	22
Total Incremental O&M (customer additions)	**$548,853**	**$1,661,244**	**$2,794,957**	**$3,939,457**	**$5,093,911**	**$6,262,048**	**$7,446,057**	**$8,638,057**	**$9,830,056**	**$11,022,056**	**$11,618,055**	**$11,618,055**
Residential	$415,502	$1,257,675	$2,125,468	$3,011,571	$3,907,725	$4,816,977	$5,740,342	$6,670,915	$7,601,489	$8,532,063	$8,997,349	$8,997,349
Commercial	$126,121	$381,881	$633,635	$878,160	$1,122,685	$1,367,992	$1,615,154	$1,863,099	$2,111,043	$2,358,987	$2,482,959	$2,482,959
Apartment	$6,936	$20,809	$34,486	$47,967	$61,351	$74,540	$87,630	$100,721	$113,812	$126,903	$133,448	$133,448
Industrial	$293	$879	$1,368	$1,758	$2,149	$2,540	$2,931	$3,322	$3,712	$4,103	$4,298	$4,298
Corporate RCAM Allocation	**$90,576**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**
Segment A Distribution O&M (with Overhead)	**$103,709**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**
Segment A Transmission O&M (with Overhead)	**$11,170**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$1,311,214**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**
Segment B O&M (with Overhead)	**$78,240**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$1,161,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**
Total O&M	**$832,547**	**$3,022,974**	**$4,156,686**	**$5,301,186**	**$6,455,640**	**$7,623,778**	**$10,851,387**	**$9,999,786**	**$11,191,786**	**$12,383,785**	**$12,979,785**	**$12,979,785**

Annual Avg. O&M **$13,252,265**
(commencing in 2025)

IR#: EP 91 (a)

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Incremental O&M per Customer											
Residential	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69
Commercial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Apartment	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Industrial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Customers Additions											
Residential											
Commercial											
Apartment											
Industrial											
Cumulative Customers - year end	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683	683	683	683	683	683
Industrial	22	22	22	22	22	22	22	22	22	22	22
Cumulative Customers - with effectivity	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683	683	683	683	683	683
Industrial	22	22	22	22	22	22	22	22	22	22	22
Total Incremental O&M (customer additions)	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**
Residential	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349
Commercial	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959
Apartment	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448
Industrial	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298
Corporate RCAM Allocation	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**
Segment A Distribution O&M (with Overhead)	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**
Segment A Transmission O&M (with Overhead)	**$53,614**	**$1,311,214**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$1,311,214**	**$53,614**	**$53,614**
Segment B O&M (with Overhead)	**$375,551**	**$1,161,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$1,161,551**	**$375,551**	**$375,551**
Total O&M	**$12,979,785**	**$15,023,385**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$15,023,385**	**$12,979,785**	**$12,979,785**

Annual Avg. O&M **$13,252,265**
(commencing in 2025)

IR#: EP 91 (a)

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Incremental O&M per Customer											
Residential	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69
Commercial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Apartment	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Industrial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Customers Additions											
Residential											
Commercial											
Apartment											
Industrial											
Cumulative Customers - year end	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683	683	683	683	683	683
Industrial	22	22	22	22	22	22	22	22	22	22	22
Cumulative Customers - with effectivity	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683	683	683	683	683	683
Industrial	22	22	22	22	22	22	22	22	22	22	22
Total Incremental O&M (customer additions)	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**
Residential	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349
Commercial	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959
Apartment	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448
Industrial	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298
Corporate RCAM Allocation	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**
Segment A Distribution O&M (with Overhead)	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**
Segment A Transmission O&M (with Overhead)	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$1,311,214**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**
Segment B O&M (with Overhead)	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$1,161,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**
Total O&M	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$15,023,385**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**

Annual Avg. O&M **$13,252,265**
(commencing in 2025)

IR#: EP 91 (a)

	2049	2050	2051	2052	2053	2054
Incremental O&M per Customer						
Residential	$67.69	$67.69	$67.69	$67.69	$67.69	$67.69
Commercial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Apartment	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Industrial	$195.39	$195.39	$195.39	$195.39	$195.39	$195.39
Customers Additions						
Residential						
Commercial						
Apartment						
Industrial						
Cumulative Customers - year end	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683
Industrial	22	22	22	22	22	22
Cumulative Customers - with effectivity	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**	**146,337**
Residential	132,924	132,924	132,924	132,924	132,924	132,924
Commercial	12,708	12,708	12,708	12,708	12,708	12,708
Apartment	683	683	683	683	683	683
Industrial	22	22	22	22	22	22
Total Incremental O&M (customer additions)	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**	**$11,618,055**
Residential	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349	$8,997,349
Commercial	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959	$2,482,959
Apartment	$133,448	$133,448	$133,448	$133,448	$133,448	$133,448
Industrial	$4,298	$4,298	$4,298	$4,298	$4,298	$4,298
Corporate RCAM Allocation	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**	**$434,763**
Segment A Distribution O&M (with Overhead)	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**	**$497,801**
Segment A Transmission O&M (with Overhead)	**$1,311,214**	**$53,614**	**$53,614**	**$53,614**	**$53,614**	**$53,614**
Segment B O&M (with Overhead)	**$1,161,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**	**$375,551**
Total O&M	**$15,023,385**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**	**$12,979,785**

Annual Avg. O&M **$13,252,265**
(commencing in 2025)

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO
TCPL INTERROGATORY #21

INTERROGATORY

Issue A2

Reference(s) (i) Exhibit E, Tab 1, Schedule 1, Page 9 and 9, May 15, 2013 Update
(ii) Exhibit E, Tab 1, Schedule 1, Page 9 and 9, July 22, 2013 Update

Preamble
TransCanada seeks to understand the economic analysis provided in the May 15, 2013 update in comparison to the economic analysis provided in the July 22, 2013 Update.

Request
(a) Please complete the following table by providing variances and explanations for those variances:

	May 15, 2013 Update	**July 22, 2013 Update**	**Variance**	**Explanation of Variance**
Capital Investment				
Mains	(redacted)	(redacted)		
Stations	(redacted)	(redacted)		
Land Rights/Total	(redacted)	(redacted)		
Total	$595,280,523	$652,144,124		
Future Reinforcement Projects				
2017	$21,000,000	$21,000,000		
2018	$16,400,000	$16,400,000		
2019	$13,000,000	$13,000,000		
2020	$250,000	$250,000		
Capital Maint. Costs	$5,218,238	$5,230,240		
Services	$396,820,220	$379,533,696		
Total Capital	$1,047,968,981	$1,087,558,060		
Total Transportation Savings	$1,632,014,615	$1,732,650,739		
Total Transportation Services Charge	$388,604,339	$471,256,624		
Net Present	$659,207,816	$667,432,377		

Witnesses: J. Denomy
T. Horton
S. Murray

Value (40 years)				
Profitability Index (40 years)	1.76	1.73		

(b) For the May 15, 2013 update and the July 22, 2013 update, please provide the breakdown of capital costs between Mains, Stations and Land Rights, which were redacted in references (i) and (ii), or explain why these amounts cannot be provided.

(c) Please reconcile the capital cost of $686.5 million provided in Exhibit C, Tab 2, Schedule 1, Page 1 with the $652.1 million capital cost provided in Exhibit E, Tab 1, Schedule 1, page 9 and 9 (both in the July 22, 2013 update).

(d) Please provide the formula used by EGD to calculate the profitability index.

(e) Please provide the discount rate used to calculate the net present value and explain why that discount rate was chosen.

(f) Please provide an economic analysis in table format similar to reference (i) and (ii) for scenarios 1, 2, and 3 as listed in Exhibit A, Tab 3, Schedule 9, Pages 8-11.

<u>RESPONSE</u>

(a)

	May 15, 2013 Update	**July 22, 2013 Update**	**Variance (July-May)**	**Explanation of Variance**
Capital Investment				
Mains	(redacted)	(redacted)		
Stations	(redacted)	(redacted)		
Land Rights/Total	(redacted)	(redacted)		
Total	$595,280,523	$652,144,124	$56.86MM	1. Additional 5.8km of NPS 42 for Segment A to go back to New Parkway West site from Bram West site
Future Reinforcement Projects				
2017	$21,000,000	$21,000,000	-	
2018	$16,400,000	$16,400,000	-	

Witnesses: J. Denomy
T. Horton
S. Murray

2019	$13,000,000	$13,000,000	-	
2020	$250,000	$250,000	-	
Capital Maint. Costs	$5,218,238	$5,230,240	$0.01MM	2. Variance due to the additional pipe length for Segment A to go back to New Parkway West site from Bram West site.
Services	$396,820,220	$379,533,696	-$17.29MM	3. Change to Customer Additions Forecast as filed June 3, 2013.
Total Capital	$1,047,968,981	$1,087,558,060	$39.59MM	4. See (1), (2) and (3).
Total Transportation Savings	$1,632,014,615	$1,732,650,739	$100.64MM	5. Update for final tolls on the Mainline and removal of toll from Parkway to Bram West
Total Transportation Services Charge	$388,604,339	$471,256,624	$82.65MM	6. Increase in capital cost for shared pipeline driving corresponding increase in revenue requirement.
Net Present Value (40 years)	$659,207,816	$667,432,377	$8.22MM	7. Net present value impact of changes above
Profitability Index (40 years)	1.76	1.73	-0.03	8. Change in total present value of capital greater than change in total present value of operating cash flows

(b) A detailed cost breakdown was provided as confidential information in the latest update. An aggregated breakdown was provided in response to Environmental Defense's motion on the public record. Additionally, a detailed cost variance analysis between multiple options has been provided as confidential redacted form in I.A3.EGD (Update).CCC.30. In order to preserve the integrity of a formal procurement process, Enbridge is not willing to provide any further breakdowns on the public record until the procurement process has been completed (expected Q1-Q2 2014).

(c) Please see the below table for reconciliation:

Witnesses: J. Denomy
T. Horton
S. Murray

	New Pkwy W Segment A (NPS 42 Option) ($millions)		Bram West Segment A (NPS 42 Option) ($millions)		Bram West Segment A (NPS 36 Option) ($millions)	
	Escalated	Non-escalated	Escalated	Non-escalated	Escalated	Non-escalated
Base Project Cost	$ 548.7	$ 548.7	$ 500.6	$ 500.6	$ 476.8	$ 476.8
Contingency	$ 84.5	$ 84.5	$ 78.0	$ 78.0	$ 62.0	$ 62.0
Escalation	$ 33.6	$ -	$ 27.8	$ -	$ 25.7	$ -
Interest During Construction	$ 19.8	$ 19.0	$ 17.4	$ 16.7	$ 16.4	$ 15.8
Total Estimated Project Cost	**$ 686.6**	**$ 652.2**	**$ 623.8**	**$ 595.3**	**$ 580.9**	**$ 554.6**

*minor rounding errors may exist in the above table

(d) The formula used by EGD to calculate the profitability index is as follows: Profitability Index (“PI”) = (Present Value (“PV”) of Operating Cash Flow + PV of CCA Tax Shield) / (PV of Capital)

(e) The discount rate used to calculate the net present value is 5.88%. This is the Company’s after-tax weighted average cost of capital. It is derived from the Board Approved 2013 Capital Structure (Excluding CIS/Customer Care) as found in the EB-2011-0354 Final Rate Order, Appendix A, page 7.

(f) Scenario 1 - please refer to Exhibit A, Tab 3, Schedule 9, Attachment 3, Column 1.

Scenario 2 - please refer to Exhibit A, Tab 3, Schedule 9, Attachment 3, Column 2.

Scenario 3 - please see table below.

Witnesses: J. Denomy
T. Horton
S. Murray

Capital Investment

Total Upfront Capital	$652,144,124
Future Reinforcement Projects	
2017	$21,000,000
2018	$16,400,000
2019	$13,000,000
2020	$250,000
Capital Maintenance Costs[1]	$5,230,240
Services[2]	$379,533,696
Total Capital	$1,087,558,060
Total Transportation Savings[1,3]	$1,786,386,614
Total Transportation Services Charge[1,4]	$471,256,624

SUMMARY OF RESULTS

Net Present Value (40 years)	$691,163,281
Profitability Index (40 years)	1.76

NOTES:

[1]Total for the 40 year horizon of analysis.

[2]Services include the costs for distribution mains, services and meters based on the 2013 capital budget.

[3]Total transportation savings are equal to expected gas supply benefits and incorporate the total cost of landing gas in the Enbridge franchise area including costs associated with tolls, fuel and commodity procurement (i.e. basis differentials). Prepared with TransCanada tolls based on the NEB's Toll Order TG-006-2013 (issued June 11, 2013) which made TransCanada's Compliance Filing tolls final and effective July 1, 2013

[4]Transportation Services Charges to be received from contracted shippers for transportation from Parkway West to to Albion Road Station. (Current Base Case)

Witnesses: J. Denomy
T. Horton
S. Murray

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO TCPL INTERROGATORY #22

INTERROGATORY

Issue A2

Reference(s) (i) Exhibit E, Tab 1, Schedule 1, Page 9 of 9

Preamble
TransCanada wishes to better understand EGD's economic analysis of the GTA Project.

Request
(a) The referenced analysis includes a net present value over 40- years. Was this determined by assessing each input over 40 years or were the results over (2015-2025) extrapolated?

(b) What TransCanada Mainline tolls did EGD assume in determining these net present values?

(c) How were future Mainline tolls determined?

RESPONSE

(a) The economic feasibility assumes all costs and distribution revenue rates are held constant in current year terms over the 40 year horizon. For the calculation of gas supply benefits (Total Transportation Savings), only the period of 2015 to 2025 were included in the feasibility.

(b) TransCanada's Compliance Filing tolls per NEB Toll Order TG-006-2013 were utilized for the analysis of gas supply benefits (Total Transportation Savings).

(c) TransCanada's Compliance Filing tolls were held constant over the period 2015 to 2025.

Witnesses: J. Denomy
S. Murray