



Ontario Energy Board

Capital Module

Applicable to ACM and ICM

Note: Depending on the selections made below, certain worksheets in this workbook will be hidden.

Version 3.01

Utility Name Chapeau Public Utilities Corporation

Service Territory (if filing more than one model) Town of Chapeau

Assigned EB Number EB-2015-0060

Name of Contact and Title Alan Morin - Manager

Phone Number 705-864-0111

Email Address cpuc@ontera.net

Is this Capital Module being filed in a CoS or Price-Cap IR Application?

COS

Rate
Year

2016

Chapeau Public Utilities Corporation is applying for:

ACM Approval

Last COS OEB Application Number

EB-2011-0322

Indicate the most recent complete year in which billing and load data exists

2014

Current IPI

2.44%

Stretch Factor Assigned to Middle Cohort

III

Stretch Factor Value

0.30%

Price Cap Index

2.14%

Based on the inputs above, the growth factor utilized in the Materiality Threshold Calculation will be determined by:

2016 Test Year Distribution Revenues

2014 Actual Distribution Revenues

Notes

Pale green cells represent input cells.

Pale blue cells represent drop-down lists. The applicant should select the appropriate item from the drop-down list.

White cells contain fixed values, automatically generated values or formulae.

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Ontario Energy Board

Capital Module

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Chapleau Public Utilities Corporation - Town of Chapleau

intentionally blank



Ontario Energy Board

Capital Module

Applicable to ACM and ICM Chapleau Public Utilities Corporation - Town of Chapleau

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?

7

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
7	microFIT



Ontario Energy Board

Capital Module

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Chapleau Public Utilities Corporation - Town of Chapleau

Input the billing determinants and base distribution rates associated with Chapleau Public Utilities Corporation's 2016 Test Year Distribution Revenues. Sheets 4 & 5 calculate the NUMERATOR portion of the growth factor calculation.

Rate Class	Units	2016 Test Year Distribution Revenues			2016 Test Year Distribution Revenues		
		Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW
RESIDENTIAL	\$/kWh	1,063	14,291,097		31.85	0.0131	0.0000
GENERAL SERVICE LESS THAN 50 KW	\$/kWh	152	4,842,432		34.16	0.0174	0.0000
GENERAL SERVICE 50 TO 4,999 KW	\$/kW	13	6,630,340	17,296	190.92	0.0000	3.5672
UNMETERED SCATTERED LOAD	\$/kWh	4	3,584		24.31	0.0327	0.0000
SENTINEL LIGHTING	\$/kW	23	26,757	66	13.33	0.0000	23.1778
STREET LIGHTING	\$/kW	328	267,045	724	1.26	0.0000	5.8788
microFIT	#N/A						

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Chapleau Public Utilities Corporation - Town of Chapleau

Calculation of 2016 Revenue Requirement. No input required.

2016 Test Year Distribution Revenues														
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW (if applicable)	Monthly Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenue Requirement from Rates	Service Charge % Revenue	Distribution Volumetric Rate % Revenue kWh	Distribution Volumetric Rate % Revenue kW	Total % Revenue
	A	B	C	D	E	F	G = A * D * 12	H = B * E	I = C * F	J = G + H + I	K = G / J	L = H / J	M = I / J	N = J / R
RESIDENTIAL	1,063	14,291,097		31.85	0.0131	0.0000	406,279	187,213	0	593,492	68.5%	31.5%	0.0%	70.0%
GENERAL SERVICE LESS THAN 50 KW	152	4,842,432		34.16	0.0174	0.0000	62,308	84,258	0	146,566	42.5%	57.5%	0.0%	17.3%
GENERAL SERVICE 50 TO 4,999 KW	13	6,630,340	17,296	190.92	0.0000	3.5672	29,784	0	61,698	91,482	32.6%	0.0%	67.4%	10.8%
UNMETERED SCATTERED LOAD	4	3,584		24.31	0.0327	0.0000	1,167	117	0	1,284	90.9%	9.1%	0.0%	0.2%
SENTINEL LIGHTING	23	26,757	66	13.33	0.0000	23.1778	3,679	0	1,530	5,209	70.6%	0.0%	29.4%	0.6%
STREET LIGHTING	328	267,045	724	1.26	0.0000	5.8788	4,959	0	4,256	9,216	53.8%	0.0%	46.2%	1.1%
microFIT							0	0	0	0	0.0%	0.0%	0.0%	0.0%
Total	1,583	26,061,255	18,086				508,175	271,589	67,484	847,248				100.0%

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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

2016 Test Year Distribution Revenues			
\$	2,735,685	A	
\$	-	B	
\$	1,622,664	C	
\$	-	D	
\$	-	E	
\$	-	F	
\$	4,358,349	G	
\$			$H = (A + G) / 2$

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

\$	1,637,728	I	
\$	69,600	J	
\$	-	K	
\$	-	L	
\$	1,707,328	M	
\$			$N = (I + M) / 2$

Average Net Fixed Assets

\$ 1,874,489 O = H - N

Working Capital Allowance

Working Capital Allowance Base
Working Capital Allowance Rate

Working Capital Allowance

\$	3,995,688	P	
	7.5%	Q	
\$			$R = P * Q$

Rate Base

\$ 2,174,166 S = O + R

Return on Rate Base

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

4.00%	T	\$	86,967	$W = S * T$
56.00%	U	\$	1,217,533	$X = S * U$
40.00%	V	\$	869,666	$Y = S * V$

Short Term Interest

Long Term Interest

Return on Equity

Return on Rate Base

1.65%	Z	\$	1,435	$AC = W * Z$
4.54%	AA	\$	55,276	$AD = X * AA$
9.19%	AB	\$	79,922	$AE = Y * AB$
		\$	136,633	$AF = AC + AD + AE$

Distribution Expenses

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

\$	728,300	AG	
\$	74,699	AH	
\$	-	AI	
\$	671	AJ	
\$		AK	
\$	8,687	AL	
		AM	
		AN	
		AO	
\$			$AP = \text{SUM} (AG : AO)$

Revenue Offsets

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

\$	8,055	AQ	
\$	6,500	AR	
\$	15,750	AS	
\$	13,200	AT	
\$			$AU = \text{SUM} (AQ : AT)$

Revenue Requirement from Distribution Rates

\$ 992,495 AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (Sheet 5)

\$ 847,248 AW

Capital Module

Applicable to ACM and ICM

Chapleau Public Utilities Corporation - Town of Chapleau

Input the billing determinants associated with Chapleau Public Utilities Corporation's 2014 Actual Distribution Revenues. This sheet calculates the DENOMINATOR portion of the growth factor calculation. Pseudo Revenue Requirement Calculation.

Rate Class	2014 Actual Distribution Revenues			2014 Base 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	1,068	15,225,943		31.85	0.0131	0.0000	408,190	199,460	0	607,649	46.7%	22.8%	0.0%	69.6%
GENERAL SERVICE LESS THAN 50 KW	154	5,251,375		34.16	0.0174	0.0000	63,128	91,374	0	154,502	7.2%	10.5%	0.0%	17.7%
GENERAL SERVICE 50 TO 4,999 KW	13	7,157,299	18,429	190.92	0.0000	3.5672	29,784	0	65,740	95,523	3.4%	0.0%	7.5%	10.9%
UNMETERED SCATTERED LOAD	4	4,068		24.31	0.0327	0.0000	1,167	133	0	1,300	0.1%	0.0%	0.0%	0.1%
SENTINEL LIGHTING	23	26,857	65	13.33	0.0000	23.1778	3,679	0	1,507	5,186	0.4%	0.0%	0.2%	0.6%
STREET LIGHTING	328	274,528	768	1.26	0.0000	5.8788	4,959	0	4,515	9,474	0.8%	0.0%	0.5%	1.1%
microFIT							0	0	0	0	0.0%	0.0%	0.0%	0.0%
Total	1,590	27,940,070	19,262				510,906	290,967	71,761	873,634				100.0%

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Chapleau Public Utilities Corporation - Town of Chapleau

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	Proposed Base Rates in Current CoS Application			2016 Test Year Distribution Revenues			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 = A * D * 12	H = B * E	I = C * F	J = G + H + I	L = G / J _{total}	M = H / J _{total}	N = I / J _{total}	O = J / J _{total}
RESIDENTIAL	31.85	0.0131	0.0000	1,063	14,291,097		406,279	187,213	0	593,492	47.95%	22.10%	0.00%	70.0%
GENERAL SERVICE LESS THAN 50 KW	34.16	0.0174	0.0000	152	4,842,432		62,308	84,258	0	146,566	7.35%	9.94%	0.00%	17.3%
GENERAL SERVICE 50 TO 4,999 KW	190.92	0.0000	3.5672	13	6,630,340	17,296	29,784	0	61,698	91,482	3.52%	0.00%	7.28%	10.8%
UNMETERED SCATTERED LOAD	24.31	0.0327	0.0000	4	3,584		1,167	117	0	1,284	0.14%	0.01%	0.00%	0.2%
SENTINEL LIGHTING	13.33	0.0000	23.1778	23	26,757	66	3,679	0	1,530	5,209	0.43%	0.00%	0.18%	0.6%
STREET LIGHTING	1.26	0.0000	5.8788	328	267,045	724	4,959	0	4,256	9,216	0.59%	0.00%	0.50%	1.1%
microFIT	0.00	0.0000	0.0000				0	0	0	0	0.00%	0.00%	0.00%	0.0%
Total							508,175	271,589	67,484	847,248				100.0%

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No Input Required.

Preliminary Threshold Calculation

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

Year	2016	
Year in which Applicant is applying	COS	<i>n</i>
Price Cap Index	2.14%	<i>PCI</i>
Growth Factor Calculation		
2016 Test Year Distribution Revenues	\$847,248	
2014 Actual Distribution Revenues	\$873,634	
Growth Factor	-1.51%	<i>g (Note 1)</i>
Dead Band	10%	
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 2,735,685	
Add: CWIP Opening	\$ -	
Capital Additions	\$ 1,622,664	
Capital Disposals	\$ -	
Capital Retirements	\$ -	
Deduct: CWIP Closing	\$ -	
Gross Fixed Assets - Closing	\$ 4,358,349	
Average Gross Fixed Assets	\$ 3,547,017	
Accumulated Depreciation - Opening	\$ 1,637,728	
Depreciation Expense	\$ 69,600	
Disposals	\$ -	
Retirements	\$ -	
Accumulated Depreciation - Closing	\$ 1,707,328	
Average Accumulated Depreciation	\$ 1,672,528	
Average Net Fixed Assets	\$ 1,874,489	
Working Capital Allowance		
Working Capital Allowance Base	\$ 3,995,688	
Working Capital Allowance Rate	8%	
Working Capital Allowance	\$ 299,677	
Rate Base	\$ 2,174,166	<i>RB</i>
Depreciation	\$ 69,600	<i>d</i>
Threshold Value (varies by Price Cap IR Year subsequent to CoS rebasing)		
Price Cap IR Year 2017	129%	
Price Cap IR Year 2018	129%	
Price Cap IR Year 2019	129%	
Price Cap IR Year 2020	129%	
Threshold CAPEX		<i>Threshold Value × d</i>
Price Cap IR Year 2017	\$ 89,551	
Price Cap IR Year 2018	\$ 89,629	
Price Cap IR Year 2019	\$ 89,707	
Price Cap IR Year 2020	\$ 89,786	

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.

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Chapleau Public Utilities Corporation - Town of Chapleau

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

Distribution System Plan CAPEX

Materiality Threshold

Maximum Eligible Incremental Capital (Forecasted CAPEX less Threshold)

Maximum Eligible Incremental Capital (Forecasted Capex less Threshold)

Proposed Capital Projects Eligible for ACM treatment

Project Descriptions:

MTS#2

Construction of a 25kV substation

Convert Hospital from 4.16 kV to 25 kV

System Conversion from 4.16 kV to 25 kV

Maximum Allowed Incremental Capital