

Flakeboard
Interrogatory No. 1

Reference: Direct testimony of Mr. Charleson and Mr. LeBlanc filed June 7, 2010, page 4, Q5. Reference is made to single end use franchises (“SEUF’s”).

Interrogatory:

A. Please identify which of the SEUF’s referred to in the evidence were granted:

- i) after the granting of EGNB’s General Franchise for New Brunswick ;
- ii) after EGNB’s 2000 application to the Public Utilities Board to set rates.

B. For each of those SEUF’s identified in sub-parts i) and ii), please identify the estimated current annual throughput for each of such SEUF’s.

Response:

A.

- i) The following SEUFs were granted on February 25, 2000, after EGNB was granted the General Franchise for New Brunswick:
 - Irving Oil Refining GP (formerly Irving Oil Limited)
 - Lake Utopia Paper, div of J.D. Irving, Limited
 - Irving Pulp & Paper, Limited
 - Irving Paper, div of Irving Pulp & Paper, Limited
 - Bayside Power, LP

TransCanada Energy was also granted a SEUF by the then Public Utilities Board on January 6, 2004.

- ii) all of the SEUFs identified above were granted after EGNB’s 2000 application to the Public Utilities Board to set rates.

B. EGNB does not have information related to the annual throughput for each individual SEUF. However, EGNB is able to estimate the aggregate consumption of the SEUFs based on information from Statistics Canada.

The most recent throughput information available relates to 2008, where Statistics Canada reported that 781,332 10^3m^3 of gas utility and direct sales occurred in New Brunswick (see <http://www.statcan.gc.ca/pub/57-601-x/2009003/t096-eng.htm>). This equals approximately 31,136 TJs of throughput. In 2008, EGNB delivered 5,042 TJs of natural gas, meaning approximately 26,094 TJs were consumed by the SEUFs.

**Flakeboard
Interrogatory No. 2**

Reference: Direct testimony of Mr. Charleson and Mr. LeBlanc filed June 7, 2010, page 5, Q6.

Interrogatory:

- A. Provide all evidence EGNB has to support its evidence that natural gas' price advantage over electricity "evaporated quickly just as EGNB entered the market ..."
- B. Provide a chart which identifies the price advantage, or disadvantage as the case may be, of natural gas relative to electricity commencing in 1995 and running through to the current date. Please identify in this how the 'price advantage' is determined.
- C. Provide the same for the price advantage/disadvantage of natural gas to light fuel oil during the same period.

Response:

- A. The following table compares the projected end-use energy costs for electricity and natural gas for the period 2001 to 2020. This forecast was prepared in March 1999 and was included in EGNB's Proposal to the province.

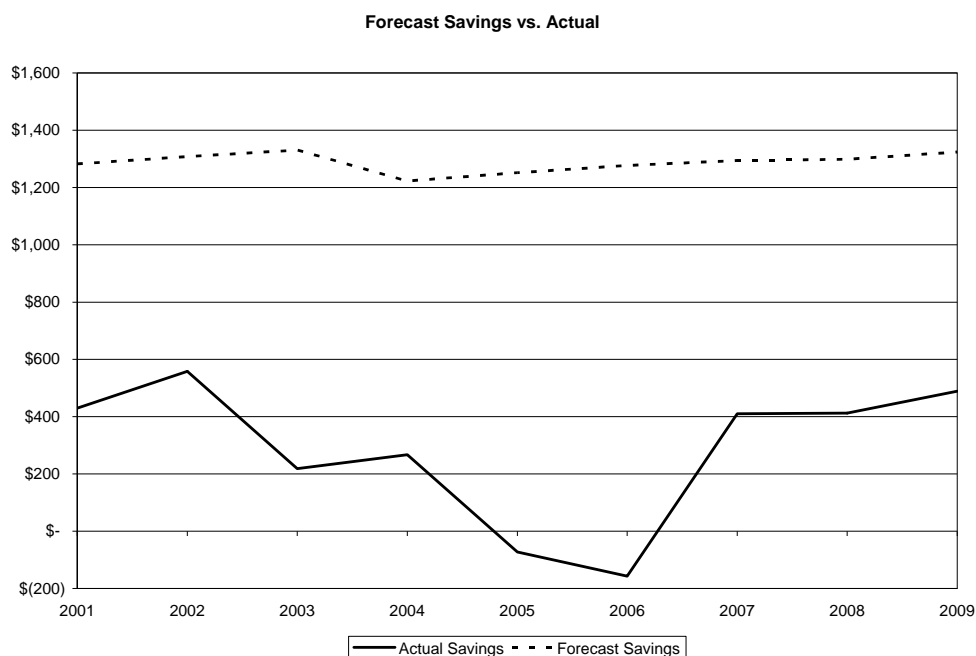
Projected New Brunswick End-User Energy Prices - Electric										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Residential										
\$/GJ Electricity (NB Power)	\$ 19.85	\$ 20.18	\$ 20.55	\$ 21.00	\$ 21.46	\$ 21.93	\$ 22.39	\$ 22.80	\$ 23.28	\$ 23.77
Electric Annual Cost	\$ 1,896	\$ 1,928	\$ 1,963	\$ 2,006	\$ 2,050	\$ 2,095	\$ 2,139	\$ 2,178	\$ 2,223	\$ 2,270
\$/GJ Natural Gas	\$ 5.37	\$ 5.43	\$ 5.54	\$ 6.86	\$ 7.00	\$ 7.17	\$ 7.40	\$ 7.71	\$ 7.88	\$ 8.09
Natural Gas Annual Cost	\$ 613	\$ 620	\$ 632	\$ 783	\$ 798	\$ 818	\$ 845	\$ 879	\$ 899	\$ 923
Absolute Savings Over Electric	\$ 1,283	\$ 1,308	\$ 1,331	\$ 1,223	\$ 1,252	\$ 1,277	\$ 1,294	\$ 1,298	\$ 1,324	\$ 1,347
Relative Savings Over Electric	68%	68%	68%	61%	61%	61%	61%	60%	60%	59%

The following table compares the actual end-use energy costs for the period March 2001 to June 2010:

Actual New Brunswick End-User Energy Prices - Electric										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Residential										
	(9Months)									(6 months)
\$/GJ Electricity (NB Power)	\$ 17.93	\$ 17.72	\$ 18.20	\$ 18.71	\$ 19.58	\$ 20.71	\$ 22.70	\$ 24.95	\$ 26.02	\$ 26.55
Electric Annual Cost	\$ 1,713	\$ 1,692	\$ 1,739	\$ 1,788	\$ 1,870	\$ 1,978	\$ 2,169	\$ 2,383	\$ 2,485	\$ 2,536
\$/GJ Natural Gas	\$ 11.24	\$ 9.94	\$ 13.32	\$ 13.33	\$ 17.03	\$ 18.72	\$ 15.41	\$ 17.28	\$ 17.50	\$ 16.89
Natural Gas Annual Cost	\$ 1,283	\$ 1,134	\$ 1,520	\$ 1,521	\$ 1,943	\$ 2,135	\$ 1,759	\$ 1,971	\$ 1,996	\$ 1,927
Absolute Savings Over Electric	\$ 430	\$ 558	\$ 219	\$ 267	\$ (73)	\$ (157)	\$ 410	\$ 412	\$ 489	\$ 609
Relative Savings Over Electric	25%	33%	13%	15%	-4%	-8%	19%	17%	20%	24%

The relative savings in the electric market was forecast to range from 68% in 2001 to 59% by 2010. Actual relative savings ranged from 25% in 2001 to negative 8% in 2006. Savings increased in 2007 to 19% as a result of the introduction of the SGSRE rate, which

necessitated a \$4.21 per GJ reduction in the distribution rate. The following chart depicts the actual full year relative saving versus the March 1999 forecast for the period 2002 to 2009.



This clearly demonstrates that the price advantage over electricity evaporated between the time EGNB prepared its proposal and when it entered the market.

B. The following table shows the actual monthly costs and savings between natural gas and electricity for the period March 2001 to June 2010:

Date	Delivered Gas \$/GJ	Total Delivered		Total Delivered Cost NB Power	Absolute Savings	Relative Savings
		Cost SGS or SGSRE	NBP \$/GJ			
Mar-01	12.37	190.89	16.48	225.81	34.93	15%
Apr-01	13.18	129.84	16.88	142.32	12.49	9%
May-01	13.14	83.46	17.33	88.67	5.21	6%
Jun-01	14.36	35.36	20.04	35.27	(0.09)	0%
Jul-01	13.09	36.12	18.83	42.38	6.26	15%
Aug-01	12.58	39.71	18.26	49.55	9.84	20%
Sep-01	10.83	41.98	17.81	61.10	19.12	31%
Oct-01	9.86	39.67	17.91	64.61	24.94	39%
Nov-01	9.93	114.92	16.60	172.64	57.72	33%
Dec-01	8.41	127.57	16.49	223.42	95.85	43%
Total	11.24	839.50	17.93	1,105.77	266.27	24%

Date	Delivered Gas \$/GJ	Total Delivered		Total Delivered Cost NB Power	Absolute Savings	Relative Savings
		Cost SGS or SGSRE	NBP \$/GJ			
Jan-02	8.52	183.97	16.29	309.97	126.00	41%
Feb-02	7.84	139.93	16.35	254.28	114.35	45%
Mar-02	8.51	131.30	16.48	225.81	94.52	42%
Apr-02	10.50	103.43	17.35	146.14	42.71	29%
May-02	10.82	68.69	17.78	90.87	22.18	24%
Jun-02	13.91	34.25	20.42	35.84	1.59	4%
Jul-02	13.39	36.94	19.25	43.20	6.26	14%
Aug-02	12.32	38.90	18.69	50.59	11.70	23%
Sep-02	12.16	47.15	18.26	62.49	15.34	25%
Oct-02	12.54	50.48	18.35	66.06	15.58	24%
Nov-02	11.28	130.51	17.08	177.45	46.94	26%
Dec-02	11.10	168.47	16.97	229.78	61.32	27%
Total	9.94	1,134.00	17.72	1,692.48	558.48	33%
Jan-03	11.87	256.31	16.78	319.07	62.75	20%
Feb-03	12.76	227.72	16.84	261.66	33.94	13%
Mar-03	17.61	271.78	16.96	232.25	(39.54)	-17%
Apr-03	12.33	121.46	17.78	149.98	28.51	19%
May-03	13.72	87.10	18.20	93.20	6.10	7%
Jun-03	16.70	41.12	20.74	36.64	(4.49)	-12%
Jul-03	16.18	44.63	19.61	44.23	(0.39)	-1%
Aug-03	15.34	48.43	19.07	51.84	3.41	7%
Sep-03	14.63	56.72	18.66	64.06	7.34	11%
Oct-03	13.67	55.01	18.75	67.69	12.69	19%
Nov-03	11.72	135.66	17.52	182.24	46.58	26%
Dec-03	11.48	174.16	17.42	236.02	61.86	26%
Total	13.32	1,520.11	18.20	1,738.88	218.77	13%
Jan-04	11.24	242.75	17.23	327.89	85.14	26%
Feb-04	11.76	209.93	17.29	268.87	58.94	22%
Mar-04	11.86	183.14	17.41	238.56	55.42	23%
Apr-04	12.31	121.20	18.31	154.41	33.21	22%
May-04	14.43	91.61	18.70	95.78	4.17	4%
Jun-04	18.21	44.84	21.10	37.34	(7.50)	-20%
Jul-04	17.69	48.79	20.03	45.23	(3.56)	-8%
Aug-04	17.14	54.11	19.52	53.11	(1.01)	-2%
Sep-04	16.43	63.69	19.13	65.72	2.02	3%
Oct-04	16.32	65.67	19.22	69.42	3.75	5%
Nov-04	15.27	176.73	18.06	187.86	11.12	6%
Dec-04	14.38	218.16	17.96	243.42	25.26	10%
Total	13.33	1,520.63	18.71	1,787.61	266.98	15%
Jan-05	14.14	305.36	17.79	338.48	33.12	10%
Feb-05	14.26	254.56	17.85	277.47	22.91	8%
Mar-05	14.36	221.72	18.50	253.29	31.56	12%
Apr-05	16.11	158.70	18.86	159.06	0.36	0%
May-05	17.63	111.97	19.26	98.65	(13.32)	-14%
Jun-05	20.30	49.98	21.71	38.44	(11.54)	-30%
Jul-05	20.29	55.99	21.23	47.95	(8.04)	-17%
Aug-05	19.74	62.35	20.70	56.30	(6.05)	-11%
Sep-05	20.14	78.06	20.28	69.67	(8.39)	-12%
Oct-05	22.00	88.51	20.38	73.60	(14.92)	-20%
Nov-05	21.19	245.20	19.16	199.23	(45.97)	-23%
Dec-05	20.49	310.97	19.05	258.17	(52.80)	-20%
Total	17.03	1,943.36	19.58	1,870.30	(73.06)	-4%
Jan-06	18.69	403.60	18.87	359.01	(44.59)	-12%
Feb-06	18.29	326.52	18.93	294.29	(32.23)	-11%
Mar-06	17.93	276.76	19.05	260.95	(15.81)	-6%
Apr-06	18.52	182.40	19.41	163.75	(18.65)	-11%
May-06	19.41	123.27	19.83	101.56	(21.71)	-21%
Jun-06	22.74	56.00	22.36	39.57	(16.43)	-42%
Jul-06	22.54	62.19	22.93	51.44	(10.75)	-21%
Aug-06	21.81	68.87	22.35	60.47	(8.41)	-14%
Sep-06	21.52	83.42	21.91	74.91	(8.51)	-11%
Oct-06	20.37	81.97	22.01	79.15	(2.82)	-4%
Nov-06	17.78	205.69	20.69	214.82	9.13	4%
Dec-06	17.45	264.75	20.58	278.47	13.73	5%
Total	18.72	2,135.43	20.71	1,978.39	(157.04)	-8%

Date	Delivered Gas \$/GJ	Total Delivered		Total Delivered Cost NB Power	Absolute Savings	Relative Savings
		Cost SGS or SGSRE	NBP \$/GJ			
Jan-07	14.04	303.14	20.38	387.38	84.24	22%
Feb-07	14.19	253.41	20.44	317.48	64.06	20%
Mar-07	14.34	221.27	20.57	281.48	60.21	21%
Apr-07	15.92	156.84	20.97	176.51	19.67	11%
May-07	16.82	106.79	21.42	109.34	2.55	2%
Jun-07	20.80	51.21	25.27	44.05	(7.16)	-16%
Jul-07	19.55	53.93	24.69	54.87	0.94	2%
Aug-07	18.22	57.52	24.42	65.62	8.10	12%
Sep-07	17.28	66.96	24.21	82.26	15.30	19%
Oct-07	17.12	68.91	24.26	86.74	17.83	21%
Nov-07	15.62	180.74	23.63	244.62	63.88	26%
Dec-07	15.69	238.10	23.58	318.30	80.20	25%
Total	15.41	1,758.84	22.70	2,168.65	409.81	19%
Jan-08	15.38	332.05	23.48	445.61	113.56	25%
Feb-08	15.53	277.32	23.51	364.38	87.06	24%
Mar-08	16.82	259.69	23.58	321.82	62.12	19%
Apr-08	19.04	187.49	24.45	204.92	17.43	9%
May-08	19.93	126.56	24.68	125.14	(1.42)	-1%
Jun-08	23.47	57.78	26.02	45.38	(12.41)	-27%
Jul-08	23.57	65.02	25.42	56.50	(8.52)	-15%
Aug-08	21.43	67.69	25.14	67.35	(0.34)	-1%
Sep-08	18.80	72.85	24.92	84.46	11.61	14%
Oct-08	19.47	78.34	24.97	89.08	10.73	12%
Nov-08	16.87	195.25	24.31	251.49	56.24	22%
Dec-08	16.55	251.06	24.26	327.29	76.23	23%
Total	17.28	1,971.11	24.95	2,383.40	412.29	17%
Jan-09	16.23	350.49	24.16	458.25	107.76	24%
Feb-09	16.40	292.73	24.19	374.68	81.95	22%
Mar-09	17.32	267.35	24.26	330.91	63.55	19%
Apr-09	17.31	170.48	25.88	216.94	46.45	21%
May-09	19.14	121.54	26.00	131.89	10.35	8%
Jun-09	22.67	55.82	26.68	46.77	(9.05)	-19%
Jul-09	21.97	60.61	26.38	58.78	(1.84)	-3%
Aug-09	20.87	65.90	26.23	70.39	4.50	6%
Sep-09	19.93	77.25	26.12	88.63	11.38	13%
Oct-09	19.78	79.59	26.15	93.37	13.78	15%
Nov-09	17.18	198.84	25.82	267.00	68.17	26%
Dec-09	16.86	255.76	25.79	347.88	92.12	26%
Total	17.50	1,996.35	26.02	2,485.49	489.13	20%
Jan-10	16.54	357.17	25.74	488.12	130.94	27%
Feb-10	16.70	298.09	25.75	398.83	100.74	25%
Mar-10	16.51	254.81	25.79	351.75	96.95	28%
Apr-10	16.60	163.46	25.88	216.94	53.48	25%
May-10	17.89	113.60	26.00	131.89	18.28	14%
Jun-10	22.23	54.74	26.68	46.77	(7.98)	-17%
Total	16.89	1,241.88	26.55	1,634.29	392.41	24%

Since there was no natural gas service available to the public prior to March 2001, it is the earliest date that a comparison can be made. The methodology used to compare the costs is the same methodology used for rate making purposes. Distribution rates are those approved for EGNB and NB Power. The gas commodity from May 2003 on is based on EUG. Prior to this, the price is based on the formula used in NB PUB 299 Exhibit 0.

- C. The following table shows the actual monthly costs and savings between natural gas and heating oil for the period March 2001 to June 2010:

Date	Delivered Gas \$/GJ	Total Delivered Cost SGS or SGSRO	Oil \$/GJ	Total \$Oil	Absolute Savings	Relative Savings
Mar-01	12.39	185.74	14.45	277.47	91.74	33%
Apr-01	13.20	127.93	13.60	168.80	40.88	24%
May-01	13.24	79.87	13.88	107.21	27.35	26%
Jun-01	16.70	27.79	14.58	31.07	3.28	11%
Jul-01	14.56	30.04	13.54	35.77	5.73	16%
Aug-01	14.29	31.11	13.50	37.65	6.54	17%
Sep-01	12.01	33.69	13.77	49.44	15.75	32%
Oct-01	9.48	43.67	12.49	73.68	30.01	41%
Nov-01	10.22	92.30	11.83	136.80	44.49	33%
Dec-01	8.29	148.07	11.64	266.26	118.20	44%
Total	11.28	800.19	13.04	1,184.16	383.98	32%
Jan-02	8.49	195.13	11.80	347.49	152.35	44%
Feb-02	7.76	156.19	11.43	294.59	138.40	47%
Mar-02	8.53	127.86	12.01	230.51	102.65	45%
Apr-02	10.52	101.95	13.47	167.11	65.16	39%
May-02	10.92	65.84	13.63	105.29	39.45	37%
Jun-02	16.25	27.04	13.81	29.44	2.40	8%
Jul-02	14.85	30.65	13.36	35.32	4.67	13%
Aug-02	14.03	30.55	13.90	38.76	8.22	21%
Sep-02	13.35	37.43	15.11	54.27	16.84	31%
Oct-02	12.17	56.04	14.97	88.28	32.24	37%
Nov-02	11.57	104.47	14.36	166.03	61.56	37%
Dec-02	10.98	196.21	13.95	319.06	122.85	39%
Total	9.91	1,129.36	12.85	1,876.13	746.77	40%
Jan-03	11.84	272.18	14.92	439.34	167.16	38%
Feb-03	12.68	255.13	15.90	409.82	154.69	38%
Mar-03	17.63	264.30	16.18	310.70	46.40	15%
Apr-03	12.35	119.69	13.53	167.96	48.27	29%
May-03	13.82	83.32	13.22	102.09	18.77	18%
Jun-03	19.04	31.69	12.74	27.15	(4.54)	-17%
Jul-03	17.64	36.40	13.32	35.19	(1.21)	-3%
Aug-03	17.05	37.12	13.41	37.38	0.26	1%
Sep-03	15.82	44.35	13.31	47.79	3.44	7%
Oct-03	13.29	61.22	11.82	69.70	8.48	12%
Nov-03	12.02	108.49	12.60	145.75	37.26	26%
Dec-03	11.36	202.91	13.45	307.61	104.70	34%
Total	13.31	1,516.81	14.39	2,100.49	583.68	28%
Jan-04	11.21	257.74	12.92	380.35	122.61	32%
Feb-04	11.68	235.08	13.63	351.15	116.06	33%
Mar-04	11.89	178.21	14.25	273.51	95.30	35%
Apr-04	12.33	119.43	14.65	181.87	62.43	34%
May-04	14.53	87.60	14.79	114.21	26.61	23%
Jun-04	20.55	34.20	16.14	34.40	0.20	1%
Jul-04	19.15	39.52	15.36	40.58	1.06	3%
Aug-04	18.85	41.04	16.12	44.96	3.92	9%
Sep-04	17.62	49.40	17.23	61.87	12.47	20%
Oct-04	15.94	73.42	15.92	93.92	20.50	22%
Nov-04	15.57	140.54	17.57	203.17	62.63	31%
Dec-04	14.26	254.71	16.24	371.65	116.93	31%
Total	13.25	1,510.90	14.74	2,151.64	640.74	30%
Jan-05	14.11	324.41	15.63	460.26	135.84	30%
Feb-05	14.18	285.38	16.13	415.72	130.34	31%
Mar-05	14.39	215.68	16.88	323.99	108.31	33%
Apr-05	16.13	156.32	18.53	229.93	73.61	32%
May-05	17.73	106.94	18.20	140.58	33.63	24%
Jun-05	22.63	37.67	16.14	34.41	(3.26)	-9%
Jul-05	21.76	44.90	18.63	49.24	4.35	9%
Aug-05	21.45	46.72	18.55	51.72	5.00	10%
Sep-05	21.32	59.80	19.82	71.17	11.38	16%
Oct-05	21.62	99.57	19.96	117.70	18.13	15%
Nov-05	21.48	193.96	18.76	216.98	23.01	11%
Dec-05	20.38	363.98	17.29	395.56	31.58	8%
Total	16.98	1,935.33	17.17	2,507.26	571.93	23%

Date	Delivered Gas \$/GJ	Total Delivered Cost SGS or SGSRO	Oil \$/GJ	Total \$Oil	Absolute Savings	Relative Savings
Jan-06	18.65	428.82	17.67	520.29	91.47	18%
Feb-06	18.19	365.98	19.96	514.47	148.49	29%
Mar-06	17.96	269.25	18.40	353.35	84.10	24%
Apr-06	18.54	179.70	18.06	224.18	44.48	20%
May-06	19.55	117.88	20.09	155.15	37.27	24%
Jun-06	25.86	43.04	19.56	41.68	(1.35)	-3%
Jul-06	24.50	50.55	19.76	52.21	1.67	3%
Aug-06	24.09	52.46	20.51	57.19	4.73	8%
Sep-06	23.10	64.78	20.37	73.16	8.38	11%
Oct-06	19.87	91.50	17.80	104.99	13.49	13%
Nov-06	18.17	164.01	17.08	197.47	33.46	17%
Dec-06	17.29	308.85	17.09	391.06	82.21	21%
Total	18.74	2,136.82	18.39	2,685.22	548.40	20%
Jan-07	18.23	419.11	19.19	565.11	146.00	26%
Feb-07	18.33	368.75	16.24	418.49	49.74	12%
Mar-07	18.60	278.81	17.86	342.83	64.01	19%
Apr-07	20.18	195.57	17.03	211.31	15.75	7%
May-07	21.18	127.75	17.92	138.40	10.64	8%
Jun-07	28.14	46.84	17.78	37.89	(8.95)	-24%
Jul-07	25.74	53.10	18.22	48.14	(4.96)	-10%
Aug-07	24.73	53.85	19.94	55.62	1.77	3%
Sep-07	23.09	64.74	18.05	64.83	0.09	0%
Oct-07	21.15	97.42	19.92	117.49	20.07	17%
Nov-07	19.89	179.58	20.59	238.06	58.48	25%
Dec-07	19.72	352.22	22.89	523.77	171.55	33%
Total	19.63	2,237.74	18.92	2,761.93	524.19	19%
Jan-08	19.52	448.77	22.13	651.61	202.84	31%
Feb-08	19.62	394.70	21.73	560.05	165.35	30%
Mar-08	21.04	315.39	24.02	461.13	145.74	32%
Apr-08	24.53	237.66	25.07	311.17	73.51	24%
May-08	25.53	153.95	27.74	214.28	60.33	28%
Jun-08	33.51	55.77	30.23	64.45	8.67	13%
Jul-08	32.45	66.96	31.26	82.60	15.64	19%
Aug-08	30.64	66.72	31.11	86.76	20.04	23%
Sep-08	27.30	76.56	28.43	102.13	25.56	25%
Oct-08	24.12	111.09	33.26	196.21	85.12	43%
Nov-08	22.42	202.40	21.80	252.06	49.65	20%
Dec-08	21.54	384.81	16.75	383.12	(1.69)	0%
Total	22.06	2,514.79	23.05	3,365.57	850.77	25%
Jan-09	17.70	406.95	17.63	519.17	112.22	22%
Feb-09	15.76	317.10	18.22	469.54	152.44	32%
Mar-09	16.59	248.74	16.79	322.30	73.57	23%
Apr-09	16.58	160.62	17.09	212.08	51.46	24%
May-09	20.58	124.08	16.19	125.02	0.94	1%
Jun-09	27.09	45.08	18.49	39.42	(5.66)	-14%
Jul-09	25.23	52.05	19.53	51.61	(0.44)	-1%
Aug-09	25.27	55.03	19.01	53.00	(2.03)	-4%
Sep-09	23.63	66.27	19.00	68.26	1.99	3%
Oct-09	21.40	98.56	18.80	110.88	12.32	11%
Nov-09	19.70	177.85	20.20	233.57	55.72	24%
Dec-09	18.82	336.22	20.40	466.62	130.40	28%
Total	18.32	2,088.55	18.30	2,671.47	582.92	22%
Jan-10	18.62	428.18	20.96	617.13	188.95	31%
Feb-10	18.72	376.68	19.60	504.97	128.29	25%
Mar-10	18.66	279.78	20.01	384.17	104.39	27%
Apr-10	18.75	181.66	20.72	257.16	75.51	29%
May-10	21.11	127.33	22.12	170.85	43.52	25%
Jun-10	27.67	46.06	20.18	43.01	(3.05)	-7%
Total	19.07	1,439.68	20.45	1,977.28	537.60	27%

Since there was no natural gas service available to the public prior to March 2001, it is the earliest date that a comparison can be made. The methodology used to compare the costs is

the same methodology used for rate making purposes. Distribution rates are those approved for EGNB. The retail price of heating oil is based on the approved methodology used between 2001 and 2008, which is derived from the price of crude. The retail price after January 2009 is derived from the cost of heating oil at New York Harbour due to a change in the Board approved methodology. The gas commodity from May 2003 on is based on EUG. Prior to this, the price is based on the formula used in the NBPUB 299 Exhibit 0.

EGNB notes that the conversion costs for residential customers from oil are significantly less than those required to convert from electric baseboard heat.

**Flakeboard
Interrogatory No. 3**

Reference:

Interrogatory:

A. In the 2000 rate hearing before the Public Utilities Board, EGNB provided projections of throughput, number of customers, etc for the future. For each year during the period from 2000 to 2009, inclusive, what portion of the throughput then projected by EGNB was to be attributable to customers whose alternative energy source was considered to be:

- i) electricity?
- ii) light fuel oil?

B. Identify what portion of the actual 2009 throughput was attributable to customers whose alternative energy source is considered to be:

- i) electricity; and
- ii) light fuel oil.

Response:

A. The following table shows, in GJs, the projected throughput attributed to the displacement of electricity and oil, as well as the percentage of total throughput that each represented.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Electricity Conversions Throughput										
Residential										
Southern Region	97,296	343,436	596,542	737,810	809,804	866,825	1,000,281	1,182,451	1,421,957	1,680,277
Northeast Region	-	-	8,589	45,829	97,145	133,825	158,518	175,476	191,048	214,476
Northwest Region	-	-	-	-	6,296	36,687	77,046	95,981	101,495	108,695
	<u>97,296</u>	<u>343,436</u>	<u>605,131</u>	<u>783,639</u>	<u>913,245</u>	<u>1,037,337</u>	<u>1,235,845</u>	<u>1,453,908</u>	<u>1,714,500</u>	<u>2,003,448</u>
Commerical/Institutional/Light Industrial										
Southern Region	667,243	1,420,599	1,811,185	2,360,951	2,760,471	3,058,805	330,421	3,463,185	3,559,721	3,641,519
Northeast Region	-	-	109,985	238,967	337,402	458,728	546,735	640,725	726,761	796,001
Northwest Region	-	-	-	-	75,376	161,209	189,749	227,413	272,039	324,718
	<u>667,243</u>	<u>1,420,599</u>	<u>1,921,170</u>	<u>2,599,918</u>	<u>3,173,249</u>	<u>3,678,742</u>	<u>1,066,905</u>	<u>4,331,323</u>	<u>4,558,521</u>	<u>4,762,238</u>
Large Volume										
Southern Region	-	-	-	-	-	-	-	-	-	-
Northeast Region	-	-	-	-	-	-	-	-	-	-
Northwest Region	-	-	-	-	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Combined Total (Electricity)	<u>764,539</u>	<u>1,764,035</u>	<u>2,526,301</u>	<u>3,383,557</u>	<u>4,086,494</u>	<u>4,716,079</u>	<u>2,302,750</u>	<u>5,785,231</u>	<u>6,273,021</u>	<u>6,765,686</u>
% of Total Throughput	<u>36.9%</u>	<u>39.7%</u>	<u>38.8%</u>	<u>38.1%</u>	<u>39.0%</u>	<u>39.4%</u>	<u>17.5%</u>	<u>40.4%</u>	<u>40.7%</u>	<u>41.1%</u>

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Oil Conversions Throughput										
Residential										
Southern Region	34,021	113,372	189,300	234,191	266,441	319,597	415,993	571,755	766,497	934,254
Northeast Region	-	-	-	10,006	26,768	39,350	50,016	59,906	73,253	94,687
Northwest Region	-	-	-	-	-	8,448	22,598	29,949	33,475	38,978
	<u>34,021</u>	<u>113,372</u>	<u>189,300</u>	<u>244,197</u>	<u>293,209</u>	<u>367,395</u>	<u>488,607</u>	<u>661,610</u>	<u>873,225</u>	<u>1,067,919</u>
Commerical/Institutional/Light Industrial										
Southern Region	708,312	1,508,027	1,922,664	2,506,268	2,930,379	3,246,545	3,503,563	3,676,345	3,788,377	3,865,657
Northeast Region	-	-	86,861	188,727	266,466	362,285	431,790	506,019	573,967	628,650
Northwest Region	-	-	-	-	52,401	112,070	131,911	158,095	189,118	225,740
	<u>708,312</u>	<u>1,508,027</u>	<u>2,009,525</u>	<u>2,694,995</u>	<u>3,249,246</u>	<u>3,720,900</u>	<u>4,067,264</u>	<u>4,340,459</u>	<u>4,551,462</u>	<u>4,720,047</u>
Large Volume										
Southern Region	62,968	125,937	127,830	129,723	129,723	129,723	129,723	129,723	129,723	129,723
Northeast Region	-	-	-	-	-	-	-	-	-	-
Northwest Region	-	-	-	-	-	-	-	-	-	-
	<u>62,968</u>	<u>125,937</u>	<u>127,830</u>	<u>129,723</u>	<u>129,723</u>	<u>129,723</u>	<u>129,723</u>	<u>129,723</u>	<u>129,723</u>	<u>129,723</u>
Combined Total (Light Fuel Oil)	<u>805,301</u>	<u>1,747,336</u>	<u>2,326,655</u>	<u>3,068,915</u>	<u>3,672,178</u>	<u>4,218,018</u>	<u>4,685,594</u>	<u>5,131,792</u>	<u>5,554,410</u>	<u>5,917,689</u>
% of Total Throughput	<u>38.9%</u>	<u>39.4%</u>	<u>35.8%</u>	<u>34.5%</u>	<u>35.0%</u>	<u>35.3%</u>	<u>35.5%</u>	<u>35.8%</u>	<u>36.0%</u>	<u>36.0%</u>

B. In 2009, 1,366 TJs or 26% of actual throughput was estimated to be attributable to customers whose alternate energy source is considered to be electricity. This includes residential electric customers who either converted electric equipment to natural gas or built with natural gas and commercial customers who converted electric equipment to natural gas. 2,869 TJs or 55% of actual throughput was estimated to be attributable to light fuel oil, with the remainder of consumption being attributed to heavy fuel oil.

Flakeboard
Interrogatory No. 4

Reference:

Interrogatory:

- A. Identify the details of any occasion since 2000 on which EGNB was unable to attract investors in EGNB. Include in the details the amount involved, the reasons identified for such inability to attract investors, the timeframe of such difficulties and the outcome of such attempt(s) to attract investors. Provide all documents to support your response.

Response:

- A. To date, EGNB has been able to attract sufficient investor interest to fulfill its capital requirements. However, EGNB notes that its partnership agreement allows for non-Enbridge partners to liquidate their investment back to Enbridge in January of each year. In 2010, 31 New Brunswick based investors (by far the largest number of individuals ever) out of the 111 New Brunswick based investors and 184 independent investors liquidated all or part of their investment. EGNB believes the motivation for this large liquidation of units was due to the increased perceived risk of the investment as a result of information in the media in the fall of 2009.

Flakeboard
Interrogatory No. 5

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010.

Interrogatory:

- A. With the exception of Heritage Gas in Nova Scotia and EGNB, please indicate all of the cases involving “greenfield” utilities in which Ms. McShane was involved as an expert giving evidence before a utility regulator with respect to the costs of capital. Include, as part of your response, the details of the utility involved, the regulated service provided by the utility, the name of the regulatory board and its relevant jurisdiction, as well as the approximate dates when such evidence was given or filed.
- B. What, if any, other cases of such a regulated greenfield utility is Ms. McShane aware within the United States or Canada? To the extent Ms. McShane is aware of others, please provide the same information with respect to such cases as sought in Part A above.

Response:

- A. Ms. McShane filed cost of capital evidence for Maritimes (NRG) before the Nova Scotia Utility and Review Board in January 1999 in its application for the natural gas distribution franchise in Nova Scotia. The franchise was subsequently awarded to Sempra Atlantic Gas. She also filed evidence for Centra Gas B.C., now Terasen Gas (Vancouver Island), before the British Columbia Utilities Commission in July 2002 and June 2005. Centra Gas is a natural gas distribution utility. She also filed evidence for the Mackenzie Valley Pipeline before the National Energy Board in January 2005. The Mackenzie Valley Pipeline is a proposed natural gas transmission pipeline. She filed evidence on behalf of Enbridge Southern Lights before the National Energy Board in June 2007. Enbridge Southern Lights is a diluent pipeline.
- B. In Canada, Ms. McShane is aware of Inuvik Gas, a gas distribution utility serving Inuvik, in the Northwest Territories, which began commercial operations in 2000. She is aware that the utility was exempted from regulation as a public utility by the Public Utilities Board of the Northwest Territories and is subject to light-handed regulation. She is not aware of any cost of capital evidence having been filed with the regulator.

In the U.S. Ms. McShane is aware of Frontier Natural Gas and Bangor Natural Gas. Frontier Natural Gas (formerly Frontier Energy) is a small natural gas utility which commenced service in 2002 in four rural North Carolina counties. As of November 2009, the company serves approximately 960 customers in six counties. Rates are market-based. Bangor Natural Gas was formed in 1997. The Company currently operates under a multi-year rate plan which was initially approved in 1998 and has been extended to 2011 in connection with Energy West’s acquisition of Bangor Gas from Sempra Energy. The initial plan contained a 15% ROE trigger for earnings sharing purposes. The ROE trigger was increased to 30% as

part of the Energy West Acquisition. Earnings in excess of 30% are shared equally between ratepayers and shareholders. She is not aware of any cost of capital evidence having been filed with respect to those utilities.

Flakeboard
Interrogatory No. 6

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010, page 15; references is made by Ms. McShane to an incremental risk premium in 2000 estimated at 200 to 300 basis points above the returns for mature gas distribution utilities.

Interrogatory:

Provide the details of how Ms. McShane determined that the incremental risk premium for EGNB adopted in 2000 was 200 to 300 basis points above the return for mature gas distribution utilities. Please provide all evidence and calculations to support such determination.

Response:

The conclusion was based on the testimony that Ms. McShane filed in NBPUB 299. A copy of that testimony is attached.

Flakeboard
Interrogatory No. 7

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010, page 6; Ms. McShane's evidence states: "Fair compensation of the capital committed to the utility provides the financial means to pursue technological innovations and ..."

Interrogatory:

Please cite all technological innovations developed by EGNB since 1999, providing details of the same including the approximate cost of developing such innovation and the economic savings achieved by EGNB from the same.

Response:

The comment was intended to be a general statement, not specific to EGNB. Examples of technological innovations in the utility industries include electronic metering, computerized billing systems, computer systems to control and monitor gas flows, new piping and trenching techniques, and smart grid technologies.

Flakeboard
Interrogatory No. 8

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010, page 14; Ms. McShane's evidence states: "Over the past five years, for every dollar that has been distributed there has been \$1.60 invested in EGNB, much of it coming from the existing partners."

Interrogatory:

- A. Provide the calculations and evidence to support this evidence.
- B. For all of the money invested in EGNB over the past five years and identify that portion which came from existing partners. In response to this, identify the precise nature of the investments so made.

Response:

- A. As seen in the response to AWL Interrogatory No. 10(a), EGNB paid \$83.0 million in distributions to investors between 2005 and 2009. During that same period, as seen in the response to Board Interrogatory No. 3(3), EGNB raised \$130.3 million in equity. The \$1.60 arises from these figures ($130.3/83 = 1.6$).

EGNB notes that in addition to the equity invested between 2005 and 2009, an additional \$131.0 million has been invested in the form of debt.

- B. The following table provides a breakdown of the money invested in EGNB over the past five years (in \$ millions):

<u>Source</u>	<u>Amount</u>
Debt	
- Existing Partners	\$131.0
- New Partners	\$ 0.0
Equity	
- Existing Partners	\$110.4
- New Partners	<u>\$ 19.9</u>
Total	\$261.3

Flakeboard
Interrogatory No. 9

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010, page 18; Ms. McShane’s evidence states: “In my judgment, it is unlikely that EGNB would, if rated by S&P, be assigned a business rating category any higher than ...”

Interrogatory:

Please identify what Ms. McShane’s qualifications and experience are with respect to such risk and debt ratings, and the basis for such “judgment”.

Response:

As set out in Appendix F, Ms. McShane has provided cost of capital analyses, including business risk assessments, for a large number of the Canadian utilities that are rated by S&P. Her conclusion was based on her knowledge of these utilities, in conjunction with a regular review of the business risk assessments and ratings reports that are issued by S&P.

**Flakeboard
Interrogatory No. 10**

Reference: Opinion on Cost of Capital by Kathleen C. McShane, filed June 7, 2010, page 28; Ms. McShane’s evidence states: “that for Canadian gas distribution utilities, the average ROE expected to be allowed in 2000 was 10%.”

Interrogatory:

- A. Provide what the actual average ROE for Canadian gas distribution utilities was for each year, starting from 2000 to and including 2009. Please provide all supporting documents and data.
- B. For EGNB in 2009, how much did each 1% of cost of debt and each 1% of return on equity represent, in dollars?

Response:

- A. The following table provides the actual ROEs for Canadian gas distributors readily available to Ms. McShane.

	AltaGas	ATCO Gas ^{1/}	Enbridge Gas Dist. ^{2/}	Gazifère ^{3/}	Gaz Métro	Pacific Northern Gas-West	Terasen Gas ^{3/}	Union Gas ^{4/}
2000	13.63	N/A	10.83	12.64	10.06	10.32	10.12	10.11
2001	9.21	9.58	10.03	11.05	10.38	7.66	9.31	11.45
2002	11.13	9.77	11.81	11.20	10.67	6.36	9.73	12.36
2003	11.94	10.68	9.74	9.90	10.82	8.25	10.23	12.08
2004	9.65	10.42	10.66	11.41	11.47	8.41	9.25	11.51
2005	8.78	8.00	9.46	9.51	10.51	8.6	9.91	10.99
2006	9.02	9.74	8.86	9.85	9.66	8.16	9.64	10.26
2007	7.60	11.02	9.78	9.70	9.91	4.94	9.55	9.99
2008	9.42	11.67	10.21	11.06	10.45	6.96	9.63	11.65

1/ Based on normal weather, except for 2008, which is based on actual weather

2/ Based on normal weather

3/ After earnings sharing

4/ Based on normal weather, except for 2007 and 2008, which are based on actual weather

The source documentation for each individual ROE is not readily available. The data have been collected over time by Ms. McShane from a variety of sources, including regulatory filings (e.g., responses to information requests, minimum filing requirements, annual reporting requirements) and directly from the utilities themselves. Ms. McShane does not have the requested data for 2009.

- B. The mid-year average 2008/2009 regulated debt was \$189,650 thousand. Each percent of debt represented approximately \$1,896.5 thousand dollars. The mid-year average regulated equity was \$185,404 thousand. Each percent of return on equity represented approximately \$1,854.0 thousand dollars.