





	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1															
2	 Ontario Energy Board														
3															
4															
5	<h1>Capital Module</h1>														
6	<h2>Applicable to ACM and ICM</h2>														
7															
8															
9															
10															
11															
12	Note: Depending on the selections made below, certain worksheets in this workbook will be hidden.														
13	Version 5.01														
14	Utility Name Greater Sudbury Hydro Inc.														
15															
16	Assigned EB Number EB-2020-024														
17															
18	Name of Contact and Title Tiija Luttrell CPA, CA Supervisor Regulatory Affairs														
19															
20	Phone Number 705-675-0514														
21															
22	Email Address tiija.luttrell@gsuinc.ca														
23															
24															
25															
26	Is this Capital Module being filed in a CoS or Price-Cap IR Application? Price-Cap IR Rate Year 2021														
27															
28	Indicate the Price-Cap IR Year (1, 2, 3, 4, etc) in which Greater Sudbury Hydro Inc. is applying: 1 Next OEB Scheduled Rebasing Year 2025														
29															
30															
31															
32	Greater Sudbury Hydro Inc. is applying for: ACM and ICM Approval														
33															
34	Last Rebasing Year: 2020														
35															
36	The most recent complete year for which actual billing and load data exists 2019														
37															
38															
39															
40	Current IPI 1.20%														
41															
42	Stretch Factor Assigned to Middle Cohort* III														
43															
44	Stretch Factor Value 0.30%														
45															
46	Price Cap Index 0.90%														
47															
48	Based on the inputs above, the growth factor utilized in the Materiality Threshold Calculation will be determined by: Revenues Based on 2020 Board-Approved Distribution Demand Revenues Based on 2019 Actual Distribution Demand														
49															
50															
51	Notes														
52															
53	 Pale green cells represent input cells.														
54															
55	 Pale blue cells represent drop-down lists. The applicant should select the appropriate item from the drop-down list.														
56															
57	 White cells contain fixed values, automatically generated values or formulae.														
58															
59															
60	This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your ICM application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.														
61	While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.														
62	*As per ACM/ICM policy, the middle cohort stretch factor is applied to all ACM/ICM applications.														
	OEB policies regarding rate-setting and rebasing following distributor consolidations could allow a distributor to not rebase rates for up to ten years. A distributor could also apply for and receive OEB approval to defer rebasing. If a distributor is under Price Cap IR for more than four years after rebasing and applies for an ICM, this spreadsheet will need to be adapted to accommodate those circumstances. The distributor should contact OEB staff to discuss the circumstances so that a customized model can be provided.														



Ontario Energy Board

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Select the appropriate rate classes as they appear on your most recent Board-Approved Tariff of Rates and Charges, excluding the MicroFit Class.

How many classes are on your most recent Board-Approved Tariff of Rates and Charges?

6

Select Your Rate Classes from the **Blue Cells** below. Please ensure that a rate class is assigned to **each shaded cell**.

	Rate Class Classification
1	RESIDENTIAL
2	GENERAL SERVICE LESS THAN 50 kW
3	GENERAL SERVICE 50 TO 4,999 KW
4	UNMETERED SCATTERED LOAD
5	SENTINEL LIGHTING
6	STREET LIGHTING

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Input the billing determinants associated with Greater Sudbury Hydro Inc.'s Revenues Based on 2020 Board-Approved Distribution Demand. Input the current approved distribution rates. Sheets 4 & 5 calculate the NUMERATOR portion of the growth factor calculation.

2020 Board-Approved Distribution Demand

Rate Class	Units	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)
RESIDENTIAL	\$/kWh	43,121	367,560,506	
GENERAL SERVICE LESS THAN 50 kW	\$/kWh	4,194	136,403,467	
GENERAL SERVICE 50 TO 4,999 kW	\$/kW	500	344,496,360	857,773
UNMETERED SCATTERED LOAD	\$/kWh	289	1,109,725	
SENTINEL LIGHTING	\$/kW	360	366,104	1,010
STREET LIGHTING	\$/kW	9,958	7,448,452	20,807

Current Approved Distribution Rates

Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW
29.31	0.0000	0.0000
22.42	0.0216	0.0000
171.02	0.0000	4.9072
7.94	0.0120	0.0000
4.61	0.0000	14.8222
5.54	0.0000	2.6929

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Calculation of pro forma 2020 Revenues. No input required.

Rate Class	2020 Board-Approved Distribution Demand			Current Approved Distribution Rates			Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenues from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW								
	A	B	C	D	E	F								N
RESIDENTIAL	43,121	367,560,506		29.31	0.0000	0.0000	15,166,518	0	0	15,166,518	100.0%	0.0%	0.0%	60.0%
GENERAL SERVICE LESS THAN 50 kW	4,194	136,403,467		22.42	0.0216	0.0000	1,128,354	2,946,315	0	4,074,669	27.7%	72.3%	0.0%	16.1%
GENERAL SERVICE 50 TO 4,999 KW	500	344,436,360	857,773	171.02	0.0000	4.9072	1,026,120	0	4,209,264	5,235,384	19.6%	0.0%	80.4%	20.7%
UNMETERED SCATTERED LOAD	289	1,109,725		7.94	0.0120	0.0000	27,536	13,317	0	40,853	67.4%	32.6%	0.0%	0.2%
SENTINEL LIGHTING	360	366,104	1,010	4.61	0.0000	14.8222	19,915	0	14,970	34,886	57.1%	0.0%	42.9%	0.1%
STREET LIGHTING	9,958	7,448,452	20,807	5.54	0.0000	2.6929	662,008	0	56,031	718,039	92.2%	0.0%	7.8%	2.8%
Total	58,422	857,384,614	879,590				18,030,451	2,959,632	4,280,265	25,270,348				100.0%

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Applicants Rate Base

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening
Add: CWIP Re-based Opening
Re-based Capital Additions
Re-based Capital Disposals
Re-based Capital Retirements
Deduct: CWIP Re-based Closing
Gross Fixed Assets - Re-based Closing
Average Gross Fixed Assets

\$	219,712,535	A			
\$	-	B			
\$	9,085,007	C			
-\$	3,395,932	D			
		E			
\$	-	F			
\$	225,401,610	G			
\$			\$	222,557,073	$H = (A + G) / 2$

Accumulated Depreciation - Re-based Opening
Re-based Depreciation Expense
Re-based Disposals
Re-based Retirements
Accumulated Depreciation - Re-based Closing
Average Accumulated Depreciation

\$	125,101,902	I			
\$	4,622,012	J			
-\$	2,864,242	K			
		L			
\$	126,859,672	M			
\$			\$	125,980,787	$N = (I + M) / 2$

Average Net Fixed Assets

\$ 96,576,286 $O = H - N$

Working Capital Allowance

Working Capital Allowance Base
Working Capital Allowance Rate

Working Capital Allowance

\$	117,101,232	P			
	7.5%	Q			
\$			\$	8,782,592	$R = P * Q$

Rate Base

\$ 105,358,878 $S = O + R$

Return on Rate Base

Deemed ShortTerm Debt %
Deemed Long Term Debt %
Deemed Equity %

4.00%	T	\$	4,214,355	$W = S * T$
56.00%	U	\$	59,000,972	$X = S * U$
40.00%	V	\$	42,143,551	$Y = S * V$

Short Term Interest

Long Term Interest

Return on Equity

Return on Rate Base

2.75%	Z	\$	115,895	$AC = W * Z$
3.15%	AA	\$	1,858,531	$AD = X * AA$
8.52%	AB	\$	3,590,631	$AE = Y * AB$
		\$	5,565,056	$AF = AC + AD + AE$

Distribution Expenses

OM&A Expenses
Amortization
Ontario Capital Tax
Grossed Up Taxes/PILs
Low Voltage
Transformer Allowance

\$	16,237,777	AG			
\$	4,333,632	AH			
\$	-	AI			
\$	300,042	AJ			
\$	-	AK			
\$	117,901	AL			
\$	268,803	AM			
\$	-	AN			
\$	-	AO			
\$			\$	21,258,155	$AP = \text{SUM} (AG : AO)$

Revenue Offsets

Specific Service Charges
Late Payment Charges
Other Distribution Income
Other Income and Deductions

-\$	218,602	AQ			
-\$	156,800	AR			
-\$	1,496,075	AS			
\$	318,690	AT	-\$	1,552,787	$AU = \text{SUM} (AQ : AT)$

Revenue Requirement from Distribution Rates

\$ 25,270,424 $AV = AF + AP + AU$

Rate Classes Revenue

Rate Classes Revenue - Total (Sheet 4)

\$ 25,270,348 AW

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Input the billing determinants associated with Greater Sudbury Hydro Inc.'s Revenues Based on 2019 Actual Distribution Demand. This sheet calculates the DENOMINATOR portion of the growth factor calculation. Pro forma Revenue Calculation.

Rate Class	2019 Actual Distribution Demand			Current Approved Distribution Rates			Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue By Rate Class	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	Billed Customers or Connections	Billed kWh	Billed kW	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW								
	A	B	C	D	E	F								
RESIDENTIAL	43,011	375,118,358		29.31	0.0000	0.0000	15,127,829	0	0	15,127,829	60.1%	0.0%	0.0%	60.1%
GENERAL SERVICE LESS THAN 50 KW	4,167	135,968,289		22.42	0.0216	0.0000	1,121,090	2,936,915	0	4,058,005	4.5%	11.7%	0.0%	16.1%
GENERAL SERVICE 50 TO 4,999 KW	501	350,908,707	845,615	171.02	0.0000	4.9072	1,028,172	0	4,149,604	5,177,776	4.1%	0.0%	16.5%	20.6%
UNMETERED SCATTERED LOAD	294	1,133,887		7.94	0.0120	0.0000	28,012	13,607	0	41,619	0.1%	0.1%	0.0%	0.2%
SENTINEL LIGHTING	366	372,542	1,025	4.61	0.0000	14.8222	20,247	0	15,197	35,445	0.1%	0.0%	0.1%	0.1%
STREET LIGHTING	9,917	7,481,252	20,902	5.54	0.0000	2.6929	659,282	0	56,288	715,570	2.6%	0.0%	0.2%	2.8%
Total	58,256	870,983,035	867,543				17,984,632	2,950,522	4,221,089	25,156,243				100.0%

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Current Revenue from Rates

This sheet is used to determine the applicant's most current allocation of revenues (after the most recent revenue to cost ratio adjustment, if applicable) to appropriately allocate the incremental revenue requirement to the classes.

Rate Class	Current OEB-Approved Base Rates			2020 Board-Approved Distribution Demand			Current Base Service Charge Revenue	Current Base Distribution Volumetric Rate kWh Revenue	Current Base Distribution Volumetric Rate kW Revenue	Total Current Base Revenue	Service Charge % Total Revenue	Distribution Volumetric Rate % Total Revenue	Distribution Volumetric Rate % Total Revenue	Total % Revenue
	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW								
	A	B	C	D	E	F	G	H	I	J	L = G / J _{total}	M = H / J _{total}	N = I / J _{total}	O
RESIDENTIAL	29.31	0	0	43,121	367,560,506	0	15,166,518	0	0	15,166,518	60.02%	0.00%	0.00%	60.0%
GENERAL SERVICE LESS THAN 50 kW	22.42	0.0216	0	4,194	136,403,467	0	1,128,354	2,946,315	0	4,074,669	4.47%	11.66%	0.00%	16.1%
GENERAL SERVICE 50 TO 4,999 KW	171.02	0	4.9072	500	344,496,360	857,773	1,026,120	0	4,209,264	5,235,384	4.06%	0.00%	16.66%	20.7%
UNMETERED SCATTERED LOAD	7.94	0.012	0	289	1,109,725	0	27,536	13,317	0	40,853	0.11%	0.05%	0.00%	0.2%
SENTINEL LIGHTING	4.61	0	14.8222	360	366,104	1,010	19,915	0	14,970	34,886	0.08%	0.00%	0.06%	0.1%
STREET LIGHTING	5.54	0	2.6929	9,958	7,448,452	20,807	662,008	0	56,031	718,039	2.62%	0.00%	0.22%	2.8%
Total							18,030,451	2,959,632	4,280,265	25,270,348				100.0%



Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

No Input Required.

Final Materiality Threshold Calculation

$$\text{Threshold Value (\%)} = 1 + \left[\left(\frac{RB}{d} \right) \times (g + PCI \times (1 + g)) \right] \times ((1 + g) \times (1 + PCI))^{n-1} + 10\%$$

Cost of Service Rebasing Year	2020	
Price Cap IR Year in which Application is made	1	<i>n</i>
Price Cap Index	0.90%	<i>PCI</i>
Growth Factor Calculation		
Revenues Based on 2020 Board-Approved Distribution	\$25,270,348	
Demand	\$25,156,243	
Revenues Based on 2019 Actual Distribution Demand		<i>g</i> (Note 1)
Growth Factor	0.45%	
Dead Band	10%	
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 219,712,535	
Add: CWIP Opening	\$ -	
Capital Additions	\$ 9,085,007	
Capital Disposals	-\$ 3,395,932	
Capital Retirements	\$ -	
Deduct: CWIP Closing	\$ -	
Gross Fixed Assets - Closing	\$ 225,401,610	
Average Gross Fixed Assets	\$ 222,557,073	
Accumulated Depreciation - Opening	\$ 125,101,902	
Depreciation Expense	\$ 4,622,012	
Disposals	-\$ 2,864,242	
Retirements	\$ -	
Accumulated Depreciation - Closing	\$ 126,859,672	
Average Accumulated Depreciation	\$ 125,980,787	
Average Net Fixed Assets	\$ 96,576,286	
Working Capital Allowance		
Working Capital Allowance Base	\$ 117,101,232	
Working Capital Allowance Rate	8%	
Working Capital Allowance	\$ 8,782,592	
Rate Base	\$ 105,358,878	<i>RB</i>
Depreciation	\$ 4,622,012	<i>d</i>
Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)		
Price Cap IR Year 2021	141%	
Price Cap IR Year 2022	141%	
Price Cap IR Year 2023	142%	
Price Cap IR Year 2024	142%	
Price Cap IR Year 2025	143%	
Price Cap IR Year 2026	143%	
Price Cap IR Year 2027	144%	
Price Cap IR Year 2028	144%	
Price Cap IR Year 2029	144%	
Price Cap IR Year 2030	145%	
Threshold CAPEX		<i>Threshold Value × d</i>
Price Cap IR Year 2021	\$ 6,514,634	
Price Cap IR Year 2022	\$ 6,534,054	
Price Cap IR Year 2023	\$ 6,553,738	
Price Cap IR Year 2024	\$ 6,573,690	
Price Cap IR Year 2025	\$ 6,593,912	
Price Cap IR Year 2026	\$ 6,614,408	
Price Cap IR Year 2027	\$ 6,635,183	
Price Cap IR Year 2028	\$ 6,656,240	
Price Cap IR Year 2029	\$ 6,677,583	
Price Cap IR Year 2030	\$ 6,699,216	

Note 1:

The growth factor *g* is annualized, depending on the number of years between the numerator and denominator for the calculation. Typically, for ACM review in a cost of service and in the fourth year of Price Cap IR, the ratio is divided by 2 to annualize it. No division is normally required for the first three years under Price Cap IR.

Greater Sudbury Hydro Inc.

Identify ALL Proposed ACM and ICM projects and related CAPEX costs in the relevant years

1. For the Cost of Service Test Year, CAPEX refers to the CAPEX approved in the DSP. For subsequent Price CAP IR years, the CAPEX to be entered is the actual CAPEX. For the current Price Cap IR year, the CAPEX to be entered is the proposed CAPEX including any ICM/updated ACM project CAPEX for the year.

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Incremental Capital Adjustment

Rate Year:

2021

Current Revenue Requirement

Current Revenue Requirement - Total	\$	25,270,424
-------------------------------------	----	------------

A

Eligible Incremental Capital for ACM/ICM Recovery

	Total Claim	Eligible for ACM/ICM (Full Year Prorated Amount) (from Sheet 10b)	
Amount of Capital Projects Claimed	\$ 4,628,519	\$ 4,628,519	B
Depreciation Expense	\$ 114,463	\$ 114,463	C
CCA	\$ 370,282	\$ 370,282	V

ACM/ICM Incremental Revenue Requirement Based on Eligible Amount in Rate Year

Return on Rate Base

Incremental Capital		\$	4,628,519	B
Depreciation Expense (prorated to Eligible Incremental Capital)		\$	114,463	C
Incremental Capital to be included in Rate Base (average NBV in year)		\$	4,571,287	D = B - C/2
	% of capital structure			
Deemed Short-Term Debt	4.0%	E \$	182,851	G = D * E
Deemed Long-Term Debt	56.0%	F \$	2,559,921	H = D * F
	Rate (%)			
Short-Term Interest	2.75%	I \$	5,028	K = G * I
Long-Term Interest	3.15%	J \$	80,638	L = H * J
Return on Rate Base - Interest		\$	85,666	M = K + L
	% of capital structure			
Deemed Equity %	40.00%	N \$	1,828,515	P = D * N
Return on Rate Base -Equity	8.52%	O \$	155,789	Q = P * O
Return on Rate Base - Total		\$	241,455	R = M + Q

Amortization Expense

Amortization Expense - Incremental	C	\$	114,463	S
------------------------------------	---	----	---------	---

Grossed up Taxes/PILs

Regulatory Taxable Income	O	\$	155,789	T
Add Back Amortization Expense (Prorated to Eligible Incremental Capital)	S	\$	114,463	U
Deduct CCA (Prorated to Eligible Incremental Capital)		\$	370,282	V
Incremental Taxable Income		-\$	100,029	W = T + U - V
Current Tax Rate	26.5%	X		
Taxes/PILs Before Gross Up		-\$	26,508	Y = W * X
Grossed-Up Taxes/PILs		-\$	36,065	Z = Y / (1 - X)

Incremental Revenue Requirement

Return on Rate Base - Total	Q	\$	241,455	AA
Amortization Expense - Total	S	\$	114,463	AB
Grossed-Up Taxes/PILs	Z	-\$	36,065	AC
Incremental Revenue Requirement		\$	319,854	AD = AA + AB + AC

Capital Module

Applicable to ACM and ICM

Greater Sudbury Hydro Inc.

Calculation of incremental rate rider. Choose one of the 3 options:

Fixed Only Rate Rider

Rate Class	Service Charge %	Distribution Volumetric	Distribution Volumetric Rate %	Service Charge Revenue	Distribution Volumetric	Distribution Volumetric Rate	Total Revenue by Rate Class	Billed Customers or Connections	Billed kWh	Billed kW	Service Charge Rate Rider
	Revenue <i>From Sheet 7</i>	Rate % Revenue kWh <i>From Sheet 7</i>	Revenue kW <i>From Sheet 7</i>		Rate Revenue kWh <i>Col D * Col I_{Total}</i>	Revenue kW <i>Col E * Col I_{Total}</i>					
RESIDENTIAL	60.02%	0.00%	0.00%	191,967	0	0	191,967	43,121	367,560,506		0.37
GENERAL SERVICE LESS THAN 50 KW	4.47%	11.66%	0.00%	14,282	37,292	0	51,574	4,194	136,403,467		1.02
GENERAL SERVICE 50 TO 4,999 KW	4.06%	0.00%	16.66%	12,988	0	53,278	66,266	500	344,496,360	857,773	11.04
UNMETERED SCATTERED LOAD	0.11%	0.05%	0.00%	349	169	0	517	289	1,109,725		0.15
SENTINEL LIGHTING	0.08%	0.00%	0.06%	252	0	189	442	360	366,104	1,010	0.10
STREET LIGHTING	2.62%	0.00%	0.22%	8,379	0	709	9,088	9,958	7,448,452	20,807	0.08
Total	71.35%	11.71%	16.94%	228,216	37,461	54,177	319,854	58,422	857,384,614	879,590	

319,854

From Sheet 11, E93