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VIA COURIER, RESS and EMAIL

May 17, 2016

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

Re: Ontario Energy Board Generic Proceeding
Natural Gas Community Expansion
Board File No.: EB-2016-0004
Enbridge Gas Distribution Undertaking Responses

Attached please find two copies of Enbridge Gas Distribution's Undertaking responses as listed below.

Exhibits J1.1, J1.4 to J1.11;
Exhibits J3.1 to J3.12; and
Exhibits J4.1 to J4.

This submission was filed through the Board's Regulatory Electronic Submission System (RESS). Confirmation of filing is attached to this letter.

Please contact the undersigned if you have any questions.

Yours truly,

[original signed]

Lorraine Chiasson
Regulatory Coordinator

cc: All parties to EB-2016-0004

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.1

UNDERTAKING

TR, page 59

To advise whether the inputs into the forecast included any impacts of cap and trade.

RESPONSE

Enbridge has determined that it will maintain its cost competitiveness compared to alternate fuels throughout the ten year customer additions forecast period for the thirty-nine community expansion projects used to illustrate its proposal in this proceeding and, accordingly, no adjustments were made to the Company's forecast of customer additions in respect of the pending implementation of the Province's carbon pricing policy. (Ref. TR Vol. 1, pages 196 and 197)

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.4

UNDERTAKING

TR, page 130

To undertake to provide the amount of contribution in aid of construction that would be required to bring all projects up to a PI of 1.

RESPONSE

Please see the requested information in Column 16 of the table below.

			Potential Customers			Forecast Customers									
	Community	Communities	Conversions	New	Total	Conversions	New	Total	Distance from Source (kms)	Total Investment	PI Normal	PI Proposed	CIAC req'd for PI=0.8	Proposed Solution	CIAC req'd for PI=1.0
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13	Col 14	Col 15	Col 16
1	Fenelon Falls & Bobcaygeon	2	3,029	3,213	6,242	2,272	3,213	5,485	47	$111,956,990	0.26	0.70	$10,980,000	Pipeline	$34,903,771
2	Scugog Island	1	1,177	291	1,468	883	291	1,174	8	$19,714,126	0.24	0.58	$6,189,863	Pipeline	$9,243,298
3	Cambray	1	400		400	300	0	300	10	$7,583,140	0.19	0.45	$3,565,567	Pipeline	$4,341,955
4	Zephyr	1	250		250	188	0	188	11	$5,184,375	0.16	0.39	$3,124,677	Pipeline	$3,599,961
5	Cotnam Island	1	100		100	75	0	75	10	$2,171,890	0.13	0.36	$1,285,518	Pipeline	$1,453,267
6	Sarsfield	1	200		200	150	0	150	10	$4,147,500	0.15	0.38	$2,535,094	Pipeline	$2,905,724
7	Udora	1	400		400	300	0	300	8	$8,842,300	0.16	0.37	$5,460,127	Pipeline	$6,236,517
8	Wilkinson Sub, Innisfil	1	90		90	68	0	68	2	$1,897,055	0.12	0.35	$1,253,680	Pipeline	$1,404,136
9	Town of Marsville	1	350		350	263	0	263	8	$8,047,225	0.16	0.36	$5,102,644	Pipeline	$5,780,808
10	Town of Mansfield	1	294		294	221	0	221	8	$6,817,129	0.15	0.36	$4,366,730	Pipeline	$4,931,872
11	Glendale Subdivision	1	100		100	75	0	75	6	$2,509,250	0.12	0.31	$1,781,728	Pipeline	$1,949,477
12	Caledon - Humber Station	1	72		72	54	0	54	3	$2,067,960	0.10	0.26	$1,594,818	Pipeline	$1,701,375
13	Enniskillen	1	200		200	150	0	150	10	$5,109,500	0.14	0.33	$3,497,095	Pipeline	$3,867,724
14	Village of Lisle	1	400		400	300	0	300	5	$9,966,800	0.15	0.34	$6,584,626	Pipeline	$7,361,015
15	5th Line, Mono Twp.	1	32		32	24	0	24	3	$1,798,760	0.05	0.15	$1,674,004	Pipeline	$1,703,238
16	Sandford	1	200		200	150	0	150	9	$5,590,500	0.13	0.31	$3,978,095	Pipeline	$4,348,724
17	Leasksdale	1	200		200	150	0	150	8	$5,590,500	0.13	0.31	$3,978,095	Pipeline	$4,348,724
18	Curran	1	100		100	75	0	75	7	$3,640,250	0.11	0.25	$2,912,728	Pipeline	$3,080,477
19	Bainsville	1	100		100	75	0	75	7	$3,997,750	0.10	0.23	$3,270,228	Pipeline	$3,437,977
20	Westmeath	1	200		200	150	0	150	10	$6,448,500	0.13	0.28	$4,836,094	Pipeline	$5,206,723
21	Haydon	1	100		100	75	0	75	10	$3,441,281	0.11	0.26	$2,679,802	LNG	$2,881,508
22	Woodville	1	300		300	225	0	225	9	$5,797,180	0.17	0.41	$3,602,262	LNG	$3,873,400
23	South Glengary	1	200		200	150	0	150	10	$4,590,881	0.15	0.35	$3,114,668	LNG	$3,349,105
24	Caledon - Torbram Road	1	79		79	59	0	59	11	$3,117,191	0.10	0.23	$2,512,246	LNG	$2,701,340
25	Chute-a-Blondeau	1	200		200	150	0	150	10	$5,335,501	0.14	0.33	$3,511,703	LNG	$3,776,025
26	Hockley Village, Mono Twp.	1	64		64	48	0	48	13	$2,950,428	0.09	0.20	$2,451,366	LNG	$2,635,878
27	Maxville	1	400		400	300	0	300	10	$7,147,877	0.18	0.44	$4,224,146	LNG	$4,542,093
28	Lanark & Balderson	1	400		400	300	0	300	12	$8,637,117	0.17	0.40	$5,018,218	LNG	$5,395,933
29	Douglas	1	200		200	150	0	150	20	$5,335,501	0.14	0.33	$3,511,703	LNG	$3,776,025
30	Eganville	1	700		700	525	0	525	40	$14,063,487	0.19	0.43	$7,718,759	LNG	$8,299,741
31	Kinburn/Fitzroy Harbour	1	500		500	375	0	375	15	$10,588,874	0.18	0.41	$6,051,359	LNG	$6,506,838
32	St. Isidore	1	400		400	300	0	300	10	$7,147,877	0.18	0.44	$4,224,146	LNG	$4,542,093
33	Kirkfield	1	800		800	600	0	600	25	$15,604,747	0.19	0.44	$8,370,140	LNG	$9,000,151
34	Minden	1	1,414		1,414	1,061	0	1,061	68	$26,418,325	0.20	0.46	$13,624,673	LNG	$14,650,186
35	Coboconk	1	400		400	300	0	300	40	$8,637,117	0.17	0.40	$5,018,218	LNG	$5,395,933
36	Norland	1	200		200	150	0	150	50	$5,335,501	0.14	0.33	$3,511,703	LNG	$3,776,025
37	Barry's Bay	1	500		500	375	0	375	90	$10,761,872	0.17	0.41	$6,212,245	LNG	$6,679,833
38	Kinmount	1	200		200	150	0	150	60	$5,335,501	0.14	0.33	$3,511,703	LNG	$3,776,025
39	Haliburtion (Dysert)	1	2,035		2,035	1,526	0	1,526	88	$37,161,620	0.20	0.47	$18,762,625	LNG	$20,174,865

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.5

UNDERTAKING

TR 1, page 150

To provide the table and any editorial comments.

RESPONSE

The table below provides energy prices forecast between natural gas and alternative fuels for New Brunswick.

Residential - SGS Price per Equivalent Energy Unit												
Energy	Unit	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Natural Gas	$/GJ	19.54	19.14	19.02	18.00	17.32	17.36	17.50	17.69	17.92	17.71	18.22
Heating Oil	$/GJ	17.25	19.02	19.66	20.14	20.42	20.65	20.84	20.98	21.10	21.18	21.21
Propane	$/GJ	18.22	18.86	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52
Electricity	$/GJ	25.61	26.12	26.65	27.18	27.72	28.28	28.84	29.42	30.01	30.61	31.22

Commercial - MGS Price per Equivalent Energy Unit												
Energy	Unit	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Natural Gas	$/GJ	21.13	20.73	20.61	19.59	18.91	18.95	19.09	19.28	19.51	19.30	19.81
Heating Oil	$/GJ	17.28	19.04	19.68	20.16	20.44	20.66	20.85	20.99	21.12	21.20	21.23
Propane	$/GJ	18.22	18.86	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52	25.52
Electricity	$/GJ	26.96	27.50	28.05	28.61	29.18	29.76	30.36	30.97	31.59	32.22	32.86

Note:

Forecast uses MGS to represent commercial sector because this rate class holds the majority in retention program. MGS also has the highest rate in EGNB's non-residential rate classes.

NG price is higher than heating oil in 2016-2018 because NG distribution rates are based on 2016 Rate Application rates. Oil price has dropped significantly from November 2015 to May 2016. Thus, oil price forecast has become lower for the next 2 years.

Forecast shows that NG will be the least expensive energy for residential sector by 2018 and for commercial sector by 2019.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.6

UNDERTAKING

TR, page 171

To confirm that even if you were to assume 100 percent conversion, you still would not achieve a PI of 1.0 for any of the 39 projects.

RESPONSE

Confirmed. At a 100% conversion rate (after 10 years) none of the 39 projects achieve a PI of 1.0.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.7

UNDERTAKING

TR, page 181

To show the calculations that demonstrate it is better for the ratepayers to have this system expansion charge treated as revenues rather than as a, sort of a contribution in aid of construction paid over time.

RESPONSE

The table below shows the total Net Revenue Requirement is lower if the SES is treated as revenue as opposed to a contribution-in-aid of construction (CIAC). As such, treating SES as revenue is more favourable from a ratepayer perspective.

Scenario	Net Revenue Requirement [PV over 40 years]
Treatment of SES as Revenue	$168.71 million
Treatment of SES as CIAC	$177.37 million

Please see Attachment 1 for details which support the results set out in the table above.

Treatment of SES as Revenue vs. CIAC

Item #		Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13	Col 14	Col 15	Col 16	Col 17	Col 18	Col 19	Col 20
1		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
2		($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)
3	Common Elements of each Scenario																				
4	Capital Investment	50.16	51.24	44.15	43.75	29.62	28.68	48.86	111.60	1.42	1.25										
5	Depreciation	(0.61)	(1.84)	(2.99)	(4.04)	(4.91)	(5.61)	(6.54)	(8.50)	(9.87)	(9.90)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)
6	Rate Base (or Average Investment)	24.77	74.25	119.53	159.97	192.18	216.06	248.75	321.46	368.79	360.24	350.96	341.04	331.13	321.22	311.30	301.39	291.48	281.57	271.65	261.74
7	Return on Rate Base @ pre-tax WACC (6.42%)	1.59	4.77	7.67	10.27	12.33	13.87	15.97	20.63	23.67	23.12	22.53	21.89	21.25	20.62	19.98	19.34	18.71	18.07	17.44	16.80
8	Incremental O&M and Municipal Taxes	0.05	0.16	0.27	0.40	0.52	0.62	0.75	1.00	1.18	1.19	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36
9	Revenues at existing rates (recoverable from new customers)	0.28	0.91	1.61	2.37	3.06	3.65	4.40	5.81	6.80	6.90	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
10	SES (recoverable from new customers)	0.52	1.67	2.96	4.29	5.46	6.42	7.60	9.77	11.30	11.45	11.52	11.52	11.52	11.52	11.52	11.52	11.52	11.52	11.52	11.52
11																					
12	Rate Impact Analysis																				
13																					
14	Scenario 1: Treatment of SES as Revenue																				
15	Revenue Requirement	2.23	6.72	10.90	14.74	17.91	20.38	23.69	30.69	35.50	35.30	37.17	36.80	36.40	35.99	35.55	35.10	34.62	34.13	33.63	33.11
16	Less: Revenues at existing rates + SES	0.80	2.58	4.58	6.66	8.52	10.07	12.00	15.57	18.11	18.35	18.46	18.46	18.46	18.46	18.46	18.46	18.46	18.46	18.46	18.46
17	Net Revenue Requirement [recoverable from all ratepayers]	1.43	4.14	6.32	8.08	9.39	10.31	11.70	15.12	17.39	16.96	18.71	18.34	17.94	17.53	17.09	16.64	16.16	15.67	15.17	14.64
18	Present Value (PV) of Net Revenue Requirement	1.39	3.77	5.41	6.50	7.10	7.32	7.81	9.48	10.25	9.39	9.74	8.97	8.25	7.57	6.93	6.34	5.79	5.28	4.80	4.35
19	Total Net Revenue Requirement [PV over 40 years]	168.71																			
20																					
21	Scenario 2: Treatment of SES as CIAC																				
22	Revenue Requirement	2.21	6.61	10.61	14.16	16.95	18.95	21.72	28.03	32.02	30.94	31.53	30.21	28.88	27.52	26.16	24.78	23.39	22.00	20.59	19.19
23	Less: Revenues at existing rates	0.28	0.91	1.61	2.37	3.06	3.65	4.40	5.81	6.80	6.90	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
24	Net Revenue Requirement [recoverable from all ratepayers]	1.93	5.70	9.00	11.79	13.89	15.30	17.32	22.23	25.22	24.04	24.59	23.27	21.94	20.58	19.22	17.84	16.45	15.06	13.65	12.25
25	Present Value (PV) of Net Revenue Requirement	1.87	5.19	7.70	9.49	10.50	10.87	11.56	13.94	14.86	13.32	12.80	11.38	10.08	8.89	7.80	6.80	5.89	5.07	4.32	3.64
26	Total Net Revenue Requirement [PV over 40 years]	177.37																			
27																					

Treatment of SES as Revenue vs. CIAC

Item #		Col 21	Col 22	Col 23	Col 24	Col 25	Col 26	Col 27	Col 28	Col 29	Col 30	Col 31	Col 32	Col 33	Col 34	Col 35	Col 36	Col 37	Col 38	Col 39	Col 40
1		Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30	Year 31	Year 32	Year 33	Year 34	Year 35	Year 36	Year 37	Year 38	Year 39	Year 40
2		($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)	($million)
3	Common Elements of each Scenario																				
4	Capital Investment																				
5	Depreciation	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)	(9.91)
6	Rate Base (or Average Investment)	251.83	241.92	232.00	222.09	212.18	202.26	192.35	182.44	172.53	162.61	152.70	142.79	132.87	122.96	113.05	103.14	93.22	83.31	73.40	63.49
7	Return on Rate Base @ pre-tax WACC (6.42%)	16.16	15.53	14.89	14.25	13.62	12.98	12.35	11.71	11.07	10.44	9.80	9.16	8.53	7.89	7.26	6.62	5.98	5.35	4.71	4.07
8	Incremental O&M and Municipal Taxes	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34
9	Revenues at existing rates (recoverable from new customers)	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
10	SES (recoverable from new customers)	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34
11																					
12	Rate Impact Analysis																				
13																					
14	Scenario 1: Treatment of SES as Revenue																				
15	Revenue Requirement	32.56	32.01	31.45	30.88	30.30	29.70	29.10	28.49	27.87	27.24	26.60	25.96	25.31	24.65	23.99	23.32	22.65	21.97	21.29	20.60
16	Less: Revenues at existing rates + SES	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27	18.27
17	Net Revenue Requirement [recoverable from all ratepayers]	14.29	13.74	13.18	12.61	12.02	11.43	10.83	10.22	9.60	8.97	8.33	7.69	7.04	6.38	5.72	5.05	4.38	3.70	3.02	2.33
18	Present Value (PV) of Net Revenue Requirement	3.99	3.61	3.25	2.92	2.62	2.34	2.08	1.85	1.63	1.43	1.25	1.08	0.93	0.79	0.67	0.55	0.45	0.36	0.28	0.20
19	Total Net Revenue Requirement [PV over 40 years]																				
20																					
21	Scenario 2: Treatment of SES as CIAC																				
22	Revenue Requirement	17.77	16.37	14.97	13.56	12.16	10.76	9.36	7.96	6.57	5.18	3.79	2.42	1.04	(0.32)	(1.68)	(3.03)	(4.37)	(5.70)	(7.02)	(8.34)
23	Less: Revenues at existing rates	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
24	Net Revenue Requirement [recoverable from all ratepayers]	10.84	9.44	8.04	6.64	5.23	3.83	2.43	1.03	(0.36)	(1.75)	(3.13)	(4.51)	(5.88)	(7.25)	(8.61)	(9.96)	(11.30)	(12.63)	(13.95)	(15.26)
25	Present Value (PV) of Net Revenue Requirement	3.03	2.48	1.98	1.54	1.14	0.78	0.47	0.19	(0.06)	(0.28)	(0.47)	(0.64)	(0.78)	(0.90)	(1.01)	(1.09)	(1.17)	(1.23)	(1.27)	(1.31)
26	Total Net Revenue Requirement [PV over 40 years]																				
27																					

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.8

UNDERTAKING

TR, page 195

To find the report from ICF consulting, if there is one.

RESPONSE

The document filed as an appendix to the Company's response to OGA Interrogatory #3 at Exhibit S3.EGDI.OGA.3 is the report provided by ICF International prepared on behalf of Enbridge and Union Gas.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.9

UNDERTAKING

TR, page 199
To see if they have the forecast and, if so, to provide the number of customers in each of these categories, the four categories that are here in sec 10, for 2030, the current forecast.

RESPONSE

The most recent long-term forecasts were completed in early spring 2015 as part of the preparation for the 2016 Rate Application. Those forecasts encompass customer additions, unlocks, average uses, and volumes. The unlocks forecast is provided below. Forecasts for the Company's 2017 Application are currently being developed and are not yet available.

Unlocks (Customer numbers) forecast

	Rate 1	Rate 6		
	Residential	**Apartment**	**Commercial**	**Industrial**
2016B	1,964,443	7,500	152,307	6,096
2016ADR*	1,964,199	7,499	152,260	6,096
2017	1,997,996	7,522	153,739	6,092
2018	2,032,123	7,546	155,185	6,089
2019	2,066,832	7,572	156,645	6,085
2020	2,102,135	7,598	158,113	6,081
2021	2,137,528	7,625	159,594	6,076
2022	2,172,919	7,652	161,070	6,072
2023	2,208,327	7,680	162,548	6,068
2024	2,243,731	7,707	164,025	6,063
2025	2,279,139	7,736	165,502	6,059
2026	2,314,545	7,764	166,980	6,054
2027	2,349,952	7,793	168,457	6,050
2028	2,385,359	7,822	169,934	6,045
2029	2,420,766	7,851	171,412	6,040
2030	2,456,172	7,881	172,889	6,036

*291 unlocks reduction for Community Expansion project

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.10

UNDERTAKING

TR, page 212

To provide a copy of the materials from the presentation to the ministry of energy.

RESPONSE

These materials are included in Union Gas undertaking response JT1.12 in EB-2015-0179.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J1.11

UNDERTAKING

TR, page 231

To undertake to recalculate the SES to achieve a PI of 1.0 for the community expansion portfolio.

RESPONSE

Please see the table below which revises Table 1 to include an additional column, (Col 9), which reflects payback periods at a SES amount corresponding to a PI of 1.0 for the CE portfolio.

Primary Fuel Type	Penetration %	Annual Heating Bill	Natural Gas Saving (no SES)	Natural Gas Saving (with SES)	Estimated Conversion Cost	Payback Period (Years) (with SES)	Payback Period (Years) (with SES at PI = 0.8)	Payback Period (Years) (with SES at PI = 1.0)
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9
Natural Gas	n/a	949						
Electricity	18%	3,114	2,165	1,613	7,250	4.5	6.3	9.2
Heating Oil	27%	2,771	1,822	1,270	3,500	2.8	4.3	7.9
Propane	43%	2,582	1,633	1,081	1,525	1.4	2.5	6.0
Wood	13%	1,537	588	36	3,500	96.3	NA *	NA *
Other (Equal Mix)	0%	2,619	1,670	1,118	3,500	3.1	5.3	12.0
Weighted Average	0.00	0	1,661	1,103	3,361	3.0	3.4	7.1

* An increase in SES is required to achieve a PI => 0. 8 at portfolio level of all CE projects. As a result natural gas becomes more expensive vs. wood and payback period become irrelevant.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.1

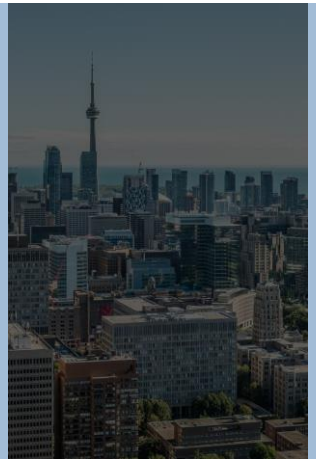
UNDERTAKING

TR, page 22

To provide all appendices to the ICF document entitled "appendix: company-specific change in natural gas demand".

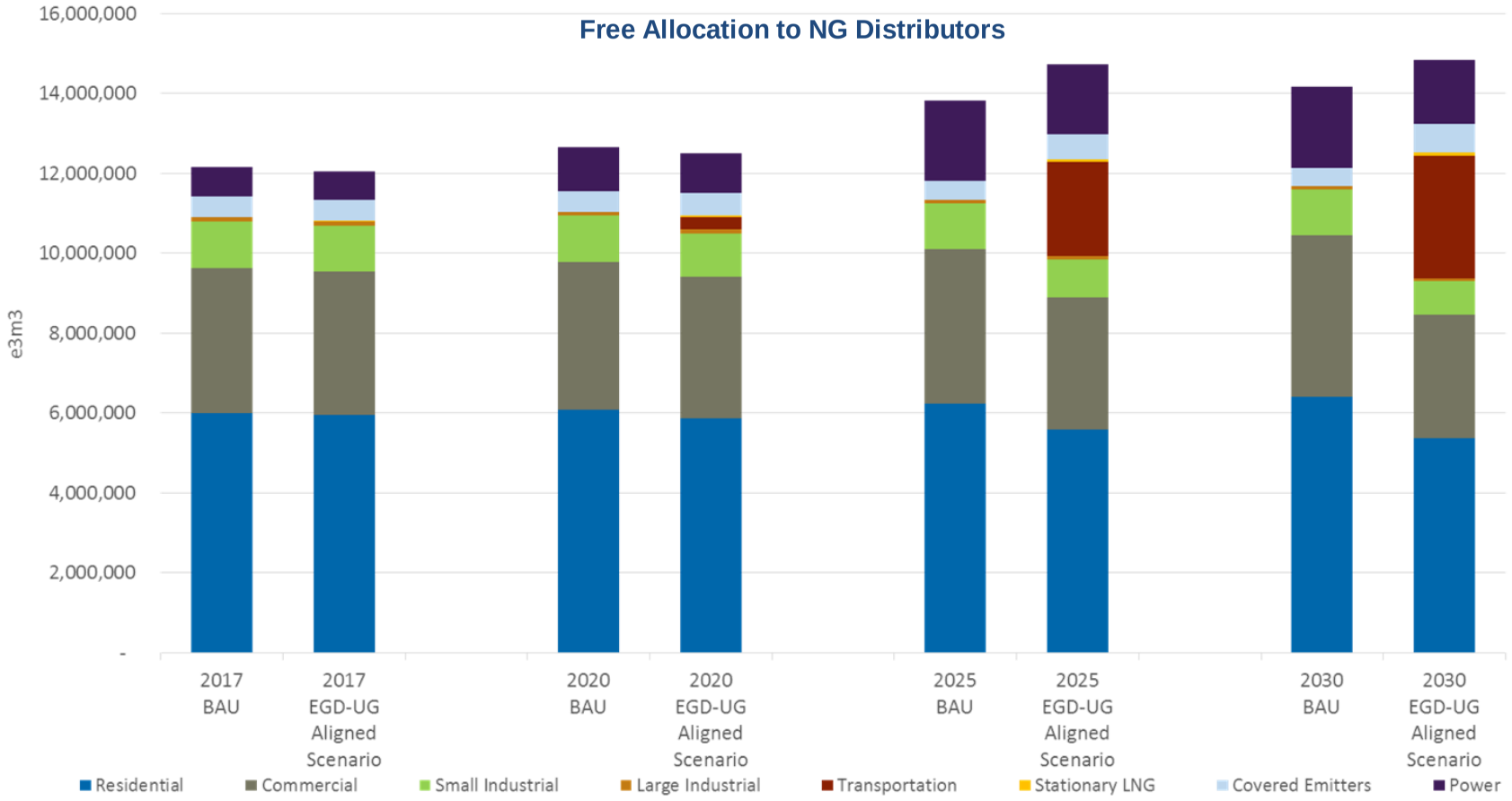
RESPONSE

Please see the attachment to this response which is a copy of the Appendix to the ICF International report filed at Exhibit S3.EGDI.OGA.3. Please note the slides in the Appendix to this report were incorrectly numbered and should have been numbered 1 through 4, not 3 through 6.

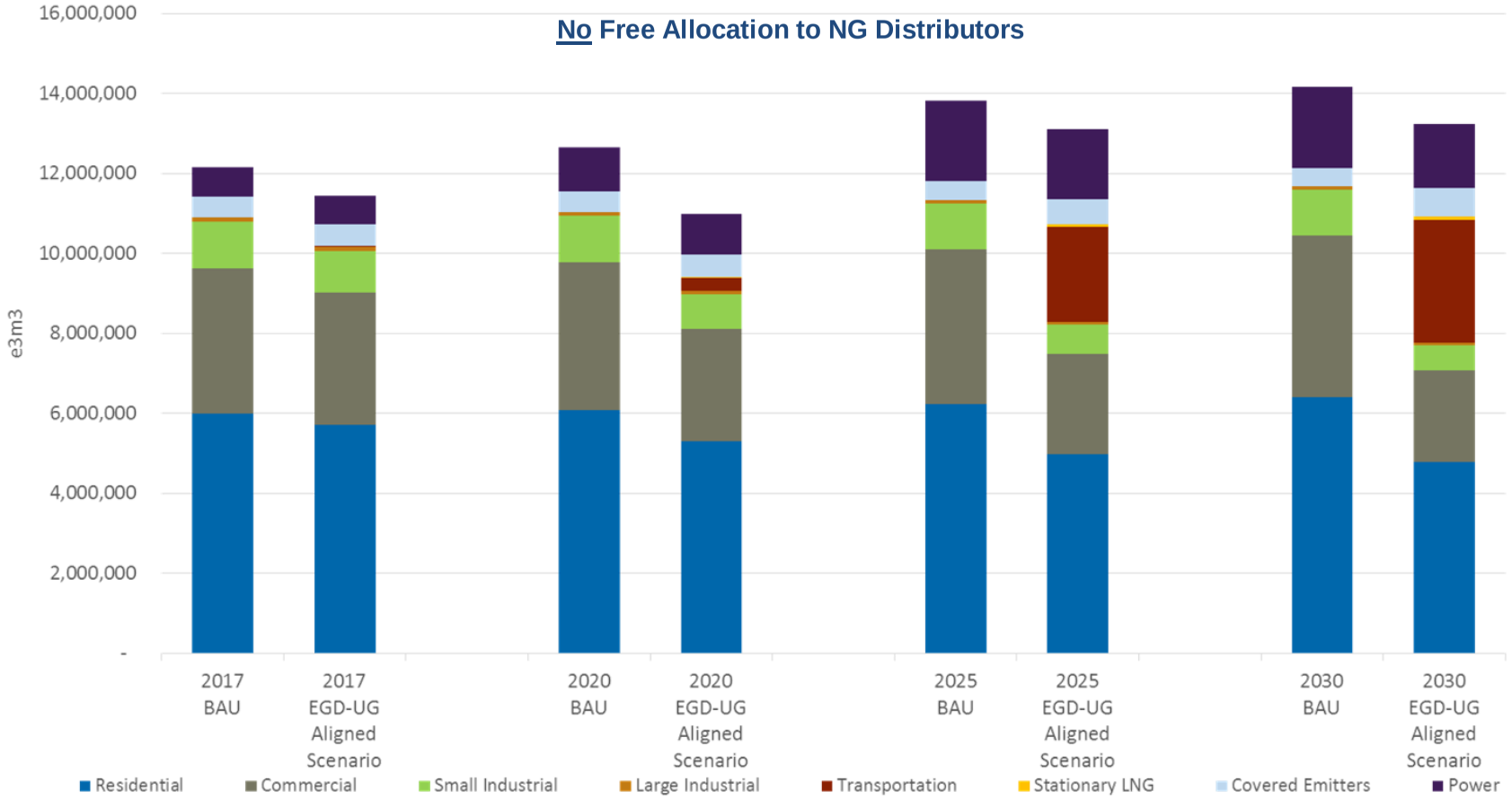


Appendix:
Natural Gas Demand

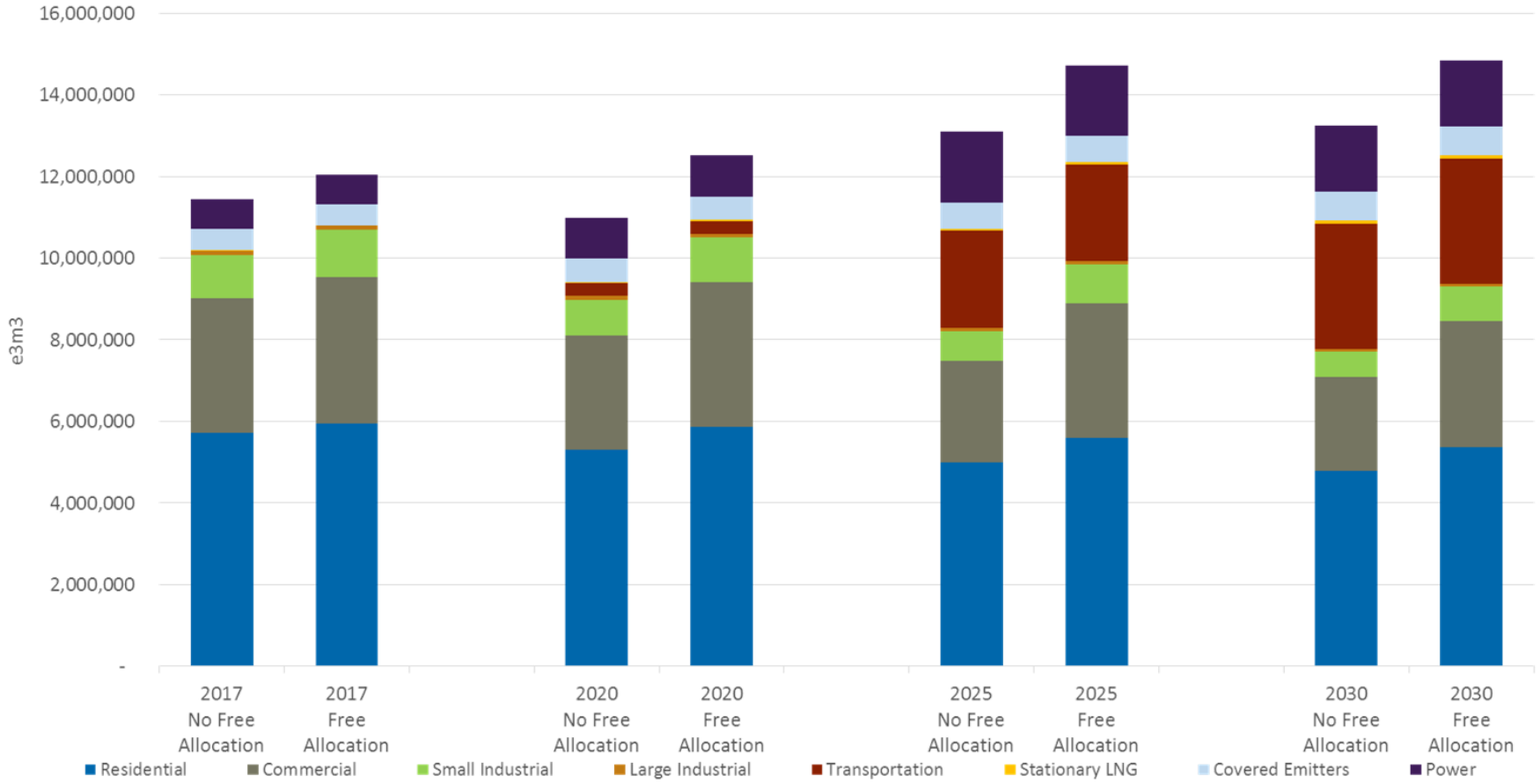
Change in Enbridge NG Demand



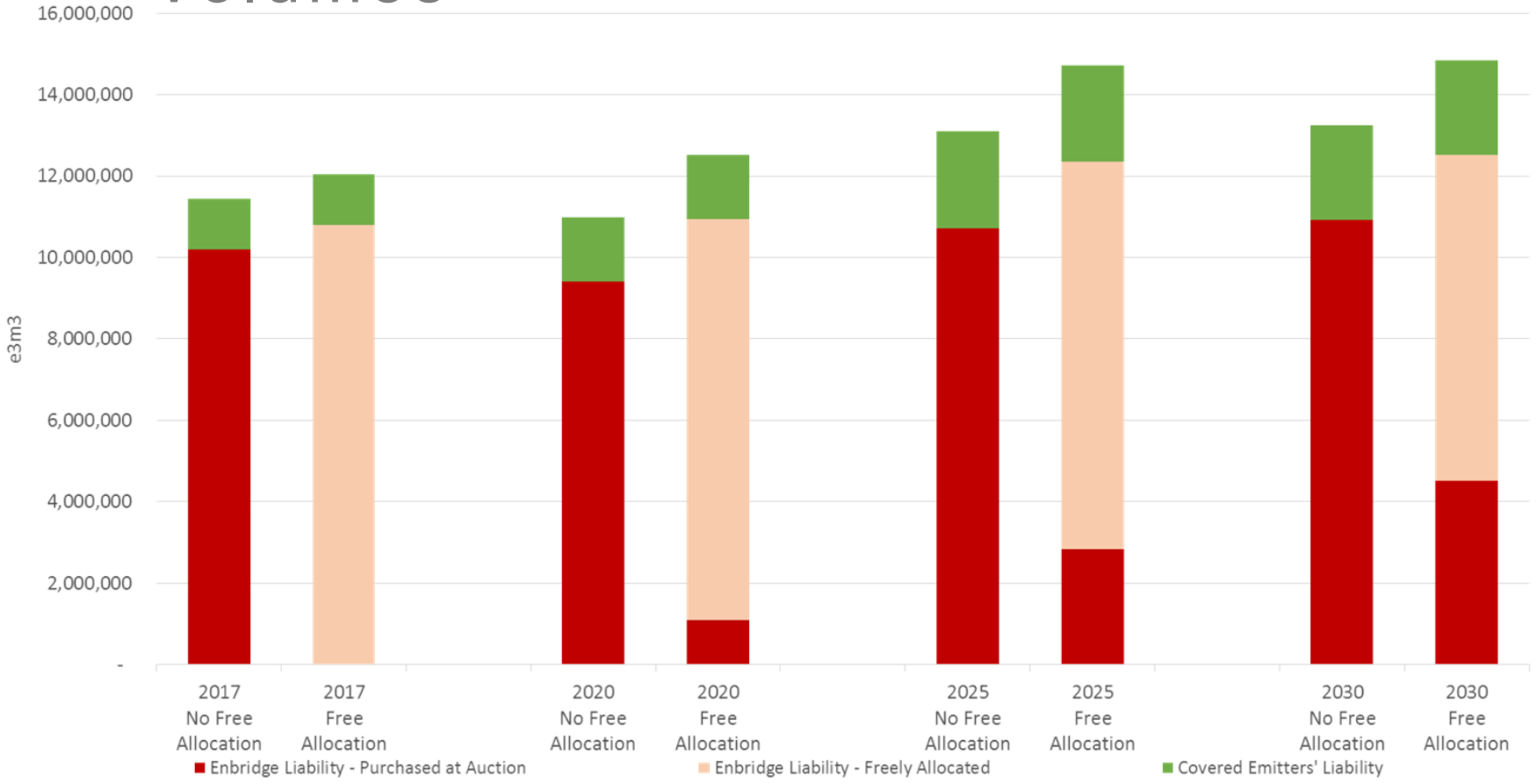
Change in Enbridge NG Demand



Free Allocation: Impact on NG Demand



Free Allocation: Impact on Compliance Volumes



ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.2

UNDERTAKING

TR, page 76

In discussing the implications of carbon cap and trade on attachment rates with OGA, EGD stated that they had analyzed the impact of carbon costs up to $300/tonne and concluded that there was still an advantage for natural gas over other fossil fuels and electric resistance heating (Vol L, pg. 207-208). Please file the analysis and the resulting comparison.

RESPONSE

Please note, the transcript reference to carbon costs being tested up to a level of $300 / tonne of CO_2 was corrected to refer to a level of $200 / tonne of CO_2 at TR Volume 3, page 75. Please see the table below which sets out the price advantage of natural gas over other fuels assuming carbon costs of $200 / tonne of CO_2.

Current Competitveness ($/GJ)				
	Natural Gas	**Heating Oil**	**Electricity**	**Propane**
Price before Carbon Tax	9.52	23.26	29.88	19.53
Gas Advantage before Carbon Tax		*59%*	*68%*	*51%*
Carbon Tax	9.95	13.87	3.38	11.95
Price after Carbon Tax @ $200 per Metric Tonne of CO_2	19.47	37.13	33.26	31.48
Gas Advantage after Carbon Tax		*48%*	*41%*	*38%*

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.3

UNDERTAKING

TR, page 76

In discussing the survey of customers undertaken to understand prospects for conversion, Enbridge indicated that the survey done in 2006 for Alfred and Plantagenet was different (Vol 1, pg.139-140). Please file the survey methodology and results for the 2006 survey.

RESPONSE

The Company has undertaken a search for a market survey summary report for the Alfred and Plantagenet project (EB-2007-0745) and has been unable to locate such a document. Those close to the project at the time believe that the hardcopy survey forms were forwarded to the Company by mail and manually tabulated, the results being directly documented in the draft Leave to Construct Application. Attached to this response are the portions of the EB-2007-0745 Application that spoke to the customer forecast and copies of the survey forms and covering letters that were mailed to potential customers in the area that was to be served by the project.

Projected Growth

3. The official plan from Alfred and Plantagenet has projected the future growth of approximately 1.3% per year. The municipality also has had inquiries from potential industrial customers as to the facilities available and believe that the availability of natural gas would help to increase the potential for development.

4. Installation of a new NPS 12 water main from Plantagenet to St. Isodore in 2006 helps prepare the area for increased development. Evidence of this potential development includes another 400 lots not currently approved by the Township. These potential new homes are not included in the customers additions forecast.

Customer Additions Forecast

5. In determining the economic viability of extending natural gas service to the Alfred-Plantagenet area, a residential and commercial survey was conducted within the community and along the proposed pipeline route during the months of July and August 2006, encompassing 100% of residences and commercial businesses. An information Open House was advertised in local newspapers and invitations were sent with the survey package to every household/business in the area. The Open House was held at Alfred College in Alfred on October 3, 2006 and the Community Centre in Plantagenet on October 4, 2006. Jacques Whitford held an open house at Alfred College to explain the environmental aspects of the project.

6. The open houses presented an opportunity for interested residents to meet EGD and Jacques Whitford staff and discuss issues of interest including but not limited to environmental concerns, equipment conversion, energy

savings, construction techniques and project extent. A sample of the residential survey form and information package is attached at Exhibit A, Tab 4, Schedule 1. Included in the package were the following:

1. a covering letter
2. brochures indicating the various uses of natural gas
3. an expansion residential survey form including a self-addressed postage paid envelope

7. Of the 1750 existing residences surveyed, 378 (22%) responded to the survey. 84% of the respondents (318) have indicated an interest in converting from their home and hot water heating method to natural gas. The survey responses also indicated some homes use a combination of energy sources and revealed the existing energy mix as 17% fuel oil, 41% electricity, 37% propane, 5% heat pump and 24% wood.

8. The average natural gas consumption of the potential project is estimated to be 2,646 m3/yr per residence. This figure was established based on survey information about home heating habits and costs in the Alfred-Plantagenet area as well as historical residential natural gas usage for the Enbridge Gas Eastern Region.

9. Commercial establishments in the area were sent a similar survey package. A sample of the commercial information package is attached at Exhibit A, Tab 4, Schedule 2. Of the 136 existing commercial establishments surveyed, 47 (35%) responded to the survey. To date 44 (94%) of the respondents have indicated an interest in converting to natural gas.

10. Of the commercial respondents that provided information about their current heating appliances, they indicated either a single or a combination fuel use. 16 (34%) of the respondents use oil as their heating fuel, 26 (55%) use propane, 20 (43%) use electricity and 0 (0%) use wood.

11. The forecast average annual volume for the commercial customers is 17,558 m3 and was based on information collected from the survey forms on the existing fuel type, current energy consumption cost and similar commercial establishments utilizing natural gas in the Enbridge Eastern Region.

12. Based on the survey results obtained and the actual customer capture rates experienced in similar communities, Enbridge estimates a total first year capture of 522 residential and 43 commercial customers. By the end of the tenth year, Enbridge forecasts a capture of 2231 residential and 145 commercial customers.

13. Enbridge has established contacts with officials of various levels of government, and commercial and residential property owners. These residents maintain that the availability of natural gas will not only provide immediate energy savings but would also assist efforts to promote future economic development in the towns and surrounding area. Letters of support received from the municipality and various local businesses for this project are attached in Exhibit E, Tab 4, Schedule 1.

Marketing Promotions

14. Enbridge has and will continue to promote the efficient use of natural gas to the residents of Alfred and Plantagenet. During the two open houses

ENBRIDGE

yes you can!

Dear Homeowner,

Yes! You may finally be able to enjoy the countless benefits of natural gas. Whether it's the significant savings gained from heating with a natural gas furnace, the convenience and fun of having a natural gas barbecue, or the endless hot water available with a natural gas water heater – the advantages of being connected to natural gas go on and on. Natural gas makes life more convenient – and a lot more fun!

Yes! The good news is Enbridge Gas Distribution plans to put a natural gas pipeline in your community. But – Enbridge can't install a pipeline unless we know that natural gas will be used by a majority of residents.

So, please take a moment to read the information brochure enclosed. You can also visit **www.enbridge.com/gas** to learn more about this incredible energy resource. Then, if you're as excited by the advantages of using natural gas as most Canadian homeowners, fill out the form enclosed and return it in the prepaid envelope by July 31, 2006 or fax to (613) 748-6894. (You might also want to discuss the issue with your neighbours and encourage them to send in their forms.)

We look forward to welcoming you as a new Enbridge Gas Distribution customer. But we especially look forward to helping another community enjoy the benefits of this wonderful, safe, economical and environmentally preferred energy resource. It is a win/win situation for everyone. If you have any questions, please call the Enbridge Sales Department at (613) 748-6733 or toll-free 1-800-267-3616, ext. 6733.

Enbridge Sales Department

yes

yes you can!

ENBRIDGE

say **yes** to natural gas! **Expansion Survey** | Residential

The results of this survey will be instrumental in our decision to expand the system into your area. Completing this survey does not mean you have signed up for natural gas.

Name: _____ ☐ Owner ☐ Tenant

Address: _____ Postal Code: _____

Municipality: _____ P.O. Box/RR#: _____

Telephone: Home ( ) _____ Business ( ) _____

E-mail Address: _____

1. How do you presently heat your home?

Electric	Oil	Propane	Plus Wood Stove	Plus Heat Pump
☐ Furnace	☐ Furnace	☐ Furnace	☐ Yes	☐ Yes
☐ Baseboard	☐ Boiler	☐ Boiler	☐ No	☐ No
☐ Boiler				

Please indicate your current energy bills

$ _____ /annually $ _____ /monthly

2. What type of home do you live in?

☐ Bungalow ☐ Two-Storey ☐ Semi-Detached ☐ Townhouse/Rowhouse ☐ Other

What is the size (sq. ft.) of your home? _____

How old is the house?

☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ over 20 years

How old is your heating system? _____ years old

over...

yes you can!

ENBRIDGE

3. If a natural gas pipeline was installed in your area, would you be interested in converting your home heating system to natural gas?

☐ Yes ☐ No

If you are interested and say YES, how soon after the pipeline construction is completed would you convert your heating system to natural gas?

☐ 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year ☐ 6-10 years

If your answer is no, please give a brief explanation as to why.

_____

_____

4. Would you be interested in natural gas for any of the following appliances?

☐ Water Heater ☐ Clothes Dryer ☐ Fireplace ☐ Barbecue ☐ Range ☐ Vehicle

☐ Outdoor Natural Gas Campfire ☐ Pool Heater ☐ Patio Lights ☐ Patio Heater

If YES, how soon after the pipeline construction is completed would you convert the appliances you are interested in to natural gas?

☐ 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year ☐ 6-10 years

Thank you for taking the time to provide us with this information. Please complete and return the survey by October 10, 2006 in the self-addressed envelope provided or fax to (613) 748-6894.

Signature: _____ Date: _____

Visit us at www.enbridge.com/gas

Privacy Commitment: At Enbridge Gas Distribution, we are committed to providing excellent service and to ensuring that our relationship with you is conducted with integrity and in a responsible, fair, honest and ethical manner. The personal information that you are providing to us will be kept confidential and will only be used to determine the feasibility of expanding the Company's natural gas system to your community. Questions about this survey or our Privacy Policy can be directed to Enbridge Gas Distribution, P.O. Box 650, Scarborough, ON M1K 5E3.

ENBRIDGE

Oui vous pouvez!

Au propriétaire de la maison,

Oui! Vous pouvez finalement profiter des avantages innombrables du gaz naturel. Que ce soit les économies substantielles faites en se chauffant avec une fournaise au gaz naturel, la commodité et le plaisir d'avoir un barbecue au gaz naturel ou d'avoir de l'eau chaude à volonté avec un chauffe-eau au gaz naturel... les avantages d'être relié au gaz naturel sont innombrables. **Le gaz naturel rend la vie plus facile... et plus plaisante!**

Oui! La bonne nouvelle est que Enbridge Gas Distribution prévoit de mettre un gazoduc dans votre localité. Mais... Enbridge ne peut pas installer un gazoduc à moins de savoir si le gaz naturel va être utilisé par un certain nombre de résidents.

Alors, veuillez prendre un moment pour lire la brochure d'information ci-jointe. Vous pouvez aussi consulter **www.enbridge.com/gas** pour en savoir plus sur cette ressource énergétique incroyable. Puis, si vous êtes vraiment intéressé à profiter des avantages du gaz naturel comme le font la plupart des propriétaires de résidences au Canada, remplissez le formulaire ci-joint et renvoyez-le par la poste avant le 31, juillet 2006 ou par télécopieur au (613) 748-6894. (Vous pouvez aussi en parler à vos voisins et les encourager à envoyer leurs formulaires.)

Nous espérons avoir le plaisir de vous accueillir parmi les abonnés d'Enbridge Gas Distribution. Mais nous espérons surtout que nous pourrons aider une autre localité à profiter des avantages de cette merveilleuse ressource d'énergie sure, économique et favorable à l'environnement. C'est une situation où tout le monde est gagnant.

Si vous avez des questions supplémentaires, s.v.p. nous contactez au (613) 748-6733 ou sans frais au 1-800-267-3616, poste 6733.

Recevez nos sincères salutations,

Enbridge Gas Distribution

Oui

ENBRIDGE

Oui vous pouvez!

Dites **oui** au gaz naturel! Étude d'expansion | Résidentiel

Les résultats de cette étude influenceront notre décision d'étendre à votre région notre système de distribution de gaz. Remplir ce questionnaire ne signifie en aucun cas que vous avez demandé l'installation du gaz naturel.

Nom: _____ ☐ Propriétaire ☐ Locataire

Adresse: _____ Code postal: _____

Municipalité: _____ CP/RR#: _____

Téléphone: Maison ( ) _____ Travail ( ) _____

Adresse électronique: _____

1. Comment chauffez-vous votre maison?

Électricité	Huile de Chauffage	Propane	Plus poêle à bois	Plus pompe à chaleur
☐ Fournaise	☐ Fournaise	☐ Fournaise	☐ Oui	☐ Oui
☐ Plinthe chauffante	☐ Chaudière	☐ Chaudière	☐ Non	☐ Non
☐ Chaudière				

Veuillez indiquer vos factures courantes en énergie

_____ $/annuellement _____ $/mensuellement

2. Quel genre de maison habitez-vous?

☐ Bungalow ☐ Deux étages ☐ Maison jumelée ☐ Maison en rangée ☐ Autre

Quelle est la taille (en pieds carrés) de votre maison? _____

Quel âge a votre maison?

☐ 1-5 ans ☐ 6-10 ans ☐ 11-15 ans ☐ 16-20 ans ☐ plus de 20 ans

Quel âge a votre système de chauffage? _____ /ans

verso...

ENBRIDGE

OUI VOUS POUVEZ!

3. Si une conduite de gaz était installée dans votre région, seriez-vous intéressé à convertir le système de chauffage de votre maison au gaz naturel?

☐ Oui ☐ Non

Si vous êtes intéressé et dites OUI, combien de temps après la construction de la conduite de gaz convertiriez-vous votre système de chauffage au gaz naturel?

☐ 1ère année ☐ 2ème année ☐ 3ème année ☐ 4ème année ☐ 5ème année ☐ 6-10 ans

Si vous avez répondu non, veuillez nous expliquer brièvement pouquoi.

_____

_____

_____

4. Seriez-vous intéressé à posséder l'un des appareils suivants fonctionnant au gaz naturel?

☐ Chauffe-eau ☐ Sécheuse ☐ Foyer ☐ Barbecue ☐ Cuisinière ☐ Véhicule

☐ Feu de camp au gaz naturel en plein air ☐ Chauffe-piscine ☐ Lumières de patio ☐ Chauffe-patio

Si vous êtes intéressé et dites OUI, combien de temps après la construction de la conduite de gaz convertiriez-vous vos appareils electroménagers au gaz naturel?

☐ 1ère année ☐ 2ème année ☐ 3ème année ☐ 4ème année ☐ 5ème année ☐ 6-10 ans

Nous vous remercions d'avoir pris le temps de nous fournir ces renseignements. Veuillez remplir et nous renvoyer ce questionnaire avant le 10 octobre, 2006 dans l'enveloppe auto-adressée fournie ou le télécopier au (613) 748-6894.

Signature:_____ Date: _____

Consultez notre site web à www.enbridge.com/gas

Protection des renseignements personnels: Chez Enbridge Gas Distribution, nous nous engageons à fournir un service excellent et à assurer que notre relation avec vous soit conduite avec intégrité et de manière responsable, équitable, honnête et éthique. Les renseignements personnels que vous nous donnez seront gardés confidentiels et ne seront utilisés que pour déterminer la rentabilité d'une expansion du système de gaz naturel de la compagnie dans votre localité. Les questions sur cette collecte de renseignements ou sur notre politique de protection des renseignements personnels peuvent être adressées à P.O. Box 650, Scarborough, ON M1K 5E3.

yes you can!

Dear Business Owner,

Yes! Enbridge Gas Distribution is currently investigating the possibility of extending a natural gas pipeline. However, before we can proceed with installation, we need to determine the interest level of you and your neighbours in switching your business to natural gas. To assist us, we ask that you please complete and return the enclosed survey within the next 2 weeks in the pre-paid return envelope provided or by fax to (613) 748-6894. Completing this survey implies no obligation or commitment on your part to convert to natural gas. Enbridge is committed to maintaining high standards of confidentiality and protection of personal customer information.

Natural gas can save you money. **Historical analysis shows that natural gas offers a cost advantage over electricity, propane, and oil. Check out your potential savings with our online calculator at www.enbridge.com/smallbiz.**

Natural gas offers instant convenience. **Natural gas is piped directly into your building so it's always there when you need it and you never have to worry about refilling a tank or running low on fuel.**

Natural gas offers easier, more affordable maintenance. **Cleaner-burning natural gas equipment means less maintenance and repairs over the years.**

Natural gas offers excellent indoor air quality and comfort. **Natural gas delivers consistent heat, and natural gas equipment is compact and quiet in operation, resulting in maximum comfort for building occupants.**

Once we review the interest level in switching to natural gas, we will notify you with further details. If you have any questions, please call the Enbridge Sales Department at (613) 748-6733 or toll-free at 1-800-267-3616, ext. 6733.

Thank you for taking the time to complete our survey. We look forward to the possibility of serving you in the near future.

Enbridge Sales Department

Filed: 2008-04-10
EB-2007-0545
Exhibit A
Tab 4
Schedule 3
Page 2 of 6

yes you can!

ENBRIDGE

say **yes** to natural gas! Expansion Survey | Commercial

The results of this survey will help us determine your interest in using natural gas. Your response will be instrumental in our decision to extend our pipeline to your area. Completing this confidential survey implies no obligation or commitment on your part to convert your business to natural gas.

Name: _____ Owner ☐ Tenant ☐

Business Name: _____

Civic: _____ Street Name: _____ PO Box: _____

City/Town: _____ Province: _____ Postal Code: _____

Business Telephone: ( ) _____

1. Type of business?

☐ Retail ☐ Office ☐ Restaurant ☐ Other _____
(please specify)

2. What equipment do you currently use?

Equipment Type	Fuel Type	Input (Btu)	Make	Age	Interested in Converting
Boiler (steam)					☐ Yes ☐ No
Boiler (water)					☐ Yes ☐ No
Furnace					☐ Yes ☐ No
Water Heaters					☐ Yes ☐ No
Unit Heaters					☐ Yes ☐ No
Rooftop					☐ Yes ☐ No
Cooking					☐ Yes ☐ No
Make-up Air					☐ Yes ☐ No
Other					☐ Yes ☐ No

over...

yes you can!

ENBRIDGE

3. What are your annual heating costs and/or consumption (approximately)?

Electricity	$ _____ / annually	_____ / annual kWh
Oil Heating	$ _____ / annually	_____ / annual litres
Propane	$ _____ / annually	_____ / annual litres

4. What is the square footage of your business/facility? _____ sq. ft.

5. If a natural gas pipeline were installed in your area, would you be interested in converting your heating system to natural gas?

☐ Yes ☐ No

If you are interested and say YES, how soon after the pipeline construction is completed would you convert your heating system to natural gas?

☐ 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year

If you answered no, please give a brief explanation as to why.

6. Would you be interested in natural gas for any of the following other appliances?

☐ Water Heater ☐ Fireplace ☐ Gas Cooking ☐ Barbecue

☐ Pool Heater ☐ Patio Heater ☐ Campfire ☐ Gas Lamp

If YES, how soon after the pipeline construction is completed would you convert the appliances you are interested in to natural gas?

☐ 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year

Thank you for taking the time to provide us with this information. Please return your completed survey in the pre-paid envelope provided or fax to (613) 748-6894.

Signature: _____ Date: _____

Visit us at www.enbridge.com/gas

Privacy Commitment: At Enbridge Gas Distribution, we are committed to providing excellent service and to ensuring that our relationship with you is conducted with integrity and in a responsible, fair, honest and ethical manner. The information that you are providing to us will be kept confidential and will only be used to determine the feasibility of expanding the Company's natural gas system to your community. Questions about this survey or our Privacy Policy can be directed to Enbridge Gas Distribution, P.O. Box 650, Scarborough, ON M1K 5E3.

ENBRIDGE

Oui vous pouvez!

Au propriétaire de la maison,

Oui! Vous pouvez finalement profiter des avantages innombrables du gaz naturel. Que ce soit les économies substantielles faites en se chauffant avec une fournaise au gaz naturel, la commodité et le plaisir d'avoir un barbecue au gaz naturel ou d'avoir de l'eau chaude à volonté avec un chauffe-eau au gaz naturel... les avantages d'être relié au gaz naturel sont innombrables. **Le gaz naturel rend la vie plus facile... et plus plaisante!**

Oui! La bonne nouvelle est que Enbridge Gas Distribution prévoit de mettre un gazoduc dans votre localité. Mais... Enbridge ne peut pas installer un gazoduc à moins de savoir si le gaz naturel va être utilisé par un certain nombre de résidents.

Alors, veuillez prendre un moment pour lire la brochure d'information ci-jointe. Vous pouvez aussi consulter **www.enbridge.com/gas** pour en savoir plus sur cette ressource énergétique incroyable. Puis, si vous êtes vraiment intéressé à profiter des avantages du gaz naturel comme le font la plupart des propriétaires de résidences au Canada, remplissez le formulaire ci-joint et renvoyez-le par la poste avant le 31, juillet 2006 ou par télécopieur au (613) 748-6894. (Vous pouvez aussi en parler à vos voisins et les encourager à envoyer leurs formulaires.)

Nous espérons avoir le plaisir de vous accueillir parmi les abonnés d'Enbridge Gas Distribution. Mais nous espérons surtout que nous pourrons aider une autre localité à profiter des avantages de cette merveilleuse ressource d'énergie sure, économique et favorable à l'environnement. C'est une situation où tout le monde est gagnant.

Si vous avez des questions supplémentaires, s.v.p. nous contactez au (613) 748-6733 ou sans frais au 1-800-267-3616, poste 6733.

Recevez nos sincères salutations,

Enbridge Gas Distribution

Oui

ENBRIDGE

Oui vous pouvez!

dites **oui** au gaz naturel! **Étude d'expansion** | Commercial

Les résultats de cette étude nous aideront à déterminer votre intérêt pour l'utilisation du gaz naturel. Ce que vous répondrez influencera grandement notre décision à installer notre gazoduc dans votre région. Répondre aux questions ne vous engage aucunement et ne vous oblige pas à convertir votre commerce au gaz naturel.

Nom : _____ Propriétaire ☐ Locataire ☐

Nom du Commerce : _____

Civique : _____ Nom de la rue : _____ Boîte postale : _____

Ville : _____ Province: _____ Code postal :_____

Téléphone d'affaires : ( ) _____

Courriel : _____

1. Genre d'affaires ?

☐ Détail ☐ Bureau ☐ Restaurant ☐ Autre _____
(veuillez spécifier)

2. Quel équipement utilisez-vous actuellement ?

Type d'équipement	Genre de combustible	Quantité (en Btu)	Marque	Age	Intérêt à convertir
Chaudière (vapeur)					Oui ☐ Non ☐
Chaudière (eau)					Oui ☐ Non ☐
Fournaise					Oui ☐ Non ☐
Chauffe-eau					Oui ☐ Non ☐
Aérothermes					Oui ☐ Non ☐
Appareil de toit					Oui ☐ Non ☐
Cuisine					Oui ☐ Non ☐
Air d'appoint					Oui ☐ Non ☐
Autre					Oui ☐ Non ☐

verso...

ENBRIDGE

OUI VOUS POUVEZ!

3. Quels sont vos coûts annuels de chauffage et/ou votre consommation (environ) ?

Électricité	$ _____ / annuellement	_____ / kWh annuellement
Huile de chauffage	$ _____ / annuellement	_____ / litres annuellement
Propane	$ _____ / annuellement	_____ / litres annuellement

4. Quel est la surface de vos bureaux/installations ? _____ pieds carrés.

5. Si une conduite de gaz naturel était installée dans votre région, seriez-vous intéressé à convertir votre système de chauffage au gaz naturel ?

☐ Oui ☐ Non

Si vous êtes intéressé et que vous avez dit OUI, combien de temps après la construction de la conduite voudriez-vous convertir votre système de chauffage au gaz naturel ?

☐ 1ère année ☐ 2e année ☐ 3e année ☐ 4e année ☐ 5e année

Si vous avez répondu non, veuillez brièvement dire pourquoi.

6. Seriez-vous intéressé par le gaz naturel pour l'un quelconque des appareils suivants ?

☐ Chauffe-eau ☐ Foyer ☐ Cuisinière ☐ Barbecue

☐ Chauffe-piscine ☐ Chauffe-patio ☐ Feu de camp ☐ Lampe à gaz

Si vous avez dit OUI, combien de temps après la construction de la conduite voudriez-vous convertir l'appareil qui vous intéresse au gaz naturel ?

☐ 1ère année ☐ 2e année ☐ 3e année ☐ 4e année ☐ 5e année

Merci de prendre le temps de nous fournir ces renseignements. Veuillez remplir et nous renvoyer ce questionnaire d'ici deux semaines dans l'enveloppe auto-adressée fournie ou le télécopier au (613) 748-6894.

Signature: _____ Date: _____

Consultez www.enbridge.com/gas

Protection des renseignements personnels : Chez Enbridge Gas Distribution nous nous engageons à fournir un service excellent et à assurer que notre relation avec vous est conduite avec intégrité de manière responsable, équitable, honnête et éthique. Les renseignements que vous nous fournissez seront gardés confidentiels et seulement utilisés pour déterminer la rentabilité de l'expansion du réseau du gaz naturel de notre compagnie à votre localité. Les questions sur cette étude ou sur notre politique de protection des renseignements personnels peuvent être envoyées à Enbridge Gas Distribution, P.O. Box 650, Scarborough, ON M1K 5E3.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.4

UNDERTAKING

TR, page 77

In FRPO.6, our question was not clear as Enbridge informed that "when natural gas is producing the electricity", it is more carbon conscious to combust the gas as opposed to generate heat with electricity. Our question was trying to get to: at what percentage of natural gas fired electricity in the annual electricity dispatch stack must gas generation be below for this statement to hold? Asked differently, if natural gas generation of electricity were to increase, at what level would the heating through electricity generated more carbon output?

RESPONSE

The above noted statement will hold true for as long as natural gas is the marginal fuel for power generation during the heating season in Ontario. As such, it is more carbon efficient and economical to combust natural gas in 92% or higher efficiency natural gas fueled furnaces than to combust natural gas in 40% efficient (including line loss) gas-fired grid-connected electricity generating facilities.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.5

UNDERTAKING

TR, page 79

To provide a figure for the profit that Enbridge shareholders would make, or what Enbridge refers to as the opportunity cost of the capital.

RESPONSE

The cost of equity capital as approved by the Board for Enbridge Gas Distribution Inc. regulated assets is currently 9.19%. Enbridge's Board approved capital structure is funded by 36% equity. The average annual cost of capital in respect of the Community Expansion Portfolio of $410 million would be approximately $1.95 million based on shareholder's return discounted at 9.19% over 40 years.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.6

UNDERTAKING

TR, page 88

To provide detailed criteria of the community expansion portfolio, and the selection criteria that would be used should the board approve fewer than 39 projects, or to evaluate a new municipality.

RESPONSE

In the Company's evidence it indicated that two types of project would qualify for inclusion in its proposed Community Expansion Portfolio (the "CEP"). These definitions are as follows:

1) Community Expansion Project – Defined as a natural gas system expansion project which will provide first time natural gas system access where a minimum of 50 potential customers in homes and businesses already exist, for which economic feasibility guidelines permit a PI of less than 1.0; and

2) Small Main Extension Project – Defined as all other forms of distribution expansion which provide first time natural gas system access to customers.

The intention of including Small Main Extension Projects in the CEP was to provide the opportunity for single or small clusters of potential customers to elect for payment of the System Expansion Surcharge as an alternative to paying a one-time Contribution in Aid of Construction ("CIAC"). The Company accepts that as currently proposed the definition of a Small Main Extension Project is too broad and proposes that it be revised as follows.

> Small Main Extension Project – Defined as all other forms of distribution expansion which provide first time natural gas system access to customers where fewer than 50 potential customers in homes and businesses already exist and where the Profitability Index for the Project (the "PI") is less than 1.0.

With respect to other selection criteria that could be used to qualify projects, considerations such as the number of potential customers, distance to the gate station,

distance to the nearest existing gas main and related costs are all taken account of in the costing of projects and resulting CEP PI. With respect to distance to existing facilities, this criteria is much less relevant in the case of potential LNG Projects. As such, the Company stands by the above-noted definitions of the types of project to be included in the CEP and the requirement to manage the PI of the CEP to a level of 0.5 or above.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.7

UNDERTAKING

TR, page 94

To provide the inputs to the table age page 46 of the Enbridge evidence.

RESPONSE

Upon review of the transcript Enbridge has determined that this particular undertaking should have been worded as follows:

To provide the inputs to the Company's Stage 2 Benefit calculation found in Table 10 on page 33 of Enbridge's pre-filed evidence.

The details of the calculation of Table 10 to the Company's evidence, including inputs, can be found at the Company's response to OGA Interrogatory #14 at Exhibit S3.EGDI.OGA.14.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.8

UNDERTAKING

TR, page 94

To provide the calculated weighted average of the revised propane price.

RESPONSE

Please see the table below which has been revised to update the "Weighted Average" line for a propane annual bill equal to $1,650.

Primary Fuel Type	Penetration %	Annual Heating Bill	Natural Gas Saving (no SES)	Natural Gas Saving (with SES)	Estimated Conversion Cost	Payback Period (Years) (with SES)
Natural Gas	n/a	949				
Electricity	18%	3,114	2,165	1,613	7,250	4.5
Heating Oil	27%	2,771	1,822	1,270	3,500	2.8
Propane	43%	1,650	701	149	1,525	10.2
Wood	13%	1,537	588	36	3,500	96.3
Other (Equal Mix)	0%	2,619	1,670	1,118	3,500	3.1
Weighted Average	0.00	0	1,260	702	3,361	4.8

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.9

UNDERTAKING

TR, page 96

To explain how the sensitivity of the numbers in stage 2, which is the benefit to connecting customers, is sensitive to the differential and to the forecast of fuel.

RESPONSE

Calculation of the Stage 2 benefits provided in Enbridge's evidence at Table 10, utilized a ten year energy price forecast (from 2016 to 2025) for all fuels. In order to respond to this request, a sensitivity analysis has been completed by the Company using 2015 actual energy prices. This analysis results in $234.5 million of Stage 2 benefits. Key assumptions of this analysis are as follows.

Assumptions:

1. 2015 actual energy prices underpinning the revised Table 1 included in EGDI's IR response to FRPO #8 at Exhibit S3.EGDI.FRPO 8 are utilized as base year prices.

2. 2015 actual prices were inflated by the year over year growth rates implicit in the forecast of fuel prices that was used for the Company's response to FRPO Interrogatory #8 at Exhibit S3.EGDI.FRPO.8.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.10

UNDERTAKING

TR, page 106

With reference to BOMA IR 26, to provide the forecast penetration rate.

RESPONSE

Please see the Company's response to Undertaking J3.11 at Exhibit J3.11.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.11

UNDERTAKING

TR, page 110

With reference to BOMA 26, to provide the actual, the forecast and the potential numbers of customers for the four to five projects, and the size in dollars of the projects; to advise the current state of the projects and the forecast over the 20-year life of the assets and the past 25 years.

RESPONSE

Please see the following attachments:

Attachment 1: Compares the potential vs. forecast customers as available in referenced Ontario Energy Board filings; and

Attachment 2: Contains the variance between forecast and actual customer additions and capital investments in the first five years after the on date of System Expansion projects. This information is available in referenced OEB filings as noted against each project.

The current state of the System Expansion projects is provided in Column 12, which represents all customers added downstream of the point where these projects were connected to the Company's then existing distribution system. The actual customer additions in Column 12 may be compared with corresponding growth forecast provided in Column 7 through Column 10 of Attachment 1, depending upon the time passed after the project on date.

Potential vs. Forecast Customers - Major System Expansion Projects

	Project Name	Project On date	OEB Filing reference	Potential Customers	OEB Filing reference	Forecast Customers			
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
						20 years	15 years	10 years	5 years
1	Russel, Cambridge & Casselman	Nov. 1995	EBLO 250/EBA 689/690/ EBC 214/215/216 Exhibit A, Tab3, Schedule 1		EBLO 250/EBA 689/690/ EBC 214/215/216 Exhibit D, Tab2, Schedule 1				
	Residential			3,306		2,182	2,099	1,984	1,510
	Commercial			323		260	252	236	211
2	Grand Valley & Waldemar	Dec. 1995	EBA 699/EBC 224 Exhibit A, Tab3, Schedule 2		EBA 699/EBC 224 Exhibit A, Tab3, Schedule 5				
	Residential			798		1,314	1,123	918	715
	Commercial			77		92	82	68	55
3	Dundalk & Proton Station	Dec. 1995	EBLO 254/EBA 710/711/713/715/ EBC 234/235/238 Exhibit J, Tab3, Schedule 3		EBLO 254/EBA 710/711/713/715/ EBC 234/235/238 Exhibit J, Tab3, Schedule 3				
	Residential			887		851	783	712	610
	Commercial			107		103	101	97	89
4	Rockland & Cumberland	Oct. 1996	EBLO 255 Exhibit A, Tab3, Schedule 2		EBLO 255 Exhibit A, Tab3, Schedule 2				
	Residential			5,853		4,563	3,842	3,123	2,239
	Commercial			203		166	163	153	139
5	Township of Tiny Ph I and II	Jan 1999 & Oct 1999	PL 102 Exhibit A, Tab3, Schedule 1		PL 102 Exhibit A, Tab3, Schedule 4				
	Residential			7,081		4,876	4,241	3,419	2,589
	Commercial			62		50	46	43	35
6	Creemore&New Lowell	Dec. 1997	EBLO 261/EBC 266/EBA 785 Exhibit A, Tab3, Schedule 3		EBLO 261/EBC 266/EBA 785 Exhibit A, Tab3, Schedule 3				
	Residential			926		775	751	710	601
	Commercial			91		69	66	62	54
7	Community of Carp	Nov. 1997	PL 98 Exhibit A, Tab3, Schedule 2		PL 98 Exhibit A, Tab3, Schedule 3				
	Residential			421		421	390	348	281
	Commercial			133		133	122	107	89
8	Alfred Plantagenet	Oct. 2008	EB-2007-0745 Exhibit A, Tab3, Schedule 1		EB-2007-0745 Exhibit A, Tab3, Schedule 1				
	Residential			2,669		-	-	2,231	
	Commercial			184		-	-	145	
	All System Expansion Projects								
	Residential			21,941		14,982	13,229	13,445	8,545
	Commercial			1,180		873	832	911	672

Forecast vs. Actual variance - Major System Expansion Projects

	Project Name	Project On date	OEB Filing Reference	Capital Cost				Customer Additions 5 years cumulative			Current State of Cumulative Customers Added YTD[1]
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12
				Forecast ($000)	Actual ($000)	Variance ($000)	Variance (%)	Forecast	Actual	Forecast Accuracy	Acutal
1	Russel, Cambridge & Casselman	Nov. 1995	RP-2001-0032 Exhibit B3, Tab2, Schedule 8	5,503	5,220	(283)	-5%				
	Residential							1,510	2,253	149%	7,777
	Commercial							211	182	86%	
2	Grand Valley & Waldemar	Dec. 1995	RP-2001-0032 Exhibit B3, Tab2, Schedule 8	1,432	1,497	65	5%				
	Residential							715	537	75%	967
	Commercial							55	26	47%	
3	Dundalk & Proton Station	Dec. 1995	RP-2001-0032 Exhibit B3, Tab2, Schedule 8	1,479	1,501	22	1%				
	Residential							610	454	74%	811
	Commercial							89	48	54%	
3	Rockland & Cumberland	Oct. 1996	RP-2002-0133 Exhibit B3, Tab2, Schedule 8	4,721	3,776	(945)	-20%				
	Residential							2,239	1,637	73%	6,927
	Commercial							139	85	61%	
4	Township of Tiny Ph I and II	Jan 1999 & Oct 199	EB-2005-0001 Exhibit B3, Tab2, Schedule 7	8,357	5,988	(2,369)	-28%				
	Residential							2,589	2,359	91%	3,688
	Commercial							35	38	109%	
5	Creemore&New Lowell	Dec. 1997	RP-2003-0203 Exhibit B3, Tab2, Schedule 7	1,572	1,604	32	2%				
	Residential							601	634	105%	895
	Commercial							54	39	72%	
6	Community of Carp	Nov. 1997	RP-2003-0203 Exhibit B3, Tab2, Schedule 7	1,581	1,347	(234)	-15%				
	Residential							281	288	102%	1,359
	Commercial							89	75	84%	
7	Alfred Plantagenet	Oct. 2008	EB-2016-0004 Exhibit S3.EGDI.BOMA.26	2,634	2,313	(321)	-12%				
	Residential & Commercial							2,376	1,382	58%	1,382
8	All System Expansion Projects										
	Residential							10,921	9,544	87%	23,806
	Commercial							672	493	73%	
						Overall		11,593	10,037	87%	23,806

Note

1 *Col 12 represent **current state** all customers added downstream of the point where the System Expansion projects connected to the Company's then existing distribution system*

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J3.12

UNDERTAKING

TR, page 119

To redo the Table 10 analysis, separating it out into two calculations, one just for the first two projects on the list, which are the Fenelon Falls and Bobcaygeon project and the Scugog Island project, which is also looking at the annual savings after an individualized SES charge would be $725. And then separate that out and do another calculation for the rest of the projects.

RESPONSE

Please see the attached tables for the analysis requested.

Fenelon Falls, Bobcaygeon and Scugog Island communities

Col 1	Col 2	Col 3
Stage 1 Benefits: Based on project cash flows		**NPV**
Stage 1 NPV (at social discount rate = 4%)	A	(15,575,705)
Stage 2 Benefits: Based on Customers' cash flows		
Energy cost savings		140,965,806
Less: Conversion costs		(10,267,887)
Stage 2 Benefits (NPV)	B	130,697,919
Combined benefits (Stage 1 + Stage 2)	A+B	115,122,213

37 Other projects in Enbridge List of communities

Col 1	Col 2	Col 3
Stage 1 Benefits: Based on project cash flows		**NPV**
Stage 1 NPV (at social discount rate = 4%)	A	(107,381,622)
Stage 2 Benefits: Based on Customers' cash flows		
Energy cost savings		238,665,831
Less: Conversion costs		(25,267,546)
Stage 2 Benefits (NPV)	B	213,398,285
Combined benefits (Stage 1 + Stage 2)	A+B	106,016,663

Fenelon Falls, Bobcaygeon and Scugog Island communities (SES = $725 per customer)

Col 1	Col 2	Col 3
Stage 1 Benefits: Based on project cash flows		**NPV**
Stage 1 NPV (at social discount rate = 4%)	A	5,318,495
Stage 2 Benefits: Based on Customers' cash flows		
Energy cost savings		122,458,677
Less: Conversion costs		(10,267,887)
Stage 2 Benefits (NPV)	B	112,190,790
Combined benefits (Stage 1 + Stage 2)	A+B	117,509,285

37 Other projects in Enbridge List of communities (SES = $725 per customer)

Col 1	Col 2	Col 3
Stage 1 Benefits: Based on project cash flows		**NPV**
Stage 1 NPV (at social discount rate = 4%)	A	(86,529,955)
Stage 2 Benefits: Based on Customers' cash flows		
Energy cost savings		209,480,668
Less: Conversion costs		(25,267,546)
Stage 2 Benefits (NPV)	B	184,213,122
Combined benefits (Stage 1 + Stage 2)	A+B	97,683,167

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J4.1

UNDERTAKING

TR, page 41

To give the new number that would replace the $123 million in Table 10, BOMA 28, using the weighted average cost of capital.

RESPONSE

In response to this Undertaking, Stage 1 benefits were recalculated after discounting the CE portfolio cash flows at Enbridge Gas Distribution's after tax Weighted Average Cost of Capital. The new number representing Stage 1 benefits in Table 10 would be $156.68 million.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J4.2

UNDERTAKING

TR, page 61

To provide the criteria used to distinguish between transmission main and a distribution main.

RESPONSE

Enbridge uses the term transmission main to describe the segment of pipe serving as primary feed to a community and the term distribution main to describe the smaller diameter gas mains that are fed by the “transmission main” and that supply the majority of the customers located in a community.

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J4.3

UNDERTAKING

TR, page 74

To find out the number of First Nations in the Enbridge service territory.

RESPONSE

Please see the Company's response to Undertaking J4.4 (Exhibit J4.4).

ENBRIDGE GAS DISTRIBUTION RESPONSE

UNDERTAKING J4.4

UNDERTAKING

TR, page 76

Enbridge to advise whether any of the 39 projects in its chart pertain to First Nations.

RESPONSE

With regard to First Nations Communities presently covered by Enbridge's service area, the Chippewas of Georgina Island First Nation is the only First Nation that is located within Enbridge's existing franchise areas. (Please note there are only four customers located on the mainland portion of the First Nation's reserve.)

The Mississaugas of Scugog Island First Nation Community will be served as part of the Company's proposed Scugog Island Project.

Although not included in the current assessment of the thirty-nine potential community expansion project's listed in Enbridge's evidence in this matter, several other First Nations Communities could possibly receive natural gas service if the Company's community expansion proposal in this proceeding is accepted, these are:

- Chippewas of Georgina Island First Nation (Island),
- Curve Lake First Nation,
- Hiawatha First Nation,
- Algonquins of Pikwakanagan, and
- Alderville First Nation.