ECONOMIC FEASIBILITY

METHODOLOGY

1. The overall feasibility of the project has been determined using the methodology that adheres to the *"Ontario Energy Board Guidelines for Assessing and Reporting on Natural System Expansion in Ontario"* and as laid out in the Ontario Energy Board's (the "Board') EBO 188 "Report to the Board" dated January 30, 1998.

2. The economic feasibility has been prepared based on Enbridge Gas Distribution Inc.'s ("Enbridge") feasibility parameters pursuant to the Board's Decision with Reasons in the Enbridge's EB-2011-0051 Rate application.

3. The economic feasibility of this project has been calculated by discounting the project's incremental cash flows forecast over a 40-year project horizon. The resulting Net Present Value ("NPV") represents both the economic feasibility of the project from the utility's perspective and its effect within the Rolling Project Portfolio. An NPV greater than zero indicates the project will have a positive contribution to the Rolling Project Portfolio and will be feasible from a utility cash flow perspective.

4. The project's upfront capital cost is estimated to be $5.3 million which includes mains, contingencies, and overhead costs. The construction period is assumed to be five months.

5. Three additional construction phases are planned in 2014, 2015, and 2019. The capital costs, including contingencies and overheads for these phases are estimated at $1.0 million, $1.9 million, and $1.8 million, respectively. The detailed capital cost breakdown is provided in Exhibit C, Tab 2, Schedule 1. Service costs of $14.2 million have been included in the feasibility analysis.

SUMMARY

6. The results of the feasibility analysis indicate a Profitability Index of 1.37, indicating the project is feasible and can be approved by the Board on the basis of this analysis.

7. A summary of the inputs and results of the feasibility are included on page 3, while pages 4 to 7 show detailed feasibility parameters and results.

SUMMARY OF INPUTS

Number of Residential Customers	7,185
Number of Commercial Customers	239
Total Number of Customers	7,424
Annual Volumes (10^3m^3)	
Rate 1	18,200
Rate 6	24,854
Total	43,053

CAPITAL INVESTMENT

Reinforcement Main (2012)	$5,347,801
Future Mains (2014, 2015, 2019)	$4,447,299
Station (2015)	$274,845
Services	$14,227,009
Total	$24,296,954

SUMMARY OF RESULTS

Net Present Value (40 years)	$7,689,736
Profitability Index (40 years)	1.37
Customer Contribution	$0.0

APPENDIX 1

Alliston

ECONOMIC FEASIBILITY STUDY

FOR A CUSTOMER REVENUE HORIZON OF 40 YEARS

Alliston
Economic Feasibility - 40 Year Horizon
Parameters and Results

Line No.	Col. 1 Description	Col. 2
	FEASIBILITY PARAMETERS	
1.	Discount Rate	5.56%
2.	CCA Rate	6.00%
3.	Tax Rate	28.25%
4.	Municipal Tax rate	0.60%
5.	Capital Tax Rate	0.00%
6.	Customer Revenue Horizon (Years)	40
7.	Annual Volumes (m^3)	43,053,253
8.	Annual Distribution Revenues (Dollars)	5,739,784
9.	Annual O&M (Dollars)	549,204
10.	Capital Investment (Dollars)	24,296,954
	Working Capital	
11.	O&M (Lead days)	(26.10)
12.	Commodity (Lag days)	5.80
	FEASIBILITY RESULTS	
13.	Net Present Value (Dollars)	7,689,736
14.	Profitability Index	1.37
15.	Customer Contribution in Aid of Construction (Dollars)	-

Alliston
Economic Feasibility - 40 year Horizon
DCF Analysis

Line No.	Col. 1 Description	Col. 2 Year 0	Col. 3 Year 1	Col. 4 Year 2	Col. 5 Year 3	Col. 6 Year 4	Col. 7 Year 5	Col. 8 Year 6	Col. 9 Year 7	Col. 10 Year 8	Col. 11 Year 9	Col. 12 Year 10	Col. 13 Year 11
	Discount factors to project outset	0.9888	0.9516	0.9015	0.8540	0.8090	0.7664	0.7260	0.6877	0.6515	0.6172	0.5847	0.5539
	INCREMENTAL CAPITAL INVESTMENT												
1.	Investment In Mains	(5,347,801)	-	(1,044,192)	(1,622,787)	-	-	-	(1,780,320)	-	-	-	-
2.	Investment in Services	(1,106,249)	(1,576,341)	(2,104,217)	(1,906,548)	(1,902,991)	(1,508,060)	(1,272,315)	(1,141,060)	(866,830)	(842,398)	-	-
3.	Investment in Stations	-	-	-	(274,845)	-	-	-	-	-	-	-	-
4.	Investment in Land	-	-	-	-	-	-	-	-	-	-	-	-
5.	Contribution In Aid Of Construction	-											
6.	Net Investment Capital	(6,454,050)	(1,576,341)	(3,148,409)	(3,804,180)	(1,902,991)	(1,508,060)	(1,272,315)	(2,921,380)	(866,830)	(842,398)	-	-
7.	Working Capital	-	585	680	938	733	627	507	552	314	319	396	-
8.	Total Investment	(6,454,050)	(1,575,756)	(3,147,729)	(3,803,242)	(1,902,258)	(1,507,434)	(1,271,808)	(2,920,827)	(866,516)	(842,079)	396	-
9.	PV Of Total Investment At Project Outset	(20,676,876)											
10.	**ACCUMULATED PV OF TOTAL INVESTMENT**	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)
	CCA TAX SHIELD												
11.	CCA Tax Shield		54,698	119,474	152,348	202,130	238,370	252,977	261,362	281,222	296,454	293,152	282,702
12.	PV Of CCA Tax Shield At Project Outset		52,051	107,701	130,101	163,520	182,678	183,658	179,750	183,219	182,967	171,397	156,580
13.	**ACCUMULATED PV OF CCA TAX SHIELD**		52,051	159,752	289,853	453,373	636,051	819,710	999,459	1,182,678	1,365,645	1,537,042	1,693,622
	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)												
14.	Gas Distribution Revenue		196,463	702,418	1,428,131	2,228,729	3,012,517	3,726,026	4,294,555	4,797,878	5,229,795	5,576,302	5,739,784
15.	Gas Costs		(77,803)	(271,218)	(540,551)	(836,624)	(1,124,146)	(1,384,023)	(1,592,129)	(1,774,402)	(1,928,628)	(2,054,905)	(2,115,830)
16.	O&M Expenses		(21,378)	(73,203)	(144,367)	(221,841)	(295,239)	(360,915)	(414,567)	(461,128)	(499,828)	(532,894)	(549,204)
17.	Net Operating Cash (Before Taxes)		97,282	357,997	743,213	1,170,264	1,593,133	1,981,089	2,287,859	2,562,347	2,801,339	2,988,503	3,074,750
18.	PV of Net Operating Cash (Before Taxes) At Project Outset		92,573	322,722	634,684	946,725	1,220,919	1,438,249	1,573,456	1,669,393	1,728,947	1,747,289	1,703,006
19.	**ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)**		92,573	415,295	1,049,979	1,996,704	3,217,623	4,655,872	6,229,328	7,898,721	9,627,668	11,374,958	13,077,964
	TAXES												
20.	Income Tax (Before Interest Tax Shield)		(16,622)	(87,621)	(191,147)	(305,388)	(421,646)	(528,706)	(613,227)	(685,854)	(751,911)	(803,367)	(827,732)
21.	Municipal Tax		(38,444)	(47,833)	(66,587)	(89,246)	(100,581)	(109,564)	(117,143)	(134,544)	(139,707)	(144,725)	(144,725)
22.	Capital Tax		-	-	-	-	-	-	-	-	-	-	-
23.	Total Taxes		(55,065)	(135,454)	(257,733)	(394,634)	(522,227)	(638,270)	(730,370)	(820,398)	(891,618)	(948,092)	(972,457)
24.	PV of Total Taxes At Project Outset		(52,400)	(122,107)	(220,098)	(319,252)	(400,216)	(463,377)	(502,306)	(534,497)	(550,294)	(554,322)	(538,613)
25.	**ACCUMULATED PV OF TOTAL TAXES**		(52,400)	(174,508)	(394,605)	(713,857)	(1,114,073)	(1,577,450)	(2,079,756)	(2,614,254)	(3,164,548)	(3,718,869)	(4,257,482)
	ACCUMULATED NPV AND PI												
26.	Net Present Value	(20,676,876)	(20,584,653)	(20,276,337)	(19,731,650)	(18,940,657)	(17,937,276)	(16,778,745)	(15,527,846)	(14,209,731)	(12,848,111)	(11,483,746)	(10,162,773)
27.	Profitability Index		0.004	0.019	0.046	0.084	0.132	0.189	0.249	0.313	0.379	0.445	0.508

Line No.	Col. 1 Description	Col. 14 Year 12	Col. 15 Year 13	Col. 16 Year 14	Col. 17 Year 15	Col. 18 Year 16	Col. 19 Year 17	Col. 20 Year 18	Col. 21 Year 19	Col. 22 Year 20	Col. 23 Year 21	Col. 24 Year 22	Col. 25 Year 23
	Discount factors to project outset	0.5247	0.4970	0.4709	0.4461	0.4226	0.4003	0.3792	0.3592	0.3403	0.3224	0.3054	0.2893
	INCREMENTAL CAPITAL INVESTMENT												
1.	Investment In Mains	-	-	-	-	-	-	-	-	-	-	-	-
2.	Investment in Services	-	-	-	-	-	-	-	-	-	-	-	-
3.	Investment in Stations	-	-	-	-	-	-	-	-	-	-	-	-
4.	Investment in Land	-	-	-	-	-	-	-	-	-	-	-	-
5.	Contribution In Aid Of Construction												
6.	Net Investment Capital	-	-	-	-	-	-	-	-	-	-	-	-
7.	Working Capital	-	-	-	-	-	-	-	-	-	-	-	-
8.	Total Investment	-	-	-	-	-	-	-	-	-	-	-	-
9.	PV Of Total Investment At Project Outset												
10.	**ACCUMULATED PV OF TOTAL INVESTMENT**	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)
	CCA TAX SHIELD												
11.	CCA Tax Shield	265,740	249,796	234,808	220,719	207,476	195,028	183,326	172,326	161,987	152,268	143,132	134,544
12.	PV Of CCA Tax Shield At Project Outset	139,431	124,160	110,562	98,453	87,670	78,068	69,518	61,904	55,124	49,087	43,711	38,924
13.	**ACCUMULATED PV OF CCA TAX SHIELD**	1,833,053	1,957,213	2,067,774	2,166,227	2,253,897	2,331,965	2,401,483	2,463,388	2,518,512	2,567,599	2,611,310	2,650,233
	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)												
14.	Gas Distribution Revenue	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784
15.	Gas Costs	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)
16.	O&M Expenses	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)
17.	Net Operating Cash (Before Taxes)	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750
18.	PV of Net Operating Cash (Before Taxes) At Project Outset	1,613,286	1,528,293	1,447,778	1,371,504	1,299,249	1,230,800	1,165,958	1,104,532	1,046,341	991,217	938,996	889,527
19.	**ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)**	14,691,250	16,219,543	17,667,321	19,038,825	20,338,074	21,568,875	22,734,833	23,839,364	24,885,706	25,876,923	26,815,919	27,705,446
	TAXES												
20.	Income Tax (Before Interest Tax Shield)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)
21.	Municipal Tax	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)
22.	Capital Tax	-	-	-	-	-	-	-	-	-	-	-	-
23.	Total Taxes	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)
24.	PV of Total Taxes At Project Outset	(510,237)	(483,356)	(457,891)	(433,768)	(410,916)	(389,268)	(368,760)	(349,332)	(330,928)	(313,494)	(296,978)	(281,332)
25.	**ACCUMULATED PV OF TOTAL TAXES**	(4,767,719)	(5,251,075)	(5,708,967)	(6,142,735)	(6,553,651)	(6,942,919)	(7,311,678)	(7,661,011)	(7,991,939)	(8,305,433)	(8,602,411)	(8,883,744)
	ACCUMULATED NPV AND PI												
26.	Net Present Value	(8,920,293)	(7,751,196)	(6,650,748)	(5,614,559)	(4,638,556)	(3,718,955)	(2,852,239)	(2,035,135)	(1,264,598)	(537,788)	147,941	795,059
27.	Profitability Index	0.569	0.625	0.678	0.728	0.776	0.820	0.862	0.902	0.939	0.974	1.007	1.038

Note a) 50% effectivity considered for the first year revenues of customer adds
Note b) Construction period from April to August 2012 considered mid-term discounting, 0.5* 5/12 = 0.208. April 2012 is project outset as time 0.
Note c) Year 1 Revenues start from September 2012 to August 2013. Year 2 Revenues start from September 2013 to August 2014, and so on.

Filed: 2011-09-29
EB-2011-0323
Exhibit E
Tab 1
Schedule 1
Page 7 of 7

Alliston
Economic Feasibility - 40 year Horizon
DCF Analysis

	Col. 1	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	Col. 41	Col. 42
Line No.	Description	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
	Discount factors to project outset	0.2741	0.2596	0.2459	0.2330	0.2207	0.2091	0.1981	0.1876	0.1777	0.1684	0.1595	0.1511	0.1431	0.1356	0.1285	0.1217	0.1153
	INCREMENTAL CAPITAL INVESTMENT																	
1.	Investment In Mains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2.	Investment in Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3.	Investment in Stations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4.	Investment in Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Contribution In Aid Of Construction																	
6.	Net Investment Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7.	Working Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8.	Total Investment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9.	PV Of Total Investment At Project Outset																	
10.	**ACCUMULATED PV OF TOTAL INVESTMENT**	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	(20,676,876)	**(20,676,876)**
	CCA TAX SHIELD																	
11.	CCA Tax Shield	126,471	118,883	111,750	105,045	98,742	92,818	87,249	82,014	77,093	72,467	68,119	64,032	60,190	56,579	53,184	49,993	429,077
12.	PV Of CCA Tax Shield At Project Outset	34,661	30,864	27,484	24,474	21,794	19,407	17,281	15,389	13,703	12,202	10,866	9,676	8,616	7,672	6,832	6,084	49,466
13.	**ACCUMULATED PV OF CCA TAX SHIELD**	2,684,894	2,715,759	2,743,243	2,767,717	2,789,510	2,808,917	2,826,198	2,841,587	2,855,290	2,867,492	2,878,358	2,888,034	2,896,650	2,904,323	2,911,155	2,917,239	**2,966,704**
	INCREMENTAL OPERATING CASHFLOWS (BEFORE TAXES)																	
14.	Gas Distribution Revenue	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784	5,739,784
15.	Gas Costs	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)	(2,115,830)
16.	O&M Expenses	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)	(549,204)
17.	Net Operating Cash (Before Taxes)	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750	3,074,750
18.	PV of Net Operating Cash (Before Taxes) At Project Outset	842,664	798,270	756,214	716,374	678,634	642,881	609,012	576,927	546,533	517,740	490,464	464,624	440,147	416,958	394,992	374,182	354,469
19.	**ACCUMULATED PV OF NET OPERATING CASH (BEFORE TAXES)**	28,548,110	29,346,379	30,102,593	30,818,968	31,497,601	32,140,482	32,749,494	33,326,422	33,872,955	34,390,694	34,881,158	35,345,782	35,785,929	36,202,887	36,597,879	36,972,061	**37,326,530**
	TAXES																	
20.	Income Tax (Before Interest Tax Shield)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)	(827,732)
21.	Municipal Tax	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)	(144,725)
22.	Capital Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23.	Total Taxes	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)	(972,457)
24.	PV of Total Taxes At Project Outset	(266,511)	(252,470)	(239,169)	(226,569)	(214,633)	(203,325)	(192,613)	(182,466)	(172,853)	(163,747)	(155,120)	(146,948)	(139,206)	(131,872)	(124,925)	(118,343)	(112,109)
25.	**ACCUMULATED PV OF TOTAL TAXES**	(9,150,254)	(9,402,725)	(9,641,894)	(9,868,463)	(10,083,096)	(10,286,421)	(10,479,034)	(10,661,500)	(10,834,353)	(10,998,100)	(11,153,220)	(11,300,167)	(11,439,373)	(11,571,245)	(11,696,170)	(11,814,513)	**(11,926,622)**
	ACCUMULATED NPV AND PI																	
26.	Net Present Value	1,405,873	1,982,537	2,527,066	3,041,345	3,527,139	3,986,102	4,419,782	4,829,632	5,217,015	5,583,210	5,929,420	6,256,773	6,566,329	6,859,088	7,135,987	7,397,910	**7,689,736**
27.	Profitability Index	1.068	1.096	1.122	1.147	1.171	1.193	1.214	1.234	1.252	1.270	1.287	1.303	1.318	1.332	1.345	1.358	**1.372**

Note a) 50% effectivity considered for the first year revenues of customer adds
Note b) Construction period from April to August 2012 considered mid-term dis
Note c) Year 1 Revenues start from September 2012 to August 2013. Year 2 I