

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
RESPONSES TO INTERROGATORIES OF ENERGY PROBE (EP)

INTERROGATORY #1

- a) In Enbridge's view, is Energy Probe's table, (attached) which includes the cost per customer and the length of time it would take to recoup the costs of switching to natural gas, a reasonable estimate of the real cost of connecting new customers in the Community Expansion program?
- b) If not, please provide a revision.

RESPONSE

Enbridge has made two revisions to the table provided by Energy Probe. The first is to revise the amounts in the "Capital Cost" column for LNG projects to reflect their proper capital cost. The second change is a correction to the calculation of the overall average capital cost per customer shown in row #42 of the "Capital Cost per customer" column.

Community	Forecasted Customers	Capital Cost	Capital Cost per customer	Capital cost from electricity customer	Capital cost + conversion from electricity customer	Number of years needed to payback cost from electricity conversion	Capital cost + conversion from Heating oil per customer	Number of years needed to payback heating oil conversion	Capital cost + conversion from Propane per customer	Number of years needed to payback propane conversion	Capital cost + conversion from Wood per customer	Number of years needed to payback from wood conversion
Fenelon Falls & Bobcaygeon	5,485	\$ 111,956,990	\$20,411	\$27,661	\$23,911	13.12	\$23,911	13.43	\$23,911	40.67	\$23,911	40.67
Scugog Island	1,174	\$ 19,714,126	\$16,792	\$24,042	\$20,292	11.14	\$20,292	11.22	\$20,292	34.51	\$20,292	34.51
Cambray	300	\$ 7,583,140	\$25,277	\$32,527	\$28,777	15.09	\$28,777	16.41	\$28,777	48.94	\$28,777	48.94
Zephyr	188	\$ 5,184,375	\$27,576	\$34,826	\$31,076	16.02	\$31,076	17.82	\$31,076	52.85	\$31,076	52.85
Cotnam Island	75	\$ 2,171,890	\$28,959	\$36,209	\$32,459	16.72	\$32,459	18.67	\$32,459	55.20	\$32,459	55.20
Sarsfield	150	\$ 4,147,500	\$27,650	\$34,900	\$31,150	16.12	\$31,150	17.87	\$31,150	52.98	\$31,150	52.98
Udora	300	\$ 8,842,300	\$29,474	\$36,724	\$32,974	16.96	\$32,974	18.10	\$30,999	56.08	\$32,974	56.08
Wilkinson Sub, Innisfil	68	\$ 1,897,055	\$27,898	\$35,148	\$31,398	16.23	\$31,398	17.23	\$29,423	53.40	\$31,398	53.40
Town of Marsville	263	\$ 8,047,225	\$30,598	\$37,848	\$34,098	17.48	\$34,098	18.71	\$32,123	57.99	\$34,098	57.99
Town of Mansfield	221	\$ 6,817,129	\$30,847	\$38,097	\$34,347	17.60	\$34,347	18.85	\$32,372	58.41	\$34,347	58.41
Glendale Subdivision	75	\$ 2,509,250	\$33,457	\$40,707	\$36,957	18.80	\$36,957	20.28	\$34,982	62.85	\$36,957	62.85
Caledon - Humber Station	54	\$ 2,067,960	\$38,296	\$45,546	\$41,796	21.04	\$41,796	22.94	\$39,821	71.08	\$41,796	71.08
Enniskillen	150	\$ 5,109,500	\$34,063	\$41,313	\$37,563	19.08	\$37,563	20.82	\$35,588	63.88	\$37,563	63.88
Village of Lisie	300	\$ 9,966,800	\$33,223	\$40,473	\$36,723	18.69	\$36,723	20.16	\$34,748	62.45	\$36,723	62.45
5th Line, Mono Twp.	24	\$ 1,798,760	\$74,948	\$82,198	\$78,448	37.97	\$78,448	43.06	\$76,473	133.42	\$78,448	133.42
Sandford	150	\$ 5,590,500	\$37,270	\$44,520	\$40,770	20.56	\$40,770	22.38	\$38,795	69.34	\$40,770	69.34
Leakssdale	150	\$ 5,590,500	\$37,270	\$44,520	\$40,770	20.56	\$40,770	22.38	\$38,795	69.34	\$40,770	69.34
Curran	75	\$ 3,640,250	\$48,537	\$55,787	\$52,037	25.77	\$52,037	28.56	\$50,062	88.50	\$52,037	88.50
Bainsville	75	\$ 3,997,750	\$53,303	\$60,553	\$56,803	31.18	\$56,803	31.18	\$54,828	96.60	\$56,803	96.60
Westmeath	150	\$ 6,448,500	\$42,990	\$50,240	\$46,490	23.21	\$46,490	25.52	\$44,515	79.06	\$46,490	79.06
Haydon	75	\$ 3,441,281	\$45,884	\$53,134	\$49,384	24.54	\$49,384	27.10	\$47,409	83.99	\$49,384	83.99
Woodville	225	\$ 5,797,180	\$25,765	\$33,015	\$29,265	15.25	\$29,265	16.06	\$27,290	49.77	\$29,265	49.77
South Glengary	150	\$ 4,590,881	\$30,606	\$37,856	\$34,106	17.49	\$34,106	18.72	\$32,131	58.00	\$34,106	58.00
Caledon-Torbram Road	59	\$ 3,117,191	\$52,834	\$60,084	\$56,334	27.75	\$56,334	30.92	\$54,359	95.81	\$56,334	95.81
Chute-a-Blondeau	150	\$ 5,335,501	\$35,570	\$42,820	\$39,070	19.78	\$39,070	21.44	\$37,095	66.45	\$39,070	66.45
Hockley Village	48	\$ 2,950,428	\$61,467	\$68,717	\$64,967	31.74	\$64,967	35.66	\$62,992	110.49	\$64,967	110.49
Maxville	300	\$ 7,147,877	\$23,826	\$31,076	\$27,326	14.35	\$27,326	15.00	\$25,351	46.47	\$27,326	46.47
Lanark & Balderson	300	\$ 8,637,117	\$28,790	\$36,040	\$32,290	16.65	\$32,290	17.72	\$30,315	54.92	\$32,290	54.92
Douglas	150	\$ 5,335,501	\$35,570	\$42,820	\$39,070	19.78	\$39,070	21.44	\$37,095	66.45	\$39,070	66.45
Eganville	525	\$ 14,063,487	\$26,788	\$34,038	\$30,288	15.72	\$30,288	16.62	\$28,313	51.51	\$30,288	51.51
Kinburn/Fitzroy Harbour	375	\$ 10,588,874	\$28,237	\$35,487	\$31,737	16.39	\$31,737	17.42	\$29,762	53.97	\$31,737	53.97
St. Isidore	300	\$ 7,147,877	\$23,826	\$31,076	\$27,326	14.35	\$27,326	15.00	\$25,351	46.47	\$27,326	46.47
Kirkfield	600	\$ 15,604,747	\$26,008	\$32,258	\$29,508	15.36	\$29,508	16.20	\$27,533	50.18	\$29,508	50.18
Minden	1061	\$ 26,418,325	\$24,899	\$32,149	\$28,399	14.85	\$28,399	15.59	\$26,424	48.30	\$28,399	48.30
Coboconk	300	\$ 8,637,117	\$28,790	\$36,040	\$32,290	16.65	\$32,290	17.72	\$30,315	54.92	\$32,290	54.92
Nonland	150	\$ 5,335,501	\$35,570	\$42,820	\$39,070	19.78	\$39,070	21.44	\$37,095	66.45	\$39,070	66.45
Barry's Bay	375	\$ 10,761,872	\$28,698	\$35,948	\$32,198	16.60	\$32,198	17.67	\$30,223	54.76	\$32,198	54.76
Kinmount	150	\$ 5,335,501	\$35,570	\$42,820	\$39,070	19.78	\$39,070	21.44	\$37,095	66.45	\$39,070	66.45
Haliburton (Dyset)	1,526	\$ 37,161,620	\$24,352	\$31,602	\$27,852	14.60	\$27,852	15.29	\$25,877	47.37	\$27,852	47.37
Totals	16,246	\$410,489,376	\$25,267	\$32,517	\$28,767	15.02	\$28,767	22.65	\$26,792	16.41	\$28,767	48.92

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #2

Ref: Enbridge Evidence, page 4

Enbridge states on page 4:

"In the early years community expansion projects tend to be detractors to profitability, however at some future point the cash flows cross over such that these projects begin to contribute to profitability. Except for the most profitable customer additions, existing customers typically support the revenue requirement of new customer for a period of time through rates. Overtime, as the revenue requirement associated with these new customers' declines, they contribute to lowering rate for customer who preceded them and cross subsidize newer customers."

- a) Does Enbridge have any evidence that older existing customers at any point STOP subsidizing new customers? Is it more likely that older, more profitable customers, are continuously used to subsidize the gas system?
- b) Can Enbridge provide evidence that at any point it has stopped charging older customers for any expansion to its distribution network?

RESPONSE

- a) The best way to demonstrate that older existing customers at any point no longer subsidize new customers is a review of the Company's historic Profitability Index within the Investment Portfolio. From 2001 to 2015 the Company's Investment Portfolio PIs ranged from a low of 0.95 to a high of 1.80, with a cumulative net present value amounting to over \$650 million during this time. This is a clear indication that over this period of time the customers that were added to the Company's distribution system have subsidized the existing customers, as opposed to the opposite.
- b) Yes, please see the Company's reply to part (a) of this question.

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INTERROGATORY #3

Ref: Enbridge Evidence

Can Enbridge provide an annual breakdown of number of new customers it has added since the 1990's?

RESPONSE

Year	Customer Adds
1992	38,400
1993	42,260
1994	45,421
1995	44,408
1996	45,830
1997	54,670
1998	54,739
1999	56,354
2000	53,676
2001	53,688
2002	54,649
2003	60,473
2004	56,485
2005	50,697
2006	47,622
2007	42,920
2008	41,052
2009	32,089
2010	36,902
2011	35,657
2012	35,971
2013	34,644
2014	34,504
2015	31,533

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INTERROGATORY #4

Ref: Enbridge Evidence, page 5

Enbridge states on page 5:

"More regulated utilities would increase the level of effort and cost required to regulate them. In short the regulator burden would increase."

Does Enbridge have any evidence to suggest that a more competitive environment - with more gas companies competing for new customers- would actually cost customers more (as regulatory costs would outweigh the benefits of competition)?

RESPONSE

Enbridge does not have any evidence to suggest that a more competitive environment with more gas companies competing for new customers would actually cost customers more, however, there has been no evidence brought forward in this proceeding indicating that an environment with more gas distributors competing for new customers would result in lower overall costs either. The Company has stated in its evidence that any new entrants should be required to demonstrate economic benefit to the market beyond that provided by incumbent service providers before being granted permission to embark upon their endeavors. The assessment of this benefit should include all costs including the cost associated with the regulation of such entities.

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #5

Ref: Enbridge Evidence, page 7

Enbridge states on page 7:

"The conversion or replacement of heating systems, water heaters, and sale and installation of other natural gas appliances will create employment opportunities."

Has Enbridge completed any studies on the employment impacts to the province of expanding the natural gas system to uneconomic communities? Has it looked at the job losses in other sectors that may be negatively impacted (propane and others)? Has it done any studies on the impact on local electricity systems that will be selling less power? If so, please provide these studies.

RESPONSE

With respect to studies dealing with the economic impacts of the expansion of gas distribution systems please see the ICF Study prepared by ICF International on behalf of the Canadian Gas Association (Reference EB-2015-0179, Exhibit B.CCC.5 Attachment 1). An assessment of the broader economic impacts of the Company's proposal and the extension of gas distribution services to unserved areas in general would require what is defined in EBO 134 as a Stage 3 benefit analysis which has not been undertaken by the Company at this time with respect to its proposal in this proceeding. With respect to impacts on the Province's electrical generation, transmission and distribution systems transitioning winter heating loads from electricity to natural gas will result in a lessened reliance on less efficient gas fired electricity generation. The economic impact on local electricity distributors will be mitigated by recent changes in the structure of electricity rates which make them more sensitive to energy demand rather than consumption.

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #6

Ref: Enbridge Evidence, Table 1, page 15

Can Enbridge please provide all the assumptions - cost of electricity and so on - used to create Table 1, page 15?

RESPONSE

Please see the Company's response to CCC Interrogatory #8 at Exhibit S3.EGDI.CCC.8.

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #7

Ref: Enbridge Evidence, Table 4, page 26

In Table 4, page 26, how did Enbridge calculate the forecasted number of customers?
Can it provide the evidence to support those figures?

RESPONSE

The customer forecast is based on the assumption that 75% of existing homes and business will convert to natural gas over 10 years – this assumption was made based on customer surveys conducted in Fenelon Falls and Bobcaygeon areas on behalf of Enbridge by a third party market research firm. The 75% forecast is conservative based on the survey results.

Enbridge's forecast of new customers is based on public domain municipal planning documents obtained by Enbridge for Fenelon Falls, Bobcaygeon and Scugog Island. Enbridge has assumed 100% of the planned development to translate into new customer additions over a ten year period.

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #8

Reference: Enbridge Evidence, page 20

Enbridge states on page 20:

"Enbridge expects that once more detailed assessments of the design and construction requirements of these projects and scheduling are completed and once the work is tendered the contingency amounts can be reduced resulting in lower overall capital cost estimates."

Can Enbridge provide an estimate to what level of contingency amounts it is using in Table 3, page 19, Column 5?

Please detail how this is different than the normal level of contingency amounts it uses?

RESPONSE

Please see the Company's response to Board Staff Interrogatory #8 at Exhibit S3.EGDI.BSTAFF.8.

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #9

Ref: Enbridge Evidence, page 21

Can Enbridge detail the derivation of the amount of the System Expansion Surcharge (SES) needed- it is currently proposing \$0.23/m³ (page 21)- for each community to bring its PI up to 0.8.

RESPONSE

The attached table provides SES amounts to achieve a PI of 0.8.

	Community	EP 9 (SES)
	Col 1	Col 2
1	Fenelon Falls & Bobcaygeon	\$ 0.28
2	Scugog Island	\$ 0.39
3	Cambray	\$ 0.58
4	Zephyr	\$ 0.71
5	Cotnam Island	\$ 0.74
6	Sarsfield	\$ 0.72
7	Udora	\$ 0.76
8	Wilkinson Sub, Innisfil	\$ 0.76
9	Town of Marsville	\$ 0.79
10	Town of Mansfield	\$ 0.80
11	Glendale Subdivision	\$ 0.92
12	Caledon - Humber Station	\$ 1.12
13	Enniskillen	\$ 0.91
14	Village of Lisle	\$ 0.87
15	5th Line, Mono Twp.	\$ 2.28
16	Sandford	\$ 1.00
17	Leaskdale	\$ 1.00
18	Curran	\$ 1.36
19	Bainsville	\$ 1.50
20	Westmeath	\$ 1.17
21	Haydon	\$ 1.28
22	Woodville	\$ 0.66
23	South Glengary	\$ 0.81
24	Caledon - Torbram Road	\$ 1.50
25	Chute-a-Blondeau	\$ 0.89
26	Hockley Village, Mono Twp.	\$ 1.77
27	Maxville	\$ 0.60
28	Lanark & Balderson	\$ 0.68
29	Douglas	\$ 0.89
30	Eganville	\$ 0.61
31	Kinburn/Fitzroy Harbour	\$ 0.66
32	St. Isidore	\$ 0.60
33	Kirkfield	\$ 0.59
34	Minden	\$ 0.55
35	Coboconk	\$ 0.68
36	Norland	\$ 0.89
37	Barry's Bay	\$ 0.67
38	Kinmount	\$ 0.89
39	Haliburton (Dysert)	\$ 0.54

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #10

Ref: Enbridge Evidence, Table 2, page 16

Can Enbridge please breakdown the "potential customers" in Table 2, page 16 by type (residential, industrial and commercial)?

RESPONSE

Please see breakdown on page 2.

Ontario Energy Board Generic Community Expansion

Filed: 2016-04-22

EB-2016-0004

Exhibit S3.EGDI.EP.10

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	Community	Potential Customers	Residential	Commercial	Industrial
Col 1	Col 2	Col 3	Col 5	Col 6	Col 7
1	Fenelon Falls & Bobcaygeon	6,242	5,903	338	1
2	Scugog Island	1,468	1,395	73	
3	Cambray	400	380	20	
4	Zephyr	250	238	13	
5	Cotnam Island	100	95	5	
6	Sarsfield	200	190	10	
7	Udora	400	380	20	
8	Wilkinson Sub, Innisfil	90	86	5	
9	Town of Marsville	350	333	18	
10	Town of Mansfield	294	279	15	
11	Glendale Subdivision	100	95	5	
12	Caledon - Humber Station	72	68	4	
13	Enniskillen	200	190	10	
14	Village of Lisle	400	380	20	
15	5th Line, Mono Twp.	32	30	2	
16	Sandford	200	190	10	
17	Leaskdale	200	190	10	
18	Curran	100	95	5	
19	Bainsville	100	95	5	
20	Westmeath	200	190	10	
21	Haydon	100	95	5	
22	Woodville	300	285	15	
23	South Glengary	200	190	10	
24	Caledon - Torbram Road	79	75	4	
25	Chute-a-Blondeau	200	190	10	
26	Hockley Village, Mono Twp.	64	61	3	
27	Maxville	400	380	20	
28	Lanark & Balderson	400	380	20	
29	Douglas	200	190	10	
30	Eganville	700	665	35	
31	Kinburn/Fitzroy Harbour	500	475	25	
32	St. Isidore	400	380	20	
33	Kirkfield	800	760	40	
34	Minden	1,414	1,344	71	
35	Coboconk	400	380	20	
36	Norland	200	190	10	
37	Barry's Bay	500	475	25	
38	Kinmount	200	190	10	
39	Haliburton (Dysert)	2,035	1,933	102	
	Total	20,490	19,439	1,050	1

ENBRIDGE GAS DISTRIBUTION INC. (ENBRIDGE)
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INTERROGATORY #11

Ref: Mechanisms for Supporting Natural Gas Community Expansion Projects

On page 4 and 5, the evidence reviews an OEB decision from 1983 related to community expansion programs, in which the Board approved the cross subsidies for expansion on the grounds that "and cross subsidy which may result is offset by the benefits ... "

Given that there were both federal and provincial funds at the time that also helped mitigate the cross subsidy, please respond to the argument that the gas companies' community expansion programs should be put on hold until the provincial government clarifies its loan and grant program?

RESPONSE

Enbridge Gas Distribution's view is that the argument put forward in this interrogatory is contrary to the Ontario Energy Board's decision to proceed, on its own motion, with a generic hearing for community expansion proposals.