

SCHOOL ENERGY COALITION

**CROSS-EXAMINATION
MATERIALS**

ENBRIDGE 2014-18 RATES

PANEL 2

EB-2012-0459

Comparison of Five Year Core Capital Spending

Category	2008	2009	2010	2011	2012	Total	2014	2015	2016	2017	2018	Total	Inc./-Dec.	Percent
Customer-Related	120	109	108	136	152	625	122	130	141	141	141	675	50	8.00%
System Integrity	157	145	159	161	187	809	243	248	242	242	242	1,217	408	50.43%
Other	90	96	71	103	90	450	79	68	59	59	59	324	-126	-28.00%
Core Capital	367	350	338	400	429	1,884	444	446	442	442	442	2,216	332	17.62%
Averages						377						443	66	17.62%

Sources:

B2/1/1, p. 3 Updated February 18, 2014

I.B18.EGDI.SEC.83, p. 2, Updated February 25, 2014

SEC INTERROGATORY #83

INTERROGATORY

Issue B18: Is the rate base for each of 2014, 2015 and 2016 appropriate, including:

- a. Opening rate base;
- b. Forecast level of Capital expenditures;
- c. Forecast Customer additions;
- d. Proposed Capital additions;
- e. Allocation of the cost and use of capital assets between utility and nonutility (unregulated) operations;
- f. Working capital allowance; and
- g. All other components of and adjustments to rate base

[A2/1/3, p. 2] Please provide the data behind the chart "EGD Capital Expenditure".

RESPONSE

Please see the table on the following page. See also the response to SEC Interrogatory #8 found at Exhibit I.A1.EGDI.SEC.8.

Capital Expenditure Profile 2000-2018																		
	(\$Millions)																	
	Col 1 2000	Col 2 2001	Col 3 2002	Col 4 2003	Col 5 2004	Col 6 2005	Col 7 2006	Col 8 2007	Col 9 2008	Col 10 2009	Col 11 2010	Col 12 2011	Col 13 2012	Col 13 2012 2013B	Col 14 2014F	Col 15 2015F	Col 16 2016F	Col 17 2016F
Customer Related	117	123	116	115	120	137	135	136	120	109	108	136	152	123	122	130	141	
System integrity	62	97	106	74	96	125	177	152	157	145	159	161	187	193	243	248	242	
Others	36	30	31	36	63	54	53	67	90	96	71	103	90	71	115	94	67	
GTA & Ottawa	-	-	-	-	-	-	-	-	-	-	-	-	9	63	202	360	-	
Total Capital Expenditure	215	250	253	225	278	316	365	355	366	349	338	399	438	450	682	832	450	

Witnesses: L. Lawler
J. Sanders

SEC INTERROGATORY #83

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[A2/1/3, p. 2] Please provide the data behind the chart "EGD Capital Expenditure".

RESPONSE

Please see the table on the following page. See also the response to SEC Interrogatory #8 found at Exhibit I.A1.EGDI.SEC.8.

Capital Expenditure Profile 2000-2018																		
(\$Millions)																		
	Col1	Col2	Col3	Col4	Col5	Col6	Col7	Col8	Col9	Col10	Col11	Col12	Col13	Col14	Col15	Col16	Col17	Col18
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013B	2014F	2015F	2016F	2017F
Customer Related	117	123	116	115	120	137	135	136	120	109	108	136	152	123	122	130	141	146
System integrity	62	97	106	74	96	125	177	152	157	145	159	161	187	193	153	248	242	277
Others	36	30	31	36	63	54	53	67	90	96	71	103	90	71	205	94	67	62
GTA & Ottawa	-	-	-	-	-	-	-	-	-	-	-	-	9	63	202	360	-	-
Total Capital Expenditure	215	250	253	225	278	316	365	355	366	349	338	399	438	450	682	832	450	485
																		509

Witnesses: L. Lawler
J. Sanders

A. Summary of the Capital Budget 2014 - 2016

6. Table 1 provides a summary view of the planned capital expenditures for the Company, totaling \$682.3 million in 2014, \$832.0 million in 2015 and \$450.0 million in 2016. These amounts are categorized in a standard summary view of the Capital Budget, as provided in previous applications.

<u>Table 1</u> <u>Summary of Capital Expenditures</u>				
	Col 1	Col 2	Col 3	Col 4
	<u>Board Approved</u>			
(\$Millions)	<u>Budget</u> 2013	<u>Forecast</u> 2014	<u>Forecast</u> 2015	<u>Forecast</u> 2016
Customer Related Distribution Plant	123.0	119.0	126.8	137.1
NGV Rental Equipment	0.3	3.4	3.6	3.7
System Improvements and Upgrades	192.8	243.2	247.8	242.2
General and Other Plant	47.6	56.3	52.7	48.4
Underground Storage Plant	22.4	21.9	15.7	10.5
Sub total "Core" Capital Expenditures	<u>386.1</u>	<u>443.8</u>	<u>446.6</u>	<u>441.9</u>
Work and Asset Management System (WAMS)	0.5	36.3	25.7	8.1
Leave to Construct - Major Reinforcements	63.3	202.2	359.7	-
Total Capital Expenditures	<u>449.9</u>	<u>682.3</u>	<u>832.0</u>	<u>450.0</u>

7. The Company will use the term "Core Capital" to include all capital spending, except for three identified major projects: the GTA and Ottawa Reinforcements and the Work and Asset Management Project (WAMS). The "Core Capital" term essentially captures the spending amounts that were included within the 2013 Board Approved Capital amount (after taking into account, as seen in Table 1 above, that there was \$0.5M of initial WAMS project spending included within the 2013 Board Approved Capital amount).

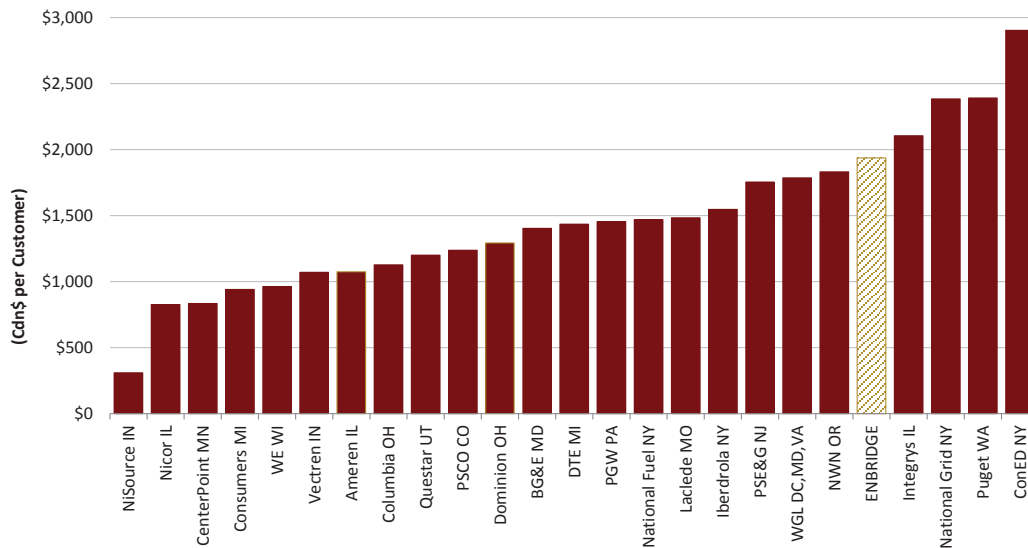
Witnesses: J. Sanders
P. Squires

UTILITY RATE BASE (INCLUDING CIS & CUSTOMER CARE)
YEAR TO YEAR SUMMARY

	Col. 1	Col. 2	Col. 3	Col. 4
Line No.	2013 Board Approved	2014 Fiscal Year	2015 Forecast Year	2016 Forecast Year
	(\$Millions)	(\$Millions)	(\$Millions)	(\$Millions)
<u>Property, Plant, and Equipment</u>				
1. Cost or redetermined value	6,749.4	7,104.1	7,568.1	8,449.0
2. Accumulated depreciation	<u>(2,804.1)</u>	<u>(2,965.0)</u>	<u>(3,082.6)</u>	<u>(3,213.4)</u>
3.	<u>3,945.3</u>	<u>4,139.1</u>	<u>4,485.5</u>	<u>5,235.6</u>
<u>Allowance for Working Capital</u>				
4. Accounts receivable rebillable projects	1.3	1.3	1.3	1.4
5. Materials and supplies	31.9	32.8	33.7	34.6
6. Mortgages receivable	0.2	0.1	0.1	-
7. Customer security deposits	(68.7)	(65.7)	(65.1)	(64.6)
8. Prepaid expenses	1.8	0.9	0.9	1.0
9. Gas in storage	248.4	279.9	291.2	276.3
10. Working cash allowance	<u>1.8</u>	<u>43.2</u>	<u>50.0</u>	<u>40.1</u>
11. Total Working Capital	<u>216.7</u>	<u>292.5</u>	<u>312.1</u>	<u>288.8</u>
12. <u>Utility Rate Base</u>	<u><u>4,162.0</u></u>	<u><u>4,431.6</u></u>	<u><u>4,797.6</u></u>	<u><u>5,524.4</u></u>

Witness: K. Culbert

*Figure 8: Total 2011 Net Plant per Customer
(Includes Transmission, Storage, Distribution and Allocated General Plant)²⁴*



EGD's 2011 O&M costs per customer, O&M costs per unit of volume, customers per employee, and labour cost per customer (excluding capitalized amounts) are within the lowest – best - quartile. In addition, EGD's 2011 net plant per volume, labour cost per customer (including capitalized amounts), and labour cost per employee are at or below the median of the industry study group. EGD's position in the top quartile of the total net plant per customer metric (EGD's net plant per customer ranking is fifth highest out of 25 companies) may appear to be inconsistent with its position in the top quartile of the customers per kilometer of distribution main (i.e. EGD's customers per kilometer ranking is seventh). However, there are other companies with similarly high plant per customer rankings and customers per kilometer of distribution rankings: ConEd, Integrys, National Grid NY and WGL. Because these LDCs serve large urban areas, it appears that the high cost of installing mains in these large urban areas may more than offset the economies of scale associated with high rankings on the customers per kilometer of main metric.

In addition to comparing EGD's 2011 cost performance to the industry study group, Concentric also compared EGD's cost trends to the industry study group average over the 2000 to 2011 time frame for the same metrics. Results for O&M cost per customer and net plant per customer are presented in the following figures. Results for all metrics are presented in Appendix A.

²⁴ Some companies were excluded from the net plant metrics due to data limitations.

SEC INTERROGATORY #91

INTERROGATORY

Issue B18: Is the rate base for each of 2014, 2015 and 2016 appropriate, including:

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[B2/1/1, pp. 17-20] Please provide the “Bottom-Up list of business needs” referred to, for all years from 2014 to 2018. Please identify all material changes to the capital budget from this initial list (i.e. immediately prior to January 18, 2013), to the final Capital Budget. Please specify which of those changes were made by the Capital Owners Committee, and which were made by Executive Management.

RESPONSE

The January 18th, Review 1 is considered the baseline iteration containing the “Bottom Up” list of business needs.

Please see the response SEC Interrogatory #95, found at Exhibit B18.EGDI.SEC.95 which shows the calculation of the \$185.9M decrease in Review 6 (the final budget) compared to Review 1 and also shows the iterative budget totals at each respective Review Cycle. In the initial baseline scenario, 2014 through 2018 capital was considered. After Review Cycle 3 the capital budget process did not evaluate 2017 and 2018 projects and amounts. The budget process applied a number of criteria to prioritize the proposed spending as described in paragraph 66 of Exhibit B2, Tab 1, Schedule 1. The timing of the need, alternative actions, probability and other financial analysis were all considerations in delaying, eliminating projects altogether or accepting the risk of uncertainty. The AMP fitting project is an example where pacing the project was deemed an acceptable risk. All changes were reviewed and approved by both the Capital Operating Committee and the Executive Management Team.

Witnesses: J. Sanders
P. Squires

Table 1 provides the capital reductions summarized by the business area detail between Review 1 and Review 6. Table 2 provides the same information at the program level.

Table 1															
SUMMARY COMPARISON OF CHANGES FINAL REVIEW 6 VS. BASELINE REVIEW 1															
(\$K)															
Review 1- Jan 18th								Review 6 - Final Capital				Changes Review 6 vs. Review 1			
CAPITAL BUSINESS AREA	F2014	F2015	F2016	Sum 14-16	F2017	F2018	Sum 17-18	F2014	F2015	F2016	Sum 14-16	F2014	F2015	F2016	Sum 14-16
1. CUST GROWTH	105,098	113,073	121,050	339,222	123,789	126,280	250,069	91,156	97,495	102,340	290,991	(13,943)	(15,579)	(18,710)	(48,231)
2. REINFORCEMENT	8,925	16,583	3,343	28,851	29,550	53,217	82,767	10,894	16,958	8,744	36,595	1,969	375	5,401	7,745
3. RELOCATIONS	15,336	15,786	16,203	47,325	16,527	16,858	33,385	15,236	13,386	12,603	41,225	(100)	(2,400)	(3,600)	(6,100)
4. SYSTEM INTEGRITY RELIABILITY	139,670	173,113	169,554	482,336	167,374	170,840	338,214	104,020	110,201	123,655	337,876	(35,650)	(62,911)	(45,899)	(144,460)
5. STORAGE	22,231	14,816	14,785	51,832	16,025	16,466	32,491	19,168	13,808	8,910	41,886	(3,063)	(1,008)	(5,875)	(9,946)
6. GENERAL PLANT	28,052	29,601	27,483	85,136	23,915	29,043	52,958	27,095	25,614	20,986	73,695	(957)	(3,987)	(6,497)	(11,441)
7. IT	24,300	26,200	27,200	77,700	31,150	29,450	60,600	29,300	27,200	27,500	84,000	5,000	1,000	300	6,300
8. DLC	88,691	88,343	91,313	268,347	93,389	95,515	188,904	103,656	98,274	93,001	294,930	14,965	9,931	1,688	26,583
9. AG	36,523	37,072	37,664	111,259	38,000	38,000	76,000	35,500	36,440	37,140	109,080	(1,023)	(632)	(524)	(2,179)
9. IDC	7,435	8,981	9,825	26,241	8,000	8,000	16,000	7,800	7,251	6,999	22,050	365	(1,730)	(2,826)	(4,191)
Summary Total	476,262	523,568	518,419	1,518,249	547,719	583,669	1,131,388	443,825	446,627	441,877	1,332,329	(32,437)	(76,941)	(76,542)	(185,920)

Witnesses: J. Sanders
P. Squires

Table 2																				
PROGRAM DETAIL- COMPARISON OF CHANGES FINAL REVIEW 6 VS. BASELINE REVIEW 1																				
(SK)																				
		Review 1- Jan 18th											Review 6- Final Capital				Changes Review 6 vs. Review 1			
PLANT DETAIL	PROGRAM DETAIL	F2014	F2015	F2016	Sum 14-16	F2017	F2018	Sum 17-18		F2014	F2015	F2016	Sum 14-16		F2014	F2015	F2016	Sum 14-16		
1. CUST GROWTH	Customer Growth	105,098	113,073	121,050	339,222	123,789	126,280	250,069		91,156	97,495	102,340	290,991		(13,943)	(15,579)	(18,710)	(48,231)		
2. REINFORCEMENT	Alliston Reinforcement	1,020	2,069	-	3,089	-	-	-		-	1,040	2,111	3,151		(1,020)	(1,029)	2,111	62		
2. REINFORCEMENT	Bathurst Reinforcement	-	-	-	-	-	9,937	9,937		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Central West Reinforcement	-	-	-	-	541	-	541		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Chippawa Reinforcement	408	-	-	408	-	-	-		408	-	-	408		-	-	-	-		
2. REINFORCEMENT	Green Bank Reinforcement	51	-	-	51	-	-	-		51	-	-	51		-	-	-	-		
2. REINFORCEMENT	Greenbank Reinforcement	-	-	-	-	-	17,776	17,776		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Huronario Reinforcement	765	-	-	765	1,082	-	1,082		-	780	-	780		(765)	780	-	15		
2. REINFORCEMENT	Hwy 35/7 Reinforcement	-	-	-	-	-	-	-		-	1,665	-	1,665		-	1,665	-	1,665		
2. REINFORCEMENT	Kingston Road Reinforcement	918	-	-	918	-	-	-		918	-	-	918		-	-	-	-		
2. REINFORCEMENT	Landsdowne Park Reinforcement	-	-	-	-	-	-	-		1,224	-	-	1,224		1,224	-	-	1,224		
2. REINFORCEMENT	Markham Reinforcement	-	-	424	424	-	1,767	1,767		-	-	-	-		-	-	(424)	(424)		
2. REINFORCEMENT	New Bayview Station Reinforcement	-	-	-	-	21,649	-	21,649		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Oriele Reinforcement	-	-	-	-	-	6,624	6,624		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Oshawa Reinforcement	-	-	-	-	-	-	-		-	-	3,714	3,714		-	-	3,714	3,714		
2. REINFORCEMENT	Peterborough Reinforcement	1,530	-	-	1,530	1,299	-	1,299		1,530	-	-	1,530		-	-	-	-		
2. REINFORCEMENT	Pickering Reinforcement	-	208	-	208	2,706	-	2,706		-	-	-	-		-	(208)	-	(208)		
2. REINFORCEMENT	Richmond Hill Reinforcement	-	1,040	-	1,040	649	833	1,482		1,020	-	-	1,020		1,020	(1,040)	-	(20)		
2. REINFORCEMENT	Spadina Reinforcement	-	-	-	-	-	662	662		-	-	-	-		-	-	-	-		
2. REINFORCEMENT	Steeles/Rouge Reinforcement	918	-	-	918	-	-	-		1,530	-	-	1,530		612	-	-	612		
2. REINFORCEMENT	Thorton Gate Pressure Elevation	-	-	-	-	-	-	-		765	-	-	765		765	-	-	765		
2. REINFORCEMENT	Vanjunmar Pressure Elevation	-	-	-	-	-	-	-		133	-	-	133		133	-	-	133		
2. REINFORCEMENT	Various other Reinforcement	2,805	2,861	2,918	8,584	1,624	1,707	3,331		2,805	2,861	2,918	8,584		-	-	-	-		
2. REINFORCEMENT	Whites Rd Reinforcement	-	-	-	-	-	-	-		-	-	-	-		-	208	-	208		
2. REINFORCEMENT	York Region Reinforcement	510	10,404	-	10,914	-	13,911	13,911		510	10,404	-	10,914		-	-	-	-		
3. RELOCATIONS	Regional relocations	15,336	15,786	16,203	47,325	16,527	16,858	33,385		15,236	13,386	12,603	41,225		(100)	(2,400)	(3,600)	(6,100)		
4. SYSTEM INTEGRITY RELIABILITY	20-Inch Lakeshore Line Replacement	5,610	-	-	5,610	-	-	-		-	-	-	-		(5,610)	-	-	(5,610)		
4. SYSTEM INTEGRITY RELIABILITY	AC Corrosion (Remediation work)	-	-	-	-	-	-	-		102	52	27	181		102	52	27	181		
4. SYSTEM INTEGRITY RELIABILITY	AMP Fitting Replacement	10,200	31,212	31,836	73,248	32,473	33,122	65,595		8,543	13,100	30,046	51,689		(1,657)	(18,112)	(1,790)	(21,559)		
4. SYSTEM INTEGRITY RELIABILITY	Anodeless Riser Replacement	275	281	669	1,225	682	696	1,378		-	-	-	-		(275)	(281)	(669)	(1,225)		
4. SYSTEM INTEGRITY RELIABILITY	Bare Steel Drips (study & removal program)	-	-	-	-	-	-	-		255	-	-	255		255	-	-	255		
4. SYSTEM INTEGRITY RELIABILITY	Bare Steel Services Replace	-	-	-	-	-	-	-		-	0	0	1		-	0	0	1		
4. SYSTEM INTEGRITY RELIABILITY	Bare Steel Services Study	-	208	-	208	-	-	-		-	-	-	-		-	(208)	-	(208)		
4. SYSTEM INTEGRITY RELIABILITY	Cambrian Road Phase 2	408	-	-	408	-	-	-		408	-	-	408		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Casing Study & Program	510	520	531	1,561	541	552	1,093		510	-	-	510		-	(520)	(531)	(1,051)		
4. SYSTEM INTEGRITY RELIABILITY	Chicago Fitting Study	204	-	-	204	-	-	-		204	-	-	204		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Coated Steel Program (Mains & Services)	367	375	-	742	-	-	-		362	-	-	362		(5)	(375)	-	(380)		
4. SYSTEM INTEGRITY RELIABILITY	Compliance of Integrity Programs	1,224	1,248	1,273	3,746	1,299	1,546	2,845		-	-	-	-		(1,224)	(1,248)	(1,273)	(3,746)		
4. SYSTEM INTEGRITY RELIABILITY	Compression Outlet Service Tee Study	-	-	-	-	-	-	-		2,866	2,924	2,982	8,771		2,866	2,924	2,982	8,771		
4. SYSTEM INTEGRITY RELIABILITY	Distribution Integrity Technology	-	-	-	-	-	-	-		1,597	1,934	2,063	5,594		1,597	1,934	2,063	5,594		
4. SYSTEM INTEGRITY RELIABILITY	Distribution Records Management Program	8,160	7,283	6,367	21,810	6,495	6,624	13,119		9,639	8,740	7,695	26,074		1,479	1,457	1,328	4,264		
4. SYSTEM INTEGRITY RELIABILITY	District Station Equipment Replacement	2,550	2,601	2,653	7,804	2,706	2,760	5,466		-	-	-	-		(2,550)	(2,601)	(2,653)	(7,804)		
4. SYSTEM INTEGRITY RELIABILITY	District/Header Station Equipment Replacement	-	-	-	-	-	-	-		6,477	9,728	10,984	27,189		6,477	9,728	10,984	27,189		
4. SYSTEM INTEGRITY RELIABILITY	Don River Bridge Crossing Replacement	9,700	(0)	0	9,700	-	-	-		-	(0)	0	0		(9,700)	-	-	(9,700)		
4. SYSTEM INTEGRITY RELIABILITY	EFV Program	1,530	-	-	1,530	-	-	-		500	604	733	1,837		(1,030)	604	733	307		
4. SYSTEM INTEGRITY RELIABILITY	Encased Bridge Crossings Study	-	208	-	208	-	-	-		-	208	0	208		-	(0)	0	0		
4. SYSTEM INTEGRITY RELIABILITY	Failure of Bonnet Bolts on Valves Study	-	-	212	212	-	-	-		-	-	-	-		-	-	(212)	(212)		
4. SYSTEM INTEGRITY RELIABILITY	Farm Tap Study	-	208	-	208	-	-	-		-	208	265	473		-	-	265	265		
4. SYSTEM INTEGRITY RELIABILITY	Fixed Ohn to EA contractors	5,628	5,740	5,855	17,224	5,972	6,092	12,064		-	-	-	-		(5,628)	(5,740)	(5,855)	(17,224)		
4. SYSTEM INTEGRITY RELIABILITY	Gate Station Equipment Replacement	5,100	5,202	5,306	15,608	5,412	5,520	10,932		12,160	10,440	7,060	29,660		7,060	5,238	1,754	14,052		
4. SYSTEM INTEGRITY RELIABILITY	Header Stations	1,000	1,020	1,040	3,060	1,061	1,082	2,143		1,500	1,537	1,576	4,613		500	517	536	1,553		
4. SYSTEM INTEGRITY RELIABILITY	ILI for pipelines	10,200	10,404	10,612	31,216	10,824	11,041	21,865		11,000	8,900	8,502	28,402		800	(1,504)	(2,110)	(2,814)		
4. SYSTEM INTEGRITY RELIABILITY	Innes and Orleans Station	92	-	-	92	-	-	-		92	-	-	92		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Inside Regulator Replacement	-	-	-	-	-	-	-		36	5	5	46		36	5	5	46		
4. SYSTEM INTEGRITY RELIABILITY	Isolated Steel Mains CP Program	-	-	-	-	-	-	-		82	-	-	82		82	-	-	82		
4. SYSTEM INTEGRITY RELIABILITY	Isolated Steel Remediation Program	-	-	-	-	-	-	-		1,326	1,353	-	2,679		1,326	1,353	-	2,679		
4. SYSTEM INTEGRITY RELIABILITY	Isolated Steel Study	1,326	1,353	-	2,679	-	-	-		-	-	-	-		(1,326)	(1,353)	-	(2,679)		
4. SYSTEM INTEGRITY RELIABILITY	Isolation Valve Study & Installation (RCV / A/	3,060	3,121	3,184	9,365	3,247	3,312	6,559		-	-	-	-		(3,060)	(3,121)	(3,184)	(9,365)		
4. SYSTEM INTEGRITY RELIABILITY	Jumper and Service Extension Study	102	104	106	312	-	-	-		408	208	212	828		306	104	106	516		
4. SYSTEM INTEGRITY RELIABILITY	Load Research Program	548	560	572	1,681	585	598	1,183		0	0	0	1		(548)	(560)	(572)	(1,680)		
4. SYSTEM INTEGRITY RELIABILITY	Load Shed Zone	-	-	-	-	-	-	-		1,145	1,171	1,194	3,510		1,145	1,171	1,194	3,510		
4. SYSTEM INTEGRITY RELIABILITY	Low Pressure Delivery Meter Set Program	3,060	5,202	5,306	13,568	5,412	5,520	10,932		1,530	2,341	2,388	6,259		(1,530)	(2,861)	(2,918)	(7,309)		
4. SYSTEM INTEGRITY RELIABILITY	Meter Barrier Study & Program	-	-	-	-	-	-	-		-	-	-	-		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Meter boxes	-	-	-	-	-	-	-		-	-	-	-		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Meters (MGI)	18,452	19,906	21,645	60,003	21,013	21,601	42,614		14,355	15,926	17,944	48,225		(4,097)	(3,980)	(3,701)	(11,778)		
4. SYSTEM INTEGRITY RELIABILITY	Miscellaneous Replacement Mains	4,080	4,162	4,245	12,486	4,330	4,416	8,746		5,388	5,866	5,058	16,311		1,308	1,704	813	3,825		
4. SYSTEM INTEGRITY RELIABILITY	N-1 reliability of supply for Single source networks	-	-	-	-	-	-	-		-	520	0	521		-	520	0	521		
4. SYSTEM INTEGRITY RELIABILITY	Network OPS/ORM M&R LEAK	1,758	1,794	1,830	5,382	1,866	1,903	3,769		1,758	1,794	1,830	5,382		-	-	-	-		
4. SYSTEM INTEGRITY RELIABILITY	Operate Gas Network - SMART System	3,570	6,763	6,898	17,230	7,036	7,177	14,213		-	-	-	-		(3,570)	(6,763)	(6,898)	(17,230)		
4. SYSTEM INTEGRITY RELIABILITY	Pipeline Markers	-	-	-	-	-	-	-		10	10	11	31		10	10	11	31		
4. SYSTEM INTEGRITY RELIABILITY	Plastic Mains (incl Services) Study	-	12,485	21,224	33,709	21,649	22,082	43,731		-	-	-	-		-	(12,485)	(21,224)	(33,709)		
4. SYSTEM INTEGRITY RELIABILITY	Reg Refits	8,914	9,285	9,671	27,869	9,742	9,937	19,679		9,814	9,985	10,171	29,969		900	700	500	2,100		
4. SYSTEM INTEGRITY RELIABILITY	Relays	9,473	10,097	10,763	30,333	10,868	10,975	21,843		4,737	5,049	5,381	15,167		(4,737)	(5,049)	(5,381)	(15,167)		
4. SYSTEM INTEGRITY RELIABILITY	Remote Control Valve Study & Installation	-	-	-	-	-	-	-		565	602	680	1,847		565	602	680	1,847		
4. SYSTEM INTEGRITY RELIABILITY	Replace 1.8 km of NPS 12 XHP main with 1.8k	-	-	3,714	3,714	-	-	-		-	-	-	-		-	-	(3,714)	(3,714)		
4. SYSTEM INTEGRITY RELIABILITY	Residential Meter Sets Study (incl. SMART sy	204	-	-	204	-	-	-		-	-	-	-		(204)	-	-	(204)		
4. SYSTEM INTEGRITY RELIABILITY	Sewer Safety Program	706	720	734	2,160	7														

Witnesses: J. Sanders
P. Squires

		Review 1- Jan 18th							Review 6 - Final Capital				Changes Review 6 vs. Review 1			
PLANT DETAIL	PROGRAM DETAIL	F2014	F2015	F2016	Sum 14-16	F2017	F2018	Sum 17-18	F2014	F2015	F2016	Sum 14-16	F2014	F2015	F2016	Sum 14-16
5. STORAGE	Acid Program	300		325	625			-				-	(300)	-	(325)	(625)
5. STORAGE	Base Gas	18	18		36			-				-	(18)	(18)	-	(36)
5. STORAGE	C of A (Stack Height, Turbo and Noise Attenuation)	250			250			-				-	(250)	-	-	(250)
5. STORAGE	Compressor Engine Overhaul				-			-	250	250	500	1,000	250	250	500	1,000
5. STORAGE	Compressor Overhaul (valve replacement)	100	100	100	300			-	100	225	100	425	-	125	-	125
5. STORAGE	Corunna Compressor Plant				-			-	9,680	4,620		14,300	9,680	4,620	-	14,300
5. STORAGE	Crowland Plant Automation	50	50	50	150			-			-	-	(50)	(50)	(50)	(150)
5. STORAGE	Crowland Plant Upgrades	200	200		400			-	200	200		400	-	-	-	-
5. STORAGE	Drawing Upgrades	100	100	100	300			-	100	100	100	300	-	-	-	-
5. STORAGE	DSA Boundary changes (purchase leases)	1,000	1,000		2,000			-	-	-	-	-	(1,000)	(1,000)	-	(2,000)
5. STORAGE	Engine Compressor Analyzer Automation (In Progress)	100	100	100	300			-	-	-	-	-	(100)	(100)	(100)	(300)
5. STORAGE	Engine Overhaul	250	250	500	1,000			-	-	-	-	-	(250)	(250)	(500)	(1,000)
5. STORAGE	Farm Purchase (C of A)			1,000	1,000			-	-	-	-	-	-	-	(1,000)	(1,000)
5. STORAGE	Gas Chromatograph at Chatham D				-			-		400		400	-	400	-	400
5. STORAGE	High Deliverability Well Erosion	60	60	70	190			-	-	-	-	-	(60)	(60)	(70)	(190)
5. STORAGE	Horizontal Well replacement program		2,500	7,500	10,000	10,000	10,000	20,000	-	-	-	-	-	(2,500)	(7,500)	(10,000)
5. STORAGE	Integrity of Pools (abandoned wells)		1,000		1,000			-				-	-	(1,000)	-	(1,000)
5. STORAGE	Integrity Records	150			150			-				-	(150)	-	-	(150)
5. STORAGE	MCC#1 Generator and Boiler	2,500			2,500			-	-	-	-	-	(2,500)	-	-	(2,500)
5. STORAGE	Misc Structures	100	100	100	300	150	100	250	-	-	-	-	(100)	(100)	(100)	(300)
5. STORAGE	Misc Field Lines	100	100	100	300	300	400	700	-	-	-	-	(100)	(100)	(100)	(300)
5. STORAGE	Misc Compressor	100	100	100	300	1,050	800	1,850	433	388	425	1,246	333	288	325	946
5. STORAGE	Misc Meas and Reg	250	250	500	1,000	500	500	1,000	-	-	-	-	(250)	(250)	(500)	(1,000)
5. STORAGE	Misc Wells	100	250	250	600	775	1,166	1,941	-	-	-	-	(100)	(250)	(250)	(600)
5. STORAGE	MOC C of A				-			-	3,000	-	-	3,000	3,000	-	-	3,000
5. STORAGE	Observation Wells				-			-	1,850	2,450	1,600	5,900	1,850	2,450	1,600	5,900
5. STORAGE	OEB Hearing and Observation Wells	3,500	3,500		7,000			-	-	-	-	-	(3,500)	(3,500)	-	(7,000)
5. STORAGE	Pipe Spec Standard (Engineering standards in place)	100	100	100	300			-	100	100	100	300	-	-	-	-
5. STORAGE	Pipeline Integrity Records				-			-	150	-	-	150	150	-	-	150
5. STORAGE	Plant Roadways and Culverts		50	50	100			-	-	-	-	-	-	(50)	(50)	(100)
5. STORAGE	Press Test/log/wellhead & fence replace	1,825	1,150	1,300	4,275			-	-	-	-	-	(1,825)	(1,150)	(1,300)	(4,275)
5. STORAGE	Remote Operations Control	600			600			-	350	-	-	350	(250)	-	-	(250)
5. STORAGE	Replacement Lines to Horizontal Wells			1,000	1,000	2,000	3,000	5,000	-	-	-	-	-	-	(1,000)	(1,000)
5. STORAGE	Road Purchase (Tecumseh Road)				-	1,250	500	1,750	-	-	-	-	-	-	-	-
5. STORAGE	Roads	70	75	80	225			-	-	-	-	-	(70)	(75)	(80)	(225)
5. STORAGE	SCADA Upgrade and Automation	50	50	50	150			-	-	-	-	-	(50)	(50)	(50)	(150)
5. STORAGE	Tecumseh New Building ORM	9,000	2,000		11,000			-	-	-	-	-	(9,000)	(2,000)	-	(11,000)
5. STORAGE	Warehouse / Layout Change				-			-	-	150	-	150	-	150	-	150
5. STORAGE	Warehouse retrofit/Johnson barn abandonment		500		500			-	-	-	-	-	-	(500)	-	(500)
5. STORAGE	Well Acid Program				-			-	300	-	325	625	300	-	325	625
5. STORAGE	Well Casing Replacement	678	698	720	2,096			-	2,530	4,800	5,760	13,090	(678)	(698)	(720)	(2,096)
5. STORAGE	Well Integrity				-			-	-	-	-	-	2,530	4,800	5,760	13,090
5. STORAGE	Well Loops	555	390	690	1,635			-	-	-	-	-	(555)	(390)	(690)	(1,635)
5. STORAGE	Wellhead Emergency Shutdown				-			-	125	125	-	250	125	125	-	250
5. STORAGE	Wellhead ESD	125	125		250			-	-	-	-	-	(125)	(125)	-	(250)
6. GENERAL PLANT	Building Improvements	3,475	1,550	1,600	6,625	1,725	1,725	3,450	5,090	2,600	2,910	10,600	1,615	1,050	1,310	3,975
6. GENERAL PLANT	Community events requirements - vehicles, vehicle wrapping, BBQ's, tents,				-			-	25	25	25	75	25	25	25	75
6. GENERAL PLANT	Convert Vacated Meter Shop space at VPC into 200 offices				-			-	-	2,100	-	2,100	-	2,100	-	2,100
6. GENERAL PLANT	Fleet	7,800	7,800	7,800	23,400	7,800	7,800	15,600	5,300	5,300	5,300	15,900	(2,500)	(2,500)	(2,500)	(7,500)
6. GENERAL PLANT	Fleet Garage Relocation to a New Leased Property				-			-	-	3,000	-	3,000	-	3,000	-	3,000
6. GENERAL PLANT	Meter Shop Relocation to Markland Leased Property				-			-	3,000	-	-	3,000	3,000	-	-	3,000
6. GENERAL PLANT	Natural Gas Transportation - Customer Compressor	7,612	7,712	7,814	23,137	5,306	5,412	10,718	2,000	2,100	2,202	6,301	(5,612)	(5,612)	(5,612)	(16,836)
6. GENERAL PLANT	Natural Gas Transportation - Rental Cylinder	69	71	73	213	75	77	152	69	71	73	213	-	-	-	-
6. GENERAL PLANT	Natural Gas Transportation - Rental VRA's	1,412	1,415	1,418	4,245	1,421	1,426	2,847	1,412	1,415	1,418	4,245	-	-	-	-
6. GENERAL PLANT	Natural Gas Transportation - Utility Compressor	105	107	110	322	112	114	226	105	107	110	322	-	-	-	-
6. GENERAL PLANT	Natural Gas Transportation - Utility Fleet Cylinders	51	103	105	259	107	109	216	51	103	105	259	-	-	-	-
6. GENERAL PLANT	Natural Gas Transportation - Utility Fleet Vehicles	458	468	479	1,405	489	500	989	458	468	479	1,405	-	-	-	-
6. GENERAL PLANT	New Office / Conference / Space Alterations	3,315	3,870	2,830	10,015	2,850	2,850	5,700	4,830	3,520	3,860	12,210	1,515	(350)	1,030	2,195
6. GENERAL PLANT	Office Furniture and Equipment	3,630	6,380	5,130	15,140	3,905	8,905	12,810	4,630	4,680	4,380	13,690	1,000	(1,700)	(750)	(1,450)
6. GENERAL PLANT	Tools and Work Equipment	125	125	125	375	125	125	250	125	125	125	375	-	-	-	-

Witnesses: J. Sanders
P. Squires

		Review 1- Jan 18th							Review 6 - Final Capital				Changes Review 6 vs. Review 1			
PLANT DETAIL	PROGRAM DETAIL	F2014	F2015	F2016	Sum 14-16	F2017	F2018	Sum 17-18	F2014	F2015	F2016	Sum 14-16	F2014	F2015	F2016	Sum 14-16
7. IT	Altra GMS / SCADA / GOMS	300	300	300	900	300		300	300	300	300	900	-	-	-	-
7. IT	Capital & OM Analytics Upgr				-			-	200	400	400	1,000	200	400	400	1,000
7. IT	CIS	4,800	4,800	6,800	16,400	4,800	4,800	9,600	6,800	4,800	6,800	18,400	2,000	-	-	2,000
7. IT	Clarity	-	-	-	-	300		300					-	-	-	-
7. IT	COMMS	500	1,000	1,000	2,500	500	200	700	300	600	600	1,500	(200)	(400)	(400)	(1,000)
7. IT	Customer Care Improvement Initiative				-			-	6,500	4,000	1,000	11,500	6,500	4,000	1,000	11,500
7. IT	Data Centre Operations	2,900	3,000	1,400	7,300			-	2,100	2,100	2,600	6,800	(800)	(900)	1,200	(500)
7. IT	Datapak / Viewer	200	-	-	200			-	200	-	-	200	-	-	-	-
7. IT	DSM DARTs	-	-	-	-	500	1,500	2,000				-	-	-	-	-
7. IT	EDMS	200	-	-	200			-	200	-	-	200	-	-	-	-
7. IT	EHS	100	-	100	200		100	100	100	-	100	200	-	-	-	-
7. IT	eInvoice	100	100	100	300	100	100	200	100	100	100	300	-	-	-	-
7. IT	eLMS	200	-	-	200			-	200	-	-	200	-	-	-	-
7. IT	EnMAR	100	100	100	300	2,000		2,000	100	100	100	300	-	-	-	-
7. IT	Enterprise GIS	500	500	500	1,500	200	200	400	500	500	500	1,500	-	-	-	-
7. IT	EnTRAC	-	2,000	2,000	4,000	2,000	200	2,200	-	2,000	2,000	4,000	-	-	-	-
7. IT	ESM / SRM	400	400	1,000	1,800	600	400	1,000	400	400	1,000	1,800	-	-	-	-
7. IT	Extranet	1,000	1,500	1,000	3,500	1,000	1,000	2,000				-	(1,000)	(1,500)	(1,000)	(3,500)
7. IT	Gas Molecule	1,000	300	200	1,500			-	1,000	300	200	1,500	-	-	-	-
7. IT	Gas Storage	800	300	300	1,400			-				-	(800)	(300)	(300)	(1,400)
7. IT	Gas Storage - GIS	1,000	200	200	1,400			-	1,000	200	200	1,400	-	-	-	-
7. IT	Information & Productivity Services	3,000	6,000	3,800	12,800	5,500	4,000	9,500	3,000	6,000	3,800	12,800	-	-	-	-
7. IT	Integrated Training Environment	200	-	-	200			-	200	-	-	200	-	-	-	-
7. IT	IT Risk Management	400	700	900	2,000			-	400	400	900	1,700	-	(300)	-	(300)
7. IT	IT Service Management/ Desktop Replaceme	2,100	2,300	4,300	8,700	6,450	12,350	18,800	2,100	2,600	4,300	9,000	-	300	-	300
7. IT	Lakeside Services GPS				-			-	150	100	150	400	150	100	150	400
7. IT	MVRS	900	300	-	1,200	300		300	900	300		1,200	-	-	-	-
7. IT	Network Services	400	900	900	2,200			-	400	900	400	1,700	-	-	(500)	(500)
7. IT	Orm Facilities Integrity SW				-			-	200	100		300	200	100	-	300
7. IT	Orm IDP IVE Continuation Project				-			-	200	200	50	450	200	200	50	450
7. IT	Orm Knowledge Management				-			-	1,100	500	200	1,800	1,100	500	200	1,800
7. IT	Orm Leak Survey Mgt Sys Repl				-			-	350	100	100	550	350	100	100	550
7. IT	ORMs Projects	2,000	1,000	500	3,500			-				-	(2,000)	(1,000)	(500)	(3,500)
7. IT	RAVE	300	200	200	700	100	100	200	300	200	200	700	-	-	-	-
7. IT	Risk Management	900	300	100	1,300			-	-	-	-	-	(900)	(300)	(100)	(1,300)
7. IT	Sustainment	-	-	1,500	1,500	1,500	1,500	3,000	-	-	1,500	1,500	-	-	-	-
7. IT	WAMS (Post Implementation Enhancements	-	-	-	-	5,000	3,000	8,000				-	-	-	-	-
8. DLC	Allocations	88,691	88,343	91,313	268,347	93,389	95,515	188,904	103,656	98,274	93,001	294,930	14,965	9,931	1,688	26,583
9. AG	Allocations	36,523	37,072	37,664	111,259	38,000	38,000	76,000	35,500	36,440	37,140	109,080	(1,023)	(632)	(524)	(2,179)
9. IDC	Allocations	7,435	8,981	9,825	26,241	8,000	8,000	16,000	7,800	7,251	6,999	22,050	365	(1,730)	(2,826)	(4,191)
Summary Total		476,262	523,568	518,419	1,518,249	547,719	583,669	1,131,388	443,825	446,627	441,877	1,332,329	(32,437)	(76,941)	(76,542)	(185,920)

Witnesses: J. Sanders
P. Squires

SEC INTERROGATORY #93

INTERROGATORY

Issue B18: Is the rate base for each of 2014, 2015 and 2016 appropriate, including:

- a. Opening rate base;
- b. Forecast level of Capital expenditures;
- c. Forecast Customer additions;
- d. Proposed Capital additions;
- e. Allocation of the cost and use of capital assets between utility and nonutility (unregulated) operations;
- f. Working capital allowance; and
- g. All other components of and adjustments to rate base

[B2/1/1, pp. 24, 27, 28] "Through the rigour of the Capital Budget Process, more than \$180 million was removed from the originally submitted "Bottom Up" grassroots budgets." With respect to this claim:

- a. Please provide a list of all the amounts removed making up this \$180 million.
- b. Please identify which of the amounts related to each year of the capital budget.
- c. For each year from 2007 through 2012, please provide the percentage difference between the initial capital budget requests of all departments, and the final capital budget approved by the Company.
- d. Please confirm that \$116 million of the \$180 million is the variable spend on system integrity, referred to on page 27. Please confirm that, if the Company determines to spend all or part of that \$116 million during the IRM period, it will seek to include that additional amount in rate base on rebasing, or at some earlier time.
- e. Please confirm that some or all of the \$180 million is made up of the \$160 million of variable spend other than system integrity, referred to on page 28. interaction, and describe what actions were taken to modify the budget as a result of each of these analyses.

Witnesses: J. Sanders
P. Squires

RESPONSE

- a) Please see the response to SEC Interrogatory #91 at Exhibit I.B18.EGDI.SEC.91
- b) Please see the response to SEC Interrogatory #91 at Exhibit I.B18.EGDI.SEC.91
- c) The Company does not retain or keep the preliminary versions of historical capital budgets. The final budgets for 2007 through 2012 are shown in Table 1 below.

Table 1 : 2007-2012 Capital Budget Expenditures					
(\$M)					
Budget 2007	Budget 2008	Budget 2009	Budget 2010	Budget 2011	Budget 2012
318.0	401.3	325.5	327.0	403.3	404.5

- d) The \$116M relates to variable or uncertain spend which was not included in the final budget (Review 5). The Company would seek rate base recovery of any variable (unbudgeted) spend at re-basing in 2019.
- e) The listing of reductions from the initial budget that total \$185M (Table 2 in I.B18.EGDI.SEC.91) is not the same listing as the variable amounts \$164M as shown below. A reduction from Review 1 (\$185M) does not translate directly to a variable cost item in the final capital review. Table 2 on the next page shows the details of the variable items which have been excluded from the final capital budgets for 2014 to 2016.

Table 2					
<u>Listing of Variable or Uncertain Projects/programs Excluded from the Final Capital</u>					
((\$Ks))					
EXH REF	EXHIBIT DESCRIPTION	V2014	V2015	V2016	Sum 14-1
B2-3-1	Sombra Redundancy	2,000		17,850	19,850
B2-5-2-1	Plastic Mains (Incl Services) Study	-	11,143	10,925	22,068
B2-5-2-2	COMPR COUPLING PRGM		1,061	1,041	2,102
B2-5-2-3	LOAD SHED PLANNING		1,194	1,170	2,364
B2-5-2-4	MOP VERIFICATION	5,304	4,881	4,786	14,971
B2-5-2-5	ILI AND ASSESSMENT PRGM	6,200	6,450	6,324	18,974
B2-5-2-7	MAINS REPL LT \$2M		467	458	925
B2-5-3-2	AMP FITTING REPL	-	13,814	13,694	27,508
B2-5-3-3	Failure of Bonnet Bolts on Valves Study		212		212
B2-5-3-5	SVC REPL LT \$2M	2,254	5,147	5,254	12,655
B2-5-4-3	COMM IND LOW PRESSURE REG STN	1,530	2,387	2,341	6,258
B2-5-4-5	STN REPL LT \$2M		3,979	3,901	7,880
B2-5-6	Load Research Prgm	548	572	560	1,680
B2-6-1	STORAGE OVERVIEW	275	25	375	675
B2-6-1	MCC#1 Generator and Boiler	500			500
B2-6-1	meter boxes	179	186	182	547
B2-6-1	Misc Structures	50	100	100	250
B2-6-1	Engine Compressor Analyzer Automatic	50	50	50	150
B2-6-1	Misc. Wells	50	125	125	300
B2-6-1	Misc Field Lines	50	50	50	150
B2-6-1	Misc. Meas and Reg	50	200	100	350
B2-6-1	Roads	50	50	50	150
B2-6-1	Crowland Plant Automation	20	20	20	60
B2-6-1	SCADA Upgrade and Automation	20	20	20	60
B2-6-1	Farm Purchase (C of A)		100		100
B2-6-1	DSA Boundary changes (purchase leases)			750	750
B2-6-1	Horizontal Well replacement program		5,000		5,000
B2-6-1	High Deliverability Well Erosion		35		35
B2-6-1	Plant Roadways and Culverts		50		50
B2-6-1	Replacement Lines to Horizontal Wells		500		500
B2-6-1-3	WELL INTEGRITY PRGM			400	400
B2-7-1	BUS DEV & CUST STRATEGY	2,612	2,612	2,612	7,836
B2-8-1-7	IT PROJ LT \$2M	900	100	300	1,300
B2-9-1	FAC/GENL PL OVERVIEW	2,500	2,500	2,500	7,500
Grand Total		25,142	63,030	75,938	164,110

Witnesses: J. Sanders
P. Squires

UNDERTAKING TCU3.5

UNDERTAKING

Technical Conference TR 3, pages 24 and 30

- A. Enbridge to provide a table (or graph) of capital expenditures, 2000-2018 showing:
 - (a) capital expenditures as percentage of depreciation costs;
 - (b) capital expenditures on a per-customer basis;
- B. Enbridge to then provide a similar table of capital expenditures, 2000 to 2018, after removing expenditures related to municipal relocations and the GTA project.
- C. Enbridge to provide a list of the agencies that could trigger relocations of Enbridge plant, and the cost-sharing arrangements that apply to each agency.

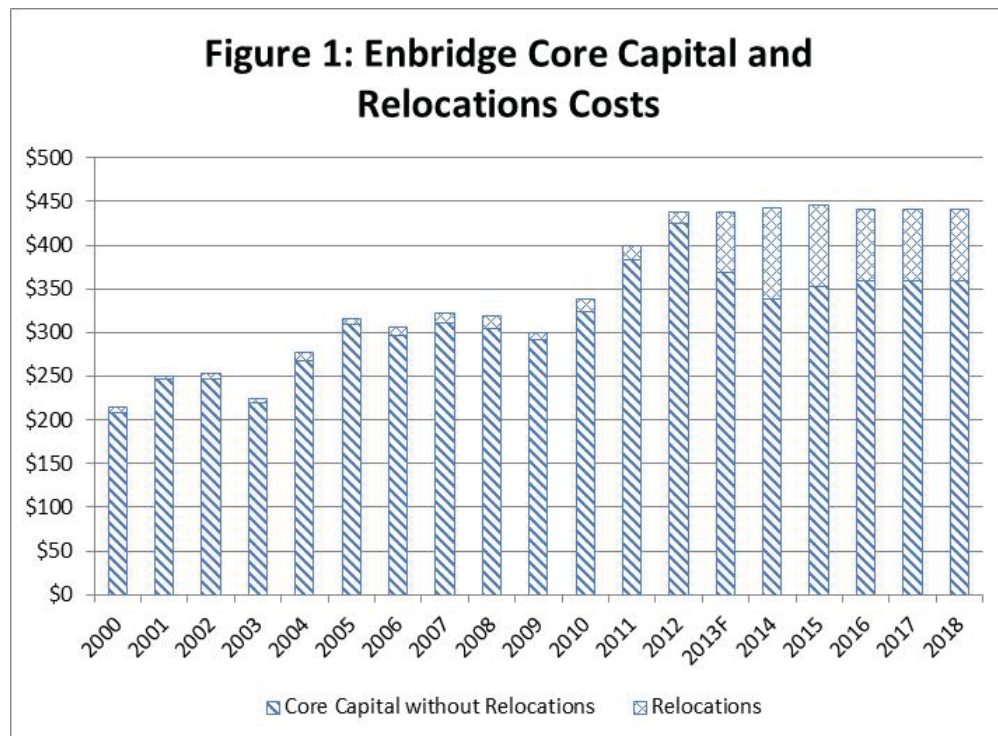
RESPONSE

For Part A (a) see Table 3 and Figure 3, Part A (b) see Table 2 and Figure 2 on the following pages.

For Part B please see Table 1 and Figure 1 on the following page.

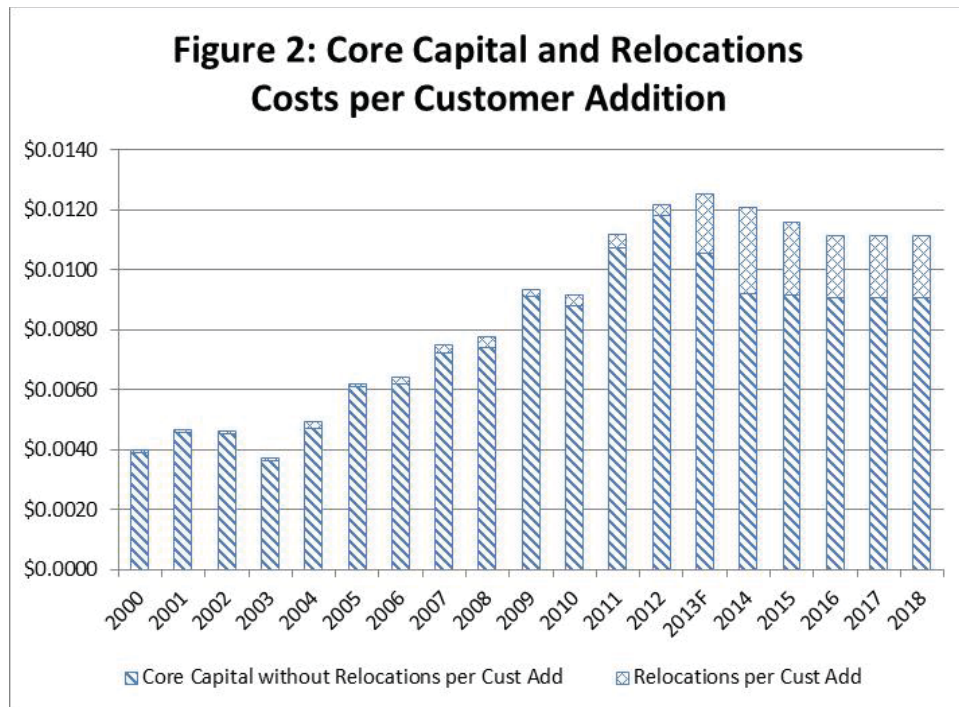
Witnesses: P. Squires
T. Teed-Martin

Table 1: Enbridge Core Capital and Relocations			
	Core Capital (\$ millions)	Core Capital without Relocations (\$ millions)	Relocations Costs (\$ millions)
2000	\$215	\$209	\$6
2001	\$250	\$246	\$3
2002	\$253	\$248	\$5
2003	\$225	\$220	\$5
2004	\$278	\$267	\$11
2005	\$316	\$309	\$7
2006	\$306	\$296	\$10
2007	\$323	\$311	\$11
2008	\$320	\$305	\$15
2009	\$300	\$292	\$8
2010	\$338	\$325	\$13
2011	\$399	\$384	\$16
2012	\$438	\$425	\$13
2013F	\$439	\$369	\$69
2014	\$444	\$338	\$106
2015	\$447	\$352	\$94
2016	\$442	\$359	\$83
2017	\$442	\$359	\$83
2018	\$442	\$359	\$83



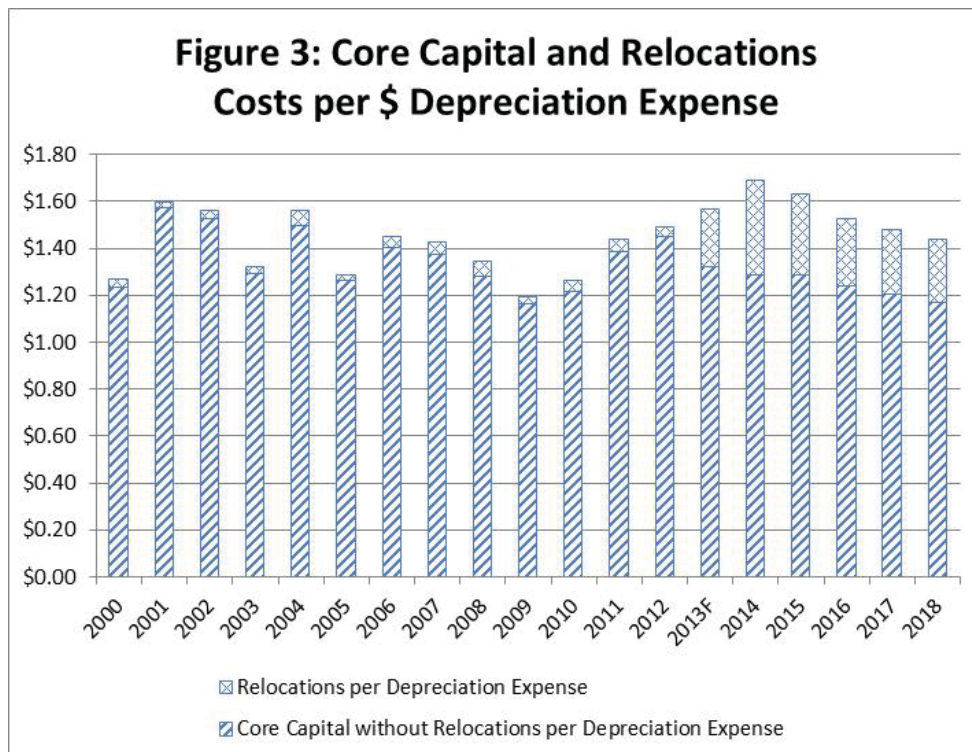
Witnesses: P. Squires
T. Teed-Martin

Table 2: Enbridge Core Capital and Relocations per Customer Addition						
	Core Capital (\$ millions)	Core Capital without Relocations (\$ millions)	Relocations Costs (\$ millions)	Customer Adds	Core Cap w/o reloc. Per cust add	Relocations costs per cust add
2000	\$215	\$209	\$6	53,676	\$3,901	\$108
2001	\$250	\$246	\$3	53,688	\$4,589	\$63
2002	\$253	\$248	\$5	54,649	\$4,531	\$97
2003	\$225	\$220	\$5	60,473	\$3,643	\$74
2004	\$278	\$267	\$11	56,485	\$4,734	\$195
2005	\$316	\$309	\$7	50,697	\$6,095	\$128
2006	\$306	\$296	\$10	47,622	\$6,220	\$206
2007	\$323	\$311	\$11	42,920	\$7,253	\$261
2008	\$320	\$305	\$15	41,052	\$7,425	\$361
2009	\$300	\$292	\$8	32,089	\$9,112	\$249
2010	\$338	\$325	\$13	36,902	\$8,799	\$358
2011	\$399	\$384	\$16	35,657	\$10,761	\$435
2012	\$438	\$425	\$13	35,971	\$11,812	\$361
2013F	\$439	\$369	\$69	34,996	\$10,553	\$1,980
2014	\$444	\$338	\$106	36,647	\$9,229	\$2,882
2015	\$447	\$352	\$94	38,489	\$9,156	\$2,447
2016	\$442	\$359	\$83	39,645	\$9,065	\$2,081
2017	\$442	\$359	\$83	39,645	\$9,065	\$2,081
2018	\$442	\$359	\$83	39,645	\$9,065	\$2,081



Witnesses: P. Squires
T. Teed-Martin

	Core Capital (\$ millions)	Core Capital without Relocations (\$ millions)	Relocations Costs (\$ millions)	Depreciation (\$ millions)	Core Cap w/o reloc. Per \$ Depreciation	Relocations costs per \$ Depreciation
2000	\$215	\$209	\$6	\$170	\$1.23	\$0.034
2001	\$250	\$246	\$3	\$156	\$1.58	\$0.022
2002	\$253	\$248	\$5	\$162	\$1.53	\$0.033
2003	\$225	\$220	\$5	\$170	\$1.30	\$0.026
2004	\$278	\$267	\$11	\$178	\$1.50	\$0.062
2005	\$316	\$309	\$7	\$245	\$1.26	\$0.027
2006	\$306	\$296	\$10	\$210	\$1.41	\$0.047
2007	\$323	\$311	\$11	\$226	\$1.38	\$0.050
2008	\$320	\$305	\$15	\$237	\$1.29	\$0.062
2009	\$300	\$292	\$8	\$251	\$1.16	\$0.032
2010	\$338	\$325	\$13	\$267	\$1.22	\$0.049
2011	\$399	\$384	\$16	\$277	\$1.39	\$0.056
2012	\$438	\$425	\$13	\$293	\$1.45	\$0.044
2013F	\$439	\$369	\$69	\$279	\$1.32	\$0.248
2014	\$444	\$338	\$106	\$262	\$1.29	\$0.403
2015	\$447	\$352	\$94	\$274	\$1.29	\$0.344
2016	\$442	\$359	\$83	\$289	\$1.24	\$0.285
2017	\$442	\$359	\$83	\$299	\$1.20	\$0.276
2018	\$442	\$359	\$83	\$307	\$1.17	\$0.269



Witnesses: P. Squires
T. Teed-Martin

1 grassroots budget. And then you go through a whole series
2 of reviews of this, and culminating in an executive review,
3 and you've talked a lot about that.

4 My question to you is this: Can you -- can you assure
5 us -- or how can you assure us as intervenors and customers
6 that the integrity -- that the original budgets that you
7 got from the grassroots were not substantially overstated?

8 Now, you have said that -- I think somewhere in here
9 that you -- and I think you have some documents that you
10 filed that in some detail that show that you have taken out
11 a significant amount of money through these six processes.

12 But how do I know that that is simply getting you back
13 to -- that the end result is still significantly inflated,
14 because the original paper that you got from your
15 grassroots people was highly inflated. How do I know that
16 isn't the case?

17 MR. SANDERS: Well, Mr. Brett, I can offer maybe a
18 couple of comments to that end.

19 First of all, I was directly involved with that
20 process. I started in around review 2. And as I said in
21 my opening statement, the company recognized that we were
22 presenting an extraordinary capital plan.

23 We brought in a team of external regulatory experts.
24 We brought in a team of external legal experts. We engaged
25 our senior management within this review. That process
26 went on for a number of months and a number of iterations,
27 and as you have mentioned, we removed \$180 million from
28 that process.

1 So to the extent that anything or any of the projects
2 submitted were inflated, the goal of the exercise was to
3 remove any of that inflation.

4 The second part of that I would look at is back to
5 looking at 2012 and 2013 actuals as a good benchmark, 2013
6 in particular. The Board-approved capital level of 387 was
7 the goal, and we recognized in 2013 we were going to
8 overshoot that amount. We tried very hard to get to that
9 amount and still ended up in the 440 million range,
10 recognizing that we would not be earning on that capital
11 until rebasing.

12 MR. BRETT: This is in 2013?

13 MR. SANDERS: 2013. So I appreciate the thought that
14 perhaps the initial kick at the budget was not appropriate,
15 but that's exactly what the exercise and the process was
16 intended to process, get through, and determine what is
17 again a prudent capital spend.

18 MR. BRETT: Just on your numbers that you threw out
19 there -- threw up there, I am looking at that page 45 of
20 45, and B-2, and I look at budget-approved total capital
21 expenditures, 449 -- well, let's take the unloaded even --
22 well, no. Take the total, because loading counts like
23 anything else. But I am looking at 449 versus 517. Is
24 that what you are looking at as well --

25 MR. SANDERS: Sorry, Mr. Brett, you are correct. That
26 is the "Total" line. I was referring to line (e), which is
27 the --

28 MS. LAWLER: Sorry, sorry. Page 44 of 45.

1 MR. BRETT: Yes, I see. Okay. That's the core?

2 MR. SANDERS: Right.

3 MR. BRETT: So it is roughly proportional anyway.

4 Okay.

5 But you mentioned that you brought in legal experts
6 and regulatory experts, and there's certainly a lot of them
7 around. But did you bring in any -- any senior outside
8 engineering firms to look at and scrutinize the
9 appropriateness of the capital budget? I don't mean
10 necessarily just to design one component of it, but to
11 scrutinize the entire budget for reasonableness?

12 You are probably familiar with Mr. -- or you may or
13 may not be familiar with Mr. -- Dr. Kaufmann's analysis
14 about that, which -- but anyway, that's -- did you bring in
15 any senior engineering people to look at the whole thing
16 and say: Well, this seems to make sense?

17 Or was that an internal company judgment, purely?

18 MR. SANDERS: Mr. Brett, I believe we have the
19 internal expertise on an engineering, operation and
20 technical basis to offer that opinion. We brought in the
21 senior people within the company, with many decades of
22 experience in the gas distribution business, to do that
23 review.

24 I don't believe -- well, the process of bringing in
25 internal experts, first of all, we would have to start with
26 a base education of what the company was, what the
27 operations were all about, get them to a point where they
28 would be comfortable with reviewing the asset plan -- or

1 the asset requirements. And I am not sure of the value of
2 that in going through the review.

3 I appreciate the perspective of looking for some
4 independence on that review, but again, I would offer that
5 the expertise within the organization was capable of
6 providing that review.

7 MR. BRETT: What about the -- did you as an
8 organization at any stage do what you might call -- what
9 has been called a benchmarking exercise of this capital
10 budget against other, what you considered to be comparable
11 utilities?

12 I mean, did you look at how others were doing things
13 and compare your costs, unit costs, total costs, different
14 categories of costs, and sort of asset plan approaches?
15 Did you do any kind of a benchmarking vis-a-vis other
16 utilities, other gas utilities?

17 MR. SANDERS: No, we did not.

18 MR. BRETT: Okay. Now, you had -- you had stated at
19 some point in your evidence here -- I don't think you need
20 to turn this up, but I will give you the reference. It's
21 paragraph 20 of A-2, T-1, schedule 2. I guess this was in
22 the overview evidence, or a piece of it.

23 But basically, the -- well, maybe I should turn it up
24 just so I get this straight here, if I can.

25 It is A-2, tab 1, schedule 2. You want to just turn
26 that up? I want to make sure we're on the same page on
27 this, that you know exactly what I'm talking about. Have
28 you got it?