Greater Sudbury Hydro Inc. Filed: 9 November, 2012 EB-2012-0126 Exhibit 5

# Exhibit 5:

# **COST OF CAPITAL AND CAPITAL STRUCTURE**

Greater Sudbury Hydro Inc. Filed:9 November, 2012 EB-2012-0126 Exhibit 5 Tab 1

Exhibit 5: Cost Of Capital And Capital Structure

Tab 1 (of 1): Cost of Capital and Capital Structure

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# CAPITAL STRUCTURE AND COST OF CAPITAL

This application is submitted in compliance with the deemed capital structure as dictated by the Ontario Energy Board ("OEB") for rate making purposes. It assumes the current Cost of Capital parameters set by the Board letter dated March 2, 2012. Greater Sudbury Hydro Inc ("GSHi") acknowledges that the OEB will be finalizing the deemed debt rates for applications for May 1, 2013 rates based on January 2013 market interest rate information. The Application will need to be revised if those debt rates change from the March 2, 2012 updated values.

# **CAPITAL STRUCTURE**

GSHi's current OEB approved capital structure for rate making purposes is 60% debt and 40% equity. This capital structure was determined in the OEB's Report of the Board on *Cost of Capital for Ontario's Regulated Utilities* dated December 11, 2009 ("Cost of Capital Report"). The Report states the debt structure is twofold with 56% deemed long term and 4% deemed short term of the total 60% debt.

Although GSHi continues to have an actual debt/equity structure that departs from the OEB deemed structure for rate making purposes, it is not proposing any departure from the deemed structure for the purposes of rate making in this Application. GSHi's deemed capital structure set out in Table 1 below:

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Table 1. Capital Structure and Return on Capital

Table 1. Capital Structure and Netariff of Capital									
	Deemed Portion	Current effective Rate	Return Amount						
Short term debt	4%	2.08%							
Long term debt	56%	4.41%							
Total Equity	40%	9.12%							
Regulated Rate of Return	100%	6.07%							
Rate Base			\$ 88,079,710						
Regulated Return on Capital			\$ 5,461,647						
Deemed Interest expense			\$ 2,248,499						
Deemed Return on Equity			\$ 3,213,148						

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OEB Appendix 2-OA has been included at Exhibit 5, Tab 1, Schedule 1, Attachment 1.

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# **Cost of Equity**

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GSHi has applied a rate of Return on Equity of 9.12% for the 2013 test Year.

9 GSHi recognizes that the Return on Equity will be updated at the time of approval

based on the OEB rates effective for May 1, 2013.

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# **Cost of Debt**

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### **Short term Debt:**

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The short term debt rate has been set at 2.08% for the 2013 Test Year. GSHi recognizes that the rate will be updated at the time of approval based on the OEB rates

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- 1 effective for May 1, 2013. GSHI has an uncommitted revolving line of credit facility of
- 2 \$5,000,000 for operating purposes at the corporate bank prime rate of interest. As of
- 3 December 31, 2011, the amount drawn by GSHi under this line of credit was \$nil (2010 -
- 4 \$nil).

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## **Long term Debt:**

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8 The Long term debt rate has been set at 4.41% for the 2013 Test Year. GSHi
9 recognizes that the rate will be updated at the time of approval based on the OEB rates
10 effective for May 1, 2013.

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The promissory note that is held with the shareholder continues to draw interest payments at a rate that was established at the corporatization of the commission in 2000. The note bears a fixed interest rate of 7.26%, but due to the fact that it is a demand loan, the deemed interest rate of 4.41% will apply for this Cost of Service Application period as noted above in the Report *Cost of Capital for Ontario's Regulated Utilities*.

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In addition to the affiliated long term debt, in 2011 GSHi entered into a 15 year interest rate swap agreement with the TD Bank for a \$2,000,000 loan to fund its Smart Meter capital program. Principal repayments on this loan began in February 2011 and will end January 2026. This interest swap is used for non-speculative purposes to convert a floating rate debt into fixed rate debt bearing interest at a rate of 3.7% plus the stamping fee of 1%. A copy of the promissory note is attached as Exhibit 5, Tab 1, Schedule 1, Attachment 3.

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## **Future Debt:**

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- As noted in Appendix 2-OB (Exhibit 5, Tab 1, Schedule 1, Attachment 2), GSHi also expects to borrow and additional \$4,000,000 required for operating funds in the 2013
- 31 Test Year to offset capital expenditures over the next four years.

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### Appendix 2-OA Capital Structure and Cost of Capital

This table must be completed for the required years of all historical years, the bridge year and the test year.

				Return		
	200	9 Board Approved	ed			
	(%)	(\$)	(%)	(\$)		
Debt Long-term Debt	52.70%	\$40,378,747	7.01%	\$2,831,92		
Short-term Debt	4.00% (1)	\$3,064,801	1.33%	\$40,76		
Total Debt	56.7%	\$43,443,548	6.61%	\$2,872,68		
Equity  Common Equity	43.00%	\$32,946,606	8.01%	\$2,639,02		
Preferred Shares	0.00%	\$ -				
Total Equity	43.0%	\$32,946,606	8.01%	\$2,639,02		
Total	100.0%	\$76,620,014	7.19%	\$5,511,7		
4.0% unless an applic	ant has proposed or bee	en approved for a diff	erent amount.			
	(%)	2010 (\$)	(%)	(\$)		
Debt						
Long-term Debt Short-term Debt	56.00% 4.00% (1)	\$43,284,420 \$3,091,744	7.25% 1.33%	\$3,138,12 \$41,12		
Total Debt	60.0%	\$46,376,164	6.86%	\$3,179,24		
Equity	40.009/	\$20.047.442	8.01%	\$2.476.48		
Common Equity Preferred Shares	40.00% 0.00%	\$30,917,443 \$ - \$30,917,443		\$2,476,4		
Total Equity	40.0%	\$30,917,443	8.01%	\$2,476,4		
Total	100.0%	\$77,293,607	7.32%	\$5,655,7		
4.0% unless an applic	ant has proposed or bee	en approved for a diff	erent amount.			
4.0% unless an applic	ant has proposed or bee	en approved for a diff	erent amount.			
4.0% unless an applic		2011		(\$)		
Debt	(%)	<b>2011</b> (\$)	(%)	(\$)		
Debt Long-term Debt Short-term Debt	(%) 56.00% 4.00% (1)	2011 (\$) \$44,708,624 \$3,193,473	(%) 7.25% 1.33%	\$3,241,3° \$42,4°		
Debt Long-term Debt Short-term Debt Total Debt	(%) 56.00%	2011 (\$) \$44,708,624	(%) 7.25%	\$3,241,3° \$42,4°		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity	(%) 56.00% 4.00% (1) 60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097	(%) 7.25% 1.33%	\$3,241,3 \$42,4 \$3,283,84		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares	(%) 56.00% 4.00% (1) 60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$-	(%) 7.25% 1.33% 6.86%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity	(%) 56.00% 4.00% (1) 60.0%  40.00%  40.00% 40.00%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$- \$31,934,732	(%) 7.25% 1.33% 6.86% 8.01%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity	(%) 56.00% 4.00% (1) 60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$-	(%) 7.25% 1.33% 6.86%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total	(%) 56.00% 4.00% (1) 60.0%  40.00%  40.00% 40.00%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$31,934,732 \$79,836,829	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total	(%) 56.00% 4.00% (1) 60.0% 40.00% 0.00% 100.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$31,934,732 \$79,836,829	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32%	\$3,241,3 \$42,4' \$3,283,8' \$2,557,9' \$2,557,9'		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity	(%) 56.00% 4.00% (1) 60.0% 40.00% 0.00% 40.0% 100.0% ant has proposed or bee	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$- \$31,934,732 \$79,836,829 en approved for a diff	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32% erent amount.	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total 4.0% unless an applic	(%)  56.00% 4.00% (1) 60.0%  40.00% 0.00% 40.0% 100.0% ant has proposed or bee	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097  \$31,934,732 \$- \$31,934,732 \$79,836,829  en approved for a diff	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32% erent amount.	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8:		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total 4.0% unless an applic	(%)  56.00%  4.00% (1)  60.0%  40.00%  40.00%  100.0%  ant has proposed or bee  (%)  56.00%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097  \$31,934,732 \$- \$31,934,732 \$r9,836,829  en approved for a diff.  2012 (\$) \$46,041,978	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32% erent amount.	\$3,241,31 \$42,41 \$3,283,84 \$2,557,91 \$2,557,91 \$5,841,81		
Debt Long-term Debt Short-term Debt Total Debt  Equity Common Equity Preferred Shares Total Equity Total 4.0% unless an applic	(%)  56.00%  4.00% (1)  60.0%  40.00%  40.00%  100.0%  ant has proposed or bee  (%)  56.00%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097  \$31,934,732 \$- \$31,934,732 \$79,836,829  en approved for a diff	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32% erent amount.	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity  Total 4.0% unless an applic	(%) 56.00% 4.00% (1) 60.0% 40.00% 0.00% 100.0%  ant has proposed or bee (%) 56.00% 4.00% (1)	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$-\$31,934,732 \$79,836,829 en approved for a diff.  2012 (\$) \$46,041,978 \$3,288,713	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32%  erent amount. (%) 5.01% 2.08%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8:		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total 4.0% unless an applic  Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity	(%)  56.00%  40.00%  40.00%  40.00%  40.00%  100.0%  100.0%  (%)  56.00%  4.00%  (1)  60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097  \$31,934,732 \$- \$31,934,732 \$79,836,829  en approved for a diff.  2012 (\$) \$46,041,978 \$3,288,713 \$49,330,690  \$32,887,127	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32%  erent amount. (%) 5.01% 2.08%	\$3,241,3 \$42,4' \$3,283,8' \$2,557,9' \$2,557,9' \$5,841,8:		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity 4.0% unless an applic  Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares	(%) 56.00% 4.00% (1) 60.0%  40.00% 0.00% 100.0%  100.0%  (%) 56.00% 4.00% (1) 60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097 \$31,934,732 \$79,836,829 en approved for a diff 2012 (\$) \$46,041,978 \$3,288,713 \$49,330,690	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32%  erent amount.  (%) 5.01% 2.03% 4.81%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8 (\$) \$2,306,7 \$88,4 \$2,375,1		
Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity Preferred Shares Total Equity Total 4.0% unless an applic  Debt Long-term Debt Short-term Debt Total Debt Equity Common Equity	(%)  56.00%  40.00%  40.00%  40.00%  40.00%  100.0%  100.0%  (%)  56.00%  4.00%  (1)  60.0%	2011 (\$) \$44,708,624 \$3,193,473 \$47,902,097  \$31,934,732 \$- \$31,934,732 \$79,836,829  en approved for a diff.  2012 (\$) \$46,041,978 \$3,288,713 \$49,330,690  \$32,887,127	(%) 7.25% 1.33% 6.86% 8.01% 8.01% 7.32% erent amount.  (%) 5.01% 2.08% 4.81%	\$3,241,3 \$42,4 \$3,283,8 \$2,557,9 \$2,557,9 \$5,841,8 (\$) \$2,306,7 \$88,4 \$2,375,1		

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#### Appendix 2-OB

#### Debt Instruments

ired years of all historical years, the bridge year and the test year.

2013

Row	Description	Lender	Affiliated or Third-	Fixed or Variable	Start Date	Term	Principal	Rate (%)	Interest (\$) (Note 1)	
			Party Debt?	Rate?		(years)	(\$)	(Note 2)		
	Multiple draw term loan (SWAP)	Toronto-Dominion Bank	Third-Party	Variable Rate	18-Jan-11	15	\$ 2,000,000	4.70%	\$ 94,000.00	
				Fixed Rate	1-Nov-00		\$ 48,645,458	4.41%		
3	Term Loan	TD bank	Third-Party	Fixed Rate	1-Jan-13	15	\$ 4,000,000	4.41%	\$ 176,400.00	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 54,645,458	0.04421	\$ 2,415,664.70	

- If financing is in place only part of the year, calculate the pro-rated interest and input in the cell.
  Input actual or deemed long-term debt rate in accordance with the guidelines in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009
  Add more lines above row 12 if necessary.

			Year	2012						
Row	Description	Lender	Affiliated or Third-	Fixed or Variable	Start Date	Term	Principal	Rate (%)	Interest (\$) (Note 1)	
			Party Debt?	Rate?		(years)	(\$)	(Note 2)		
	Multiple draw term loan (SWAP)			Variable Rate	18-Jan-11	15	\$ 2,000,000	3.47%		
2	Promissory Note	Greater Sudbury Utilities	Affiliated	Fixed Rate			\$ 48,645,458	4.41%	\$ 2,145,264.70	
3									\$	
4									\$ -	
5										
6										
7										
8										
9									\$ -	
10									\$ -	
11										
12										

\$ 50,645,458 | 0.04373 | \$

2,214,664.70

# Total

- 1 If financing is in place only part of the year, calculate the pro-rated interest and input in the cell.
  2 Input actual or deemed long-term debt rate in accordance with the guidelines in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009
  3 Add more lines above row 12 if necessary.

Year 2011

Row	Description	Lender	Affiliated or Third-	Fixed or Variable	Start Date	Term	Principal	Rate (%)	Interest (\$) (Note 1)	
			Party Debt?	Rate?		(years)	(\$)	(Note 2)	(**************************************	
1	Multiple draw term loan (SWAP)	Toronto-Dominion Bank	Third-Party	Variable Rate	18-Jan-11	15	\$ 2,000,000	3.47%	\$ 69,400.00	
2	Promissory Note	Greater Sudbury Utilities	Affiliated	Fixed Rate			\$ 48,645,458	4.41%	\$ 2,145,264.70	
3									\$ -	
4									\$ -	
5									\$	
6									\$ -	
7									\$	
8									\$	
9									\$ -	
10									\$	
11									\$ -	
12									\$	
	· · · · · · · · · · · · · · · · · · ·									
Total							\$ 50,645,458	0.04373	\$ 2,214,664.70	· · · · · · · · · · · · · · · · · · ·

#### Notes

- 1 If financing is in place only part of the year, calculate the pro-rated interest and input in the cell.
  2 Input actual or deemed long-term debt rate in accordance with the guidelines in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009
  3 Add more lines above row 12 if necessary.

Year 2010

Row	Description	Lender	Affiliated or Third-		Start Date	Term	Principal		Interest (\$) (Note 1)	
			Party Debt?	Rate?		(years)	(\$)	(Note 2)		
1									\$ -	
2	Promissory Note	Greater Sudbury Utilities	Affiliated	Fixed Rate			\$ 48,645,458	4.41%	\$ 2,145,264.70	
3									\$ -	
4									\$	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 48,645,458	0.0441	\$ 2,145,264.70	

- 1 If financing is in place only part of the year, calculate the pro-rated interest and input in the cell.
  2 Input actual or deemed long-term debt rate in accordance with the guidelines in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009
  3 Add more lines above row 12 if necessary.

Year 2009

Row	Description	Lender	Affiliated or Third-	Fixed or Variable	Start Date	Term	Principal	Rate (%)	Interest (\$) (Note 1)	
			Party Debt?	Rate?		(years)	(\$)	(Note 2)		
1									\$ -	
2	Promissory Note	Greater Sudbury Utilities	Affiliated	Fixed Rate	1-Nov-00	demand	\$ 48,645,458	4.41%	\$ 2,145,264.70	
3									\$ -	
4									\$ -	
5									\$ -	
6									\$ -	
7									\$ -	
8									\$ -	
9									\$ -	
10									\$ -	
11									\$ -	
12									\$ -	
Total							\$ 48,645,458	0.0441	\$ 2,145,264.70	

- 1 If financing is in place only part of the year, calculate the pro-rated interest and input in the cell.
  2 Input actual or deemed long-term debt rate in accordance with the guidelines in The Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009
  3 Add more lines above row 12 if necessary.

Promissory note as per By-Law 2001-212A

or pursuant to Transfer By-Law #33,

Setion 4,06 & Section 4,08.

Greater Sudbury Utilities Inc.
9 November, 2012
EB-2012-0126
Exhibit 5
Table 1
Schedule 1
Attachment 3

### PROMISSORY NOTE

7 #48, 645, 458

FOR VALUE RECEIVED, Greater Sudbury Hydro Inc./Hydro du Grand Sudbury Inc. ("WiresCo") hereby promises to pay to or to the order of Greater Sudbury Utilities Inc./Services Publics du Grand Sudbury Inc. ("HoldCo") the principal sum of FIFTY ONE MILLION NINE HUNDRED THOUSAND DOLLARS (\$51,900,000) (the "Principal") on a date which is no later than six (6) months from the date of demand in writing by HoldCo.

# Repayment on Demand

HoldCo may demand repayment of all or part of the outstanding Principal with interest at the Established Rate (as defined in Schedule "A" hereto) upon six (6) months' written notice of demand to WiresCo.

## Interest

The outstanding Principal, shall bear interest at the Established Rate, such interest to be paid quarterly not in advance. For greater certainty, HoldCo may, from time to time, by written notice to WiresCo designate a specific interest rate to be paid by WiresCo with respect to the outstanding Principal. Any change in the Established Rate shall be effective thirty (30) days after the date of written notice of such change by HoldCo to WiresCo.

Interest at the Established Rate shall accrue from the Interest Commencement Date until the Principal is paid in full, with interest on overdue interest at the Established Rate.

# <u>Adjustments</u>

The terms of this Promissory Note are subject to and may be adjusted in accordance with Article IV of the Transfer By-law passed by the Transition Board on October 16, 2000 as By-law No.TB-33. Adjustments made to the terms of this Promissory Note pursuant to Article IV of the Transfer By-Law shall be effective upon such reasonable written notice as may be agreed to by WiresCo and HoldCo.

HoldCo, in consultation with WiresCo, may revise, change or restate any of the terms of this Promissory Note, other than in accordance with Article IV of the Transfer By-Law, upon thirty (30) days' prior written notice to WiresCo.

This Promissory Note is not assignable by HoldCo without the consent of WiresCo, such consent not to be unreasonably withheld.

DATED as of the 1st day of November, 2000.

GREATER SUDBURY HYDRO INC./ HYDRO DU GRAND SUDBURY INC.

Per:

Authorized Signing Officer

Authorized Signing Officer

# SCHEDULE "A"

# **DEFINITIONS**

"Established Rate" means, the interest rate which the Ontario Energy Board or its successor may, from time to time, permit regulated distribution corporations to recover for rate making purposes or such other interest rate established by HoldCo from time to time, and communicated in writing to WiresCo.

"Interest Commencement Date" means, January 1, 2001.

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# PROMISSORY NOTE, ESTABLISHED RATE

Pursuant to the promissory note, dated November 1, 2000, issued between *Greater Sudbury Utilities Inc./Services Publics du Grand Sudbury Inc.* and *Greater Sudbury Hydro Inc./Hydro du Grand Sudbury Inc.* wherein the rate of interest payable is to be set by the holder, this notification shall serve to set the rate at an annual interest rate of **7.26**% for the period commencing January 1, 2001 until changed in writing by the holder.

This interest rate is to be compounded annually not in advance.

**DATED** as of 26% day of **November, 2001**.

Per: Keul Murleau

Chair

**Director**