Response to OEB Staff Interrogatory Question #1

Reference:

Question #1:

1 Staff 1. Updates

Upon completing all interrogatories from OEB staff and intervenors, please provide updated RRWFs in working Microsoft Excel format with any corrections or adjustments that the Applicant wishes to make to the amounts in the previous version of the RRWFs included in the middle column. Please include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note. Also upon completing all interrogatories from OEB staff and intervenors please provide any updates to the following Microsoft Excel documents in working format: PILS, any Appendix 2 changes (e.g. cost allocation, rate design, and bill impacts, and so on as required), EDDVAR spreadsheet, and the updated cost allocation model reflecting the revised revenue requirement in the updated RRWFs.

Response:

Please see attachments Att-OEB-Q1-A_Chapter_2_Appendicies_2-G_SQI for updated Service Reliability Indicators.

Please see attachments Att-OEB-Q1-B, Att-OEB-Q1-C, Att-OEB-Q1-D, Att-OEB-Q1-E, and Att-OEB-Q1-F for updated PILS models using the Ontario Energy Board's ("OEB") updated model published July 7, 2015 for years 2016 through 2020.

Please see attachments Att-OEB-Q1-G, Att-OEB-Q1-H, Att-OEB-Q1-I, Att-OEB-Q1-J and Att-OEB-Q1-K for Cost Allocation models using the OEB updated model published July 16, 2015 for years 2016 through 2020. During our review of information provided in Appendix 2-BA for years 2015 to 2020, Hydro Ottawa noted errors in two accounts; Meters (OEB 1860) and Miscellaneous Equipment (OEB 1960). For each fiscal year, the

additions amount under accumulated depreciation for Miscellaneous Equipment should be approximately $.3K higher and should be $.3k lower for Meters. There is no impact to annual total depreciation expense for years 2015 to 2020 as shown in Exhibit D, Tab 1, Schedule 1 nor any impact on net book value as shown in Appendix 2-BA for years 2015 to 2020. The revised numbers have been used in the cost allocation models.

Hydro Ottawa will provide an update to this response on the completion of the updated rate design, as this could not be accomplished by the interrogatory filing deadline.

File Number:	EB-2015-0004
Exhibit:	B
Tab:	5
Schedule:	4
Page:	1
Date:	31-Jul-15

Appendix 2-G
Service Reliability Indicators
2010 - 2014

Index	Including outages caused by loss of supply					Excluding outages caused by loss of supply				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
SAIDI	1.36	2.60	1.64	1.67	1.66	1.05	2.44	1.31	1.64	1.59
SAIFI	1.39	1.69	1.81	1.53	1.08	0.77	1.40	1.13	1.36	0.86

5 Year Historical Average

SAIDI		1.786		1.606
SAIFI		1.500		1.104

SAIDI = System Average Interruption Duration Index

SAIFI = System Average Interruption Frequency Index

Indicator	OEB Minimum Standard	2010	2011	2012	2013	2014
Low Voltage Connections	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%
High Voltage Connections	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Telephone Accessibility	65.0%	82.1%	82.9%	82.5%	82.2%	80.3%
Appointments Met	90.0%	100.0%	97.3%	97.4%	97.4%	98.3%
Written Response to Enquires	80.0%	99.9%	99.9%	100.0%	99.3%	100.0%
Emergency Urban Response	80.0%	97.0%	81.6%	98.5%	97.6%	98.8%
Emergency Rural Response	80.0%	N/A	N/A	N/A	N/A	N/A
Telephone Call Abandon Rate	10.0%	2.6%	2.7%	1.8%	1.9%	2.3%
Appointment Scheduling	90.0%	100.0%	100.0%	99.8%	100.0%	100.0%
Rescheduling a Missed Appointment	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Reconnection Performance Standard	85.0%	N/A	100.0%	100.0%	100.0%	100.0%

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Version 1.0

Utility Name	Hydro Ottawa Limited
Assigned EB Number	EB-2015-0004
Name and Title	Geoff Simpson, Chief Financial Officer
Phone Number	613-738-5499
Email Address	geoffsimpson@hydroottawa.com
Date	
Last COS Re-based Year	**2012**

Note: Drop-down lists are shaded blue; Input cells are shaded green.

This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your rate 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.

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.

Instructions

Purpose
The purpose of this workbook is to calculate the estimated Payment in Lieu of Taxes (PILs) for the Test Year. The calculation of PILs for the Test Year is on tab T0 and is based on the inputs on the other tabs.

Tab S Summary is a summary of the amounts to be transferred to the Revenue Requirement Workform. The Revenue Requirement Workform is on tab 3 of the Revenue Requirement Workform.

Methodology
To calculate the PILs for the Test Year:

1) input the balances from the income tax return of the Historical Year in tabs H1 to H13.
2) input the balances for the subsequent two (2) years (the Bridge Year and the Test Year).
Inputs should include:
- non-deductible expenses (Schedule 1 - B1 and T1)
- capital additions (Schedule 8 - B8 and T8)
- cumulative eligible expenditures (Schedule 10 - B10 and T10)
- non-deductible reserves (Schedule 13 - B13 and T13)

3) make any other adjustments and inputs required so that the PILs amount calculated for the Test Year on tab T0 is reasonable.

Other Notes
Tabs H1 to H13 relate to the Historical Year.
Tabs B1 to B13 relate to the Bridge Year.
Tabs T1 to T13 relate to the Test Year.

s The amounts on tabs H1 to H13 should agree to the tax return filed with the Canada Revenue Agency. Any CRA audit adjustments or corrections should also be reflected.

It is assumed the net income before tax for the Test Year is equal to the Return on Equity. Return on Equity is calculated on tab A.

e On tab "A. Data Input Sheet", input the "Rate Base" amount and "Return on Rate Base" amounts.

For the 2016 Application, the "Test Year" is 2016, the "Historical Year" is 2014, and the "Bridge Year" is 2015.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

1. Info
S. Summary
A. Data Input Sheet
B. Tax Rates & Exemptions

Historical Year

H0 - PILs, Tax Provision Historical Year
H1 - Adj. Taxable Income Historical Year
H4 - Schedule 4 Loss Carry Forward Historical Year
H8 - Schedule 8 Historical'!A1
H10 - Schedule 10 CEC Historical Year
H13 - Schedule 13 Tax Reserves Historical

Bridge Year

B0 - PILs,Tax Provision Bridge Year
B1 - Adj. Taxable Income Bridge Year
B4 - Schedule 4 Loss Carry Forward Bridge Year
B8 - Schedule 8 CCA Bridge Year
B10 - Schedule 10 CEC Bridge Year
B13 - Schedule 13 Tax Reserves Bridge Year

Test Year

T0 PILs, Tax Provision Test Year
T1 Taxable Income Test Year
T4 Schedule 4 Loss Carry Forward Test Year
T8 Schedule 8 CCA Test Year
T10 Schedule 10 CEC Test Year
T13 Schedule 13 Reserve Test Year

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

No inputs required on this worksheet.

Inputs on Service Revenue Requirement Worksheet

The Service Revenue Requirement is in the 'Revenue Requirement Workform' - Tab 3.

Item	Working Paper Reference		
Adjustments required to arrive at taxable income	as below	**-19,841,511**	
Test Year - Payments in Lieu of Taxes (PILs)	T0	**3,663,107**	
Test Year - Grossed-up PILs	T0	**4,983,819**	
Federal Tax Rate	T0	**15.0%**	
Ontario Tax Rate	T0	**11.5%**	

Calculation of Adjustments required to arrive at Taxable Income			
Regulatory Income (before income taxes)	T1	34,296,633	
Taxable Income	T1	14,455,122	
Difference	calculated	-19,841,511	as above

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Rate Base		S	**$**	**921,952,501**		
Return on Ratebase						
Deemed ShortTerm Debt %	4.00%	T	$	36,878,100	*W = S * T*	
Deemed Long Term Debt %	56.00%	U	$	516,293,401	*X = S * U*	
Deemed Equity %	40.00%	V	$	368,781,000	*Y = S * V*	
Short Term Interest Rate	2.16%	Z	$	796,567	*AC = W * Z*	
Long Term Interest	3.72%	AA	$	19,206,115	*AD = X * AA*	
Return on Equity (Regulatory Income)	9.30%	AB	**$**	**34,296,633**	*AE = Y * AB*	T1
Return on Rate Base			**$**	**54,299,314**	*AF = AC + AD + AE*	

Questions that must be answered

	Historical	Bridge	Test Year
1. Does the applicant have any Investment Tax Credits (ITC)?	Yes	Yes	Yes
2. Does the applicant have any SRED Expenditures?	No	No	No
3. Does the applicant have any Capital Gains or Losses for tax purposes?	No	No	No
4. Does the applicant have any Capital Leases?	No	No	No
5. Does the applicant have any Loss Carry-Forwards (non-capital or net capital)?	No	No	No
6. Since 1999, has the applicant acquired another regulated applicant's assets?	No	No	No
7. Did the applicant pay dividends? *If Yes, please describe what was the tax treatment in the manager's summary.*	Yes	Yes	Yes
8. Did the applicant elect to capitalize interest incurred on CWIP for tax purposes?	No	No	No

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Tax Rates Federal & Provincial As of June 15, 2015	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015	Effective January 1, 2016
Federal income tax					
General corporate rate	38.00%	38.00%	38.00%	38.00%	38.00%
Federal tax abatement	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%
Adjusted federal rate	28.00%	28.00%	28.00%	28.00%	28.00%
Rate reduction	-13.00%	-13.00%	-13.00%	-13.00%	-13.00%
Federal Income Tax	15.00%	15.00%	15.00%	15.00%	15.00%
Ontario income tax	11.50%	11.50%	11.50%	11.50%	11.50%
Combined federal and Ontario	26.50%	26.50%	26.50%	26.50%	26.50%
Federal & Ontario Small Business					
Federal small business threshold	500,000	500,000	500,000	500,000	500,000
Ontario Small Business Threshold	500,000	500,000	500,000	500,000	500,000
Federal small business rate	11.00%	11.00%	11.00%	11.00%	10.50%
Ontario small business rate	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

1. The Ontario Energy Board's proxy for taxable capital is rate base.
2. If taxable capital exceds $15 million the maximum tax rates apply.
3. If taxable capital is below $10 million the minimum tax rates apply.
4. Where taxable capital is between $10 million and $15 million, the tax rate will be calculated.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Historical Year

Note: Input the actual information from the tax returns for the historical year.

					Wires Only	
Regulatory Taxable Income				H1	$ 1,027,371	**A**
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	**B**			
	Federal tax rate (Maximum 15%)	15.00%	**C**			
	Combined tax rate (Maximum 26.5%)				26.50%	**M = K + L**
Total Income Taxes					**$ 272,253**	**E = A * D**
Investment Tax Credits						**F**
Miscellaneous Tax Credits						**G**
Total Tax Credits					**$ -**	**H = F + G**
Corporate PILs/Income Tax Provision for Historical Year					**$ 272,253**	**I = H + E**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Historical Year

	T2S1 line #	Total for Legal Entity	Non-Distribution Eliminations	Historic Wires Only
Income before PILs/Taxes	A	28,783,000		28,783,000
Additions:				
Interest and penalties on taxes	103	6,439		6,439
Amortization of tangible assets	104	30,249,000		30,249,000
Amortization of intangible assets	106	5,791,000		5,791,000
Recapture of capital cost allowance from Schedule 8	107			0
Gain on sale of eligible capital property from Schedule 10	108			0
Income or loss for tax purposes- joint ventures or partnerships	109			0
Loss in equity of subsidiaries and affiliates	110			0
Loss on disposal of assets	111	1,509,282		1,509,282
Charitable donations	112	212,515		212,515
Taxable Capital Gains	113			0
Political Donations	114			0
Deferred and prepaid expenses	116			0
Scientific research expenditures deducted on financial statements	118			0
Capitalized interest	119			0
Non-deductible club dues and fees	120			0
Non-deductible meals and entertainment expense	121	70,010		70,010
Non-deductible automobile expenses	122			0
Non-deductible life insurance premiums	123			0
Non-deductible company pension plans	124			0
Tax reserves deducted in prior year	125	1,110,910		1,110,910
Reserves from financial statements- balance at end of year	126	5,371,304		5,371,304
Soft costs on construction and renovation of buildings	127			0
Book loss on joint ventures or partnerships	205			0
Capital items expensed	206			0
Debt issue expense	208			0
Development expenses claimed in current year	212			0
Financing fees deducted in books	216			0
Gain on settlement of debt	220			0
Non-deductible advertising	226			0
Non-deductible interest	227			0
Non-deductible legal and accounting fees	228			0
Recapture of SR&ED expenditures	231			0
Share issue expense	235			0
Write down of capital property	236			0
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237			0
Other Additions				
Interest Expensed on Capital Leases	290			0
Realized Income from Deferred Credit Accounts	291			0
Pensions	292	597,824		597,824
Non-deductible penalties	293			0
	294			0
	295			0
ARO Accretion expense		10,438		10,438
Capital Contributions Received (ITA 12(1)(x))				0
Lease Inducements Received (ITA 12(1)(x))				0
Deferred Revenue (ITA 12(1)(a))				0
Prior Year Investment Tax Credits received		11,878		11,878
Current Year Investment Tax Credits received		226,323		226,323

Impairment charge		1,250,168		1,250,168
				0
				0
				0
				0
				0
				0
				0
				0
Total Additions		**46,417,091**	**0**	**46,417,091**
Deductions:				
Gain on disposal of assets per financial statements	401			0
Dividends not taxable under section 83	402			0
Capital cost allowance from Schedule 8	403	64,818,889		64,818,889
Terminal loss from Schedule 8	404			0
Cumulative eligible capital deduction from Schedule 10	405	91,757		91,757
Allowable business investment loss	406			0
Deferred and prepaid expenses	409			0
Scientific research expenses claimed in year	411			0
Tax reserves claimed in current year	413	3,227,504		3,227,504
Reserves from financial statements - balance at beginning of year	414	3,063,750		3,063,750
Contributions to deferred income plans	416	570,527		570,527
Book income of joint venture or partnership	305			0
Equity in income from subsidiary or affiliates	306			0
Other deductions: (Please explain in detail the nature of the item)				
Interest capitalized for accounting deducted for tax	390	1,857,000		1,857,000
Capital Lease Payments	391			0
Non-taxable imputed interest income on deferral and variance accounts	392			0
	393			0
	394			0
ARO Payments - Deductible for Tax when Paid		103,721		103,721
ITA 13(7.4) Election - Capital Contributions Received				0
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				0
Deferred Revenue - ITA 20(1)(m) reserve				0
Principal portion of lease payments				0
Lease Inducement Book Amortization credit to income				0
Financing fees for tax ITA 20(1)(e) and (e.1)				0
Tax credits accrued for in current year & deducted in financials in current year		227,057		227,057
				0
				0
				0
				0
				0
				0
Total Deductions		**73,960,205**	**0**	**73,960,205**
Net Income for Tax Purposes		**1,239,886**	**0**	**1,239,886**
Charitable donations from Schedule 2	311	212,515		212,515
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320			0
Non-capital losses of preceding taxation years from Schedule 4	331			0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332			0
Limited partnership losses of preceding taxation years from Schedule 4	335			0
TAXABLE INCOME		**1,027,371**	**0**	**1,027,371**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Historical

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical	0		0	B4

Net Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical			0	B4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 - Historical Year

Class	Class Description	UCC End of Year Historical per tax returns	Less: Non-Distribution Portion	UCC Regulated Historical Year
1	Distribution System - post 1987	194,128,563	994,943	193,133,620
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	23,891,295	735,570	23,155,725
2	Distribution System - pre 1988	63,500,604		63,500,604
8	General Office/Stores Equip	8,163,885		8,163,885
10	Computer Hardware/ Vehicles	5,514,836		5,514,836
10.1	Certain Automobiles			0
12	Computer Software	16,489,286		16,489,286
13 1	Lease # 1			0
13 2	Lease #2			0
13 3	Lease # 3			0
13 4	Lease # 4			0
14	Franchise			0
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs			0
42	Fibre Optic Cable	371,686		371,686
43.1	Certain Energy-Efficient Electrical Generating Equipment			0
43.2	Certain Clean Energy Generation Equipment	85,572	85,572	0
45	Computers & Systems Software acq'd post Mar 22/04	26,138		26,138
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)			0
47	Distribution System - post February 2005	357,958,594		357,958,594
50	Data Network Infrastructure Equipment - post Mar 2007	1,986,143		1,986,143
52	Computer Hardware and system software			0
95	CWIP			0
3	Building - pre 1988	9,673,783		9,673,783
				0
				0
				0
				0
				0
				0
				0
				0
				0
	SUB-TOTAL - UCC	681,790,385	1,816,085	679,974,300

Schedule 10 CEC - Historical Year

Cumulative Eligible Capital				**824,938**
Additions				
Cost of Eligible Capital Property Acquired during Test Year	647,837			
Other Adjustments	0			
Subtotal	647,837	**x 3/4 =**	485,878	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0	
			485,878	**485,878**
Amount transferred on amalgamation or wind-up of subsidiary	0			**0**
Subtotal				**1,310,816**
Deductions				
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year				
Other Adjustments	0			
Subtotal	0	**x 3/4 =**		**0**
Cumulative Eligible Capital Balance				**1,310,816**
Current Year Deduction		**1,310,816**	**x 7% =**	**91,757**
Cumulative Eligible Capital - Closing Balance				**1,219,059**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Historical

Continuity of Reserves

Description	Historical Balance as per tax returns	Non-Distribution Eliminations	Utility Only	
Capital Gains Reserves ss.40(1)			0	B13
Tax Reserves Not Deducted for accounting purposes				
Reserve for doubtful accounts ss. 20(1)(l)	3,227,504		3,227,504	B13
Reserve for goods and services not delivered ss. 20(1)(m)			0	B13
Reserve for unpaid amounts ss. 20(1)(n)			0	B13
Debt & Share Issue Expenses ss. 20(1)(e)			0	B13
Other tax reserves			0	B13
			0	
			0	
			0	
			0	
			0	
Total	**3,227,504**	**0**	**3,227,504**	
Financial Statement Reserves (not deductible for Tax Purposes)				
General Reserve for Inventory Obsolescence (non-specific)			0	B13
General reserve for bad debts	3,828,062		3,828,062	B13
Accrued Employee Future Benefits:			0	B13
- Medical and Life Insurance			0	B13
-Short & Long-term Disability			0	B13
-Accmulated Sick Leave			0	B13
- Termination Cost			0	B13
- Other Post-Employment Benefits			0	B13
Provision for Environmental Costs			0	B13
Restructuring Costs			0	B13
Accrued Contingent Litigation Costs			0	B13
Accrued Self-Insurance Costs			0	B13
Other Contingent Liabilities	1,543,242		1,543,242	B13
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0	B13
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0	B13
Other			0	B13
			0	
			0	
Total	**5,371,304**	**0**	**5,371,304**	

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILS Tax Provision - Bridge Year

			Reference	Wires Only	
Regulatory Taxable Income			B1	-$ 6,256,777	**A**
Combined Tax Rate and PILs	Effective Ontario Tax Rate	11.50%	**B**		
	Federal tax rate (Maximum 15%)	15.00%	**C**		
	Combined tax rate			26.50%	**D = B + C**
Total Income Taxes			calculated	**-$ 1,658,046**	**E = A * D**
Investment Tax Credits					**F**
Miscellaneous Tax Credits				$ -	**G**
Total Tax Credits				**$ -**	**H = F + G**
Corporate PILs/Income Tax Provision for Bridge Year				**$ -**	**I = H + E**

Note:

1. This is for the derivation of Bridge year PILs income tax expense and should not be used for Test year revenue requirement calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

	T2S1 line #	Working Paper Reference	Total for Regulated Utility
Income before PILs/Taxes	A		27,637,000
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets	104		38,416,273
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves deducted in prior year	125	B13	3,227,504
Reserves from financial statements- balance at end of year	126	B13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Other Additions			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits Received			182,500
Total Additions			**48,890,634**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	B8	71,086,230
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10	405	B10	998,873
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves claimed in current year	413	B13	3,227,504
Reserves from financial statements - balance at beginning of year	414	B13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Interest capitalized for accounting deducted for tax	390		1,427,000
Capital Lease Payments	391		
Non-taxable imputed interest income on deferral and variance accounts	392		
	393		
	394		
ARO Payments - Deductible for Tax when Paid			
ITA 13(7.4) Election - Capital Contributions Received			
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds			
Deferred Revenue - ITA 20(1)(m) reserve			
Principal portion of lease payments			
Lease Inducement Book Amortization credit to income			
Financing fees for tax ITA 20(1)(e) and (e.1)			
Total Deductions		calculated	**82,710,911**
Net Income for Tax Purposes		calculated	**-6,183,277**
Charitable donations from Schedule 2	311		-73,500
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320		
Non-capital losses of preceding taxation years from Schedule 4	331	B4	0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332		
Limited partnership losses of preceding taxation years from Schedule 4	335		
TAXABLE INCOME		calculated	**-6,256,777**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Corporation Loss Continuity and Application

Schedule 4 Loss Carry Forward - Bridge Year

Non-Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)	B1	0	
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year	B1	0	
Balance available for use post Bridge Year	calculated	0	T4

Net Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)			
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year			
Balance available for use post Bridge Year	calculated	0	T4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Bridge Year

Class	Class Description	Working Paper Reference	UCC Regulated Historical Year	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Bridge Year CCA		UCC End of Bridge Year
1	Distribution System - post 1987	H8	$ 193,133,620			$ 193,133,620	$ -	$ 193,133,620	4%	$ 7,725,345		$ 185,408,275
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	H8	$ 23,155,725	$ 2,259,608		$ 25,415,333	$ 1,129,804	$ 24,285,529	6%	$ 1,457,132		$ 23,958,201
2	Distribution System - pre 1988	H8	$ 63,500,604			$ 63,500,604	$ -	$ 63,500,604	6%	$ 3,810,036		$ 59,690,568
8	General Office/Stores Equip	H8	$ 8,163,885	$ 1,531,020		$ 9,694,905	$ 765,510	$ 8,929,395	20%	$ 1,785,879		$ 7,909,026
10	Computer Hardware/ Vehicles	H8	$ 5,514,836	$ 1,464,507		$ 6,979,343	$ 732,254	$ 6,247,090	30%	$ 1,874,127		$ 5,105,216
10.1	Certain Automobiles	H8				$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	H8	$ 16,489,286	$ 8,494,616		$ 24,983,902	$ 4,247,308	$ 20,736,594	100%	$ 20,736,594		$ 4,247,308
13 1	Lease # 1	H8				$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	H8				$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	H8				$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	H8				$ -	$ -	$ -		$ -		$ -
14	Franchise	H8				$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs	H8				$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	H8	$ 371,686			$ 371,686	$ -	$ 371,686	12%	$ 44,602		$ 327,084
43.1	Certain Energy-Efficient Electrical Generating Equipment	H8				$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	H8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	H8	$ 26,138			$ 26,138	$ -	$ 26,138	45%	$ 11,762		$ 14,376
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	H8				$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	H8	$ 357,958,594	$ 78,153,441		$ 436,112,035	$ 39,076,721	$ 397,035,315	8%	$ 31,762,825		$ 404,349,210
50	Data Network Infrastructure Equipment - post Mar 2007	H8	$ 1,986,143	$ 1,097,672		$ 3,083,815	$ 548,836	$ 2,534,979	55%	$ 1,394,238		$ 1,689,577
52	Computer Hardware and system software	H8				$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	H8				$ -	$ -	$ -		$ -		$ -
3	Building - pre 1988		$ 9,673,783			$ 9,673,783	$ -	$ 9,673,783	5%	$ 483,689		$ 9,190,094
						$ -	$ -	$ -	10%	$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
	TOTAL		$ 679,974,300	$ 93,000,864	$ -	$ 772,975,164	$ 46,500,432	$ 726,474,732		$ 71,086,230	B1	$ 701,888,934

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filer

Schedule 10 CEC - Bridge Year

				Reference	
Cumulative Eligible Capital				H10	**1,219,059**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	17,400,735				
Other Adjustments	0				
Subtotal	17,400,735	**x 3/4 =**	########		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			########		**13,050,551**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**14,269,610**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**

Cumulative Eligible Capital Balance			**14,269,610**
Current Year Deduction	**14,269,610**	**x 7% =**	**998,873**
Cumulative Eligible Capital - Closing Balance			**13,270,737**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Bridge Year

Continuity of Reserves

Description	Reference	Historical Utility Only	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Bridge Year Adjustments: Additions	Bridge Year Adjustments: Disposals	Balance for Bridge Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	H13	0		0				0	T13	0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	H13	3,227,504		3,227,504				3,227,504	T13	0	
Reserve for goods and services not delivered ss. 20(1)(m)	H13	0		0				0	T13	0	
Reserve for unpaid amounts ss. 20(1)(n)	H13	0		0				0	T13	0	
Debt & Share Issue Expenses ss. 20(1)(e)	H13	0		0				0	T13	0	
Other tax reserves	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	B1	**0**	**0**	**3,227,504**	B1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	H13	0		0				0	T13	0	
General reserve for bad debts	H13	3,828,062		3,828,062				3,828,062	T13	0	
Accrued Employee Future Benefits:	H13	0		0				0	T13	0	
- Medical and Life Insurance	H13	0		0				0	T13	0	
-Short & Long-term Disability	H13	0		0				0	T13	0	
-Accmulated Sick Leave	H13	0		0				0	T13	0	
- Termination Cost	H13	0		0				0	T13	0	
- Other Post-Employment Benefits	H13	0		0				0	T13	0	
Provision for Environmental Costs	H13	0		0				0	T13	0	
Restructuring Costs	H13	0		0				0	T13	0	
Accrued Contingent Litigation Costs	H13	0		0				0	T13	0	
Accrued Self-Insurance Costs	H13	0		0				0	T13	0	
Other Contingent Liabilities	H13	1,543,242		1,543,242				1,543,242	T13	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	H13	0		0				0	T13	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	H13	0		0				0	T13	0	
Other	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	B1	**0**	**0**	**5,371,304**	B1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Test Year

					Wires Only		
Regulatory Taxable Income				T1	$ 14,455,122	A	
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	B				
	Federal tax rate (Maximum 15%)	15.00%	C				
	Combined tax rate (Maximum 26.5%)				26.50%	D = B + C	
Total Income Taxes					**$ 3,830,607**	E = A * D	
Investment Tax Credits						F	
Miscellaneous Tax Credits					$ 167,500	G	
Total Tax Credits					**$ 167,500**	H = F + G	
Corporate PILs/Income Tax Provision for Test Year					**$ 3,663,107**	I = H + E	S. Su
Corporate PILs/Income Tax Provision Gross Up [1]		73.50%	J		**$ 1,320,712**	K = J * I	
Income Tax (grossed-up)					**$ 4,983,819**	L = K + I	S. Su

Note:

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Taxable Income - Test Year

		Working Paper Reference	Test Year Taxable Income
Net Income Before Taxes		A.	34,296,633

	T2 S1 line #		
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets *2-4 ADJUSTED ACCOUNTING DATA P489*	104		40,755,585
Amortization of intangible assets *2-4 ADJUSTED ACCOUNTING DATA P490*	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves beginning of year	125	T13	3,227,504
Reserves from financial statements- balance at end of year	126	T13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		

Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Other Additions: (please explain in detail the nature of the item)			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
	296		
	297		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits received			167,500
Total Additions			**51,214,946**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	T8	60,668,749
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10 CEC	405	T10	1,188,900
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves end of year	413	T13	3,227,504
Reserves from financial statements - balance at beginning of year	414	T13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			
Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		

Non-taxable imputed interest income on deferral and variance accounts	392			
	393			
	394			
	395			
	396			
	397			
ARO Payments - Deductible for Tax when Paid				
ITA 13(7.4) Election - Capital Contributions Received				
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				
Deferred Revenue - ITA 20(1)(m) reserve				
Principal portion of lease payments				
Lease Inducement Book Amortization credit to income				
Financing fees for tax ITA 20(1)(e) and (e.1)				
Total Deductions		calculated	**71,056,457**	
NET INCOME FOR TAX PURPOSES		calculated	**14,455,122**	
Charitable donations	311			
Taxable dividends received under section 112 or 113	320			
Non-capital losses of preceding taxation years from Schedule 7-1	331	T4	0	
Net-capital losses of preceding taxation years (Please show calculation)	332			
Limited partnership losses of preceding taxation years from Schedule 4	335			
REGULATORY TAXABLE INCOME		calculated	**14,455,122**	T0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Test Year

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Working Paper Reference	Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)	T1	0		0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year	T1	0		0
Balance available for use post Test Year	calculated	0	0	0

Net Capital Loss Carry Forward Deduction		Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)				0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year				0
Balance available for use post Test Year	calculated	0	0	0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Test Year

Class	Class Description	Working Paper Reference	UCC Test Year Opening Balance	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Test Year CCA		UCC End of Test Year
1	Distribution System - post 1987	B8	$ 185,408,275			$ 185,408,275	$ -	$ 185,408,275	4%	$ 7,416,331		$ 177,991,944
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	B8	$ 23,958,201	3,085,755		$ 27,043,956	$ 1,542,878	$ 25,501,079	6%	$ 1,530,065		$ 25,513,892
2	Distribution System - pre 1988	B8	$ 59,690,568			$ 59,690,568	$ -	$ 59,690,568	6%	$ 3,581,434		$ 56,109,134
8	General Office/Stores Equip	B8	$ 7,909,026	4,688,193		$ 12,597,219	$ 2,344,097	$ 10,253,123	20%	$ 2,050,625		$ 10,546,595
10	Computer Hardware/ Vehicles	B8	$ 5,105,216	1,289,703		$ 6,394,919	$ 644,852	$ 5,750,068	30%	$ 1,725,020		$ 4,669,899
10.1	Certain Automobiles	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	B8	$ 4,247,308	5,746,639		$ 9,993,947	$ 2,873,320	$ 7,120,628	100%	$ 7,120,628		$ 2,873,320
13 1	Lease # 1	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	B8	$ -			$ -	$ -	$ -		$ -		$ -
14	Franchise	B8	$ -			$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bl	B8	$ -			$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	B8	$ 327,084			$ 327,084	$ -	$ 327,084	12%	$ 39,250		$ 287,834
43.1	Certain Energy-Efficient Electrical Generating Equipment	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	B8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	B8	$ 14,376			$ 14,376	$ -	$ 14,376	45%	$ 6,469		$ 7,907
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	B8	$ 404,349,210	65,468,861		$ 469,818,071	$ 32,734,431	$ 437,083,640	8%	$ 34,966,691		$ 434,851,380
50	Data Network Infrastructure Equipment - post Mar 2007	B8	$ 1,689,577	3,067,144		$ 4,756,721	$ 1,533,572	$ 3,223,149	55%	$ 1,772,732		$ 2,983,989
52	Computer Hardware and system software	B8	$ -			$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	B8	$ -			$ -	$ -	$ -	0%	$ -		$ -
3	Building - pre 1988		$ 9,190,094			$ 9,190,094	$ -	$ 9,190,094	5%	$ 459,505		$ 8,730,589
			$ -			$ -	$ -	$ -	10%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
	TOTAL		$ 701,888,934	$ 83,346,295	$ -	$ 785,235,229	$ 41,673,148	$ 743,562,082		$ 60,668,749	T1	$ 724,566,480

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 10 CEC - Test Year

Cumulative Eligible Capital				B10	**13,270,737**
Additions					
Cost of Eligible Capital Property Acquired during Test Year		4,951,403			
Other Adjustments		0			
	Subtotal	4,951,403	**x 3/4 =**	3,713,552	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002		0	**x 1/2 =**	0	
				3,713,552	**3,713,552**
Amount transferred on amalgamation or wind-up of subsidiary		0			**0**
	Subtotal				**16,984,289**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year		0			
Other Adjustments		0			
	Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**16,984,289**
Current Year Deduction (Carry Forward to Tab "Test Year Taxable Income")	**16,984,289**	**x 7% =**	**1,188,900**
Cumulative Eligible Capital - Closing Balance			**15,795,389**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Test Year

Continuity of Reserves

Description	Working Paper Reference	Bridge Year	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Test Year Adjustments: Additions	Test Year Adjustments: Disposals	Balance for Test Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	B13	0		0				0		0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	B13	3,227,504		3,227,504		0	0	3,227,504		0	
Reserve for goods and services not delivered ss. 20(1)(m)	B13	0		0				0		0	
Reserve for unpaid amounts ss. 20(1)(n)	B13	0		0				0		0	
Debt & Share Issue Expenses ss. 20(1)(e)	B13	0		0				0		0	
Other tax reserves	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	T1	**0**	**0**	**3,227,504**	T1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	B13	0		0				0		0	
General reserve for bad debts	B13	3,828,062		3,828,062				3,828,062		0	
Accrued Employee Future Benefits:	B13	0		0				0		0	
- Medical and Life Insurance	B13	0		0				0		0	
-Short & Long-term Disability	B13	0		0				0		0	
-Accmulated Sick Leave	B13	0		0				0		0	
- Termination Cost	B13	0		0				0		0	
- Other Post-Employment Benefits	B13	0		0				0		0	
Provision for Environmental Costs	B13	0		0				0		0	
Restructuring Costs	B13	0		0				0		0	
Accrued Contingent Litigation Costs	B13	0		0				0		0	
Accrued Self-Insurance Costs	B13	0		0				0		0	
Other Contingent Liabilities	B13	1,543,242		1,543,242				1,543,242		0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	B13	0		0				0		0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	B13	0		0				0		0	
Other	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	T1	**0**	**0**	**5,371,304**	T1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Version 1.0

Utility Name	Hydro Ottawa Limited
Assigned EB Number	EB-2015-0004
Name and Title	Geoff Simpson, Chief Financial Officer
Phone Number	613-738-5499
Email Address	geoffsimpson@hydroottawa.com
Date	
Last COS Re-based Year	**2012**

Note: Drop-down lists are shaded blue; Input cells are shaded green.

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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.

Instructions

Purpose
The purpose of this workbook is to calculate the estimated Payment in Lieu of Taxes (PILs) for the Test Year. The calculation of PILs for the Test Year is on tab T0 and is based on the inputs on the other tabs.

Tab S Summary is a summary of the amounts to be transferred to the Revenue Requirement Workform. The Revenue Requirement Workform is on tab 3 of the Revenue Requirement Workform.

Methodology
To calculate the PILs for the Test Year:

1) input the balances from the income tax return of the Historical Year in tabs H1 to H13.
2) input the balances for the subsequent two (2) years (the Bridge Year and the Test Year).
Inputs should include:
- non-deductible expenses (Schedule 1 - B1 and T1)
- capital additions (Schedule 8 - B8 and T8)
- cumulative eligible expenditures (Schedule 10 - B10 and T10)
- non-deductible reserves (Schedule 13 - B13 and T13)

3) make any other adjustments and inputs required so that the PILs amount calculated for the Test Year on tab T0 is reasonable.

Other Notes
Tabs H1 to H13 relate to the Historical Year.
Tabs B1 to B13 relate to the Bridge Year.
Tabs T1 to T13 relate to the Test Year.

s The amounts on tabs H1 to H13 should agree to the tax return filed with the Canada Revenue Agency. Any CRA audit adjustments or corrections should also be reflected.

It is assumed the net income before tax for the Test Year is equal to the Return on Equity. Return on Equity is calculated on tab A.

e On tab "A. Data Input Sheet", input the "Rate Base" amount and "Return on Rate Base" amounts.

For the 2016 Application, the "Test Year" is 2016, the "Historical Year" is 2014, and the "Bridge Year" is 2015.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

1. Info
S. Summary
A. Data Input Sheet
B. Tax Rates & Exemptions

Historical Year

H0 - PILs, Tax Provision Historical Year
H1 - Adj. Taxable Income Historical Year
H4 - Schedule 4 Loss Carry Forward Historical Year
H8 - Schedule 8 Historical'!A1
H10 - Schedule 10 CEC Historical Year
H13 - Schedule 13 Tax Reserves Historical

Bridge Year

B0 - PILs,Tax Provision Bridge Year
B1 - Adj. Taxable Income Bridge Year
B4 - Schedule 4 Loss Carry Forward Bridge Year
B8 - Schedule 8 CCA Bridge Year
B10 - Schedule 10 CEC Bridge Year
B13 - Schedule 13 Tax Reserves Bridge Year

Test Year

T0 PILs, Tax Provision Test Year
T1 Taxable Income Test Year
T4 Schedule 4 Loss Carry Forward Test Year
T8 Schedule 8 CCA Test Year
T10 Schedule 10 CEC Test Year
T13 Schedule 13 Reserve Test Year

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

No inputs required on this worksheet.

Inputs on Service Revenue Requirement Worksheet

The Service Revenue Requirement is in the 'Revenue Requirement Workform' - Tab 3.

Item	Working Paper Reference		
Adjustments required to arrive at taxable income	as below	**-21,920,315**	
Test Year - Payments in Lieu of Taxes (PILs)	T0	**3,554,049**	
Test Year - Grossed-up PILs	T0	**4,835,440**	
Federal Tax Rate	T0	**15.0%**	
Ontario Tax Rate	T0	**11.5%**	

Calculation of Adjustments required to arrive at Taxable Income			
Regulatory Income (before income taxes)	T1	36,058,234	
Taxable Income	T1	14,137,920	
Difference	calculated	-21,920,315	as above

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Rate Base		S	**$**	**969,307,374**		
Return on Ratebase						
Deemed ShortTerm Debt %	4.00%	T	$	38,772,295	*W = S * T*	
Deemed Long Term Debt %	56.00%	U	$	542,812,129	*X = S * U*	
Deemed Equity %	40.00%	V	$	387,722,950	*Y = S * V*	
Short Term Interest Rate	2.16%	Z	$	837,482	*AC = W * Z*	
Long Term Interest	3.94%	AA	$	21,386,798	*AD = X * AA*	
Return on Equity (Regulatory Income)	9.30%	AB	**$**	**36,058,234**	*AE = Y * AB*	T1
Return on Rate Base			**$**	**58,282,514**	*AF = AC + AD + AE*	

Questions that must be answered

	Historical	Bridge	Test Year
1. Does the applicant have any Investment Tax Credits (ITC)?	Yes	Yes	Yes
2. Does the applicant have any SRED Expenditures?	No	No	No
3. Does the applicant have any Capital Gains or Losses for tax purposes?	No	No	No
4. Does the applicant have any Capital Leases?	No	No	No
5. Does the applicant have any Loss Carry-Forwards (non-capital or net capital)?	No	No	No
6. Since 1999, has the applicant acquired another regulated applicant's assets?	No	No	No
7. Did the applicant pay dividends? *If Yes, please describe what was the tax treatment in the manager's summary.*	Yes	Yes	Yes
8. Did the applicant elect to capitalize interest incurred on CWIP for tax purposes?	No	No	No

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Tax Rates Federal & Provincial As of June 15, 2015	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015	Effective January 1, 2016
Federal income tax					
General corporate rate	38.00%	38.00%	38.00%	38.00%	38.00%
Federal tax abatement	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%
Adjusted federal rate	28.00%	28.00%	28.00%	28.00%	28.00%
Rate reduction	-13.00%	-13.00%	-13.00%	-13.00%	-13.00%
Federal Income Tax	15.00%	15.00%	15.00%	15.00%	15.00%
Ontario income tax	11.50%	11.50%	11.50%	11.50%	11.50%
Combined federal and Ontario	26.50%	26.50%	26.50%	26.50%	26.50%
Federal & Ontario Small Business					
Federal small business threshold	500,000	500,000	500,000	500,000	500,000
Ontario Small Business Threshold	500,000	500,000	500,000	500,000	500,000
Federal small business rate	11.00%	11.00%	11.00%	11.00%	10.50%
Ontario small business rate	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

1. The Ontario Energy Board's proxy for taxable capital is rate base.
2. If taxable capital exceds $15 million the maximum tax rates apply.
3. If taxable capital is below $10 million the minimum tax rates apply.
4. Where taxable capital is between $10 million and $15 million, the tax rate will be calculated.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Historical Year

Note: Input the actual information from the tax returns for the historical year.

					Wires Only	
Regulatory Taxable Income				H1	-$ 6,256,777	**A**
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	**B**			
	Federal tax rate (Maximum 15%)	15.00%	**C**			
	Combined tax rate (Maximum 26.5%)				26.50%	**M = K + L**
Total Income Taxes					**-$ 1,658,046**	**E = A * D**
Investment Tax Credits						**F**
Miscellaneous Tax Credits						**G**
Total Tax Credits					**$ -**	**H = F + G**
Corporate PILs/Income Tax Provision for Historical Year					**$ -**	**I = H + E**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Historical Year

	T2S1 line #	Total for Legal Entity	Non-Distribution Eliminations	Historic Wires Only
Income before PILs/Taxes	A	27,637,000		27,637,000
Additions:				
Interest and penalties on taxes	103	5,000		5,000
Amortization of tangible assets	104	38,416,273		38,416,273
Amortization of intangible assets	106			0
Recapture of capital cost allowance from Schedule 8	107			0
Gain on sale of eligible capital property from Schedule 10	108			0
Income or loss for tax purposes- joint ventures or partnerships	109			0
Loss in equity of subsidiaries and affiliates	110			0
Loss on disposal of assets	111	1,013,053		1,013,053
Charitable donations	112			0
Taxable Capital Gains	113			0
Political Donations	114			0
Deferred and prepaid expenses	116			0
Scientific research expenditures deducted on financial statements	118			0
Capitalized interest	119			0
Non-deductible club dues and fees	120			0
Non-deductible meals and entertainment expense	121	75,000		75,000
Non-deductible automobile expenses	122			0
Non-deductible life insurance premiums	123			0
Non-deductible company pension plans	124			0
Tax reserves deducted in prior year	125	3,227,504		3,227,504
Reserves from financial statements- balance at end of year	126	5,371,304		5,371,304
Soft costs on construction and renovation of buildings	127			0
Book loss on joint ventures or partnerships	205			0
Capital items expensed	206			0
Debt issue expense	208			0
Development expenses claimed in current year	212			0
Financing fees deducted in books	216			0
Gain on settlement of debt	220			0
Non-deductible advertising	226			0
Non-deductible interest	227			0
Non-deductible legal and accounting fees	228			0
Recapture of SR&ED expenditures	231			0
Share issue expense	235			0
Write down of capital property	236			0
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237			0
Other Additions				
Interest Expensed on Capital Leases	290			0
Realized Income from Deferred Credit Accounts	291			0
Pensions	292	600,000		600,000
Non-deductible penalties	293			0
	294			0
	295			0
ARO Accretion expense				0
Capital Contributions Received (ITA 12(1)(x))				0
Lease Inducements Received (ITA 12(1)(x))				0
Deferred Revenue (ITA 12(1)(a))				0
Prior Year Investment Tax Credits received				0
Current Year Investment Tax Credits received		182,500		182,500

Impairment charge				0
				0
				0
				0
				0
				0
				0
				0
				0
Total Additions		**48,890,634**	**0**	**48,890,634**
Deductions:				
Gain on disposal of assets per financial statements	401			0
Dividends not taxable under section 83	402			0
Capital cost allowance from Schedule 8	403	71,086,230		71,086,230
Terminal loss from Schedule 8	404			0
Cumulative eligible capital deduction from Schedule 10	405	998,873		998,873
Allowable business investment loss	406			0
Deferred and prepaid expenses	409			0
Scientific research expenses claimed in year	411			0
Tax reserves claimed in current year	413	3,227,504		3,227,504
Reserves from financial statements - balance at beginning of year	414	5,371,304		5,371,304
Contributions to deferred income plans	416	600,000		600,000
Book income of joint venture or partnership	305			0
Equity in income from subsidiary or affiliates	306			0
Other deductions: (Please explain in detail the nature of the item)				
Interest capitalized for accounting deducted for tax	390	1,427,000		1,427,000
Capital Lease Payments	391			0
Non-taxable imputed interest income on deferral and variance accounts	392			0
	393			0
	394			0
ARO Payments - Deductible for Tax when Paid				0
ITA 13(7.4) Election - Capital Contributions Received				0
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				0
Deferred Revenue - ITA 20(1)(m) reserve				0
Principal portion of lease payments				0
Lease Inducement Book Amortization credit to income				0
Financing fees for tax ITA 20(1)(e) and (e.1)				0
Tax credits accrued for in current year & deducted in financials in current year				0
				0
				0
				0
				0
				0
				0
Total Deductions		**82,710,911**	**0**	**82,710,911**
Net Income for Tax Purposes		**-6,183,277**	**0**	**-6,183,277**
Charitable donations from Schedule 2	311	73,500		73,500
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320			0
Non-capital losses of preceding taxation years from Schedule 4	331			0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332			0
Limited partnership losses of preceding taxation years from Schedule 4	335			0
TAXABLE INCOME		**-6,256,777**	**0**	**-6,256,777**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Historical

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical	0		0	B4

Net Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical			0	B4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 - Historical Year

Class	Class Description	UCC End of Year Historical per tax returns	Less: Non-Distribution Portion	UCC Regulated Historical Year
1	Distribution System - post 1987	185,408,275		185,408,275
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	23,958,201		23,958,201
2	Distribution System - pre 1988	59,690,568		59,690,568
8	General Office/Stores Equip	7,909,026		7,909,026
10	Computer Hardware/ Vehicles	5,105,216		5,105,216
10.1	Certain Automobiles			0
12	Computer Software	4,247,308		4,247,308
13 1	Lease # 1			0
13 2	Lease #2			0
13 3	Lease # 3			0
13 4	Lease # 4			0
14	Franchise			0
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs			0
42	Fibre Optic Cable	327,084		327,084
43.1	Certain Energy-Efficient Electrical Generating Equipment			0
43.2	Certain Clean Energy Generation Equipment	0		0
45	Computers & Systems Software acq'd post Mar 22/04	14,376		14,376
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)			0
47	Distribution System - post February 2005	404,349,210		404,349,210
50	Data Network Infrastructure Equipment - post Mar 2007	1,689,577		1,689,577
52	Computer Hardware and system software			0
95	CWIP			0
3	Building - pre 1988	9,190,094		9,190,094
				0
				0
				0
				0
				0
				0
				0
				0
				0
	SUB-TOTAL - UCC	701,888,934	0	701,888,934

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Income Tax/PILs Workform for 2016 Filer

Schedule 10 CEC - Historical Year

Cumulative Eligible Capital				**1,219,059**
Additions				
Cost of Eligible Capital Property Acquired during Test Year	17,400,735			
Other Adjustments	0			
Subtotal	17,400,735	**x 3/4 =**	########	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0	
			########	**13,050,551**
Amount transferred on amalgamation or wind-up of subsidiary	0			**0**
Subtotal				**14,269,610**
Deductions				
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year				
Other Adjustments	0			
Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**14,269,610**
Current Year Deduction	**14,269,610**	**x 7% =**	**998,873**
Cumulative Eligible Capital - Closing Balance			**13,270,737**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Historical

Continuity of Reserves

Description	Historical Balance as per tax returns	Non-Distribution Eliminations	Utility Only	
Capital Gains Reserves ss.40(1)			0	B13
Tax Reserves Not Deducted for accounting purposes				
Reserve for doubtful accounts ss. 20(1)(l)	3,227,504		3,227,504	B13
Reserve for goods and services not delivered ss. 20(1)(m)			0	B13
Reserve for unpaid amounts ss. 20(1)(n)			0	B13
Debt & Share Issue Expenses ss. 20(1)(e)			0	B13
Other tax reserves			0	B13
			0	
			0	
			0	
			0	
			0	
Total	**3,227,504**	**0**	**3,227,504**	
Financial Statement Reserves (not deductible for Tax Purposes)				
General Reserve for Inventory Obsolescence (non-specific)			0	B13
General reserve for bad debts	3,828,062		3,828,062	B13
Accrued Employee Future Benefits:			0	B13
- Medical and Life Insurance			0	B13
-Short & Long-term Disability			0	B13
-Accmulated Sick Leave			0	B13
- Termination Cost			0	B13
- Other Post-Employment Benefits			0	B13
Provision for Environmental Costs			0	B13
Restructuring Costs			0	B13
Accrued Contingent Litigation Costs			0	B13
Accrued Self-Insurance Costs			0	B13
Other Contingent Liabilities	1,543,242		1,543,242	B13
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0	B13
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0	B13
Other			0	B13
			0	
			0	
Total	**5,371,304**	**0**	**5,371,304**	

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILS Tax Provision - Bridge Year

			Reference	Wires Only	
Regulatory Taxable Income			B1	$ 14,455,122	**A**
Combined Tax Rate and PILs	Effective Ontario Tax Rate	11.50%	**B**		
	Federal tax rate (Maximum 15%)	15.00%	**C**		
	Combined tax rate			26.50%	**D = B + C**
Total Income Taxes			calculated	**$ 3,830,607**	**E = A * D**
Investment Tax Credits					**F**
Miscellaneous Tax Credits				$ 167,500	**G**
Total Tax Credits				**$ 167,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Bridge Year				**$ 3,663,107**	**I = H + E**

Note:

1. This is for the derivation of Bridge year PILs income tax expense and should not be used for Test year revenue requirement calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

	T2S1 line #	Working Paper Reference	Total for Regulated Utility
Income before PILs/Taxes	A		34,296,633

Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets	104		40,755,585
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves deducted in prior year	125	B13	3,227,504
Reserves from financial statements- balance at end of year	126	B13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Other Additions			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits Received			167,500
Total Additions			**51,214,946**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	B8	60,668,749
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10	405	B10	1,188,900
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves claimed in current year	413	B13	3,227,504
Reserves from financial statements - balance at beginning of year	414	B13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		
Non-taxable imputed interest income on deferral and variance accounts	392		
	393		
	394		
ARO Payments - Deductible for Tax when Paid			
ITA 13(7.4) Election - Capital Contributions Received			
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds			
Deferred Revenue - ITA 20(1)(m) reserve			
Principal portion of lease payments			
Lease Inducement Book Amortization credit to income			
Financing fees for tax ITA 20(1)(e) and (e.1)			
Total Deductions		calculated	**71,056,457**
Net Income for Tax Purposes		calculated	**14,455,122**
Charitable donations from Schedule 2	311		
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320		
Non-capital losses of preceding taxation years from Schedule 4	331	B4	0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332		
Limited partnership losses of preceding taxation years from Schedule 4	335		
TAXABLE INCOME		calculated	**14,455,122**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Corporation Loss Continuity and Application

Schedule 4 Loss Carry Forward - Bridge Year

Non-Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)	B1	0	
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year	B1	0	
Balance available for use post Bridge Year	calculated	0	T4

Net Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)			
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year			
Balance available for use post Bridge Year	calculated	0	T4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Bridge Year

Class	Class Description	Working Paper Reference	UCC Regulated Historical Year	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Bridge Year CCA		UCC End of Bridge Year
1	Distribution System - post 1987	H8	$ 185,408,275			$ 185,408,275	$ -	$ 185,408,275	4%	$ 7,416,331		$ 177,991,944
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	H8	$ 23,958,201	$ 3,085,755		$ 27,043,956	$ 1,542,878	$ 25,501,079	6%	$ 1,530,065		$ 25,513,892
2	Distribution System - pre 1988	H8	$ 59,690,568			$ 59,690,568	$ -	$ 59,690,568	6%	$ 3,581,434		$ 56,109,134
8	General Office/Stores Equip	H8	$ 7,909,026	$ 4,688,193		$ 12,597,219	$ 2,344,097	$ 10,253,123	20%	$ 2,050,625		$ 10,546,595
10	Computer Hardware/ Vehicles	H8	$ 5,105,216	$ 1,289,703		$ 6,394,919	$ 644,852	$ 5,750,068	30%	$ 1,725,020		$ 4,669,899
10.1	Certain Automobiles	H8				$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	H8	$ 4,247,308	$ 5,746,639		$ 9,993,947	$ 2,873,320	$ 7,120,628	100%	$ 7,120,628		$ 2,873,320
13 1	Lease # 1	H8				$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	H8				$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	H8				$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	H8				$ -	$ -	$ -		$ -		$ -
14	Franchise	H8				$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs	H8				$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	H8	$ 327,084			$ 327,084	$ -	$ 327,084	12%	$ 39,250		$ 287,834
43.1	Certain Energy-Efficient Electrical Generating Equipment	H8				$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	H8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	H8	$ 14,376			$ 14,376	$ -	$ 14,376	45%	$ 6,469		$ 7,907
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	H8				$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	H8	$ 404,349,210	$ 65,468,861		$ 469,818,071	$ 32,734,431	$ 437,083,640	8%	$ 34,966,691		$ 434,851,380
50	Data Network Infrastructure Equipment - post Mar 2007	H8	$ 1,689,577	$ 3,067,144		$ 4,756,721	$ 1,533,572	$ 3,223,149	55%	$ 1,772,732		$ 2,983,989
52	Computer Hardware and system software	H8				$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	H8				$ -	$ -	$ -		$ -		$ -
3	Building - pre 1988		$ 9,190,094			$ 9,190,094	$ -	$ 9,190,094	5%	$ 459,505		$ 8,730,589
						$ -	$ -	$ -	10%	$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
	TOTAL		$ 701,888,934	$ 83,346,295	$ -	$ 785,235,229	$ 41,673,148	$ 743,562,082		$ 60,668,749	B1	$ 724,566,480

Schedule 10 CEC - Bridge Year

				Reference	
Cumulative Eligible Capital				H10	**13,270,737**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	4,951,403				
Other Adjustments	0				
Subtotal	4,951,403	**x 3/4 =**	3,713,552		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			3,713,552		**3,713,552**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**16,984,289**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**

Cumulative Eligible Capital Balance			**16,984,289**
Current Year Deduction	**16,984,289**	**x 7% =**	**1,188,900**
Cumulative Eligible Capital - Closing Balance			**15,795,389**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Bridge Year

Continuity of Reserves

Description	Reference	Historical Utility Only	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Bridge Year Adjustments: Additions	Bridge Year Adjustments: Disposals	Balance for Bridge Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	H13	0		0				0	T13	0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	H13	3,227,504		3,227,504				3,227,504	T13	0	
Reserve for goods and services not delivered ss. 20(1)(m)	H13	0		0				0	T13	0	
Reserve for unpaid amounts ss. 20(1)(n)	H13	0		0				0	T13	0	
Debt & Share Issue Expenses ss. 20(1)(e)	H13	0		0				0	T13	0	
Other tax reserves	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	B1	**0**	**0**	**3,227,504**	B1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	H13	0		0				0	T13	0	
General reserve for bad debts	H13	3,828,062		3,828,062				3,828,062	T13	0	
Accrued Employee Future Benefits:	H13	0		0				0	T13	0	
- Medical and Life Insurance	H13	0		0				0	T13	0	
-Short & Long-term Disability	H13	0		0				0	T13	0	
-Accmulated Sick Leave	H13	0		0				0	T13	0	
- Termination Cost	H13	0		0				0	T13	0	
- Other Post-Employment Benefits	H13	0		0				0	T13	0	
Provision for Environmental Costs	H13	0		0				0	T13	0	
Restructuring Costs	H13	0		0				0	T13	0	
Accrued Contingent Litigation Costs	H13	0		0				0	T13	0	
Accrued Self-Insurance Costs	H13	0		0				0	T13	0	
Other Contingent Liabilities	H13	1,543,242		1,543,242				1,543,242	T13	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	H13	0		0				0	T13	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	H13	0		0				0	T13	0	
Other	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	B1	**0**	**0**	**5,371,304**	B1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Test Year

					Wires Only		
Regulatory Taxable Income				T1	$ 14,137,920	A	
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	B				
	Federal tax rate (Maximum 15%)	15.00%	C				
	Combined tax rate (Maximum 26.5%)				26.50%	D = B + C	
Total Income Taxes					**$ 3,746,549**	E = A * D	
Investment Tax Credits						F	
Miscellaneous Tax Credits					$ 192,500	G	
Total Tax Credits					**$ 192,500**	H = F + G	
Corporate PILs/Income Tax Provision for Test Year					**$ 3,554,049**	I = H + E	S. Su
Corporate PILs/Income Tax Provision Gross Up [1]		73.50%	J		**$ 1,281,392**	K = J * I	
Income Tax (grossed-up)					**$ 4,835,440**	L = K + I	S. Su

Note:

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Taxable Income - Test Year

		Working Paper Reference	Test Year Taxable Income
Net Income Before Taxes		A.	36,058,234

	T2 S1 line #		
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets *2-4 ADJUSTED ACCOUNTING DATA P489*	104		44,057,757
Amortization of intangible assets *2-4 ADJUSTED ACCOUNTING DATA P490*	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves beginning of year	125	T13	3,227,504
Reserves from financial statements- balance at end of year	126	T13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		

Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Other Additions: (please explain in detail the nature of the item)			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
	296		
	297		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits received			192,500
Total Additions			**54,542,118**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	T8	65,892,596
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10 CEC	405	T10	1,371,029
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves end of year	413	T13	3,227,504
Reserves from financial statements - balance at beginning of year	414	T13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			
Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		

Non-taxable imputed interest income on deferral and variance accounts	392			
	393			
	394			
	395			
	396			
	397			
ARO Payments - Deductible for Tax when Paid				
ITA 13(7.4) Election - Capital Contributions Received				
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				
Deferred Revenue - ITA 20(1)(m) reserve				
Principal portion of lease payments				
Lease Inducement Book Amortization credit to income				
Financing fees for tax ITA 20(1)(e) and (e.1)				
Total Deductions		calculated	**76,462,433**	
NET INCOME FOR TAX PURPOSES		calculated	**14,137,920**	
Charitable donations	311			
Taxable dividends received under section 112 or 113	320			
Non-capital losses of preceding taxation years from Schedule 7-1	331	T4	0	
Net-capital losses of preceding taxation years (Please show calculation)	332			
Limited partnership losses of preceding taxation years from Schedule 4	335			
REGULATORY TAXABLE INCOME		calculated	**14,137,920**	T0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Test Year

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Working Paper Reference	Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)	T1	0		0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year	T1	0		0
Balance available for use post Test Year	calculated	0	0	0

Net Capital Loss Carry Forward Deduction		Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)				0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year				0
Balance available for use post Test Year	calculated	0	0	0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Test Year

Class	Class Description	Working Paper Reference	UCC Test Year Opening Balance	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Test Year CCA		UCC End of Test Year
1	Distribution System - post 1987	B8	$ 177,991,944			$ 177,991,944	$ -	$ 177,991,944	4%	$ 7,119,678		$ 170,872,266
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	B8	$ 25,513,892	2,500,925		$ 28,014,817	$ 1,250,463	$ 26,764,354	6%	$ 1,605,861		$ 26,408,955
2	Distribution System - pre 1988	B8	$ 56,109,134			$ 56,109,134	$ -	$ 56,109,134	6%	$ 3,366,548		$ 52,742,586
8	General Office/Stores Equip	B8	$ 10,546,595	5,659,176		$ 16,205,771	$ 2,829,588	$ 13,376,183	20%	$ 2,675,237		$ 13,530,534
10	Computer Hardware/ Vehicles	B8	$ 4,669,899	1,035,059		$ 5,704,958	$ 517,530	$ 5,187,428	30%	$ 1,556,229		$ 4,148,729
10.1	Certain Automobiles	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	B8	$ 2,873,320	14,487,488		$ 17,360,808	$ 7,243,744	$ 10,117,064	100%	$ 10,117,064		$ 7,243,744
13 1	Lease # 1	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	B8	$ -			$ -	$ -	$ -		$ -		$ -
14	Franchise	B8	$ -			$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bl	B8	$ -			$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	B8	$ 287,834			$ 287,834	$ -	$ 287,834	12%	$ 34,540		$ 253,294
43.1	Certain Energy-Efficient Electrical Generating Equipment	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	B8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	B8	$ 7,907			$ 7,907	$ -	$ 7,907	45%	$ 3,558		$ 4,349
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	B8	$ 434,851,380	57,120,445		$ 491,971,825	$ 28,560,223	$ 463,411,602	8%	$ 37,072,928		$ 454,898,896
50	Data Network Infrastructure Equipment - post Mar 2007	B8	$ 2,983,989	957,202		$ 3,941,191	$ 478,601	$ 3,462,590	55%	$ 1,904,424		$ 2,036,766
52	Computer Hardware and system software	B8	$ -			$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	B8	$ -			$ -	$ -	$ -	0%	$ -		$ -
3	Building - pre 1988		$ 8,730,589			$ 8,730,589	$ -	$ 8,730,589	5%	$ 436,529		$ 8,294,060
			$ -			$ -	$ -	$ -	10%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
	TOTAL		$ 724,566,480	$ 81,760,295	$ -	$ 806,326,775	$ 40,880,148	$ 765,446,628		$ 65,892,596	T1	$ 740,434,180

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 10 CEC - Test Year

Cumulative Eligible Capital				B10	**15,795,389**
Additions					
Cost of Eligible Capital Property Acquired during Test Year		5,054,317			
Other Adjustments		0			
	Subtotal	5,054,317	**x 3/4 =**	3,790,738	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002		0	**x 1/2 =**	0	
				3,790,738	**3,790,738**
Amount transferred on amalgamation or wind-up of subsidiary		0			**0**
	Subtotal				**19,586,127**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year		0			
Other Adjustments		0			
	Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**19,586,127**
Current Year Deduction (Carry Forward to Tab "Test Year Taxable Income")	**19,586,127**	**x 7% =**	**1,371,029**
Cumulative Eligible Capital - Closing Balance			**18,215,098**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Test Year

Continuity of Reserves

Description	Working Paper Reference	Bridge Year	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Test Year Adjustments: Additions	Test Year Adjustments: Disposals	Balance for Test Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	B13	0		0				0		0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	B13	3,227,504		3,227,504		0	0	3,227,504		0	
Reserve for goods and services not delivered ss. 20(1)(m)	B13	0		0				0		0	
Reserve for unpaid amounts ss. 20(1)(n)	B13	0		0				0		0	
Debt & Share Issue Expenses ss. 20(1)(e)	B13	0		0				0		0	
Other tax reserves	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	T1	**0**	**0**	**3,227,504**	T1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	B13	0		0				0		0	
General reserve for bad debts	B13	3,828,062		3,828,062				3,828,062		0	
Accrued Employee Future Benefits:	B13	0		0				0		0	
- Medical and Life Insurance	B13	0		0				0		0	
-Short & Long-term Disability	B13	0		0				0		0	
-Accmulated Sick Leave	B13	0		0				0		0	
- Termination Cost	B13	0		0				0		0	
- Other Post-Employment Benefits	B13	0		0				0		0	
Provision for Environmental Costs	B13	0		0				0		0	
Restructuring Costs	B13	0		0				0		0	
Accrued Contingent Litigation Costs	B13	0		0				0		0	
Accrued Self-Insurance Costs	B13	0		0				0		0	
Other Contingent Liabilities	B13	1,543,242		1,543,242				1,543,242		0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	B13	0		0				0		0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	B13	0		0				0		0	
Other	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	T1	**0**	**0**	**5,371,304**	T1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Version 1.0

Utility Name	Hydro Ottawa Limited
Assigned EB Number	EB-2015-0004
Name and Title	Geoff Simpson, Chief Financial Officer
Phone Number	613-738-5499
Email Address	geoffsimpson@hydroottawa.com
Date	
Last COS Re-based Year	**2012**

Note: Drop-down lists are shaded blue; Input cells are shaded green.

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Instructions

Purpose
The purpose of this workbook is to calculate the estimated Payment in Lieu of Taxes (PILs) for the Test Year. The calculation of PILs for the Test Year is on tab T0 and is based on the inputs on the other tabs.

Tab S Summary is a summary of the amounts to be transferred to the Revenue Requirement Workform. The Revenue Requirement Workform is on tab 3 of the Revenue Requirement Workform.

Methodology
To calculate the PILs for the Test Year:

1) input the balances from the income tax return of the Historical Year in tabs H1 to H13.
2) input the balances for the subsequent two (2) years (the Bridge Year and the Test Year).
Inputs should include:
- non-deductible expenses (Schedule 1 - B1 and T1)
- capital additions (Schedule 8 - B8 and T8)
- cumulative eligible expenditures (Schedule 10 - B10 and T10)
- non-deductible reserves (Schedule 13 - B13 and T13)

3) make any other adjustments and inputs required so that the PILs amount calculated for the Test Year on tab T0 is reasonable.

Other Notes
Tabs H1 to H13 relate to the Historical Year.
Tabs B1 to B13 relate to the Bridge Year.
Tabs T1 to T13 relate to the Test Year.

s The amounts on tabs H1 to H13 should agree to the tax return filed with the Canada Revenue Agency. Any CRA audit adjustments or corrections should also be reflected.

It is assumed the net income before tax for the Test Year is equal to the Return on Equity. Return on Equity is calculated on tab A.

e On tab "A. Data Input Sheet", input the "Rate Base" amount and "Return on Rate Base" amounts.

For the 2016 Application, the "Test Year" is 2016, the "Historical Year" is 2014, and the "Bridge Year" is 2015.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

1. Info
S. Summary
A. Data Input Sheet
B. Tax Rates & Exemptions

Historical Year

H0 - PILs, Tax Provision Historical Year
H1 - Adj. Taxable Income Historical Year
H4 - Schedule 4 Loss Carry Forward Historical Year
H8 - Schedule 8 Historical'!A1
H10 - Schedule 10 CEC Historical Year
H13 - Schedule 13 Tax Reserves Historical

Bridge Year

B0 - PILs,Tax Provision Bridge Year
B1 - Adj. Taxable Income Bridge Year
B4 - Schedule 4 Loss Carry Forward Bridge Year
B8 - Schedule 8 CCA Bridge Year
B10 - Schedule 10 CEC Bridge Year
B13 - Schedule 13 Tax Reserves Bridge Year

Test Year

T0 PILs, Tax Provision Test Year
T1 Taxable Income Test Year
T4 Schedule 4 Loss Carry Forward Test Year
T8 Schedule 8 CCA Test Year
T10 Schedule 10 CEC Test Year
T13 Schedule 13 Reserve Test Year

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

No inputs required on this worksheet.

Inputs on Service Revenue Requirement Worksheet

The Service Revenue Requirement is in the 'Revenue Requirement Workform' - Tab 3.

Item	Working Paper Reference		
Adjustments required to arrive at taxable income	as below	**-20,339,930**	
Test Year - Payments in Lieu of Taxes (PILs)	T0	**4,523,890**	
Test Year - Grossed-up PILs	T0	**6,154,952**	
Federal Tax Rate	T0	**15.0%**	
Ontario Tax Rate	T0	**11.5%**	

Calculation of Adjustments required to arrive at Taxable Income			
Regulatory Income (before income taxes)	T1	37,911,214	
Taxable Income	T1	17,571,283	
Difference	calculated	-20,339,930	as above

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Income Tax/PILs Workform for 2016 Filers

Rate Base		S	**$**	**1,019,118,646**		
Return on Ratebase						
Deemed ShortTerm Debt %	4.00%	T	$	40,764,746	*W = S * T*	
Deemed Long Term Debt %	56.00%	U	$	570,706,442	*X = S * U*	
Deemed Equity %	40.00%	V	$	407,647,458	*Y = S * V*	
Short Term Interest Rate	2.16%	Z	$	880,519	*AC = W * Z*	
Long Term Interest	4.08%	AA	$	23,284,823	*AD = X * AA*	
Return on Equity (Regulatory Income)	9.30%	AB	**$**	**37,911,214**	*AE = Y * AB*	T1
Return on Rate Base			**$**	**62,076,555**	*AF = AC + AD + AE*	

Questions that must be answered

	Historical	Bridge	Test Year
1. Does the applicant have any Investment Tax Credits (ITC)?	Yes	Yes	Yes
2. Does the applicant have any SRED Expenditures?	No	No	No
3. Does the applicant have any Capital Gains or Losses for tax purposes?	No	No	No
4. Does the applicant have any Capital Leases?	No	No	No
5. Does the applicant have any Loss Carry-Forwards (non-capital or net capital)?	No	No	No
6. Since 1999, has the applicant acquired another regulated applicant's assets?	No	No	No
7. Did the applicant pay dividends? *If Yes, please describe what was the tax treatment in the manager's summary.*	Yes	Yes	Yes
8. Did the applicant elect to capitalize interest incurred on CWIP for tax purposes?	No	No	No

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Tax Rates Federal & Provincial As of June 15, 2015	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015	Effective January 1, 2016
Federal income tax					
General corporate rate	38.00%	38.00%	38.00%	38.00%	38.00%
Federal tax abatement	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%
Adjusted federal rate	28.00%	28.00%	28.00%	28.00%	28.00%
Rate reduction	-13.00%	-13.00%	-13.00%	-13.00%	-13.00%
Federal Income Tax	15.00%	15.00%	15.00%	15.00%	15.00%
Ontario income tax	11.50%	11.50%	11.50%	11.50%	11.50%
Combined federal and Ontario	26.50%	26.50%	26.50%	26.50%	26.50%
Federal & Ontario Small Business					
Federal small business threshold	500,000	500,000	500,000	500,000	500,000
Ontario Small Business Threshold	500,000	500,000	500,000	500,000	500,000
Federal small business rate	11.00%	11.00%	11.00%	11.00%	10.50%
Ontario small business rate	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

1. The Ontario Energy Board's proxy for taxable capital is rate base.
2. If taxable capital exceds $15 million the maximum tax rates apply.
3. If taxable capital is below $10 million the minimum tax rates apply.
4. Where taxable capital is between $10 million and $15 million, the tax rate will be calculated.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Historical Year

Note: Input the actual information from the tax returns for the historical year.

					Wires Only	
Regulatory Taxable Income				H1	$ 14,455,122	**A**
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	**B**			
	Federal tax rate (Maximum 15%)	15.00%	**C**			
	Combined tax rate (Maximum 26.5%)				26.50%	**M = K + L**
Total Income Taxes					**$ 3,830,607**	**E = A * D**
Investment Tax Credits						**F**
Miscellaneous Tax Credits					$ 167,500	**G**
Total Tax Credits					**$ 167,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Historical Year					**$ 3,663,107**	**I = H + E**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Historical Year

	T2S1 line #	Total for Legal Entity	Non-Distribution Eliminations	Historic Wires Only
Income before PILs/Taxes	A	34,296,633		34,296,633
Additions:				
Interest and penalties on taxes	103	5,000		5,000
Amortization of tangible assets	104	40,755,585		40,755,585
Amortization of intangible assets	106			0
Recapture of capital cost allowance from Schedule 8	107			0
Gain on sale of eligible capital property from Schedule 10	108			0
Income or loss for tax purposes- joint ventures or partnerships	109			0
Loss in equity of subsidiaries and affiliates	110			0
Loss on disposal of assets	111	1,013,053		1,013,053
Charitable donations	112			0
Taxable Capital Gains	113			0
Political Donations	114			0
Deferred and prepaid expenses	116			0
Scientific research expenditures deducted on financial statements	118			0
Capitalized interest	119			0
Non-deductible club dues and fees	120			0
Non-deductible meals and entertainment expense	121	75,000		75,000
Non-deductible automobile expenses	122			0
Non-deductible life insurance premiums	123			0
Non-deductible company pension plans	124			0
Tax reserves deducted in prior year	125	3,227,504		3,227,504
Reserves from financial statements- balance at end of year	126	5,371,304		5,371,304
Soft costs on construction and renovation of buildings	127			0
Book loss on joint ventures or partnerships	205			0
Capital items expensed	206			0
Debt issue expense	208			0
Development expenses claimed in current year	212			0
Financing fees deducted in books	216			0
Gain on settlement of debt	220			0
Non-deductible advertising	226			0
Non-deductible interest	227			0
Non-deductible legal and accounting fees	228			0
Recapture of SR&ED expenditures	231			0
Share issue expense	235			0
Write down of capital property	236			0
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237			0
Other Additions				
Interest Expensed on Capital Leases	290			0
Realized Income from Deferred Credit Accounts	291			0
Pensions	292	600,000		600,000
Non-deductible penalties	293			0
	294			0
	295			0
ARO Accretion expense				0
Capital Contributions Received (ITA 12(1)(x))				0
Lease Inducements Received (ITA 12(1)(x))				0
Deferred Revenue (ITA 12(1)(a))				0
Prior Year Investment Tax Credits received				0
Current Year Investment Tax Credits received		167,500		167,500

Impairment charge				0
				0
				0
				0
				0
				0
				0
				0
				0
Total Additions		**51,214,946**	**0**	**51,214,946**
Deductions:				
Gain on disposal of assets per financial statements	401			0
Dividends not taxable under section 83	402			0
Capital cost allowance from Schedule 8	403	60,668,749		60,668,749
Terminal loss from Schedule 8	404			0
Cumulative eligible capital deduction from Schedule 10	405	1,188,900		1,188,900
Allowable business investment loss	406			0
Deferred and prepaid expenses	409			0
Scientific research expenses claimed in year	411			0
Tax reserves claimed in current year	413	3,227,504		3,227,504
Reserves from financial statements - balance at beginning of year	414	5,371,304		5,371,304
Contributions to deferred income plans	416	600,000		600,000
Book income of joint venture or partnership	305			0
Equity in income from subsidiary or affiliates	306			0
Other deductions: (Please explain in detail the nature of the item)				
Interest capitalized for accounting deducted for tax	390			0
Capital Lease Payments	391			0
Non-taxable imputed interest income on deferral and variance accounts	392			0
	393			0
	394			0
ARO Payments - Deductible for Tax when Paid				0
ITA 13(7.4) Election - Capital Contributions Received				0
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				0
Deferred Revenue - ITA 20(1)(m) reserve				0
Principal portion of lease payments				0
Lease Inducement Book Amortization credit to income				0
Financing fees for tax ITA 20(1)(e) and (e.1)				0
Tax credits accrued for in current year & deducted in financials in current year				0
				0
				0
				0
				0
				0
				0
Total Deductions		**71,056,457**	**0**	**71,056,457**
Net Income for Tax Purposes		**14,455,122**	**0**	**14,455,122**
Charitable donations from Schedule 2	311	0		0
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320			0
Non-capital losses of preceding taxation years from Schedule 4	331			0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332			0
Limited partnership losses of preceding taxation years from Schedule 4	335			0
TAXABLE INCOME		**14,455,122**	**0**	**14,455,122**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Historical

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical	0		0	B4

Net Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical			0	B4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 - Historical Year

Class	Class Description	UCC End of Year Historical per tax returns	Less: Non-Distribution Portion	UCC Regulated Historical Year
1	Distribution System - post 1987	177,991,944		177,991,944
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	25,513,892		25,513,892
2	Distribution System - pre 1988	56,109,134		56,109,134
8	General Office/Stores Equip	10,546,595		10,546,595
10	Computer Hardware/ Vehicles	4,669,899		4,669,899
10.1	Certain Automobiles			0
12	Computer Software	2,873,320		2,873,320
13 1	Lease # 1			0
13 2	Lease #2			0
13 3	Lease # 3			0
13 4	Lease # 4			0
14	Franchise			0
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs			0
42	Fibre Optic Cable	287,834		287,834
43.1	Certain Energy-Efficient Electrical Generating Equipment			0
43.2	Certain Clean Energy Generation Equipment	0		0
45	Computers & Systems Software acq'd post Mar 22/04	7,907		7,907
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)			0
47	Distribution System - post February 2005	434,851,380		434,851,380
50	Data Network Infrastructure Equipment - post Mar 2007	2,983,989		2,983,989
52	Computer Hardware and system software			0
95	CWIP			0
3	Building - pre 1988	8,730,589		8,730,589
				0
				0
				0
				0
				0
				0
				0
				0
				0
	SUB-TOTAL - UCC	724,566,480	0	724,566,480

Schedule 10 CEC - Historical Year

Cumulative Eligible Capital					**13,270,737**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	4,951,403				
Other Adjustments	0				
Subtotal	4,951,403	**x 3/4 =**	3,713,552		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			3,713,552		**3,713,552**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**16,984,289**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**
Cumulative Eligible Capital Balance					**16,984,289**
Current Year Deduction		**16,984,289**		**x 7% =**	**1,188,900**
Cumulative Eligible Capital - Closing Balance					**15,795,389**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Historical

Continuity of Reserves

Description	Historical Balance as per tax returns	Non-Distribution Eliminations	Utility Only	
Capital Gains Reserves ss.40(1)			0	B13
Tax Reserves Not Deducted for accounting purposes				
Reserve for doubtful accounts ss. 20(1)(l)	3,227,504		3,227,504	B13
Reserve for goods and services not delivered ss. 20(1)(m)			0	B13
Reserve for unpaid amounts ss. 20(1)(n)			0	B13
Debt & Share Issue Expenses ss. 20(1)(e)			0	B13
Other tax reserves			0	B13
			0	
			0	
			0	
			0	
			0	
Total	**3,227,504**	**0**	**3,227,504**	
Financial Statement Reserves (not deductible for Tax Purposes)				
General Reserve for Inventory Obsolescence (non-specific)			0	B13
General reserve for bad debts	3,828,062		3,828,062	B13
Accrued Employee Future Benefits:			0	B13
- Medical and Life Insurance			0	B13
-Short & Long-term Disability			0	B13
-Accmulated Sick Leave			0	B13
- Termination Cost			0	B13
- Other Post-Employment Benefits			0	B13
Provision for Environmental Costs			0	B13
Restructuring Costs			0	B13
Accrued Contingent Litigation Costs			0	B13
Accrued Self-Insurance Costs			0	B13
Other Contingent Liabilities	1,543,242		1,543,242	B13
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0	B13
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0	B13
Other			0	B13
			0	
			0	
Total	**5,371,304**	**0**	**5,371,304**	

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILS Tax Provision - Bridge Year

			Reference	Wires Only	
Regulatory Taxable Income			B1	$ 14,137,920	**A**
Combined Tax Rate and PILs	Effective Ontario Tax Rate	11.50%	**B**		
	Federal tax rate (Maximum 15%)	15.00%	**C**		
	Combined tax rate			26.50%	**D = B + C**
Total Income Taxes			calculated	**$ 3,746,549**	**E = A * D**
Investment Tax Credits					**F**
Miscellaneous Tax Credits				$ 192,500	**G**
Total Tax Credits				**$ 192,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Bridge Year				**$ 3,554,049**	**I = H + E**

Note:

1. This is for the derivation of Bridge year PILs income tax expense and should not be used for Test year revenue requirement calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

	T2S1 line #	Working Paper Reference	Total for Regulated Utility
Income before PILs/Taxes	A		36,058,234

Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets	104		44,057,757
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves deducted in prior year	125	B13	3,227,504
Reserves from financial statements- balance at end of year	126	B13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		

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Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Other Additions			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits Received			192,500
Total Additions			**54,542,118**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	B8	65,892,596
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10	405	B10	1,371,029
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves claimed in current year	413	B13	3,227,504
Reserves from financial statements - balance at beginning of year	414	B13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		
Non-taxable imputed interest income on deferral and variance accounts	392		
	393		
	394		
ARO Payments - Deductible for Tax when Paid			
ITA 13(7.4) Election - Capital Contributions Received			
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds			
Deferred Revenue - ITA 20(1)(m) reserve			
Principal portion of lease payments			
Lease Inducement Book Amortization credit to income			
Financing fees for tax ITA 20(1)(e) and (e.1)			
Total Deductions		calculated	**76,462,433**
Net Income for Tax Purposes		calculated	**14,137,920**
Charitable donations from Schedule 2	311		
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320		
Non-capital losses of preceding taxation years from Schedule 4	331	B4	0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332		
Limited partnership losses of preceding taxation years from Schedule 4	335		
TAXABLE INCOME		calculated	**14,137,920**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Corporation Loss Continuity and Application

Schedule 4 Loss Carry Forward - Bridge Year

Non-Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)	B1	0	
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year	B1	0	
Balance available for use post Bridge Year	calculated	0	T4

Net Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)			
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year			
Balance available for use post Bridge Year	calculated	0	T4

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Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Bridge Year

Class	Class Description	Working Paper Reference	UCC Regulated Historical Year	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Bridge Year CCA		UCC End of Bridge Year
1	Distribution System - post 1987	H8	$ 177,991,944			$ 177,991,944	$ -	$ 177,991,944	4%	$ 7,119,678		$ 170,872,266
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	H8	$ 25,513,892	$ 2,500,925		$ 28,014,817	$ 1,250,463	$ 26,764,354	6%	$ 1,605,861		$ 26,408,955
2	Distribution System - pre 1988	H8	$ 56,109,134			$ 56,109,134	$ -	$ 56,109,134	6%	$ 3,366,548		$ 52,742,586
8	General Office/Stores Equip	H8	$ 10,546,595	$ 5,659,176		$ 16,205,771	$ 2,829,588	$ 13,376,183	20%	$ 2,675,237		$ 13,530,534
10	Computer Hardware/ Vehicles	H8	$ 4,669,899	$ 1,035,059		$ 5,704,958	$ 517,530	$ 5,187,428	30%	$ 1,556,229		$ 4,148,729
10.1	Certain Automobiles	H8				$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	H8	$ 2,873,320	$ 14,487,488		$ 17,360,808	$ 7,243,744	$ 10,117,064	100%	$ 10,117,064		$ 7,243,744
13 1	Lease # 1	H8				$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	H8				$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	H8				$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	H8				$ -	$ -	$ -		$ -		$ -
14	Franchise	H8				$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs	H8				$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	H8	$ 287,834			$ 287,834	$ -	$ 287,834	12%	$ 34,540		$ 253,294
43.1	Certain Energy-Efficient Electrical Generating Equipment	H8				$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	H8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	H8	$ 7,907			$ 7,907	$ -	$ 7,907	45%	$ 3,558		$ 4,349
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	H8				$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	H8	$ 434,851,380	$ 57,120,445		$ 491,971,825	$ 28,560,223	$ 463,411,602	8%	$ 37,072,928		$ 454,898,896
50	Data Network Infrastructure Equipment - post Mar 2007	H8	$ 2,983,989	$ 957,202		$ 3,941,191	$ 478,601	$ 3,462,590	55%	$ 1,904,424		$ 2,036,766
52	Computer Hardware and system software	H8				$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	H8				$ -	$ -	$ -		$ -		$ -
3	Building - pre 1988		$ 8,730,589			$ 8,730,589	$ -	$ 8,730,589	5%	$ 436,529		$ 8,294,060
						$ -	$ -	$ -	10%	$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
	TOTAL		$ 724,566,480	$ 81,760,295	$ -	$ 806,326,775	$ 40,880,148	$ 765,446,628		$ 65,892,596	B1	$ 740,434,180

Schedule 10 CEC - Bridge Year

				Reference	
Cumulative Eligible Capital				H10	**15,795,389**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	5,054,317				
Other Adjustments	0				
Subtotal	5,054,317		**x 3/4 =**	3,790,738	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0		**x 1/2 =**	0	
				3,790,738	**3,790,738**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**19,586,127**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0		**x 3/4 =**		**0**
Cumulative Eligible Capital Balance					**19,586,127**
Current Year Deduction		**19,586,127**		**x 7% =**	**1,371,029**
Cumulative Eligible Capital - Closing Balance					**18,215,098**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Bridge Year

Continuity of Reserves

Description	Reference	Historical Utility Only	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Bridge Year Adjustments: Additions	Bridge Year Adjustments: Disposals	Balance for Bridge Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	H13	0		0				0	T13	0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	H13	3,227,504		3,227,504				3,227,504	T13	0	
Reserve for goods and services not delivered ss. 20(1)(m)	H13	0		0				0	T13	0	
Reserve for unpaid amounts ss. 20(1)(n)	H13	0		0				0	T13	0	
Debt & Share Issue Expenses ss. 20(1)(e)	H13	0		0				0	T13	0	
Other tax reserves	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	B1	**0**	**0**	**3,227,504**	B1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	H13	0		0				0	T13	0	
General reserve for bad debts	H13	3,828,062		3,828,062				3,828,062	T13	0	
Accrued Employee Future Benefits:	H13	0		0				0	T13	0	
- Medical and Life Insurance	H13	0		0				0	T13	0	
-Short & Long-term Disability	H13	0		0				0	T13	0	
-Accmulated Sick Leave	H13	0		0				0	T13	0	
- Termination Cost	H13	0		0				0	T13	0	
- Other Post-Employment Benefits	H13	0		0				0	T13	0	
Provision for Environmental Costs	H13	0		0				0	T13	0	
Restructuring Costs	H13	0		0				0	T13	0	
Accrued Contingent Litigation Costs	H13	0		0				0	T13	0	
Accrued Self-Insurance Costs	H13	0		0				0	T13	0	
Other Contingent Liabilities	H13	1,543,242		1,543,242				1,543,242	T13	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	H13	0		0				0	T13	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	H13	0		0				0	T13	0	
Other	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	B1	**0**	**0**	**5,371,304**	B1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Test Year

					Wires Only		
Regulatory Taxable Income				T1	$ 17,571,283	A	
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	B				
	Federal tax rate (Maximum 15%)	15.00%	C				
	Combined tax rate (Maximum 26.5%)				26.50%	D = B + C	
Total Income Taxes					**$ 4,656,390**	E = A * D	
Investment Tax Credits						F	
Miscellaneous Tax Credits					$ 132,500	G	
Total Tax Credits					**$ 132,500**	H = F + G	
Corporate PILs/Income Tax Provision for Test Year					**$ 4,523,890**	I = H + E	S. Su
Corporate PILs/Income Tax Provision Gross Up [1]		73.50%	J		**$ 1,631,062**	K = J * I	
Income Tax (grossed-up)					**$ 6,154,952**	L = K + I	S. Su

Note:

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Taxable Income - Test Year

		Working Paper Reference	Test Year Taxable Income
Net Income Before Taxes		A.	37,911,214

	T2 S1 line #		
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets *2-4 ADJUSTED ACCOUNTING DATA P489*	104		46,943,424
Amortization of intangible assets *2-4 ADJUSTED ACCOUNTING DATA P490*	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves beginning of year	125	T13	3,227,504
Reserves from financial statements- balance at end of year	126	T13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		

Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Other Additions: (please explain in detail the nature of the item)			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
	296		
	297		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits received			132,500
Total Additions			**57,367,785**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	T8	66,953,538
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10 CEC	405	T10	1,555,369
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves end of year	413	T13	3,227,504
Reserves from financial statements - balance at beginning of year	414	T13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			
Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		

Non-taxable imputed interest income on deferral and variance accounts	392			
	393			
	394			
	395			
	396			
	397			
ARO Payments - Deductible for Tax when Paid				
ITA 13(7.4) Election - Capital Contributions Received				
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				
Deferred Revenue - ITA 20(1)(m) reserve				
Principal portion of lease payments				
Lease Inducement Book Amortization credit to income				
Financing fees for tax ITA 20(1)(e) and (e.1)				
Total Deductions		calculated	**77,707,715**	
NET INCOME FOR TAX PURPOSES		calculated	**17,571,283**	
Charitable donations	311			
Taxable dividends received under section 112 or 113	320			
Non-capital losses of preceding taxation years from Schedule 7-1	331	T4	0	
Net-capital losses of preceding taxation years (Please show calculation)	332			
Limited partnership losses of preceding taxation years from Schedule 4	335			
REGULATORY TAXABLE INCOME		calculated	**17,571,283**	T0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Test Year

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Working Paper Reference	Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)	T1	0		0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year	T1	0		0
Balance available for use post Test Year	calculated	0	0	0

Net Capital Loss Carry Forward Deduction		Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)				0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year				0
Balance available for use post Test Year	calculated	0	0	0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Test Year

Class	Class Description	Working Paper Reference	UCC Test Year Opening Balance	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Test Year CCA		UCC End of Test Year
1	Distribution System - post 1987	B8	$ 170,872,266			$ 170,872,266	$ -	$ 170,872,266	4%	$ 6,834,891		$ 164,037,376
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	B8	$ 26,408,955	2,929,713		$ 29,338,668	$ 1,464,857	$ 27,873,812	6%	$ 1,672,429		$ 27,666,240
2	Distribution System - pre 1988	B8	$ 52,742,586			$ 52,742,586	$ -	$ 52,742,586	6%	$ 3,164,555		$ 49,578,031
8	General Office/Stores Equip	B8	$ 13,530,534	4,303,997		$ 17,834,531	$ 2,151,999	$ 15,682,533	20%	$ 3,136,507		$ 14,698,025
10	Computer Hardware/ Vehicles	B8	$ 4,148,729	1,451,508		$ 5,600,237	$ 725,754	$ 4,874,483	30%	$ 1,462,345		$ 4,137,892
10.1	Certain Automobiles	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	B8	$ 7,243,744	4,427,066		$ 11,670,810	$ 2,213,533	$ 9,457,277	100%	$ 9,457,277		$ 2,213,533
13 1	Lease # 1	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	B8	$ -			$ -	$ -	$ -		$ -		$ -
14	Franchise	B8	$ -			$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bl	B8	$ -			$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	B8	$ 253,294			$ 253,294	$ -	$ 253,294	12%	$ 30,395		$ 222,898
43.1	Certain Energy-Efficient Electrical Generating Equipment	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	B8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	B8	$ 4,349			$ 4,349	$ -	$ 4,349	45%	$ 1,957		$ 2,392
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	B8	$ 454,898,896	74,671,869		$ 529,570,765	$ 37,335,935	$ 492,234,831	8%	$ 39,378,786		$ 490,191,979
50	Data Network Infrastructure Equipment - post Mar 2007	B8	$ 2,036,766	1,016,261		$ 3,053,027	$ 508,131	$ 2,544,897	55%	$ 1,399,693		$ 1,653,334
52	Computer Hardware and system software	B8	$ -			$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	B8	$ -			$ -	$ -	$ -	0%	$ -		$ -
3	Building - pre 1988		$ 8,294,060			$ 8,294,060	$ -	$ 8,294,060	5%	$ 414,703		$ 7,879,357
			$ -			$ -	$ -	$ -	10%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
	TOTAL		$ 740,434,180	$ 88,800,414	$ -	$ 829,234,594	$ 44,400,207	$ 784,834,387		$ 66,953,538	T1	$ 762,281,056

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Income Tax/PILs Workform for 2016 Filers

Schedule 10 CEC - Test Year

Cumulative Eligible Capital				B10	**18,215,098**
Additions					
Cost of Eligible Capital Property Acquired during Test Year		5,339,288			
Other Adjustments		0			
	Subtotal	5,339,288	**x 3/4 =**	4,004,466	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002		0	**x 1/2 =**	0	
				4,004,466	**4,004,466**
Amount transferred on amalgamation or wind-up of subsidiary		0			**0**
	Subtotal				**22,219,564**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year		0			
Other Adjustments		0			
	Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**22,219,564**
Current Year Deduction (Carry Forward to Tab "Test Year Taxable Income")	**22,219,564**	**x 7% =**	**1,555,369**
Cumulative Eligible Capital - Closing Balance			**20,664,195**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Test Year

Continuity of Reserves

Description	Working Paper Reference	Bridge Year	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Test Year Adjustments: Additions	Test Year Adjustments: Disposals	Balance for Test Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	B13	0		0				0		0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	B13	3,227,504		3,227,504		0	0	3,227,504		0	
Reserve for goods and services not delivered ss. 20(1)(m)	B13	0		0				0		0	
Reserve for unpaid amounts ss. 20(1)(n)	B13	0		0				0		0	
Debt & Share Issue Expenses ss. 20(1)(e)	B13	0		0				0		0	
Other tax reserves	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	T1	**0**	**0**	**3,227,504**	T1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	B13	0		0				0		0	
General reserve for bad debts	B13	3,828,062		3,828,062				3,828,062		0	
Accrued Employee Future Benefits:	B13	0		0				0		0	
- Medical and Life Insurance	B13	0		0				0		0	
-Short & Long-term Disability	B13	0		0				0		0	
-Accmulated Sick Leave	B13	0		0				0		0	
- Termination Cost	B13	0		0				0		0	
- Other Post-Employment Benefits	B13	0		0				0		0	
Provision for Environmental Costs	B13	0		0				0		0	
Restructuring Costs	B13	0		0				0		0	
Accrued Contingent Litigation Costs	B13	0		0				0		0	
Accrued Self-Insurance Costs	B13	0		0				0		0	
Other Contingent Liabilities	B13	1,543,242		1,543,242				1,543,242		0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	B13	0		0				0		0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	B13	0		0				0		0	
Other	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	T1	**0**	**0**	**5,371,304**	T1	**0**	**0**

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Income Tax/PILs Workform for 2016 Filers

Version 1.0

Utility Name	Hydro Ottawa Limited
Assigned EB Number	EB-2015-0004
Name and Title	Geoff Simpson, Chief Financial Officer
Phone Number	613-738-5499
Email Address	geoffsimpson@hydroottawa.com
Date	
Last COS Re-based Year	**2012**

Note: Drop-down lists are shaded blue; Input cells are shaded green.

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Instructions

Purpose
The purpose of this workbook is to calculate the estimated Payment in Lieu of Taxes (PILs) for the Test Year. The calculation of PILs for the Test Year is on tab T0 and is based on the inputs on the other tabs.

Tab S Summary is a summary of the amounts to be transferred to the Revenue Requirement Workform. The Revenue Requirement Workform is on tab 3 of the Revenue Requirement Workform.

Methodology
To calculate the PILs for the Test Year:

1) input the balances from the income tax return of the Historical Year in tabs H1 to H13.
2) input the balances for the subsequent two (2) years (the Bridge Year and the Test Year).
Inputs should include:
- non-deductible expenses (Schedule 1 - B1 and T1)
- capital additions (Schedule 8 - B8 and T8)
- cumulative eligible expenditures (Schedule 10 - B10 and T10)
- non-deductible reserves (Schedule 13 - B13 and T13)

3) make any other adjustments and inputs required so that the PILs amount calculated for the Test Year on tab T0 is reasonable.

Other Notes
Tabs H1 to H13 relate to the Historical Year.
Tabs B1 to B13 relate to the Bridge Year.
Tabs T1 to T13 relate to the Test Year.

s The amounts on tabs H1 to H13 should agree to the tax return filed with the Canada Revenue Agency. Any CRA audit adjustments or corrections should also be reflected.

It is assumed the net income before tax for the Test Year is equal to the Return on Equity. Return on Equity is calculated on tab A.

e On tab "A. Data Input Sheet", input the "Rate Base" amount and "Return on Rate Base" amounts.

For the 2016 Application, the "Test Year" is 2016, the "Historical Year" is 2014, and the "Bridge Year" is 2015.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

1. Info
S. Summary
A. Data Input Sheet
B. Tax Rates & Exemptions

Historical Year

H0 - PILs, Tax Provision Historical Year
H1 - Adj. Taxable Income Historical Year
H4 - Schedule 4 Loss Carry Forward Historical Year
H8 - Schedule 8 Historical'!A1
H10 - Schedule 10 CEC Historical Year
H13 - Schedule 13 Tax Reserves Historical

Bridge Year

B0 - PILs,Tax Provision Bridge Year
B1 - Adj. Taxable Income Bridge Year
B4 - Schedule 4 Loss Carry Forward Bridge Year
B8 - Schedule 8 CCA Bridge Year
B10 - Schedule 10 CEC Bridge Year
B13 - Schedule 13 Tax Reserves Bridge Year

Test Year

T0 PILs, Tax Provision Test Year
T1 Taxable Income Test Year
T4 Schedule 4 Loss Carry Forward Test Year
T8 Schedule 8 CCA Test Year
T10 Schedule 10 CEC Test Year
T13 Schedule 13 Reserve Test Year

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Income Tax/PILs Workform for 2016 Filers

No inputs required on this worksheet.

Inputs on Service Revenue Requirement Worksheet

The Service Revenue Requirement is in the 'Revenue Requirement Workform' - Tab 3.

Item	Working Paper Reference		
Adjustments required to arrive at taxable income	as below	**-14,887,254**	
Test Year - Payments in Lieu of Taxes (PILs)	T0	**6,276,925**	
Test Year - Grossed-up PILs	T0	**8,540,033**	
Federal Tax Rate	T0	**15.0%**	
Ontario Tax Rate	T0	**11.5%**	

Calculation of Adjustments required to arrive at Taxable Income			
Regulatory Income (before income taxes)	T1	39,047,346	
Taxable Income	T1	24,160,093	
Difference	calculated	-14,887,254	as above

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Rate Base		S	**$**	**1,049,659,845**		
Return on Ratebase						
Deemed ShortTerm Debt %	4.00%	T	$	41,986,394	*W = S * T*	
Deemed Long Term Debt %	56.00%	U	$	587,809,513	*X = S * U*	
Deemed Equity %	40.00%	V	$	419,863,938	*Y = S * V*	
Short Term Interest Rate	2.16%	Z	$	906,906	*AC = W * Z*	
Long Term Interest	4.17%	AA	$	24,511,657	*AD = X * AA*	
Return on Equity (Regulatory Income)	9.30%	AB	**$**	**39,047,346**	*AE = Y * AB*	T1
Return on Rate Base			**$**	**64,465,909**	*AF = AC + AD + AE*	

Questions that must be answered

	Historical	Bridge	Test Year
1. Does the applicant have any Investment Tax Credits (ITC)?	Yes	Yes	Yes
2. Does the applicant have any SRED Expenditures?	No	No	No
3. Does the applicant have any Capital Gains or Losses for tax purposes?	No	No	No
4. Does the applicant have any Capital Leases?	No	No	No
5. Does the applicant have any Loss Carry-Forwards (non-capital or net capital)?	No	No	No
6. Since 1999, has the applicant acquired another regulated applicant's assets?	No	No	No
7. Did the applicant pay dividends? *If Yes, please describe what was the tax treatment in the manager's summary.*	Yes	Yes	Yes
8. Did the applicant elect to capitalize interest incurred on CWIP for tax purposes?	No	No	No

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Tax Rates Federal & Provincial As of June 15, 2015	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015	Effective January 1, 2016
Federal income tax					
General corporate rate	38.00%	38.00%	38.00%	38.00%	38.00%
Federal tax abatement	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%
Adjusted federal rate	28.00%	28.00%	28.00%	28.00%	28.00%
Rate reduction	-13.00%	-13.00%	-13.00%	-13.00%	-13.00%
Federal Income Tax	15.00%	15.00%	15.00%	15.00%	15.00%
Ontario income tax	11.50%	11.50%	11.50%	11.50%	11.50%
Combined federal and Ontario	26.50%	26.50%	26.50%	26.50%	26.50%
Federal & Ontario Small Business					
Federal small business threshold	500,000	500,000	500,000	500,000	500,000
Ontario Small Business Threshold	500,000	500,000	500,000	500,000	500,000
Federal small business rate	11.00%	11.00%	11.00%	11.00%	10.50%
Ontario small business rate	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

1. The Ontario Energy Board's proxy for taxable capital is rate base.
2. If taxable capital exceds $15 million the maximum tax rates apply.
3. If taxable capital is below $10 million the minimum tax rates apply.
4. Where taxable capital is between $10 million and $15 million, the tax rate will be calculated.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Historical Year

Note: Input the actual information from the tax returns for the historical year.

					Wires Only	
Regulatory Taxable Income				H1	$ 14,137,920	**A**
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	**B**			
	Federal tax rate (Maximum 15%)	15.00%	**C**			
	Combined tax rate (Maximum 26.5%)				26.50%	**M = K + L**
Total Income Taxes					**$ 3,746,549**	**E = A * D**
Investment Tax Credits						**F**
Miscellaneous Tax Credits					$ 192,500	**G**
Total Tax Credits					**$ 192,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Historical Year					**$ 3,554,049**	**I = H + E**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Historical Year

	T2S1 line #	Total for Legal Entity	Non-Distribution Eliminations	Historic Wires Only
Income before PILs/Taxes	A	36,058,234		36,058,234
Additions:				
Interest and penalties on taxes	103	5,000		5,000
Amortization of tangible assets	104	44,057,757		44,057,757
Amortization of intangible assets	106			0
Recapture of capital cost allowance from Schedule 8	107			0
Gain on sale of eligible capital property from Schedule 10	108			0
Income or loss for tax purposes- joint ventures or partnerships	109			0
Loss in equity of subsidiaries and affiliates	110			0
Loss on disposal of assets	111	1,013,053		1,013,053
Charitable donations	112			0
Taxable Capital Gains	113			0
Political Donations	114			0
Deferred and prepaid expenses	116			0
Scientific research expenditures deducted on financial statements	118			0
Capitalized interest	119			0
Non-deductible club dues and fees	120			0
Non-deductible meals and entertainment expense	121	75,000		75,000
Non-deductible automobile expenses	122			0
Non-deductible life insurance premiums	123			0
Non-deductible company pension plans	124			0
Tax reserves deducted in prior year	125	3,227,504		3,227,504
Reserves from financial statements- balance at end of year	126	5,371,304		5,371,304
Soft costs on construction and renovation of buildings	127			0
Book loss on joint ventures or partnerships	205			0
Capital items expensed	206			0
Debt issue expense	208			0
Development expenses claimed in current year	212			0
Financing fees deducted in books	216			0
Gain on settlement of debt	220			0
Non-deductible advertising	226			0
Non-deductible interest	227			0
Non-deductible legal and accounting fees	228			0
Recapture of SR&ED expenditures	231			0
Share issue expense	235			0
Write down of capital property	236			0
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237			0
Other Additions				
Interest Expensed on Capital Leases	290			0
Realized Income from Deferred Credit Accounts	291			0
Pensions	292	600,000		600,000
Non-deductible penalties	293			0
	294			0
	295			0
ARO Accretion expense				0
Capital Contributions Received (ITA 12(1)(x))				0
Lease Inducements Received (ITA 12(1)(x))				0
Deferred Revenue (ITA 12(1)(a))				0
Prior Year Investment Tax Credits received				0
Current Year Investment Tax Credits received		192,500		192,500

Impairment charge				0
				0
				0
				0
				0
				0
				0
				0
				0
Total Additions		**54,542,118**	**0**	**54,542,118**
Deductions:				
Gain on disposal of assets per financial statements	401			0
Dividends not taxable under section 83	402			0
Capital cost allowance from Schedule 8	403	65,892,596		65,892,596
Terminal loss from Schedule 8	404			0
Cumulative eligible capital deduction from Schedule 10	405	1,371,029		1,371,029
Allowable business investment loss	406			0
Deferred and prepaid expenses	409			0
Scientific research expenses claimed in year	411			0
Tax reserves claimed in current year	413	3,227,504		3,227,504
Reserves from financial statements - balance at beginning of year	414	5,371,304		5,371,304
Contributions to deferred income plans	416	600,000		600,000
Book income of joint venture or partnership	305			0
Equity in income from subsidiary or affiliates	306			0
Other deductions: (Please explain in detail the nature of the item)				
Interest capitalized for accounting deducted for tax	390			0
Capital Lease Payments	391			0
Non-taxable imputed interest income on deferral and variance accounts	392			0
	393			0
	394			0
ARO Payments - Deductible for Tax when Paid				0
ITA 13(7.4) Election - Capital Contributions Received				0
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				0
Deferred Revenue - ITA 20(1)(m) reserve				0
Principal portion of lease payments				0
Lease Inducement Book Amortization credit to income				0
Financing fees for tax ITA 20(1)(e) and (e.1)				0
Tax credits accrued for in current year & deducted in financials in current year				0
				0
				0
				0
				0
				0
				0
Total Deductions		**76,462,433**	**0**	**76,462,433**
Net Income for Tax Purposes		**14,137,920**	**0**	**14,137,920**
Charitable donations from Schedule 2	311	0		0
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320			0
Non-capital losses of preceding taxation years from Schedule 4	331			0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332			0
Limited partnership losses of preceding taxation years from Schedule 4	335			0
TAXABLE INCOME		**14,137,920**	**0**	**14,137,920**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Historical

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical	0		0	B4

Net Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical			0	B4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 - Historical Year

Class	Class Description	UCC End of Year Historical per tax returns	Less: Non-Distribution Portion	UCC Regulated Historical Year
1	Distribution System - post 1987	170,872,266		170,872,266
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	26,408,955		26,408,955
2	Distribution System - pre 1988	52,742,586		52,742,586
8	General Office/Stores Equip	13,530,534		13,530,534
10	Computer Hardware/ Vehicles	4,148,729		4,148,729
10.1	Certain Automobiles			0
12	Computer Software	7,243,744		7,243,744
13 1	Lease # 1			0
13 2	Lease #2			0
13 3	Lease # 3			0
13 4	Lease # 4			0
14	Franchise			0
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs			0
42	Fibre Optic Cable	253,294		253,294
43.1	Certain Energy-Efficient Electrical Generating Equipment			0
43.2	Certain Clean Energy Generation Equipment	0		0
45	Computers & Systems Software acq'd post Mar 22/04	4,349		4,349
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)			0
47	Distribution System - post February 2005	454,898,896		454,898,896
50	Data Network Infrastructure Equipment - post Mar 2007	2,036,766		2,036,766
52	Computer Hardware and system software			0
95	CWIP			0
3	Building - pre 1988	8,294,060		8,294,060
				0
				0
				0
				0
				0
				0
				0
				0
				0
	SUB-TOTAL - UCC	740,434,180	0	740,434,180

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filer

Schedule 10 CEC - Historical Year

Cumulative Eligible Capital				**15,795,389**
Additions				
Cost of Eligible Capital Property Acquired during Test Year	5,054,317			
Other Adjustments	0			
Subtotal	5,054,317	**x 3/4 =**	3,790,738	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0	
			3,790,738	**3,790,738**
Amount transferred on amalgamation or wind-up of subsidiary	0			**0**
Subtotal				**19,586,127**
Deductions				
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year				
Other Adjustments	0			
Subtotal	0	**x 3/4 =**		**0**
Cumulative Eligible Capital Balance				**19,586,127**
Current Year Deduction		**19,586,127**	**x 7% =**	**1,371,029**
Cumulative Eligible Capital - Closing Balance				**18,215,098**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Historical

Continuity of Reserves

Description	Historical Balance as per tax returns	Non-Distribution Eliminations	Utility Only	
Capital Gains Reserves ss.40(1)			0	B13
Tax Reserves Not Deducted for accounting purposes				
Reserve for doubtful accounts ss. 20(1)(l)	3,227,504		3,227,504	B13
Reserve for goods and services not delivered ss. 20(1)(m)			0	B13
Reserve for unpaid amounts ss. 20(1)(n)			0	B13
Debt & Share Issue Expenses ss. 20(1)(e)			0	B13
Other tax reserves			0	B13
			0	
			0	
			0	
			0	
			0	
Total	**3,227,504**	**0**	**3,227,504**	
Financial Statement Reserves (not deductible for Tax Purposes)				
General Reserve for Inventory Obsolescence (non-specific)			0	B13
General reserve for bad debts	3,828,062		3,828,062	B13
Accrued Employee Future Benefits:			0	B13
- Medical and Life Insurance			0	B13
-Short & Long-term Disability			0	B13
-Accmulated Sick Leave			0	B13
- Termination Cost			0	B13
- Other Post-Employment Benefits			0	B13
Provision for Environmental Costs			0	B13
Restructuring Costs			0	B13
Accrued Contingent Litigation Costs			0	B13
Accrued Self-Insurance Costs			0	B13
Other Contingent Liabilities	1,543,242		1,543,242	B13
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0	B13
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0	B13
Other			0	B13
			0	
			0	
Total	**5,371,304**	**0**	**5,371,304**	

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILS Tax Provision - Bridge Year

			Reference	Wires Only	
Regulatory Taxable Income			B1	$ 17,571,283	**A**
Combined Tax Rate and PILs	Effective Ontario Tax Rate	11.50%	**B**		
	Federal tax rate (Maximum 15%)	15.00%	**C**		
	Combined tax rate			26.50%	**D = B + C**
Total Income Taxes			calculated	**$ 4,656,390**	**E = A * D**
Investment Tax Credits					**F**
Miscellaneous Tax Credits				$ 132,500	**G**
Total Tax Credits				**$ 132,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Bridge Year				**$ 4,523,890**	**I = H + E**

Note:

1. This is for the derivation of Bridge year PILs income tax expense and should not be used for Test year revenue requirement calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

	T2S1 line #	Working Paper Reference	Total for Regulated Utility
Income before PILs/Taxes	A		37,911,214

Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets	104		46,943,424
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves deducted in prior year	125	B13	3,227,504
Reserves from financial statements- balance at end of year	126	B13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Other Additions			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits Received			132,500
Total Additions			**57,367,785**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	B8	66,953,538
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10	405	B10	1,555,369
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves claimed in current year	413	B13	3,227,504
Reserves from financial statements - balance at beginning of year	414	B13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		
Non-taxable imputed interest income on deferral and variance accounts	392		
	393		
	394		
ARO Payments - Deductible for Tax when Paid			
ITA 13(7.4) Election - Capital Contributions Received			
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds			
Deferred Revenue - ITA 20(1)(m) reserve			
Principal portion of lease payments			
Lease Inducement Book Amortization credit to income			
Financing fees for tax ITA 20(1)(e) and (e.1)			
Total Deductions		calculated	**77,707,715**
Net Income for Tax Purposes		calculated	**17,571,283**
Charitable donations from Schedule 2	311		
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320		
Non-capital losses of preceding taxation years from Schedule 4	331	B4	0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332		
Limited partnership losses of preceding taxation years from Schedule 4	335		
TAXABLE INCOME		calculated	**17,571,283**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Corporation Loss Continuity and Application

Schedule 4 Loss Carry Forward - Bridge Year

Non-Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)	B1	0	
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year	B1	0	
Balance available for use post Bridge Year	calculated	0	T4

Net Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)			
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year			
Balance available for use post Bridge Year	calculated	0	T4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Bridge Year

Class	Class Description	Working Paper Reference	UCC Regulated Historical Year	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Bridge Year CCA		UCC End of Bridge Year
1	Distribution System - post 1987	H8	$ 170,872,266			$ 170,872,266	$ -	$ 170,872,266	4%	$ 6,834,891		$ 164,037,376
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	H8	$ 26,408,955	$ 2,929,713		$ 29,338,668	$ 1,464,857	$ 27,873,812	6%	$ 1,672,429		$ 27,666,240
2	Distribution System - pre 1988	H8	$ 52,742,586			$ 52,742,586	$ -	$ 52,742,586	6%	$ 3,164,555		$ 49,578,031
8	General Office/Stores Equip	H8	$ 13,530,534	$ 4,303,997		$ 17,834,531	$ 2,151,999	$ 15,682,533	20%	$ 3,136,507		$ 14,698,025
10	Computer Hardware/ Vehicles	H8	$ 4,148,729	$ 1,451,508		$ 5,600,237	$ 725,754	$ 4,874,483	30%	$ 1,462,345		$ 4,137,892
10.1	Certain Automobiles	H8				$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	H8	$ 7,243,744	$ 4,427,066		$ 11,670,810	$ 2,213,533	$ 9,457,277	100%	$ 9,457,277		$ 2,213,533
13 1	Lease # 1	H8				$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	H8				$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	H8				$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	H8				$ -	$ -	$ -		$ -		$ -
14	Franchise	H8				$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs	H8				$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	H8	$ 253,294			$ 253,294	$ -	$ 253,294	12%	$ 30,395		$ 222,898
43.1	Certain Energy-Efficient Electrical Generating Equipment	H8				$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	H8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	H8	$ 4,349			$ 4,349	$ -	$ 4,349	45%	$ 1,957		$ 2,392
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	H8				$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	H8	$ 454,898,896	$ 74,671,869		$ 529,570,765	$ 37,335,935	$ 492,234,831	8%	$ 39,378,786		$ 490,191,979
50	Data Network Infrastructure Equipment - post Mar 2007	H8	$ 2,036,766	$ 1,016,261		$ 3,053,027	$ 508,131	$ 2,544,897	55%	$ 1,399,693		$ 1,653,334
52	Computer Hardware and system software	H8				$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	H8				$ -	$ -	$ -		$ -		$ -
3	Building - pre 1988		$ 8,294,060			$ 8,294,060	$ -	$ 8,294,060	5%	$ 414,703		$ 7,879,357
						$ -	$ -	$ -	10%	$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
	TOTAL		$ 740,434,180	$ 88,800,414	$ -	$ 829,234,594	$ 44,400,207	$ 784,834,387		$ 66,953,538	B1	$ 762,281,056

Schedule 10 CEC - Bridge Year

				Reference	
Cumulative Eligible Capital				H10	**18,215,098**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	5,339,288				
Other Adjustments	0				
Subtotal	5,339,288	**x 3/4 =**	4,004,466		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			4,004,466		**4,004,466**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**22,219,564**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**

Cumulative Eligible Capital Balance			**22,219,564**
Current Year Deduction	**22,219,564**	**x 7% =**	**1,555,369**
Cumulative Eligible Capital - Closing Balance			**20,664,195**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Bridge Year

Continuity of Reserves

Description	Reference	Historical Utility Only	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Bridge Year Adjustments: Additions	Bridge Year Adjustments: Disposals	Balance for Bridge Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	H13	0		0				0	T13	0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	H13	3,227,504		3,227,504				3,227,504	T13	0	
Reserve for goods and services not delivered ss. 20(1)(m)	H13	0		0				0	T13	0	
Reserve for unpaid amounts ss. 20(1)(n)	H13	0		0				0	T13	0	
Debt & Share Issue Expenses ss. 20(1)(e)	H13	0		0				0	T13	0	
Other tax reserves	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	B1	**0**	**0**	**3,227,504**	B1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	H13	0		0				0	T13	0	
General reserve for bad debts	H13	3,828,062		3,828,062				3,828,062	T13	0	
Accrued Employee Future Benefits:	H13	0		0				0	T13	0	
- Medical and Life Insurance	H13	0		0				0	T13	0	
-Short & Long-term Disability	H13	0		0				0	T13	0	
-Accmulated Sick Leave	H13	0		0				0	T13	0	
- Termination Cost	H13	0		0				0	T13	0	
- Other Post-Employment Benefits	H13	0		0				0	T13	0	
Provision for Environmental Costs	H13	0		0				0	T13	0	
Restructuring Costs	H13	0		0				0	T13	0	
Accrued Contingent Litigation Costs	H13	0		0				0	T13	0	
Accrued Self-Insurance Costs	H13	0		0				0	T13	0	
Other Contingent Liabilities	H13	1,543,242		1,543,242				1,543,242	T13	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	H13	0		0				0	T13	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	H13	0		0				0	T13	0	
Other	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	B1	**0**	**0**	**5,371,304**	B1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Test Year

					Wires Only		
Regulatory Taxable Income				T1	$ 24,160,093	A	
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	B				
	Federal tax rate (Maximum 15%)	15.00%	C				
	Combined tax rate (Maximum 26.5%)				26.50%	D = B + C	
Total Income Taxes					**$ 6,402,425**	E = A * D	
Investment Tax Credits						F	
Miscellaneous Tax Credits					$ 125,500	G	
Total Tax Credits					**$ 125,500**	H = F + G	
Corporate PILs/Income Tax Provision for Test Year					**$ 6,276,925**	I = H + E	S. Su
Corporate PILs/Income Tax Provision Gross Up [1]		73.50%	J		**$ 2,263,109**	K = J * I	
Income Tax (grossed-up)					**$ 8,540,033**	L = K + I	S. Su

Note:

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Taxable Income - Test Year

		Working Paper Reference	Test Year Taxable Income
Net Income Before Taxes		A.	39,047,346

	T2 S1 line #		
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets *2-4 ADJUSTED ACCOUNTING DATA P489*	104		48,823,718
Amortization of intangible assets *2-4 ADJUSTED ACCOUNTING DATA P490*	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves beginning of year	125	T13	3,227,504
Reserves from financial statements- balance at end of year	126	T13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		

Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Other Additions: (please explain in detail the nature of the item)			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
	296		
	297		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits received			125,500
Total Additions			**59,241,079**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	T8	63,217,553
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10 CEC	405	T10	1,711,972
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves end of year	413	T13	3,227,504
Reserves from financial statements - balance at beginning of year	414	T13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			
Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		

Non-taxable imputed interest income on deferral and variance accounts	392			
	393			
	394			
	395			
	396			
	397			
ARO Payments - Deductible for Tax when Paid				
ITA 13(7.4) Election - Capital Contributions Received				
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				
Deferred Revenue - ITA 20(1)(m) reserve				
Principal portion of lease payments				
Lease Inducement Book Amortization credit to income				
Financing fees for tax ITA 20(1)(e) and (e.1)				
Total Deductions		calculated	**74,128,333**	
NET INCOME FOR TAX PURPOSES		calculated	**24,160,093**	
Charitable donations	311			
Taxable dividends received under section 112 or 113	320			
Non-capital losses of preceding taxation years from Schedule 7-1	331	T4	0	
Net-capital losses of preceding taxation years (Please show calculation)	332			
Limited partnership losses of preceding taxation years from Schedule 4	335			
REGULATORY TAXABLE INCOME		calculated	**24,160,093**	T0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Test Year

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Working Paper Reference	Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)	T1	0		0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year	T1	0		0
Balance available for use post Test Year	calculated	0	0	0

Net Capital Loss Carry Forward Deduction		Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)				0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year				0
Balance available for use post Test Year	calculated	0	0	0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Test Year

Class	Class Description	Working Paper Reference	UCC Test Year Opening Balance	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Test Year CCA		UCC End of Test Year
1	Distribution System - post 1987	B8	$ 164,037,376			$ 164,037,376	$ -	$ 164,037,376	4%	$ 6,561,495		$ 157,475,881
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	B8	$ 27,666,240	860,917		$ 28,527,157	$ 430,459	$ 28,096,698	6%	$ 1,685,802		$ 26,841,355
2	Distribution System - pre 1988	B8	$ 49,578,031			$ 49,578,031	$ -	$ 49,578,031	6%	$ 2,974,682		$ 46,603,349
8	General Office/Stores Equip	B8	$ 14,698,025	3,095,502		$ 17,793,527	$ 1,547,751	$ 16,245,776	20%	$ 3,249,155		$ 14,544,371
10	Computer Hardware/ Vehicles	B8	$ 4,137,892	1,479,811		$ 5,617,703	$ 739,906	$ 4,877,798	30%	$ 1,463,339		$ 4,154,364
10.1	Certain Automobiles	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	B8	$ 2,213,533	4,325,277		$ 6,538,810	$ 2,162,639	$ 4,376,172	100%	$ 4,376,172		$ 2,162,639
13 1	Lease # 1	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	B8	$ -			$ -	$ -	$ -		$ -		$ -
14	Franchise	B8	$ -			$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bl	B8	$ -			$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	B8	$ 222,898			$ 222,898	$ -	$ 222,898	12%	$ 26,748		$ 196,151
43.1	Certain Energy-Efficient Electrical Generating Equipment	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	B8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	B8	$ 2,392			$ 2,392	$ -	$ 2,392	45%	$ 1,076		$ 1,315
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	B8	$ 490,191,979	52,817,278		$ 543,009,257	$ 26,408,639	$ 516,600,618	8%	$ 41,328,049		$ 501,681,208
50	Data Network Infrastructure Equipment - post Mar 2007	B8	$ 1,653,334	900,848		$ 2,554,182	$ 450,424	$ 2,103,758	55%	$ 1,157,067		$ 1,397,115
52	Computer Hardware and system software	B8	$ -			$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	B8	$ -			$ -	$ -	$ -	0%	$ -		$ -
3	Building - pre 1988		$ 7,879,357			$ 7,879,357	$ -	$ 7,879,357	5%	$ 393,968		$ 7,485,389
			$ -			$ -	$ -	$ -	10%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
	TOTAL		$ 762,281,056	$ 63,479,633	$ -	$ 825,760,689	$ 31,739,817	$ 794,020,872		$ 63,217,553	T1	$ 762,543,136

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 10 CEC - Test Year

Cumulative Eligible Capital				B10	**20,664,195**
Additions					
Cost of Eligible Capital Property Acquired during Test Year		5,056,723			
Other Adjustments		0			
	Subtotal	5,056,723	**x 3/4 =**	3,792,542	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002		0	**x 1/2 =**	0	
				3,792,542	**3,792,542**
Amount transferred on amalgamation or wind-up of subsidiary		0			**0**
	Subtotal				**24,456,737**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year		0			
Other Adjustments		0			
	Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**24,456,737**
Current Year Deduction (Carry Forward to Tab "Test Year Taxable Income")	**24,456,737**	**x 7% =**	**1,711,972**
Cumulative Eligible Capital - Closing Balance			**22,744,765**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Test Year

Continuity of Reserves

Description	Working Paper Reference	Bridge Year	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Test Year Adjustments: Additions	Test Year Adjustments: Disposals	Balance for Test Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	B13	0		0				0		0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	B13	3,227,504		3,227,504		0	0	3,227,504		0	
Reserve for goods and services not delivered ss. 20(1)(m)	B13	0		0				0		0	
Reserve for unpaid amounts ss. 20(1)(n)	B13	0		0				0		0	
Debt & Share Issue Expenses ss. 20(1)(e)	B13	0		0				0		0	
Other tax reserves	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	T1	**0**	**0**	**3,227,504**	T1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	B13	0		0				0		0	
General reserve for bad debts	B13	3,828,062		3,828,062				3,828,062		0	
Accrued Employee Future Benefits:	B13	0		0				0		0	
- Medical and Life Insurance	B13	0		0				0		0	
-Short & Long-term Disability	B13	0		0				0		0	
-Accmulated Sick Leave	B13	0		0				0		0	
- Termination Cost	B13	0		0				0		0	
- Other Post-Employment Benefits	B13	0		0				0		0	
Provision for Environmental Costs	B13	0		0				0		0	
Restructuring Costs	B13	0		0				0		0	
Accrued Contingent Litigation Costs	B13	0		0				0		0	
Accrued Self-Insurance Costs	B13	0		0				0		0	
Other Contingent Liabilities	B13	1,543,242		1,543,242				1,543,242		0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	B13	0		0				0		0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	B13	0		0				0		0	
Other	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	T1	**0**	**0**	**5,371,304**	T1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Version 1.0

Utility Name	Hydro Ottawa Limited
Assigned EB Number	EB-2015-0004
Name and Title	Geoff Simpson, Chief Financial Officer
Phone Number	613-738-5499
Email Address	geoffsimpson@hydroottawa.com
Date	
Last COS Re-based Year	**2012**

Note: Drop-down lists are shaded blue; Input cells are shaded green.

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Instructions

Purpose
The purpose of this workbook is to calculate the estimated Payment in Lieu of Taxes (PILs) for the Test Year. The calculation of PILs for the Test Year is on tab T0 and is based on the inputs on the other tabs.

Tab S Summary is a summary of the amounts to be transferred to the Revenue Requirement Workform. The Revenue Requirement Workform is on tab 3 of the Revenue Requirement Workform.

Methodology
To calculate the PILs for the Test Year:

1) input the balances from the income tax return of the Historical Year in tabs H1 to H13.
2) input the balances for the subsequent two (2) years (the Bridge Year and the Test Year).
Inputs should include:
- non-deductible expenses (Schedule 1 - B1 and T1)
- capital additions (Schedule 8 - B8 and T8)
- cumulative eligible expenditures (Schedule 10 - B10 and T10)
- non-deductible reserves (Schedule 13 - B13 and T13)

3) make any other adjustments and inputs required so that the PILs amount calculated for the Test Year on tab T0 is reasonable.

Other Notes
Tabs H1 to H13 relate to the Historical Year.
Tabs B1 to B13 relate to the Bridge Year.
Tabs T1 to T13 relate to the Test Year.

s The amounts on tabs H1 to H13 should agree to the tax return filed with the Canada Revenue Agency. Any CRA audit adjustments or corrections should also be reflected.

It is assumed the net income before tax for the Test Year is equal to the Return on Equity. Return on Equity is calculated on tab A.

e On tab "A. Data Input Sheet", input the "Rate Base" amount and "Return on Rate Base" amounts.

For the 2016 Application, the "Test Year" is 2016, the "Historical Year" is 2014, and the "Bridge Year" is 2015.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

1. Info
S. Summary
A. Data Input Sheet
B. Tax Rates & Exemptions

Historical Year

H0 - PILs, Tax Provision Historical Year
H1 - Adj. Taxable Income Historical Year
H4 - Schedule 4 Loss Carry Forward Historical Year
H8 - Schedule 8 Historical'!A1
H10 - Schedule 10 CEC Historical Year
H13 - Schedule 13 Tax Reserves Historical

Bridge Year

B0 - PILs,Tax Provision Bridge Year
B1 - Adj. Taxable Income Bridge Year
B4 - Schedule 4 Loss Carry Forward Bridge Year
B8 - Schedule 8 CCA Bridge Year
B10 - Schedule 10 CEC Bridge Year
B13 - Schedule 13 Tax Reserves Bridge Year

Test Year

T0 PILs, Tax Provision Test Year
T1 Taxable Income Test Year
T4 Schedule 4 Loss Carry Forward Test Year
T8 Schedule 8 CCA Test Year
T10 Schedule 10 CEC Test Year
T13 Schedule 13 Reserve Test Year

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

No inputs required on this worksheet.

Inputs on Service Revenue Requirement Worksheet

The Service Revenue Requirement is in the 'Revenue Requirement Workform' - Tab 3.

Item	Working Paper Reference		
Adjustments required to arrive at taxable income	as below	**-18,994,322**	
Test Year - Payments in Lieu of Taxes (PILs)	T0	**5,626,106**	
Test Year - Grossed-up PILs	T0	**7,654,566**	
Federal Tax Rate	T0	**15.0%**	
Ontario Tax Rate	T0	**11.5%**	

Calculation of Adjustments required to arrive at Taxable Income			
Regulatory Income (before income taxes)	T1	40,672,081	
Taxable Income	T1	21,677,759	
Difference	calculated	-18,994,322	as above

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Rate Base		S	**$**	**1,093,335,519**		

Return on Ratebase

Deemed ShortTerm Debt %	4.00%	T	$	43,733,421	*W = S * T*	
Deemed Long Term Debt %	56.00%	U	$	612,267,891	*X = S * U*	
Deemed Equity %	40.00%	V	$	437,334,208	*Y = S * V*	
Short Term Interest Rate	2.16%	Z	$	944,642	*AC = W * Z*	
Long Term Interest	4.23%	AA	$	25,898,932	*AD = X * AA*	
Return on Equity (Regulatory Income)	9.30%	AB	**$**	**40,672,081**	*AE = Y * AB*	T1
Return on Rate Base			**$**	**67,515,655**	*AF = AC + AD + AE*	

Questions that must be answered

	Historical	Bridge	Test Year
1. Does the applicant have any Investment Tax Credits (ITC)?	Yes	Yes	Yes
2. Does the applicant have any SRED Expenditures?	No	No	No
3. Does the applicant have any Capital Gains or Losses for tax purposes?	No	No	No
4. Does the applicant have any Capital Leases?	No	No	No
5. Does the applicant have any Loss Carry-Forwards (non-capital or net capital)?	No	No	No
6. Since 1999, has the applicant acquired another regulated applicant's assets?	No	No	No
7. Did the applicant pay dividends? *If Yes, please describe what was the tax treatment in the manager's summary.*	Yes	Yes	Yes
8. Did the applicant elect to capitalize interest incurred on CWIP for tax purposes?	No	No	No

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Tax Rates Federal & Provincial As of June 15, 2015	Effective January 1, 2012	Effective January 1, 2013	Effective January 1, 2014	Effective January 1, 2015	Effective January 1, 2016
Federal income tax					
General corporate rate	38.00%	38.00%	38.00%	38.00%	38.00%
Federal tax abatement	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%
Adjusted federal rate	28.00%	28.00%	28.00%	28.00%	28.00%
Rate reduction	-13.00%	-13.00%	-13.00%	-13.00%	-13.00%
Federal Income Tax	15.00%	15.00%	15.00%	15.00%	15.00%
Ontario income tax	11.50%	11.50%	11.50%	11.50%	11.50%
Combined federal and Ontario	26.50%	26.50%	26.50%	26.50%	26.50%
Federal & Ontario Small Business					
Federal small business threshold	500,000	500,000	500,000	500,000	500,000
Ontario Small Business Threshold	500,000	500,000	500,000	500,000	500,000
Federal small business rate	11.00%	11.00%	11.00%	11.00%	10.50%
Ontario small business rate	4.50%	4.50%	4.50%	4.50%	4.50%

Notes

1. The Ontario Energy Board's proxy for taxable capital is rate base.
2. If taxable capital exceds $15 million the maximum tax rates apply.
3. If taxable capital is below $10 million the minimum tax rates apply.
4. Where taxable capital is between $10 million and $15 million, the tax rate will be calculated.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Historical Year

Note: Input the actual information from the tax returns for the historical year.

					Wires Only	
Regulatory Taxable Income				H1	$ 17,571,283	**A**
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	**B**			
	Federal tax rate (Maximum 15%)	15.00%	**C**			
	Combined tax rate (Maximum 26.5%)				26.50%	**M = K + L**
Total Income Taxes					**$ 4,656,390**	**E = A * D**
Investment Tax Credits						**F**
Miscellaneous Tax Credits					$ 132,500	**G**
Total Tax Credits					**$ 132,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Historical Year					**$ 4,523,890**	**I = H + E**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Historical Year

	T2S1 line #	Total for Legal Entity	Non-Distribution Eliminations	Historic Wires Only
Income before PILs/Taxes	A	37,911,214		37,911,214
Additions:				
Interest and penalties on taxes	103	5,000		5,000
Amortization of tangible assets	104	46,943,424		46,943,424
Amortization of intangible assets	106			0
Recapture of capital cost allowance from Schedule 8	107			0
Gain on sale of eligible capital property from Schedule 10	108			0
Income or loss for tax purposes- joint ventures or partnerships	109			0
Loss in equity of subsidiaries and affiliates	110			0
Loss on disposal of assets	111	1,013,053		1,013,053
Charitable donations	112			0
Taxable Capital Gains	113			0
Political Donations	114			0
Deferred and prepaid expenses	116			0
Scientific research expenditures deducted on financial statements	118			0
Capitalized interest	119			0
Non-deductible club dues and fees	120			0
Non-deductible meals and entertainment expense	121	75,000		75,000
Non-deductible automobile expenses	122			0
Non-deductible life insurance premiums	123			0
Non-deductible company pension plans	124			0
Tax reserves deducted in prior year	125	3,227,504		3,227,504
Reserves from financial statements- balance at end of year	126	5,371,304		5,371,304
Soft costs on construction and renovation of buildings	127			0
Book loss on joint ventures or partnerships	205			0
Capital items expensed	206			0
Debt issue expense	208			0
Development expenses claimed in current year	212			0
Financing fees deducted in books	216			0
Gain on settlement of debt	220			0
Non-deductible advertising	226			0
Non-deductible interest	227			0
Non-deductible legal and accounting fees	228			0
Recapture of SR&ED expenditures	231			0
Share issue expense	235			0
Write down of capital property	236			0
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237			0
Other Additions				
Interest Expensed on Capital Leases	290			0
Realized Income from Deferred Credit Accounts	291			0
Pensions	292	600,000		600,000
Non-deductible penalties	293			0
	294			0
	295			0
ARO Accretion expense				0
Capital Contributions Received (ITA 12(1)(x))				0
Lease Inducements Received (ITA 12(1)(x))				0
Deferred Revenue (ITA 12(1)(a))				0
Prior Year Investment Tax Credits received				0
Current Year Investment Tax Credits received		132,500		132,500

Impairment charge				0
				0
				0
				0
				0
				0
				0
				0
				0
Total Additions		**57,367,785**	**0**	**57,367,785**
Deductions:				
Gain on disposal of assets per financial statements	401			0
Dividends not taxable under section 83	402			0
Capital cost allowance from Schedule 8	403	66,953,538		66,953,538
Terminal loss from Schedule 8	404			0
Cumulative eligible capital deduction from Schedule 10	405	1,555,369		1,555,369
Allowable business investment loss	406			0
Deferred and prepaid expenses	409			0
Scientific research expenses claimed in year	411			0
Tax reserves claimed in current year	413	3,227,504		3,227,504
Reserves from financial statements - balance at beginning of year	414	5,371,304		5,371,304
Contributions to deferred income plans	416	600,000		600,000
Book income of joint venture or partnership	305			0
Equity in income from subsidiary or affiliates	306			0
Other deductions: (Please explain in detail the nature of the item)				
Interest capitalized for accounting deducted for tax	390			0
Capital Lease Payments	391			0
Non-taxable imputed interest income on deferral and variance accounts	392			0
	393			0
	394			0
ARO Payments - Deductible for Tax when Paid				0
ITA 13(7.4) Election - Capital Contributions Received				0
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				0
Deferred Revenue - ITA 20(1)(m) reserve				0
Principal portion of lease payments				0
Lease Inducement Book Amortization credit to income				0
Financing fees for tax ITA 20(1)(e) and (e.1)				0
Tax credits accrued for in current year & deducted in financials in current year				0
				0
				0
				0
				0
				0
				0
Total Deductions		**77,707,715**	**0**	**77,707,715**
Net Income for Tax Purposes		**17,571,283**	**0**	**17,571,283**
Charitable donations from Schedule 2	311	0		0
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320			0
Non-capital losses of preceding taxation years from Schedule 4	331			0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332			0
Limited partnership losses of preceding taxation years from Schedule 4	335			0
TAXABLE INCOME		**17,571,283**	**0**	**17,571,283**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Historical

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical	0		0	B4

Net Capital Loss Carry Forward Deduction	Total	Non-Distribution Portion	Utility Balance	
Actual Historical			0	B4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 - Historical Year

Class	Class Description	UCC End of Year Historical per tax returns	Less: Non-Distribution Portion	UCC Regulated Historical Year
1	Distribution System - post 1987	164,037,376		164,037,376
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	27,666,240		27,666,240
2	Distribution System - pre 1988	49,578,031		49,578,031
8	General Office/Stores Equip	14,698,025		14,698,025
10	Computer Hardware/ Vehicles	4,137,892		4,137,892
10.1	Certain Automobiles			0
12	Computer Software	2,213,533		2,213,533
13 1	Lease # 1			0
13 2	Lease #2			0
13 3	Lease # 3			0
13 4	Lease # 4			0
14	Franchise			0
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs			0
42	Fibre Optic Cable	222,898		222,898
43.1	Certain Energy-Efficient Electrical Generating Equipment			0
43.2	Certain Clean Energy Generation Equipment	0		0
45	Computers & Systems Software acq'd post Mar 22/04	2,392		2,392
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)			0
47	Distribution System - post February 2005	490,191,979		490,191,979
50	Data Network Infrastructure Equipment - post Mar 2007	1,653,334		1,653,334
52	Computer Hardware and system software			0
95	CWIP			0
3	Building - pre 1988	7,879,357		7,879,357
				0
				0
				0
				0
				0
				0
				0
				0
				0
	SUB-TOTAL - UCC	762,281,056	0	762,281,056

Schedule 10 CEC - Historical Year

Cumulative Eligible Capital					**18,215,098**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	5,339,288				
Other Adjustments	0				
Subtotal	5,339,288	**x 3/4 =**	4,004,466		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			4,004,466		**4,004,466**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**22,219,564**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**
Cumulative Eligible Capital Balance					**22,219,564**
Current Year Deduction			**22,219,564**	**x 7% =**	**1,555,369**
Cumulative Eligible Capital - Closing Balance					**20,664,195**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Historical

Continuity of Reserves

Description	Historical Balance as per tax returns	Non-Distribution Eliminations	Utility Only	
Capital Gains Reserves ss.40(1)			0	B13
Tax Reserves Not Deducted for accounting purposes				
Reserve for doubtful accounts ss. 20(1)(l)	3,227,504		3,227,504	B13
Reserve for goods and services not delivered ss. 20(1)(m)			0	B13
Reserve for unpaid amounts ss. 20(1)(n)			0	B13
Debt & Share Issue Expenses ss. 20(1)(e)			0	B13
Other tax reserves			0	B13
			0	
			0	
			0	
			0	
			0	
Total	**3,227,504**	**0**	**3,227,504**	
Financial Statement Reserves (not deductible for Tax Purposes)				
General Reserve for Inventory Obsolescence (non-specific)			0	B13
General reserve for bad debts	3,828,062		3,828,062	B13
Accrued Employee Future Benefits:			0	B13
- Medical and Life Insurance			0	B13
-Short & Long-term Disability			0	B13
-Accmulated Sick Leave			0	B13
- Termination Cost			0	B13
- Other Post-Employment Benefits			0	B13
Provision for Environmental Costs			0	B13
Restructuring Costs			0	B13
Accrued Contingent Litigation Costs			0	B13
Accrued Self-Insurance Costs			0	B13
Other Contingent Liabilities	1,543,242		1,543,242	B13
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0	B13
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0	B13
Other			0	B13
			0	
			0	
Total	**5,371,304**	**0**	**5,371,304**	

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILS Tax Provision - Bridge Year

			Reference	Wires Only	
Regulatory Taxable Income			B1	$ 24,160,093	**A**
Combined Tax Rate and PILs	Effective Ontario Tax Rate	11.50%	**B**		
	Federal tax rate (Maximum 15%)	15.00%	**C**		
	Combined tax rate			26.50%	**D = B + C**
Total Income Taxes			calculated	**$ 6,402,425**	**E = A * D**
Investment Tax Credits					**F**
Miscellaneous Tax Credits				$ 125,500	**G**
Total Tax Credits				**$ 125,500**	**H = F + G**
Corporate PILs/Income Tax Provision for Bridge Year				**$ 6,276,925**	**I = H + E**

Note:

1. This is for the derivation of Bridge year PILs income tax expense and should not be used for Test year revenue requirement calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

	T2S1 line #	Working Paper Reference	Total for Regulated Utility
Income before PILs/Taxes	A		39,047,346

Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets	104		48,823,718
Amortization of intangible assets	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves deducted in prior year	125	B13	3,227,504
Reserves from financial statements- balance at end of year	126	B13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		
Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Other Additions			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits Received			125,500
Total Additions			**59,241,079**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	B8	63,217,553
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10	405	B10	1,711,972
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves claimed in current year	413	B13	3,227,504
Reserves from financial statements - balance at beginning of year	414	B13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Adjusted Taxable Income - Bridge Year

Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		
Non-taxable imputed interest income on deferral and variance accounts	392		
	393		
	394		
ARO Payments - Deductible for Tax when Paid			
ITA 13(7.4) Election - Capital Contributions Received			
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds			
Deferred Revenue - ITA 20(1)(m) reserve			
Principal portion of lease payments			
Lease Inducement Book Amortization credit to income			
Financing fees for tax ITA 20(1)(e) and (e.1)			
Total Deductions		calculated	**74,128,333**
Net Income for Tax Purposes		calculated	**24,160,093**
Charitable donations from Schedule 2	311		
Taxable dividends deductible under section 112 or 113, from Schedule 3 (item 82)	320		
Non-capital losses of preceding taxation years from Schedule 4	331	B4	0
Net-capital losses of preceding taxation years from Schedule 4 *(Please include explanation and calculation in Manager's summary)*	332		
Limited partnership losses of preceding taxation years from Schedule 4	335		
TAXABLE INCOME		calculated	**24,160,093**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Corporation Loss Continuity and Application

Schedule 4 Loss Carry Forward - Bridge Year

Non-Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)	B1	0	
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year	B1	0	
Balance available for use post Bridge Year	calculated	0	T4

Net Capital Loss Carry Forward Deduction		Total	
Actual Historical	H4	0	
Application of Loss Carry Forward to reduce taxable income in Bridge Year			
Other Adjustments Add (+) Deduct (-)			
Balance available for use in Test Year	calculated	0	
Amount to be used in Bridge Year			
Balance available for use post Bridge Year	calculated	0	T4

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Bridge Year

Class	Class Description	Working Paper Reference	UCC Regulated Historical Year	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Bridge Year CCA		UCC End of Bridge Year
1	Distribution System - post 1987	H8	$ 164,037,376			$ 164,037,376	$ -	$ 164,037,376	4%	$ 6,561,495		$ 157,475,881
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	H8	$ 27,666,240	$ 860,917		$ 28,527,157	$ 430,459	$ 28,096,698	6%	$ 1,685,802		$ 26,841,355
2	Distribution System - pre 1988	H8	$ 49,578,031			$ 49,578,031	$ -	$ 49,578,031	6%	$ 2,974,682		$ 46,603,349
8	General Office/Stores Equip	H8	$ 14,698,025	$ 3,095,502		$ 17,793,527	$ 1,547,751	$ 16,245,776	20%	$ 3,249,155		$ 14,544,371
10	Computer Hardware/ Vehicles	H8	$ 4,137,892	$ 1,479,811		$ 5,617,703	$ 739,906	$ 4,877,798	30%	$ 1,463,339		$ 4,154,364
10.1	Certain Automobiles	H8				$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	H8	$ 2,213,533	$ 4,325,277		$ 6,538,810	$ 2,162,639	$ 4,376,172	100%	$ 4,376,172		$ 2,162,639
13 1	Lease # 1	H8				$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	H8				$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	H8				$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	H8				$ -	$ -	$ -		$ -		$ -
14	Franchise	H8				$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bldgs	H8				$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	H8	$ 222,898			$ 222,898	$ -	$ 222,898	12%	$ 26,748		$ 196,151
43.1	Certain Energy-Efficient Electrical Generating Equipment	H8				$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	H8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	H8	$ 2,392			$ 2,392	$ -	$ 2,392	45%	$ 1,076		$ 1,315
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	H8				$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	H8	$ 490,191,979	$ 52,817,278		$ 543,009,257	$ 26,408,639	$ 516,600,618	8%	$ 41,328,049		$ 501,681,208
50	Data Network Infrastructure Equipment - post Mar 2007	H8	$ 1,653,334	$ 900,848		$ 2,554,182	$ 450,424	$ 2,103,758	55%	$ 1,157,067		$ 1,397,115
52	Computer Hardware and system software	H8				$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	H8				$ -	$ -	$ -		$ -		$ -
3	Building - pre 1988		$ 7,879,357			$ 7,879,357	$ -	$ 7,879,357	5%	$ 393,968		$ 7,485,389
						$ -	$ -	$ -	10%	$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
						$ -	$ -	$ -		$ -		$ -
	TOTAL		$ 762,281,056	$ 63,479,633	$ -	$ 825,760,689	$ 31,739,817	$ 794,020,872		$ 63,217,553	B1	$ 762,543,136

Schedule 10 CEC - Bridge Year

				Reference	
Cumulative Eligible Capital				H10	**20,664,195**
Additions					
Cost of Eligible Capital Property Acquired during Test Year	5,056,723				
Other Adjustments	0				
Subtotal	5,056,723	**x 3/4 =**	3,792,542		
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002	0	**x 1/2 =**	0		
			3,792,542		**3,792,542**
Amount transferred on amalgamation or wind-up of subsidiary	0				**0**
Subtotal					**24,456,737**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year					
Other Adjustments	0				
Subtotal	0	**x 3/4 =**			**0**

Cumulative Eligible Capital Balance			**24,456,737**
Current Year Deduction	**24,456,737**	**x 7% =**	**1,711,972**
Cumulative Eligible Capital - Closing Balance			**22,744,765**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Bridge Year

Continuity of Reserves

Description	Reference	Historical Utility Only	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Bridge Year Adjustments: Additions	Bridge Year Adjustments: Disposals	Balance for Bridge Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	H13	0		0				0	T13	0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	H13	3,227,504		3,227,504				3,227,504	T13	0	
Reserve for goods and services not delivered ss. 20(1)(m)	H13	0		0				0	T13	0	
Reserve for unpaid amounts ss. 20(1)(n)	H13	0		0				0	T13	0	
Debt & Share Issue Expenses ss. 20(1)(e)	H13	0		0				0	T13	0	
Other tax reserves	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	B1	**0**	**0**	**3,227,504**	B1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	H13	0		0				0	T13	0	
General reserve for bad debts	H13	3,828,062		3,828,062				3,828,062	T13	0	
Accrued Employee Future Benefits:	H13	0		0				0	T13	0	
- Medical and Life Insurance	H13	0		0				0	T13	0	
-Short & Long-term Disability	H13	0		0				0	T13	0	
-Accmulated Sick Leave	H13	0		0				0	T13	0	
- Termination Cost	H13	0		0				0	T13	0	
- Other Post-Employment Benefits	H13	0		0				0	T13	0	
Provision for Environmental Costs	H13	0		0				0	T13	0	
Restructuring Costs	H13	0		0				0	T13	0	
Accrued Contingent Litigation Costs	H13	0		0				0	T13	0	
Accrued Self-Insurance Costs	H13	0		0				0	T13	0	
Other Contingent Liabilities	H13	1,543,242		1,543,242				1,543,242	T13	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	H13	0		0				0	T13	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	H13	0		0				0	T13	0	
Other	H13	0		0				0	T13	0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	B1	**0**	**0**	**5,371,304**	B1	**0**	**0**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

PILs Tax Provision - Test Year

					Wires Only		
Regulatory Taxable Income				T1	$ 21,677,759	A	
Combined Tax Rate and PILs	Ontario Tax Rate (Maximum 11.5%)	11.50%	B				
	Federal tax rate (Maximum 15%)	15.00%	C				
	Combined tax rate (Maximum 26.5%)				26.50%	D = B + C	
Total Income Taxes					**$ 5,744,606**	E = A * D	
Investment Tax Credits						F	
Miscellaneous Tax Credits					$ 118,500	G	
Total Tax Credits					**$ 118,500**	H = F + G	
Corporate PILs/Income Tax Provision for Test Year					**$ 5,626,106**	I = H + E	S. Su
Corporate PILs/Income Tax Provision Gross Up [1]		73.50%	J		**$ 2,028,460**	K = J * I	
Income Tax (grossed-up)					**$ 7,654,566**	L = K + I	S. Su

Note:

1. This is for the derivation of revenue requirement and should not be used for sufficiency/deficiency calculations.

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Taxable Income - Test Year

		Working Paper Reference	Test Year Taxable Income
Net Income Before Taxes		A.	40,672,081

	T2 S1 line #		
Additions:			
Interest and penalties on taxes	103		5,000
Amortization of tangible assets *2-4 ADJUSTED ACCOUNTING DATA P489*	104		50,160,773
Amortization of intangible assets *2-4 ADJUSTED ACCOUNTING DATA P490*	106		
Recapture of capital cost allowance from Schedule 8	107		
Gain on sale of eligible capital property from Schedule 10	108		
Income or loss for tax purposes- joint ventures or partnerships	109		
Loss in equity of subsidiaries and affiliates	110		
Loss on disposal of assets	111		1,013,053
Charitable donations	112		
Taxable Capital Gains	113		
Political Donations	114		
Deferred and prepaid expenses	116		
Scientific research expenditures deducted on financial statements	118		
Capitalized interest	119		
Non-deductible club dues and fees	120		
Non-deductible meals and entertainment expense	121		75,000
Non-deductible automobile expenses	122		
Non-deductible life insurance premiums	123		
Non-deductible company pension plans	124		
Tax reserves beginning of year	125	T13	3,227,504
Reserves from financial statements- balance at end of year	126	T13	5,371,304
Soft costs on construction and renovation of buildings	127		
Book loss on joint ventures or partnerships	205		
Capital items expensed	206		
Debt issue expense	208		
Development expenses claimed in current year	212		
Financing fees deducted in books	216		
Gain on settlement of debt	220		
Non-deductible advertising	226		
Non-deductible interest	227		
Non-deductible legal and accounting fees	228		
Recapture of SR&ED expenditures	231		
Share issue expense	235		
Write down of capital property	236		

Amounts received in respect of qualifying environment trust per paragraphs 12(1)(z.1) and 12(1)(z.2)	237		
Other Additions: (please explain in detail the nature of the item)			
Interest Expensed on Capital Leases	290		
Realized Income from Deferred Credit Accounts	291		
Pensions	292		600,000
Non-deductible penalties	293		
	294		
	295		
	296		
	297		
ARO Accretion expense			
Capital Contributions Received (ITA 12(1)(x))			
Lease Inducements Received (ITA 12(1)(x))			
Deferred Revenue (ITA 12(1)(a))			
Prior Year Investment Tax Credits received			
Current Year Investment Tax Credits received			118,500
Total Additions			**60,571,134**
Deductions:			
Gain on disposal of assets per financial statements	401		
Dividends not taxable under section 83	402		
Capital cost allowance from Schedule 8	403	T8	68,507,311
Terminal loss from Schedule 8	404		
Cumulative eligible capital deduction from Schedule 10 CEC	405	T10	1,859,337
Allowable business investment loss	406		
Deferred and prepaid expenses	409		
Scientific research expenses claimed in year	411		
Tax reserves end of year	413	T13	3,227,504
Reserves from financial statements - balance at beginning of year	414	T13	5,371,304
Contributions to deferred income plans	416		600,000
Book income of joint venture or partnership	305		
Equity in income from subsidiary or affiliates	306		
Other deductions: (Please explain in detail the nature of the item)			
Interest capitalized for accounting deducted for tax	390		
Capital Lease Payments	391		

Non-taxable imputed interest income on deferral and variance accounts	392			
	393			
	394			
	395			
	396			
	397			
ARO Payments - Deductible for Tax when Paid				
ITA 13(7.4) Election - Capital Contributions Received				
ITA 13(7.4) Election - Apply Lease Inducement to cost of Leaseholds				
Deferred Revenue - ITA 20(1)(m) reserve				
Principal portion of lease payments				
Lease Inducement Book Amortization credit to income				
Financing fees for tax ITA 20(1)(e) and (e.1)				
Total Deductions		calculated	**79,565,456**	
NET INCOME FOR TAX PURPOSES		calculated	**21,677,759**	
Charitable donations	311			
Taxable dividends received under section 112 or 113	320			
Non-capital losses of preceding taxation years from Schedule 7-1	331	T4	0	
Net-capital losses of preceding taxation years (Please show calculation)	332			
Limited partnership losses of preceding taxation years from Schedule 4	335			
REGULATORY TAXABLE INCOME		calculated	**21,677,759**	T0

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 7-1 Loss Carry Forward - Test Year

Corporation Loss Continuity and Application

Non-Capital Loss Carry Forward Deduction	Working Paper Reference	Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)	T1	0		0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year	T1	0		0
Balance available for use post Test Year	calculated	0	0	0

Net Capital Loss Carry Forward Deduction		Total	Non-Distribution Portion	Utility Balance
Actual/Estimated Bridge Year	B4	0		0
				0
Other Adjustments Add (+) Deduct (-)				0
Balance available for use in Test Year	calculated	0	0	0
Amount to be used in Test Year				0
Balance available for use post Test Year	calculated	0	0	0

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Income Tax/PILs Workform for 2016 Filers

Schedule 8 CCA - Test Year

Class	Class Description	Working Paper Reference	UCC Test Year Opening Balance	Additions	Disposals (Negative)	UCC Before 1/2 Yr Adjustment	1/2 Year Rule {1/2 Additions Less Disposals}	Reduced UCC	Rate %	Test Year CCA		UCC End of Test Year
1	Distribution System - post 1987	B8	$ 157,475,881			$ 157,475,881	$ -	$ 157,475,881	4%	$ 6,299,035		$ 151,176,846
1 Enhanced	Non-residential Buildings Reg. 1100(1)(a.1) election	B8	$ 26,841,355	7,064,568		$ 33,905,923	$ 3,532,284	$ 30,373,639	6%	$ 1,822,418		$ 32,083,504
2	Distribution System - pre 1988	B8	$ 46,603,349			$ 46,603,349	$ -	$ 46,603,349	6%	$ 2,796,201		$ 43,807,148
8	General Office/Stores Equip	B8	$ 14,544,371	4,684,276		$ 19,228,647	$ 2,342,138	$ 16,886,509	20%	$ 3,377,302		$ 15,851,346
10	Computer Hardware/ Vehicles	B8	$ 4,154,364	1,572,486		$ 5,726,850	$ 786,243	$ 4,940,607	30%	$ 1,482,182		$ 4,244,668
10.1	Certain Automobiles	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
12	Computer Software	B8	$ 2,162,639	11,398,852		$ 13,561,491	$ 5,699,426	$ 7,862,065	100%	$ 7,862,065		$ 5,699,426
13 1	Lease # 1	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 2	Lease #2	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 3	Lease # 3	B8	$ -			$ -	$ -	$ -		$ -		$ -
13 4	Lease # 4	B8	$ -			$ -	$ -	$ -		$ -		$ -
14	Franchise	B8	$ -			$ -	$ -	$ -		$ -		$ -
17	New Electrical Generating Equipment Acq'd after Feb 27/00 Other Than Bl	B8	$ -			$ -	$ -	$ -	8%	$ -		$ -
42	Fibre Optic Cable	B8	$ 196,151			$ 196,151	$ -	$ 196,151	12%	$ 23,538		$ 172,612
43.1	Certain Energy-Efficient Electrical Generating Equipment	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
43.2	Certain Clean Energy Generation Equipment	B8	$ -			$ -	$ -	$ -	50%	$ -		$ -
45	Computers & Systems Software acq'd post Mar 22/04	B8	$ 1,315			$ 1,315	$ -	$ 1,315	45%	$ 592		$ 724
46	Data Network Infrastructure Equipment (acq'd post Mar 22/04)	B8	$ -			$ -	$ -	$ -	30%	$ -		$ -
47	Distribution System - post February 2005	B8	$ 501,681,208	82,851,650		$ 584,532,858	$ 41,425,825	$ 543,107,033	8%	$ 43,448,563		$ 541,084,295
50	Data Network Infrastructure Equipment - post Mar 2007	B8	$ 1,397,115	919,028		$ 2,316,143	$ 459,514	$ 1,856,629	55%	$ 1,021,146		$ 1,294,997
52	Computer Hardware and system software	B8	$ -			$ -	$ -	$ -	100%	$ -		$ -
95	CWIP	B8	$ -			$ -	$ -	$ -	0%	$ -		$ -
3	Building - pre 1988		$ 7,485,389			$ 7,485,389	$ -	$ 7,485,389	5%	$ 374,269		$ 7,111,119
			$ -			$ -	$ -	$ -	10%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
			$ -			$ -	$ -	$ -	0%	$ -		$ -
	TOTAL		$ 762,543,136	$ 108,490,860	$ -	$ 871,033,996	$ 54,245,430	$ 816,788,566		$ 68,507,311	T1	$ 802,526,685

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 10 CEC - Test Year

Cumulative Eligible Capital				B10	**22,744,765**
Additions					
Cost of Eligible Capital Property Acquired during Test Year		5,089,596			
Other Adjustments		0			
	Subtotal	5,089,596	**x 3/4 =**	3,817,197	
Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an ECP to the Corporation after Friday, December 20, 2002		0	**x 1/2 =**	0	
				3,817,197	**3,817,197**
Amount transferred on amalgamation or wind-up of subsidiary		0			**0**
	Subtotal				**26,561,962**
Deductions					
Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all ECP during Test Year		0			
Other Adjustments		0			
	Subtotal	0	**x 3/4 =**		**0**

Cumulative Eligible Capital Balance			**26,561,962**
Current Year Deduction (Carry Forward to Tab "Test Year Taxable Income")	**26,561,962**	**x 7% =**	**1,859,337**
Cumulative Eligible Capital - Closing Balance			**24,702,625**

Ontario Energy Board

Income Tax/PILs Workform for 2016 Filers

Schedule 13 Tax Reserves - Test Year

Continuity of Reserves

Description	Working Paper Reference	Bridge Year	Eliminate Amounts Not Relevant for Bridge Year	Adjusted Utility Balance		Test Year Adjustments: Additions	Test Year Adjustments: Disposals	Balance for Test Year		Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	B13	0		0				0		0	
Tax Reserves Not Deducted for accounting purposes											
Reserve for doubtful accounts ss. 20(1)(l)	B13	3,227,504		3,227,504		0	0	3,227,504		0	
Reserve for goods and services not delivered ss. 20(1)(m)	B13	0		0				0		0	
Reserve for unpaid amounts ss. 20(1)(n)	B13	0		0				0		0	
Debt & Share Issue Expenses ss. 20(1)(e)	B13	0		0				0		0	
Other tax reserves	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**3,227,504**	**0**	**3,227,504**	T1	**0**	**0**	**3,227,504**	T1	**0**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)											
General Reserve for Inventory Obsolescence (non-specific)	B13	0		0				0		0	
General reserve for bad debts	B13	3,828,062		3,828,062				3,828,062		0	
Accrued Employee Future Benefits:	B13	0		0				0		0	
- Medical and Life Insurance	B13	0		0				0		0	
-Short & Long-term Disability	B13	0		0				0		0	
-Accmulated Sick Leave	B13	0		0				0		0	
- Termination Cost	B13	0		0				0		0	
- Other Post-Employment Benefits	B13	0		0				0		0	
Provision for Environmental Costs	B13	0		0				0		0	
Restructuring Costs	B13	0		0				0		0	
Accrued Contingent Litigation Costs	B13	0		0				0		0	
Accrued Self-Insurance Costs	B13	0		0				0		0	
Other Contingent Liabilities	B13	1,543,242		1,543,242				1,543,242		0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	B13	0		0				0		0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	B13	0		0				0		0	
Other	B13	0		0				0		0	
		0		0				0		0	
		0		0				0		0	
Total		**5,371,304**	**0**	**5,371,304**	T1	**0**	**0**	**5,371,304**	T1	**0**	**0**

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2016 Cost Allocation Model

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,440,624,000

Total kWs from Load Forecast	10,124,953

Deficiency/sufficiency (RRWF 8. cell F51)	- 17,209,490

Miscellaneous Revenue (RRWF 5. cell F48)	11,699,538

For 2016 Year

			1	2	3	4	6	7	8	9	11	12	13
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Billing Data													
Forecast kWh	**CEN**	7,440,624,000	2,216,045,000	726,360,000	2,954,441,000	863,309,000	620,218,000	43,552,000	48,000	16,651,000			
Forecast kW	**CDEM**	10,124,953			7,027,979	1,847,365	1,121,449	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,499,198			1,756,995	461,841	280,362						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	7,440,624,000	2,216,045,000	726,360,000	2,954,441,000	863,309,000	620,218,000	43,552,000	48,000	16,651,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$159,359,893	$86,359,164	$20,171,698	$35,397,687	$10,269,766	$5,725,783	$872,268	$3,902	$549,494	$0	$10,131	$0
Transformer Ownership Allowance		$1,124,639	$0	$0	$790,648	$207,829	$126,163	$0	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$158,235,254	$86,359,164	$20,171,698	$34,607,039	$10,061,938	$5,599,620	$872,268	$3,902	$549,494	$0	$10,131	$0

Ontario Energy Board

2016 Cost Allocation Model

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

For 2016 Year

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731		-	
Bulk Delivery CP	BCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731	-	-	
Total Sytem CP	DCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731	-	-	
4 CP													
Transformation CP	TCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356		-	
Bulk Delivery CP	BCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356	-	-	
Total Sytem CP	DCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356	-	-	
12 CP													
Transformation CP	TCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468		230	
Bulk Delivery CP	BCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468	-	230	
Total Sytem CP	DCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,457,990	497,262	153,148	527,926	156,830	105,588	13,805	14	2,265		1,152	
Primary NCP	PNCP1	1,457,990	497,262	153,148	527,926	156,830	105,588	13,805	14	2,265		1,152	
Line Transformer NCP	LTNCP1	1,245,101	497,262	153,148	459,296	69,005	49,626	13,805	14	2,265	-	680	
Secondary NCP	SNCP1	930,458	497,262	153,148	263,963			13,805	14	2,265	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906		3,836	
Primary NCP	PNCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906		3,836	
Line Transformer NCP	LTNCP4	4,878,062	1,961,254	576,965	1,818,362	266,079	190,823	53,358	54	8,906	-	2,263	
Secondary NCP	SNCP4	3,625,543	1,961,254	576,965	1,025,007			53,358	54	8,906	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,887		7,657	
Primary NCP	PNCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,887		7,657	
Line Transformer NCP	LTNCP12	13,421,320	5,439,974	1,578,908	5,005,186	722,507	514,194	130,015	131	25,887	-	4,517	
Secondary NCP	SNCP12	10,051,460	5,439,974	1,578,908	2,876,544			130,015	131	25,887	-		

Ontario Energy Board

2016 Cost Allocation Model

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Sheet O1 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

For 2016 Year

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >50-Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$158,235,254	$86,359,164	$20,171,698	$34,607,039	$10,061,938	$0	$5,599,620	$872,268	$3,902	$549,494	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,699,538	$7,720,233	$1,310,382	$1,904,323	$439,039	$0	$242,186	$61,232	$805	$18,618	$0	$2,719	$0
		Miscellaneous Revenue Input equals Output												
	Total Revenue at Existing Rates	$169,934,792	$94,079,396	$21,482,080	$36,511,362	$10,500,977	$0	$5,841,806	$933,501	$4,707	$568,113	$0	$12,850	$0
	Factor required to recover deficiency (1 + D)	1.1088												
	Distribution Revenue at Status Quo Rates	$175,444,744	$95,751,490	$22,365,549	$38,370,862	$11,156,263	$0	$6,208,628	$967,135	$4,327	$609,257	$0	$11,232	$0
	Miscellaneous Revenue (mi)	$11,699,538	$7,720,233	$1,310,382	$1,904,323	$439,039	$0	$242,186	$61,232	$805	$18,618	$0	$2,719	$0
	Total Revenue at Status Quo Rates	$187,144,282	$103,471,723	$23,675,932	$40,275,185	$11,595,302	$0	$6,450,814	$1,028,368	$5,131	$627,875	$0	$13,952	$0
	Expenses													
di	Distribution Costs (di)	$28,347,308	$13,641,944	$2,961,437	$7,947,202	$2,003,267	$0	$1,355,022	$323,382	$1,371	$102,649	$0	$11,035	$0
cu	Customer Related Costs (cu)	$17,064,637	$13,856,084	$1,705,783	$1,284,236	$184,533	$0	$16,086	$13,280	$1,365	$366	$0	$2,903	$0
ad	General and Administration (ad)	$41,693,619	$24,868,789	$4,295,843	$8,716,096	$2,074,448	$0	$1,309,912	$316,100	$2,455	$97,069	$0	$12,905	$0
dep	Depreciation and Amortization (dep)	$40,755,585	$19,986,126	$4,475,383	$11,210,142	$2,738,787	$0	$1,829,603	$380,276	$1,511	$119,133	$0	$14,625	$0
INPUT	PILs (INPUT)	$4,983,819	$2,344,302	$531,233	$1,442,158	$357,713	$0	$241,668	$49,191	$196	$15,637	$0	$1,721	$0
INT	Interest	$20,002,681	$9,408,914	$2,132,118	$5,788,136	$1,435,690	$0	$969,939	$197,430	$788	$62,757	$0	$6,908	$0
	Total Expenses	$152,847,649	$84,106,159	$16,101,796	$36,387,971	$8,794,438	$0	$5,722,229	$1,279,660	$7,687	$397,611	$0	$50,098	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$34,296,633	$16,132,540	$3,655,733	$9,924,349	$2,461,637	$0	$1,663,059	$338,515	$1,351	$107,604	$0	$11,845	$0
	Revenue Requirement (includes NI)	$187,144,282	$100,238,699	$19,757,531	$46,312,320	$11,256,075	$0	$7,385,288	$1,618,174	$9,037	$505,215	$0	$61,943	$0
		Revenue Requirement Input equals Output												
	Rate Base Calculation													
	Net Assets													
dp	Distribution Plant - Gross	$784,399,963	$372,386,150	$83,886,378	$224,613,184	$55,492,636	$0	$37,455,029	$7,779,770	$31,422	$2,482,472	$0	$272,924	$0
gp	General Plant - Gross	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$0	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
accum dep	Accumulated Depreciation	($91,977,757)	($44,320,057)	($10,043,535)	($25,820,857)	($6,367,257)	$0	($4,265,396)	($856,511)	($3,360)	($267,712)	$0	($33,072)	$0
co	Capital Contribution	($34,294,412)	($18,605,287)	($3,693,651)	($9,277,262)	($1,861,385)	$0	($1,258,570)	($431,588)	($2,181)	($151,904)	$0	($12,584)	$0
	Total Net Plant	$782,594,971	$368,432,716	$83,422,899	$226,249,216	$56,094,585	$0	$37,897,104	$7,736,170	$30,926	$2,460,973	$0	$270,383	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$894,285,487	$268,175,263	$87,229,363	$353,899,725	$103,407,625	$0	$74,290,052	$5,250,740	$6,257	$2,026,462	$0	$0	$0
	OM&A Expenses	$87,105,564	$52,366,817	$8,963,063	$17,947,534	$4,262,248	$0	$2,681,020	$652,762	$5,192	$200,085	$0	$26,843	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$981,391,050*	*$320,542,080*	*$96,192,426*	*$371,847,259*	*$107,669,873*	*$0*	*$76,971,072*	*$5,903,502*	*$11,449*	*$2,226,546*	*$0*	*$26,843*	*$0*
	Working Capital	$139,357,529	$45,516,975	$13,659,325	$52,802,311	$15,289,122	$0	$10,929,892	$838,297	$1,626	$316,170	$0	$3,812	$0
	Total Rate Base	$921,952,501	$413,949,691	$97,082,224	$279,051,526	$71,383,707	$0	$48,826,996	$8,574,467	$32,552	$2,777,142	$0	$274,195	$0
		Rate Base Input equals Output												
	Equity Component of Rate Base	$368,781,000	$165,579,877	$38,832,889	$111,620,611	$28,553,483	$0	$19,530,798	$3,429,787	$13,021	$1,110,857	$0	$109,678	$0
	Net Income on Allocated Assets	$34,296,633	$19,365,564	$7,574,134	$3,887,215	$2,800,864	$0	$728,585	($251,292)	($2,555)	$230,264	$0	($36,146)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$34,296,633	$19,365,564	$7,574,134	$3,887,215	$2,800,864	$0	$728,585	($251,292)	($2,555)	$230,264	$0	($36,146)	$0
	RATIOS ANALYSIS													
	REVENUE TO EXPENSES STATUS QUO%	100.00%	103.23%	119.83%	86.96%	103.01%	0.00%	87.35%	63.55%	56.78%	124.28%	0.00%	22.52%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($17,209,490)	($6,159,302)	$1,724,549	($9,800,957)	($755,098)	$0	($1,543,482)	($684,673)	($4,330)	$62,897	$0	($49,093)	$0
		Deficiency Input equals Output												
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	$0	$3,233,024	$3,918,401	($6,037,134)	$339,227	$0	($934,474)	($589,806)	($3,906)	$122,660	$0	($47,991)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	11.70%	19.50%	3.48%	9.81%	0.00%	3.73%	-7.33%	-19.62%	20.73%	0.00%	-32.96%	0.00%

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-0004

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

For 2016 Year

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Customer Unit Cost per month - Avoided Cost	$4.54	$7.07	$41.02	$168.91	$88.29	$0.21	$1.86	-$0.03	0	$202.43	0
Customer Unit Cost per month - Directly Related	$7.89	$11.57	$70.56	$296.83	$216.92	$0.49	$3.71	-$0.02	0	$326.81	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$16.51	$24.62	$100.01	$531.04	$585.58	$14.15	$13.31	$7.85	0	$274.75	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet O1 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$158,235,254	$86,359,164	$20,171,698	$34,607,039	$10,061,938	$5,599,620	$872,268	$3,902	$549,494	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,699,538	$7,720,233	$1,310,382	$1,904,323	$439,039	$242,186	$61,232	$805	$18,618	$0	$2,719	$0
		Miscellaneous Revenue Input equals Output											
	Total Revenue at Existing Rates	$169,934,792	$94,079,396	$21,482,080	$36,511,362	$10,500,977	$5,841,806	$933,501	$4,707	$568,113	$0	$12,850	$0
	Factor required to recover deficiency (1 + D)	1.1088											
	Distribution Revenue at Status Quo Rates	$175,444,744	$95,751,490	$22,365,549	$38,370,862	$11,156,263	$6,208,628	$967,135	$4,327	$609,257	$0	$11,232	$0
	Miscellaneous Revenue (mi)	$11,699,538	$7,720,233	$1,310,382	$1,904,323	$439,039	$242,186	$61,232	$805	$18,618	$0	$2,719	$0
	Total Revenue at Status Quo Rates	$187,144,282	$103,471,723	$23,675,932	$40,275,185	$11,595,302	$6,450,814	$1,028,368	$5,131	$627,875	$0	$13,952	$0
	Expenses												
di	Distribution Costs (di)	$28,347,308	$13,641,944	$2,961,437	$7,947,202	$2,003,267	$1,355,022	$323,382	$1,371	$102,649	$0	$11,035	$0
cu	Customer Related Costs (cu)	$17,064,637	$13,856,084	$1,705,783	$1,284,236	$184,533	$16,086	$13,280	$1,365	$366	$0	$2,903	$0
ad	General and Administration (ad)	$41,693,619	$24,868,789	$4,295,843	$8,716,096	$2,074,448	$1,309,912	$316,100	$2,455	$97,069	$0	$12,905	$0
dep	Depreciation and Amortization (dep)	$40,755,585	$19,986,126	$4,475,383	$11,210,142	$2,738,787	$1,829,603	$380,276	$1,511	$119,133	$0	$14,625	$0
INPUT	PILs (INPUT)	$4,983,819	$2,344,302	$531,233	$1,442,158	$357,713	$241,668	$49,191	$196	$15,637	$0	$1,721	$0
INT	Interest	$20,002,681	$9,408,914	$2,132,118	$5,788,136	$1,435,690	$969,939	$197,430	$788	$62,757	$0	$6,908	$0
	Total Expenses	$152,847,649	$84,106,159	$16,101,798	$36,387,971	$8,794,438	$5,722,229	$1,279,660	$7,687	$397,611	$0	$50,098	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$34,296,633	$16,132,540	$3,655,733	$9,924,349	$2,461,637	$1,663,059	$338,515	$1,351	$107,604	$0	$11,845	$0
	Revenue Requirement (includes NI)	$187,144,282	$100,238,699	$19,757,531	$46,312,320	$11,256,075	$7,385,288	$1,618,174	$9,037	$505,215	$0	$61,943	$0
		Revenue Requirement Input equals Output											
	Rate Base Calculation												
	Net Assets												
dp	Distribution Plant - Gross	$784,399,963	$372,386,150	$83,886,378	$224,613,184	$55,492,636	$37,455,029	$7,779,770	$31,422	$2,482,472	$0	$272,924	$0
gp	General Plant - Gross	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
accum dep	Accumulated Depreciation	($91,977,757)	($44,320,057)	($10,043,535)	($25,820,857)	($6,367,257)	($4,265,396)	($856,511)	($3,360)	($267,712)	$0	($33,072)	$0
co	Capital Contribution	($34,294,412)	($18,605,287)	($3,693,651)	($8,277,262)	($1,861,385)	($1,258,570)	($431,588)	($2,181)	($151,904)	$0	($12,584)	$0
	Total Net Plant	$782,594,971	$368,432,716	$83,422,899	$226,249,216	$56,094,585	$37,897,104	$7,736,170	$30,926	$2,460,973	$0	$270,383	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$894,285,487	$268,175,263	$87,229,363	$353,899,725	$103,407,625	$74,290,052	$5,250,740	$6,257	$2,026,462	$0	$0	$0
	OM&A Expenses	$87,105,564	$52,366,817	$8,963,063	$17,947,534	$4,262,248	$2,681,020	$652,762	$5,192	$200,085	$0	$26,843	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$981,391,050*	*$320,542,080*	*$96,192,426*	*$371,847,259*	*$107,669,873*	*$76,971,072*	*$5,903,502*	*$11,449*	*$2,226,546*	*$0*	*$26,843*	*$0*
	Working Capital	$139,357,529	$45,516,975	$13,659,325	$52,802,311	$15,289,122	$10,929,892	$838,297	$1,626	$316,170	$0	$3,812	$0
	Total Rate Base	$921,952,501	$413,949,691	$97,082,224	$279,051,526	$71,383,707	$48,826,996	$8,574,467	$32,552	$2,777,142	$0	$274,195	$0
		Rate Base Input equals Output											
	Equity Component of Rate Base	$368,781,000	$165,579,877	$38,832,889	$111,620,611	$28,553,483	$19,530,798	$3,429,787	$13,021	$1,110,857	$0	$109,678	$0
	Net Income on Allocated Assets	$34,296,633	$19,365,564	$7,574,134	$3,887,215	$2,800,864	$728,585	($251,292)	($2,555)	$230,264	$0	($36,146)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$34,296,633	$19,365,564	$7,574,134	$3,887,215	$2,800,864	$728,585	($251,292)	($2,555)	$230,264	$0	($36,146)	$0
	RATIOS ANALYSIS												
	REVENUE TO EXPENSES STATUS QUO%	100.00%	103.23%	119.83%	86.96%	103.01%	87.35%	63.55%	56.78%	124.28%	0.00%	22.52%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($17,209,490)	($6,159,302)	$1,724,549	($9,800,957)	($755,098)	($1,543,482)	($684,673)	($4,330)	$62,897	$0	($49,093)	$0
		Deficiency Input equals Output											
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	$0	$3,233,024	$3,918,401	($6,037,134)	$339,227	($934,474)	($589,806)	($3,906)	$122,660	$0	($47,991)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	11.70%	19.50%	3.48%	9.81%	3.73%	-7.33%	-19.62%	20.73%	0.00%	-32.96%	0.00%

Ontario Energy Board

2016 Cost Allocation Model

Cost Allocation Model ("CA Model") Version 3.3

Instructions Sheet

General:
These instructions are included with the OEB CA Model version 2 and higher, as a reference for distributor staff and other users of the model.

Version 3.3 is designed for use with 2016 COS rate applications.

The instructions are organized by Input sheet (I1 to I9). The instructions are followed by suggestions of how to use Output sheets O1, O2, O3.1 and O3.6, and the Exhibit sheets E2 - E5.
There are numerous references in these instructions to specific Excel cells in the Revenue Requirement Work Form ("RRWF"). The cross-references to RRWF are intended to ensure consistency within the application. it is probably most convenient to complete the RRWF first, then the CA model. I f completing the CA model first, leave the required cross references blank temporarily, eg at the top of worksheet I-3 and I-6.1, ignoring the corresponding error messages in the rose-coloured diagnostic cells. Once the RRWF is completed, the necessary information should be included in the CA Model so that the error warnings are operational.
The original model and related documents are on the web-site in EB-2005-0317;
http://www.ontarioenergyboard.ca/OEB/Industry/Regulatory+Proceedings/Policy+Initiatives+and+Consultations/Archived+OEB+Key+Initiatives/Cost+Allocation+Review.

A staff report "Board Staff Implementation of the Board's Findings on the Review of Electricity Cost Allocation Policy" documents the rationale for the significant changes in Version 2 relative to version 1.2. The subsequent changes (versions 3.0 and 3.1) are noted in red font in these instructions.

Worksheet I1 Introduction
This input worksheet is for basic information about the utility and the application. This worksheet does not require any changes after filing the initial application.

- Input to Cell C11 is carried forward to the heading on all worksheets.
- The colour-coding used throughout the model is explained just below the applicant information area.

Worksheet I2 LDC Classes

The main purpose of this worksheet is to define the rate classes.

- Input to Cell C-17 is copied to the header of all worksheets. When the CA Model is modified for a specific reason, such as a run using final proposed rates for the purposes of a draft rate order, a new description should be entered in Cell C-17.
- Cell C20 and below shows common rate class names. Substitute the proper name if applicable. Any input to Column D will appear as the column headings if different from Column C;
- In Column E, choose Yes or No as applicable for the proposed customer classes, and click Update.
- Do not include microFIT as a rate classification in CA Model until further notice in the Filing Requirements.
- If the applicant is a Host Distributor with a separate class for the Embedded Distributor(s), use Row 29. Otherwise, a Host Distributor should refer to Filing Requirements for instructions on how to reflect the Embedded Distributor in the applicable rate class.
- Be aware that the "Update" button hides and unhides columns, nothing more. If you have entered data for a class in an input sheet, the data will remain until you delete the data. (If you enter data for a class and subsequently change to 'No' for that class in I-2 and click Update, the data for the class will be hidden but will continue to affect range totals, allocators, etc.).
- For the user's convenience, a space is available at B46 to describe a scenario (customer classes, load data, choice of allocators, etc.) to keep track of alternative cost allocation outcomes as they are being studied. This information is in addition to the summary description in Cell C 17.
- The Residential, GS < 50 kW and Street Light customer classes are now locked from being edited and removed. This is to ensure that the Residential and Street Light class data is always in the same position for the calculation of the street light adjustment factor.

Worksheet I3 Trial Balance Data

The main purpose of this owrkdsheet is to enter the forecast account balances. For convenience the accounts that affect the test year revenue requirement have a yellow background in column A. (All accounts that are reported for the RRRTrial Balance are included in I-3, although many of them do not affect the revenue requirement.)

There are diagnostic cells at the top of I-3 for cross-references to the user's RRWF, to avoid filing information that is inconsistent. The CA model works regardless of whether the diagnostic messages in cells H14 and H16 are flagging a discrepancy.

- At Cell F10, input the return on equity RRWF tab 9 'Revenue Requirement' cell F23;
- At Cell F11, input the forecast of PILs from RRWF tab 9 'Revenue Requirement' cell F19;
- At Cell F12, input Interest Cost from RRWF tab 9 'Revenue Requirement' cell F22;
- Cell F13 should be entered equal to RRWF tab 9 'Service Revenue Requirement' cell F26;
- Cell F15 should be entered equal to RRWF tab 4 'Rate Base' cell G19

● Starting at Row 20, enter forecast amounts for USoA accounts in column D. The CA Model has a few new Rows that are inserted for finer granularity within existing accounts.
● Cells D78 and D79 are the balances in Account 1575 and 1576. The recovery of these balances is not done through the service revenue requirement and distribution rates, rather through a rate rider per memo June 25, 2013. Version 3.1 differs from 3.0 in this regard.
● Column D contains the forecast amounts for the test year, and is to match the amounts in the rate application. For asset accounts, enter the mid-year average amounts matching the corresponding amounts in the rate base;
● Remember to include revenue accounts as negative numbers, as in the Trial Balance.
● Note that SSS Administration revenue is now Account 4086, whereas it was previously a sub-account of 4080.

● Column F is available to re-assign amounts among the accounts in Column D. Generally if costs are removed from one USoA account and added to another account, the rationale for the re-assignment is to be provided by the distributor in its prefiled evidence.
● No rationale is required if the entries in column F have been directed by Board policy. For example see note below re Account 4235.
● Row 274 has been added, to allow for new account 4086 SSS Administration Charge.
● Rows 284 and 285 have been added, to allow for separate allocation of the Account Set-Up Charges sub-account distinct from other revenue streams in Account 4235. Enter the sub-account amounts at Cell F284 and F285 and enter negative sum at F284 (should be the negative of D284). No explanation is required.
● Row 469 has been added to allow for inclusion of LEAP, distinct from other donations which are not recoverable. Enter full amount of Account 6205 in cell D468, negative amount of LEAP in F468, and positive amount of LEAP in F469. (Only the latter is recovered, and therefore must be allocated to classes.)
● Column G is used for costs that are directly allocated. Put the appropriate total amount in Column G, and the model places it into I-9 to be included in the class revenue requirement of the applicable class.
● Note that the model has Rows in I9 for most capital and OM&A accounts, but not revenue accounts. If an account has no corresponding Row in I9, the model does not provide a ready means of direct allocation.
● Column I has drop-down menus in the new Rows. If necessary use the menu to select the allocator for the account that the distributor considers most appropriate. (The model on the website has an allocator already selected at the suggestion of the CA Working Group, but the distributor is ultimately responsible for selecting the most appropriate allocator considering how it uses the sub-account in question.).

Worksheet I4 Break Out Assets

This input worksheet is for breaking the asset accounts into a more granular level.

● Cell C12 requires data entry from the RRWF tab 4. Rate Base, Cell G14. The message at D93 is intended to ensure consistency between the cost allocation model and the rest of the application.
● Columns L - O require the break-out of the aggregate depreciation accounts into the sub-accounts for each asset account.
● Worksheet I4 is designed for assets that are not allocated directly to any customer class. The gross and net values of assets directly allocated to one or more classes are recorded in worksheet I9.

Worksheet I5.1 Miscellaneous Data

● In cell D15, enter the km of distribution line, regardless of voltage (structures, not circuits) used in determining customer density of the service area.
● In Cell D19, enter the percentage of OM&A plus Cost of Power that is included as working capital, eg.13%, or a percentage based on the distributor's lead-lag study;
● Cell D21 yields a weighting factor to attribute pole access revenue in the same proportions as the corresponding allocation of costs. Considering the NBV of all poles that yield pole rental revenue, enter the estimated percentage of poles that are at Secondary voltage, and the remainder percentage (i.e. the poles at Primary voltage).

Worksheet I5.2 Weighting Factors

This worksheet is used to input a weighting factor for services and a weighting factor for Billing and Collection. Generallythe Residential wieghting factor should be 1.0, with each other class weighted relative to that.

- Row 11: calculate weighting factors reflecting only installed capital costs recorded in Account 1855 – Services. Where there is variety of situations within a class, provide a single factor that is suitable for the whole class. See examples in the boxes below.
- Row 15: calculate weighting factors reflecting costs in Account 5315 – Customer Billing, Account 5320 – Collecting, and Account 5340 – Miscellaneous Customer Account Expenses.
- Default weights are no longer provided in the model. The weights previously provided in version 1.2 can be found in the Board staff's implementation documentation [EB-2010-0219].

Example: **Weighting Factor for Services:**

Assume that the amount recorded in 1855 for a typical residential customer is $1,000.
Assume that there are 500 customers in the GS>50 class.
Assume that 100 of them are industrial customers served by a single span of overhead conductor. The amount remaining on the books in Account 1855 is $500, though the current cost of replacing the service including labour would be much larger.
Assume that 100 customers have underground service that required extensive permits, street repairs, and labour costs, as well as materials. The services are recent, and the amount recorded in 1855 averages $25,000.
Assume 300 customers have no costs recorded in Account 1855, and would have no cost recorded even if replaced (per distributor's accounting practice and conditions of service)
Calculation of a single factor for GS>50 class -- weighted average of embedded book values including installation
➢ [(100 * $5,000) + (100 * $25,000) + (300 * $0)] / 500 = $6,000 per customer
Weighting factor for residential @ $1,000 is 1.00
Weighting factor for GS>50 kW = $6,000/$1,000 = 6.00

Example: **Weighting Factor for Billing and Collecting:**

Assume that the Residential cost averaged over all residential customers is $1.50 for bill preparation and mailing, $0.50 to record revenue from a normal payment, and $1.00 per bill on average for other costs associated with collecting, etc. that are recorded in accounts 5315, 5320 and 5340. Total $3 per residential bill.
Assume that there are 15 customers in the USL class:
Assume that 5 of the15 customers have a large number of devices and the number of devices changes from time to time, so additional clerical attention is required each month amounting to $50 over the group ($10 per bill). Assuming that other costs are the same as for a residential customer at $1.50 per bill, the average cost is $11.50 per bill.
Assume the other 10 USL customers have a small number of devices and require the same amount of effort as a typical residential customer. There are less issues with collecting, so the incidental costs are $0.50 per month. Total cost is $2.50 per bill
Calculation of index for USL class (weighted average of 5 and 10 customers)
➢ [(5 * $11.50) + (10 * $2.50)] / 15 = $5.50 per bill.
Weighting factor for Residential = $3.00 / $3.00 = 1.00
Weighting factor for USL = $5.50 / $3.00 = 1.83

Worksheet I6.1 Revenue
This input sheet is used to calculate hypothetical revenues, based on the test year volumetric forecast at the current rates. (This calculation is also used in RRWF for the calculation of Revenue Sufficiency/Deficiency.)

- Cells B10, B13, B16 and B19 are used to flag internal inconsistencies that may exist amongst the application exhibits.
- Cell B10 – from Exhibit 3 of the application, input total energy from the test year load forecast, adjusted downward for distribution line losses.
- Cell B13 – from Exhibit 3 of the application, input the total billing demands of all demand-billed classes.
- Cell B16 –from RRWF tab 8 Revenue Deficiency/Sufficiency H16.
- Cell B19 – enter data from RRWF tab 8. Revenue Deficiency/Sufficiency F18.
- Rows 25 and 26: enter weather-normalized load after line losses. These quantities will be the results found in the distributor's load forecast Exhibit 3.
- Rows 31, 44, 50 and 51 found in versions 3.0 and earlier of the model no longer play a role in the model. The model now relies on the distributor's load forecast.
- Row 29 is the forecast of billing demand of customers that are not Wholesale Market Participants. Host distributors -- remember that this may apply to embedded distributors.
- Rows 33-36 - enter the currently approved rates for each class. Include the Transformer Ownership Allowance for the applicable classes.
- Row 37 – a placeholder Row for any other rate (e.g. separate rates per street lighting fixture, if charged in accition to kW demand).
- Row 39 is class revenue gross of TOA, and row 41 is net. The model uses the latter in worksheet O1.

Note that the revenue formula calculates monthly fixed revenue from the largest of # of customers / connections / devices from Rows 18, 19 and 21 in worksheet I-6.2. This is approriate if a class, eg streetlights, is billed per device, of if the number of devices equals the number of connections. If this is not appropriate for the distributor's rate structure, the distributor should correct the formula in row 39 for the applicable class(es), or over-write it with apecific cell references. For example, if USL is billed per customer without regard to number of connections or devices, replace the MAX term with a simple reference to I-6.2 row 21.

- As an alternative run of the CA Model, but not for submission with the application, it may be useful to enter the rates that are being proposed in the application in Rows 33-36. See notes to Worksheet O-1 below.
- If the Conditions of Service for a class of large customers require that all customers supply their own transformation, then the published rate is presumably for the class standard and the TOA should be entered as $0.

Worksheet I6.2 Customer Data

This input sheet is for inputting the various customer data by rate class, such as number of bill, number of customers, etc.

- Row 18 'Number of devices' was added as of version 2 of the model. Generally this will require input for the Street Lighting and Unmetered Scattered Load classes.
- The number of devices (Row 18) should be equal to or greater than the number of connections (Row 19)
- The number of connections should be equal to or greater than the number of customers (Row 21).
- The allocation of customer-related costs is based on customer count and connections. "Daisy-chaining" is the situation where the number of devices exceeds the number of connections. The allocation formula is appropriate if the distributors costs are proportional to the number of connections (and the corresponding weighting factor). If this is not appropriate to the applicant's proposed approach, change the cell reference in the formula (eg to the corresponding number of devices) in worksheet E2, row 82, and also in the appropriate column(s) in worksheet E3.
- The Streetlighting Adjustment Factors for Primary and Line Transformer costs are calculated here (Rows 52 and 53). All relevant data inputs are automatically populated to allow for each double checking of the calculations.
- Cells J23 and J24 calculate the "adjusted connections" for the CCP and CCLT allocators by dividing the number of devices by the relevant street lighting adjustment factors. This calculation reflects the implementation of the OEB's cost allocation policy for street lighting outlined in a letter issued on June 12, 2015.

Worksheet I7.1 Meter Capital

The purpose of this input worksheet is to derive the weighting factor of each class for the allocator CWMC, which is used to allocate accounts 1860 Meters, 5065 Meter Expense, and 5175 Maintenance. It does not affect the deferral account 1555 Smart Meter Capital and Recovery VA.

- As a general rule, include one meter per customer in this worksheet, i.e. include smart meter or standard meter, not both.
- Replace meter descriptions in Column C with new descriptions that match the meters actually in use, and input the applicable average installed replacement cost of each type of meter.
- During the transitional period, until all smart meters are in the Rate Base, include in the documentation of the application an explanation of which unit cost is being used. Since the weighting factor will remain unchanged during the IRM period, the distributor may consider including smart meters rather than the soon-to-be-stranded meters, even though not all smart meters have been transferred to account 1860 at the time of the cost-of-service application.
- If the cost of equipment used to download billing data is included in Account 1860 – Meters, the cost of such equipment should be considered in this worksheet.
- Note that Account 1920 – Computer Hardware, Account 1925 – Computer Software and Account 1955 – Communications Equipment are allocated to the customer classes by the composite allocator Net Fixed Assets (excluding credit for capital contributions). If equipment for automated meter-reading and data storage are recorded in these accounts, the distributor may consider moving capital costs to Account 1860 – Meters in worksheet I-3 and reflecting this in the meter capital weighting factors, with the objective of reaching a more accurate allocation of these costs.
- Entries for USL, Street lighting and Sentinel Lighting in worksheet I7.1 and I7.2 are 0. For any cost of estimating or verifying unmetered loads, see note re direct allocation under worksheet I9.

Worksheet I7.2 Meter Reading

The purpose of this input worksheet is to derive the weighting factors for the allocator CWMR, which is used only to allocate costs that are recorded in account 5310 Meter Reading Expense. The data in Column C are relative amounts, with the typical Residential reading having a weight of 1.0.

- This worksheet has not been modified to reflect automated meter reading. The Rows in worksheet I7.2continue to reflect differences in customer density, relative difficulty in reaching the meter, and frequency of reading the meter in the respective classes. To the extent that these factors are now more nearly uniform due to automated meter reading, the distributor may find that the appropriate weights are close to 1.0 for all classes.

  Note that the cost of the Smart Meter Entity is treated as a pass-through cost with its own rate rider. It is not included in the service revenue requirement and is not allocated in this model, except as a component of Working Capital (account 4751).

Worksheet I8 Demand Data

This input sheet is to record the various coincident and non-coincident peaks by rate class, which are used a cost allocators in the CA Model.

- There have been no changes to this worksheet. If the distributor's most up-to-date load profile data comes from the Hydro One analysis used in the Informational Filing in 2006-7, then the data in worksheet I-8 may be the same for each class as was used for the Informational Filing -- except scaled up or down to reflect the current energy forecast compared to the class's energy used in the previous filing.

Worksheet I9 Direct Allocation

This input worksheet allows for directly allocating costs to specific rate classes.

- The total amount of direct allocation is found in column C. This amount must be attributed to one class, or to a subset of classes, in columns E - X.
  - Remember that costs associated with verifying and updating estimates of unmetered loads may be allocated directly to the applicable class. [EB-2005-0317, Cost allocation Review, Board Directions, p. 87].
  - Additional information on direct allocations can be found above in the notes for Column G in input sheet I3 Trial Balance.
  - The numerous columns to the right of I-9 are used for the purpose of burdening directly-allocated costs for a share of overhead costs. No inputs are required
  - The formula at cell C148 has been corrected in version 3.2 so that cells E149:X151 are calculated from NBV in all instances.

Worksheet O1

This is an output worksheet that shows the allocated revenue requirements and the revenue-to-cost ratios by rate class. The diagnostic cells in this sheet check that the allocated costs reconcile to the account totals entered in worksheet I-3.

- In these instructions for Worksheet 01, "RRWF" means RRWF tab 8. Revenue Sufficiency / Deficiency.
- "Appendix 2-P" means Appendix 2-P in 2014 Appendix 2 Filing Requirements.
- Row 18 – Distribution Revenue at Existing Rates:
  - Cell C18 should equal the total in RRWF Cell F17 – Distribution Revenue at Currently Approved Rates", and
  - Cells D18 and beyond are the inputs to Appendix 2-P, Table B, Column 7B.
- Row 19 – Miscellaneous Revenue:
  - Cell C19 should equal RRWF Cell F18,
  - Cells D19 and beyond are the inputs to Appendix 2-P, Table B, Column 7E,

  - Note the diagnostic test in Row 20 for Miscellaneous Revenue. The model calculates the status quo rates from the test year Service Revenue Requirement less Miscellaneous Revenue. If Miscellaneous Revenue is entered inaccurately, the status quo rates and status quo ratios in Row 75 will also be inaccurate for the respective classes.
- Cell C21 – Total Revenue at Existing Rates should be equal to RRWF Cell F19;
- Row 23 – Distribution Revenue at Status Quo Rates":
  - Cell C23 should equal RRWF, sum of Cells H16 & H17
  - Cells D23 and beyond are the hypothetical distribution revenue, by class, if there were no rate re-balancing. These cells are the inputs to Appendix 2-P, Table B, Column 7C.
- Cell C25 should equal RRWF Cell H19 – Total Revenue.
- Row 40 – Revenue Requirement (includes NI):
  - Cell C40 is the total revenue requirement, and should be equal to RRWF worksheet tab 9 Revenue Requirement, Cell F22; and
  - Cells D40 and beyond are inputs to Appendix O, table (a), Column 7A.
- Row 75 – Revenue to Expenses Status Quo:
  - Cell C75 should equal 100%, and
  - Cells D75 and beyond are the inputs to Appendix 2-P, table C, second column "Status Quo Ratios".
- Cells C71 and C81 should equal the corresponding target returns on equity (RRWF Column H).

The 2014 Filing Requirements do not require a second version of the model showing revenue with proposed rates. However, it may be helpful to the user to verify the proposed distribution rates and ratios by substituting proposed rates in place of currently approved ones in I-6.1. Having made that change, there should be no deficiency row 21 versus 25, and the revenue to cost ratios (row 75) should now be the proposed ratios.

It may also be useful to run an updated version when preparing a Draft Rate Order:

- At worksheet I3, modify Miscellaneous Income accounts if necessary, along with forecast capital and OM&A accounts, if any of these have changed as a result of a Decision or settlement agreement.
- At worksheet I6.1, modify the class load forecast inputs if it has changed since the original application, at Rows 25 - 27.
- At worksheet I6.1, substitute the proposed rates at Rows 33 – 36.
- At worksheet I8, data may need to be changed if the load forecast has been changed.
- On worksheet O1:
  - Cell C22 should now equal 1.00 and Rows 18 and 23 should be identical.
  - Cells D75 and beyond should show the newly-approved revenue to cost ratios.

Worksheet O2

Rows 14 - 17 provide information relevant to the Monthly Service Charge of each class, usually referred to as the floor (alternate versions in rows 14 and 16) and the ceiling in row 17 (based on Minimum System assumptions)
Users of the model have observed that for some classes, the ceiling comes out lower than the floor, or even negative. This occurs in situations where customer-related costs are relatively low compared to Demand-related costs, and appears to be a result of prorated depreciation on General Plant. With this discrepancy remaining in the model, the precise calculation of the ceiling should be used with appropriate caution.

Worksheet O3.1

The purpose of this output worksheet is to provide information on the cost per unit of providing customers with transformation service.

- Row 27, expresses the transformer costs in per kW terms. The amount found in Row 27 is not necessarily identical to the cost that would be saved if the customer provides its own transformer. While it is useful information, the value in Row 27 should not be presented as the sole evidence to support changing the Transformer Ownership Allowance.

Worksheet O3.6

The purpose of this output worksheet is to provide information to be used to update the provincial standard monthly charge for microFIT installations.

- Check that Cell 23 is equal to O-2 Cell D132 less Cell D81, which is an update of the information that underpins the current rate; and
- Cells C24 and C25 have been added in version 2 of the model per Board Report (p. 8).

If the distributor intends to propose a microFIT charge based on its own costs, this will require sub-account information as per the Board's FAQ # 18, December 23, 2010. The information from Worksheet O-3.6 will not likely be considered relevant for approval of a non-uniform charge.

Worksheets E2 and E4

Worksheet E2 shows the proportions allocated to each rate class by the various allocators. These allocators are linked to the applicable USoA accounts in worksheet E4.

- Worksheet E4 is not locked, and the user may propose to allocate any account using a different allocator than the defalt found in the model. If the applicant is proposing to use a different allocator, please note that this would be a departure from standard policy and should be identified and explained in Exhibit 7 of the applicaiton.

Worksheet E3

The Peak Load Carrying Capability adjustment is entered at cell A14. The default is 400 Watts. The adjustment is related to the definition of Minimum System, i.e. categorization between customer-related and demand-related cost. For further explanation see the Board Report EB-2005-0317.

- If proposing a PLCC of other than 400 Watts, this should be identified and explained in Exhibit 7.
- Worksheet E3 has been updated to use the "adjusted connections", calculated on Sheet I6.2 for the calculation of the CCP and CCLT allocators.

Worksheet E5

The purpose of this worksheet is to aid in detecting and correcting instances in which an account is not fully allocated to the rate classes.

Each cell in columns J and L should be zero. If the calculation is not zero, and the account involved is one that affects the revenue requirement (highlighted in column A of I-3) the reason for the discrepancy should be traced

E3	**PLCC**	**Backup documentation for calculating Peak Load Carrying Capability.**
E4	**Trial Balance Index**	**Exhibit showing 1. how accounts are grouped for reporting, how accounts are categorized and how accounts are allocated**
E5	**Reconciliation**	**Exhibit showing reconciliation of accounts included and excluded from the allocation study to TB balance**

Ontario Energy Board

2016 Cost Allocation Model

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Sheet I2 Class Selection -

Instructions:

Step 1: Please input identification of thsi Run in C15 and C17

Step 2: Please input your proposed rate classes.

Step 3: After all classes have been entered, Click the "Update" button in cell E41

Please input the date on which this Run of the model was prepared or submitted

Please provide summary identification of this Run

		Utility's Class Definition	Current
1	Residential		YES
2	GS <50		YES
3	GS>50-Regular	GS 50 to 1,499 kW	YES
4	GS> 50-TOU	GS 1,500 to 4,999 kW	YES
5	GS >50-Intermediate		NO
6	Large Use >5MW	Large Use	YES
7	Street Light		YES
8	Sentinel		YES
9	Unmetered Scattered Load		YES
10	Embedded Distributor		NO
11	Back-up/Standby Power	Standby Power GS 50 to 1,499 kW	YES
12	Rate Class 1	Standby Power GS 1,500 to 4,999 kW	YES
13	Rate class 2	Standby Power Large Use	YES
14	Rate class 3		NO
15	Rate class 4		NO
16	Rate class 5		NO
17	Rate class 6		NO
18	Rate class 7		NO
19	Rate class 8		NO
20	Rate class 9		NO

** **Space available for additional information about this run**

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Sheet I3 Trial Balance Data

Comparisons with RRWF

RRWF Reference:

9. cel IF23	**Return on Deemed Equity**	$34,296,633		
9. cell F19	**Income Taxes (Grossed up)**	$4,983,819		
9. cell F22	**Deemed Interest Expense**	$20,002,681		
9. cell F25	**Service Revenue Requirement**	$187,144,282	**From this Sheet**	**Differences?**
	Revenue Requirement to be Used in this model ($)	$187,144,282	**$187,144,282**	**Rev Req Matches**
9. cell G19	**Rate Base ($)**	$921,952,501		
	Rate Base to be Used in this model ($)	$921,952,501	**$921,952,501**	**Rate Base Matches**

Uniform System of Accounts - Detail Accounts

USoA Account #	Accounts		Forecast Financial Statement	Model Adjustments	Reclassify accounts	Direct Allocation	Reclassified Balance
1005	Cash						$0
1010	Cash Advances and Working Funds						$0
1020	Interest Special Deposits						$0
1030	Dividend Special Deposits						$0
1040	Other Special Deposits						$0
1060	Term Deposits						$0
1070	Current Investments						$0
1100	Customer Accounts Receivable						$0
1102	Accounts Receivable - Services						$0
1104	Accounts Receivable - Recoverable Work						$0
1105	Accounts Receivable - Merchandise, Jobbing, etc.						$0
1110	Other Accounts Receivable						$0
1120	Accrued Utility Revenues						$0
1130	Accumulated Provision for Uncollectible Accounts--Credit						$0
1140	Interest and Dividends Receivable						$0
1150	Rents Receivable						$0
1170	Notes Receivable						$0
1180	Prepayments						$0
1190	Miscellaneous Current and Accrued Assets						$0
1200	Accounts Receivable from Associated Companies						$0
1210	Notes Receivable from Associated Companies						$0
1305	Fuel Stock						$0
1330	Plant Materials and Operating Supplies						$0
1340	Merchandise						$0
1350	Other Materials and Supplies						$0
1405	Long Term Investments in Non-Associated Companies						$0
1408	Long Term Receivable - Street Lighting Transfer						$0
1410	Other Special or Collateral Funds						$0
1415	Sinking Funds						$0
1425	Unamortized Debt Expense						$0
1445	Unamortized Discount on Long-Term Debt--Debit						$0
1455	Unamortized Deferred Foreign Currency Translation Gains and Losses						$0
1460	Other Non-Current Assets						$0
1465	O.M.E.R.S. Past Service Costs						$0
1470	Past Service Costs - Employee Future Benefits						$0
1475	Past Service Costs - Other Pension Plans						$0

1480	Portfolio Investments - Associated Companies					$0
1485	Investment in Associated Companies - Significant Influence					$0
1490	Investment in Subsidiary Companies					$0
1505	Unrecovered Plant and Regulatory Study Costs					$0
1508	Other Regulatory Assets					$0
1510	Preliminary Survey and Investigation Charges					$0
1515	Emission Allowance Inventory					$0
1516	Emission Allowances Withheld					$0
1518	RCVARetail					$0
1520	Power Purchase Variance Account					$0
1521	Special Purpose Charge Assessment Variance Account					$0
1525	Miscellaneous Deferred Debits					$0
1530	Deferred Losses from Disposition of Utility Plant					$0
1531	Renewable Connection Capital Deferral Account					$0
1532	Renewable Connection OM&A Deferral Account					$0
1533	Renewable Connection Funding Adder Deferral Account					$0
1534	Smart Grid Capital Deferral Account					$0
1535	Smart Grid OM&A Deferral Account					$0
1536	Smart Grid Funding Adder Deferral Account					$0
1540	Unamortized Loss on Reacquired Debt					$0
1545	Development Charge Deposits/ Receivables					$0
1548	RCVASTR					$0
1550	LV Variance Account					$0
1555	Smart Meter Capital and Recovery Variance Account					$0
1556	Smart Meter OM&A Variance Account					$0
1560	Deferred Development Costs					$0
1562	Deferred Payments in Lieu of Taxes					$0
1563	Account 1563 - Deferred PILs Contra Account					$0
1565	Conservation and Demand Management Expenditures and Recoveries					$0
1566	CDM Contra Account					$0
1567	Bd-approved CDM Variance Account					$0
1568	LRAM Variance Account					$0
1570	Qualifying Transition Costs					$0
1571	Pre-market Opening Energy Variance					$0
1572	Extraordinary Event Costs					$0
1574	Deferred Rate Impact Amounts					$0
1575	IFRS -CGAAP Transition PP&E Amounts					$0
1576	Accounting Changes under CGAAP					$0
1580	RSVAWMS					$0
1582	RSVAONE-TIME					$0
1584	RSVANW					$0
1586	RSVACN					$0
1588	RSVAPOWER					$0
1589	RSVA-GA					$0
1590	Recovery of Regulatory Asset Balances					$0
1592	2006 PILs Variance					$0
1595	Reg Balance Control Account					$0
1605	Electric Plant in Service - Control Account					$0
1606	Organization					$0
1608	Franchises and Consents					$0
1610	Miscellaneous Intangible Plant					$0
1615	Land					$0
1616	Land Rights					$0
1620	Buildings and Fixtures					$0
1630	Leasehold Improvements					$0
1635	Boiler Plant Equipment					$0
1640	Engines and Engine-Driven Generators					$0
1645	Turbogenerator Units					$0
1650	Reservoirs, Dams and Waterways					$0
1655	Water Wheels, Turbines and Generators					$0
1660	Roads, Railroads and Bridges					$0
1665	Fuel Holders, Producers and Accessories					$0
1670	Prime Movers					$0
1675	Generators					$0
1680	Accessory Electric Equipment					$0
1685	Miscellaneous Power Plant Equipment					$0
1705	Land					$0
1706	Land Rights					$0
1708	Buildings and Fixtures					$0
1710	Leasehold Improvements					$0
1715	Station Equipment					$0
1720	Towers and Fixtures					$0
1725	Poles and Fixtures					$0
1730	Overhead Conductors and Devices					$0
1735	Underground Conduit					$0
1740	Underground Conductors and Devices					$0
1745	Roads and Trails					$0
1805	Land	$25,030,973				$25,030,973
1806	Land Rights					$0
1808	Buildings and Fixtures	$28,887,078				$28,887,078
1810	Leasehold Improvements	$0				$0
1815	Transformer Station Equipment - Normally Primary above 50 kV	$93,555,012				$93,555,012
1820	Distribution Station Equipment - Normally Primary below 50 kV	$85,870,473				$85,870,473
1825	Storage Battery Equipment	$0				$0
1830	Poles, Towers and Fixtures	$98,309,764				$98,309,764
1835	Overhead Conductors and Devices	$89,406,132				$89,406,132
1840	Underground Conduit	$98,619,864				$98,619,864
1845	Underground Conductors and Devices	$103,705,636				$103,705,636
1850	Line Transformers	$71,573,323				$71,573,323

1855	Services	$50,582,151				$50,582,151
1860	Meters	$38,859,558				$38,859,558
	blank row					
1865	Other Installations on Customer's Premises					$0
1870	Leased Property on Customer Premises					$0
1875	Street Lighting and Signal Systems					$0
1905	Land					$0
1906	Land Rights	$1,868,075				$1,868,075
1908	Buildings and Fixtures	$32,877,351				$32,877,351
1910	Leasehold Improvements	$0				$0
1915	Office Furniture and Equipment	$1,499,288				$1,499,288
1920	Computer Equipment - Hardware	$7,727,522				$7,727,522
1925	Computer Software	$51,325,406				$51,325,406
1930	Transportation Equipment	$13,184,543				$13,184,543
1935	Stores Equipment	$914,862				$914,862
1940	Tools, Shop and Garage Equipment	$4,024,656				$4,024,656
1945	Measurement and Testing Equipment	$229,016				$229,016
1950	Power Operated Equipment	$0				$0
1955	Communication Equipment	$2,745,647				$2,745,647
1960	Miscellaneous Equipment	$913,030				$913,030
1965	Water Heater Rental Units					$0
1970	Load Management Controls - Customer Premises	$134,245				$134,245
1975	Load Management Controls - Utility Premises	$17,974				$17,974
1980	System Supervisory Equipment	$7,005,560				$7,005,560
1985	Sentinel Lighting Rental Units					$0
1990	Other Tangible Property					$0
1995	Contributions and Grants - Credit	($35,636,923)		$1,342,511		($34,294,412)
2005	Property Under Capital Leases					$0
2010	Electric Plant Purchased or Sold					$0
2020	Experimental Electric Plant Unclassified					$0
2030	Electric Plant and Equipment Leased to Others					$0
2040	Electric Plant Held for Future Use					$0
2050	Completed Construction Not Classified--Electric					$0
2055	Construction Work in Progress--Electric					$0
2060	Electric Plant Acquisition Adjustment					$0
2065	Other Electric Plant Adjustment					$0
2070	Other Utility Plant					$0
2075	Non-Utility Property Owned or Under Capital Leases					$0
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	($90,635,246)		($1,342,511)		($91,977,757)
2120	Accumulated Amortization of Electric Utility Plant - Intangibles					$0
2140	Accumulated Amortization of Electric Plant Acquisition Adjustment					$0
2160	Accumulated Amortization of Other Utility Plant					$0
2180	Accumulated Amortization of Non-Utility Property					$0
2205	Accounts Payable					$0
2208	Customer Credit Balances					$0
2210	Current Portion of Customer Deposits					$0
2215	Dividends Declared					$0
2220	Miscellaneous Current and Accrued Liabilities					$0
2225	Notes and Loans Payable					$0
2240	Accounts Payable to Associated Companies					$0
2242	Notes Payable to Associated Companies					$0
2250	Debt Retirement Charges(DRC) Payable					$0
2252	Transmission Charges Payable					$0
2254	Electrical Safety Authority Fees Payable					$0
2256	Independent Market Operator Fees and Penalties Payable					$0
2260	Current Portion of Long Term Debt					$0
2262	Ontario Hydro Debt - Current Portion					$0
2264	Pensions and Employee Benefits - Current Portion					$0
2268	Accrued Interest on Long Term Debt					$0
2270	Matured Long Term Debt					$0
2272	Matured Interest on Long Term Debt					$0
2285	Obligations Under Capital Leases--Current					$0
2290	Commodity Taxes					$0
2292	Payroll Deductions / Expenses Payable					$0
2294	Accrual for Taxes, Payments in Lieu of Taxes, Etc.					$0
2296	Future Income Taxes - Current					$0
2305	Accumulated Provision for Injuries and Damages					$0
2306	Employee Future Benefits					$0
2308	Other Pensions - Past Service Liability					$0
2310	Vested Sick Leave Liability					$0
2315	Accumulated Provision for Rate Refunds					$0
2320	Other Miscellaneous Non-Current Liabilities					$0
2325	Obligations Under Capital Lease--Non-Current					$0
2330	Development Charge Fund					$0
2335	Long Term Customer Deposits					$0
2340	Collateral Funds Liability					$0
2345	Unamortized Premium on Long Term Debt					$0
2348	O.M.E.R.S. - Past Service Liability - Long Term Portion					$0
2350	Future Income Tax - Non-Current					$0
2405	Other Regulatory Liabilities					$0
2410	Deferred Gains from Disposition of Utility Plant					$0
2415	Unamortized Gain on Reacquired Debt					$0
2425	Other Deferred Credits					$0
2435	Accrued Rate-Payer Benefit					$0
2505	Debentures Outstanding - Long Term Portion					$0
2510	Debenture Advances					$0
2515	Reacquired Bonds					$0
2520	Other Long Term Debt					$0
2525	Term Bank Loans - Long Term Portion					$0
2530	Ontario Hydro Debt Outstanding - Long Term Portion					$0
2550	Advances from Associated Companies					$0

3005	Common Shares Issued					$0
3008	Preference Shares Issued					$0
3010	Contributed Surplus					$0
3020	Donations Received					$0
3022	Development Charges Transferred to Equity					$0
3026	Capital Stock Held in Treasury					$0
3030	Miscellaneous Paid-In Capital					$0
3035	Installments Received on Capital Stock					$0
3040	Appropriated Retained Earnings					$0
3045	Unappropriated Retained Earnings					$0
3046	Balance Transferred From Income		$0		$0	($34,296,633)
3047	Appropriations of Retained Earnings - Current Period					$0
3048	Dividends Payable-Preference Shares					$0
3049	Dividends Payable-Common Shares					$0
3055	Adjustment to Retained Earnings					$0
3065	Unappropriated Undistributed Subsidiary Earnings					$0
3075	Non-Utility Shareholders' Equity					$0
4006	Residential Energy Sales	($222,557,643)				($222,557,643)
4010	Commercial Energy Sales					$0
4015	Industrial Energy Sales					$0
4020	Energy Sales to Large Users	($54,745,432)				($54,745,432)
4025	Street Lighting Energy Sales	($3,365,897)				($3,365,897)
4030	Sentinel Lighting Energy Sales	($10,104)				($10,104)
4035	General Energy Sales	($464,506,807)				($464,506,807)
4040	Other Energy Sales to Public Authorities					$0
4045	Energy Sales to Railroads and Railways					$0
4050	Revenue Adjustment	($1)				($1)
4055	Energy Sales for Resale					$0
4060	Interdepartmental Energy Sales					$0
4062	Billed WMS	($46,057,766)				($46,057,766)
4064	Billed-One-Time					$0
4066	Billed NW	($59,040,195)				($59,040,195)
4068	Billed CN	($36,058,243)				($36,058,243)
4069	Billed LV	($507,616)				($507,616)
4080	Distribution Services Revenue					$0
4082	Retail Services Revenues	($171,228)				($171,228)
4084	Service Transaction Requests (STR) Revenues	($6,132)				($6,132)
4086	SSS Admin Charge	($891,797)				($891,797)
4090	Electric Services Incidental to Energy Sales	($341,400)				($341,400)
4105	Transmission Charges Revenue					$0
4110	Transmission Services Revenue					$0
4205	Interdepartmental Rents					$0
4210	Rent from Electric Property					$0
4215	Other Utility Operating Income					$0
4220	Other Electric Revenues					$0
4225	Late Payment Charges	($898,752)				($898,752)
4230	Sales of Water and Water Power					$0
4235	Miscellaneous Service Revenues	($5,910,525)		$5,910,525		$0
4235-1	Account Set Up Charges			$1,992,321		($1,992,321)
4235-90	Miscellaneous Service Revenues - Residual			($3,918,204)		($3,918,204)
4240	Provision for Rate Refunds					$0
4245	Government Assistance Directly Credited to Income					$0
4305	Regulatory Debits					$0
4310	Regulatory Credits					$0
4315	Revenues from Electric Plant Leased to Others	($1,839,502)				($1,839,502)
4320	Expenses of Electric Plant Leased to Others					$0
4324	Special Purpose Charge Recovery					$0
4325	Revenues from Merchandise, Jobbing, Etc.	($5,459,437)				($5,459,437)
4330	Costs and Expenses of Merchandising, Jobbing, Etc.	$4,045,020				$4,045,020
4335	Profits and Losses from Financial Instrument Hedges					$0
4340	Profits and Losses from Financial Instrument Investments					$0
4345	Gains from Disposition of Future Use Utility Plant					$0
4350	Losses from Disposition of Future Use Utility Plant					$0
4355	Gain on Disposition of Utility and Other Property					$0
4360	Loss on Disposition of Utility and Other Property	($198,349)				($198,349)
4365	Gains from Disposition of Allowances for Emission					$0
4370	Losses from Disposition of Allowances for Emission					$0
4375	Revenues from Non-Utility Operations					$0
4380	Expenses of Non-Utility Operations					$0
4385	Non-Utility Rental Income					$0
4390	Miscellaneous Non-Operating Income					$0
4395	Rate-Payer Benefit Including Interest					$0
4398	Foreign Exchange Gains and Losses, Including Amortization					$0
4405	Interest and Dividend Income	($27,436)				($27,436)
4415	Equity in Earnings of Subsidiary Companies					$0
4505	Operation Supervision and Engineering					$0
4510	Fuel					$0
4515	Steam Expense					$0
4520	Steam From Other Sources					$0
4525	Steam Transferred--Credit					$0
4530	Electric Expense					$0
4535	Water For Power					$0
4540	Water Power Taxes					$0
4545	Hydraulic Expenses					$0
4550	Generation Expense					$0
4555	Miscellaneous Power Generation Expenses					$0
4560	Rents					$0
4565	Allowances for Emissions					$0
4605	Maintenance Supervision and Engineering					$0
4610	Maintenance of Structures					$0
4615	Maintenance of Boiler Plant					$0
4620	Maintenance of Electric Plant					$0
4625	Maintenance of Reservoirs, Dams and Waterways					$0

4630	Maintenance of Water Wheels, Turbines and Generators					$0
4635	Maintenance of Generating and Electric Plant					$0
4640	Maintenance of Miscellaneous Power Generation Plant					$0
4705	Power Purchased	$760,837,744				$760,837,744
4708	Charges-WMS	$45,456,690				$45,456,690
4710	Cost of Power Adjustments					$0
4712	Charges-One-Time					$0
4714	Charges-NW	$53,789,954				$53,789,954
4715	System Control and Load Dispatching					$0
4716	Charges-CN	$30,702,632				$30,702,632
4720	Other Expenses					$0
4725	Competition Transition Expense					$0
4730	Rural Rate Assistance Expense					$0
4750	Charges-LV	$455,000				$455,000
4751	Charges - Smart Metering Entity Charge	$3,043,466				$3,043,466
4805	Operation Supervision and Engineering					$0
4810	Load Dispatching					$0
4815	Station Buildings and Fixtures Expenses					$0
4820	Transformer Station Equipment - Operating Labour					$0
4825	Transformer Station Equipment - Operating Supplies and Expense					$0
4830	Overhead Line Expenses					$0
4835	Underground Line Expenses					$0
4840	Transmission of Electricity by Others					$0
4845	Miscellaneous Transmission Expense					$0
4850	Rents					$0
4905	Maintenance Supervision and Engineering					$0
4910	Maintenance of Transformer Station Buildings and Fixtures					$0
4916	Maintenance of Transformer Station Equipment					$0
4930	Maintenance of Towers, Poles and Fixtures					$0
4935	Maintenance of Overhead Conductors and Devices					$0
4940	Maintenance of Overhead Lines - Right of Way					$0
4945	Maintenance of Overhead Lines - Roads and Trails Repairs					$0
4950	Maintenance of Overhead Lines - Snow Removal from Roads and Trails					$0
4960	Maintenance of Underground Lines					$0
4965	Maintenance of Miscellaneous Transmission Plant					$0
5005	Operation Supervision and Engineering					$0
5010	Load Dispatching	$3,678,298				$3,678,298
5012	Station Buildings and Fixtures Expense	$343,662				$343,662
5014	Transformer Station Equipment - Operation Labour	$106,833				$106,833
5015	Transformer Station Equipment - Operation Supplies and Expenses	$29,491				$29,491
5016	Distribution Station Equipment - Operation Labour	$233,163				$233,163
5017	Distribution Station Equipment - Operation Supplies and Expenses	$57,317				$57,317
5020	Overhead Distribution Lines and Feeders - Operation Labour	$197,234				$197,234
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	$30,582				$30,582
5030	Overhead Subtransmission Feeders - Operation					$0
5035	Overhead Distribution Transformers- Operation	$7,799				$7,799
5040	Underground Distribution Lines and Feeders - Operation Labour	$469,697				$469,697
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	$2,847,751				$2,847,751
5050	Underground Subtransmission Feeders - Operation					$0
5055	Underground Distribution Transformers - Operation	$37,472				$37,472
5060	Street Lighting and Signal System Expense					$0
5065	Meter Expense	$689,731				$689,731
5070	Customer Premises - Operation Labour					$0
5075	Customer Premises - Materials and Expenses					$0
5085	Miscellaneous Distribution Expense	$11,761,693				$11,761,693
5090	Underground Distribution Lines and Feeders - Rental Paid					$0
5095	Overhead Distribution Lines and Feeders - Rental Paid					$0
5096	Other Rent					$0
5105	Maintenance Supervision and Engineering					$0
5110	Maintenance of Buildings and Fixtures - Distribution Stations					$0
5112	Maintenance of Transformer Station Equipment	$330,675				$330,675
5114	Maintenance of Distribution Station Equipment	$709,895				$709,895
5120	Maintenance of Poles, Towers and Fixtures	$579,188				$579,188
5125	Maintenance of Overhead Conductors and Devices	$879,712				$879,712
5130	Maintenance of Overhead Services	$575,820				$575,820
5135	Overhead Distribution Lines and Feeders - Right of Way	$3,506,963				$3,506,963
5145	Maintenance of Underground Conduit	$66,866				$66,866
5150	Maintenance of Underground Conductors and Devices	$1,036,475				$1,036,475
5155	Maintenance of Underground Services	$355,577				$355,577
5160	Maintenance of Line Transformers	$505,145				$505,145
5165	Maintenance of Street Lighting and Signal Systems					$0
5170	Sentinel Lights - Labour					$0
5172	Sentinel Lights - Materials and Expenses					$0
5175	Maintenance of Meters	$1,840,111				$1,840,111
5178	Customer Installations Expenses- Leased Property					$0
5185	Water Heater Rentals - Labour					$0
5186	Water Heater Rentals - Materials and Expenses					$0
5190	Water Heater Controls - Labour					$0
5192	Water Heater Controls - Materials and Expenses					$0

5195	Maintenance of Other Installations on Customer Premises					$0
5205	Purchase of Transmission and System Services					$0
5210	Transmission Charges					$0
5215	Transmission Charges Recovered					$0
5305	Supervision					$0
5310	Meter Reading Expense	$371,040				$371,040
5315	Customer Billing	$10,043,085				$10,043,085
5320	Collecting	$2,141,494				$2,141,494
5325	Collecting- Cash Over and Short					$0
5330	Collection Charges					$0
5335	Bad Debt Expense	$1,979,175				$1,979,175
5340	Miscellaneous Customer Accounts Expenses					$0
5405	Supervision					$0
5410	Community Relations - Sundry	$6,162,315				$6,162,315
5415	Energy Conservation					$0
5420	Community Safety Program					$0
5425	Miscellaneous Customer Service and Informational Expenses					$0
5505	Supervision					$0
5510	Demonstrating and Selling Expense	$261,592				$261,592
5515	Advertising Expense					$0
5520	Miscellaneous Sales Expense					$0
5605	Executive Salaries and Expenses	$3,268,460				$3,268,460
5610	Management Salaries and Expenses	$8,998,638				$8,998,638
5615	General Administrative Salaries and Expenses	$2,349,300				$2,349,300
5620	Office Supplies and Expenses	$4,071,458				$4,071,458
5625	Administrative Expense Transferred Credit	$769,912				$769,912
5630	Outside Services Employed	$1,066,760				$1,066,760
5635	Property Insurance	$725,333				$725,333
5640	Injuries and Damages	$927,756				$927,756
5645	Employee Pensions and Benefits	$622,805				$622,805
5650	Franchise Requirements					$0
5655	Regulatory Expenses	$1,365,775				$1,365,775
5660	General Advertising Expenses					$0
5665	Miscellaneous General Expenses	$2,713,269				$2,713,269
5670	Rent					$0
5675	Maintenance of General Plant	$6,092,313				$6,092,313
5680	Electrical Safety Authority Fees					$0
5681	Special Purpose Charge Expense					$0
5685	Independent Market Operator Fees and Penalties					$0
5705	Amortization Expense - Property, Plant, and Equipment	$40,755,585				$40,755,585
5710	Amortization of Limited Term Electric Plant					$0
5715	Amortization of Intangibles and Other Electric Plant					$0
5720	Amortization of Electric Plant Acquisition Adjustments					$0
5725	Miscellaneous Amortization	$11,484				$11,484
5730	Amortization of Unrecovered Plant and Regulatory Study Costs					$0
5735	Amortization of Deferred Development Costs					$0
5740	Amortization of Deferred Charges					$0
6005	Interest on Long Term Debt	$20,002,681	($20,002,681)		$0	$20,002,681
6010	Amortization of Debt Discount and Expense					$0
6015	Amortization of Premium on Debt Credit					$0
6020	Amortization of Loss on Reacquired Debt					$0
6025	Amortization of Gain on Reacquired Debt--Credit					$0
6030	Interest on Debt to Associated Companies					$0
6035	Other Interest Expense	$644,041				$644,041
6040	Allowance for Borrowed Funds Used During Construction--Credit					$0
6042	Allowance For Other Funds Used During Construction	($2,638,378)				($2,638,378)
6045	Interest Expense on Capital Lease Obligations					$0
6105	Taxes Other Than Income Taxes	$2,087,844				$2,087,844
6110	Income Taxes	$4,983,819	($4,983,819)		$0	$4,983,819
6115	Provision for Future Income Taxes					$0
6205	Donations					$0
6205-1	Sub-account LEAP Funding	$210,088				$210,088
6210	Life Insurance					$0
6215	Penalties					$0
6225	Other Deductions					$0
6305	Extraordinary Income					$0
6310	Extraordinary Deductions					$0
6315	Income Taxes, Extraordinary Items					$0
6405	Discontinues Operations - Income/ Gains					$0
6410	Discontinued Operations - Deductions/ Losses					$0
6415	Income Taxes, Discontinued Operations					$0

$0

Reclassification Equals to Zero. O.K. to Proceed.

Asset Accounts Directly Allocated $0

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Sheet I4 Break Out Worksheet -

Instructions:
This is an input sheet for the Break Out of Distribution Assets, Contributed Capital, Amortization, and Amortization Expenses.
*****Please see Instructions tab for detailed instructions*****

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	$782,594,971

RATE BASE AND DISTRIBUTION ASSETS		BALANCE SHEET ITEMS									EXPENSE ITEMS			
											5705	5710	5715	5720
Account	Description	Break out Functions	BREAK OUT (%)	BREAK OUT ($)	After BO	Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Asset net of Accumulated Depreciation and Contributed Capital	Amortization Expense - Property, Plant, and Equipment	Amortization of Limited Term Electric Plant	Amortization of Intangibles and Other Electric Plant	Amortization of Electric Plant Acquisition Adjustments
1565	Conservation and Demand Management	$0		-	-					-				
1805	Land	$25,030,973		($25,030,973)	-									
1805-1	Land Station >50 kV		5.80%	$1,451,796	1,451,796					1,451,796				
1805-2	Land Station <50 kV		94.20%	$23,579,177	23,579,177					23,579,177				
1806	Land Rights	$0		$0	-									
1806-1	Land Rights Station >50 kV			$0	-					-				
1806-2	Land Rights Station <50 kV		100.00%	$0	-					-				
1808	Buildings and Fixtures	$28,887,078		($28,887,078)	-									
1808-1	Buildings and Fixtures > 50 kV		14.00%	$4,044,191	4,044,191	($2,141)		$ (279,983)		3,762,067	$117,586			
1808-2	Buildings and Fixtures < 50 kV		86.00%	$24,842,887	24,842,887	($13,151)		$ (1,719,895)		23,109,841	$722,313			
1810	Leasehold Improvements	$0		$0	-									
1810-1	Leasehold Improvements >50 kV			$0	-					-				
1810-2	Leasehold Improvements <50 kV		100.00%	$0	-					-				
1815	Transformer Station Equipment - Normally Primary above 50 kV	$93,555,012		$0	93,555,012			$ (7,493,939)		86,061,073	$3,132,025			
1820	Distribution Station Equipment - Normally Primary below 50 kV	$85,870,473		($85,870,473)	-					-				
1820	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)			$0	-	$0		$ -		-	$0			
1820	Distribution Station Equipment - Normally Primary below 50 kV Primary)		92.00%	$79,000,835	79,000,835	($136,343)		$ (8,321,696)		70,542,796	$3,057,462			
1820	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		8.00%	$6,869,638	6,869,638	($11,856)		$ (723,626)		6,134,156	$265,866			
1825	Storage Battery Equipment	$0		$0	-									
1825	Storage Battery Equipment > 50 kV			$0	-					-				
1825	Storage Battery Equipment <50 kV		100.00%	$0	-					-				
1830	Poles, Towers and Fixtures	$98,309,764		($98,309,764)	-									
1830	Poles, Towers and Fixtures - Subtransmission Bulk Delivery			$0	-	$0		$ -		-	$0			
1830	Poles, Towers and Fixtures - Primary		70.00%	$68,816,835	68,816,835	($1,741,448)		$ (3,837,961)		63,237,426	$1,786,524			
1830	Poles, Towers and Fixtures - Secondary		30.00%	$29,492,929	29,492,929	($746,335)		$ (1,644,841)		27,101,754	$765,653			
1835	Overhead Conductors and Devices	$89,406,132		($89,406,132)	-									
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery			$0	-	$0		$ -		-	$0			
1835-4	Overhead Conductors and Devices - Primary		100.00%	$89,406,132	89,406,132	($2,611,599)		$ (5,050,858)		81,743,675	$2,435,833			
1835-5	Overhead Conductors and Devices - Secondary		0.00%	$0	-	$0		$ -		-	$0			
1840	Underground Conduit	$98,619,864		($98,619,864)	-									
1840-3	Underground Conduit - Bulk Delivery			$0	-	$0		$ -		-	$0			
1840-4	Underground Conduit - Primary		71.00%	$70,020,103	70,020,103	($5,134,285)		$ (4,705,315)		60,180,503	$2,227,099			
1840-5	Underground Conduit - Secondary		29.00%	$28,599,760	28,599,760	($2,097,102)		$ (1,921,889)		24,580,769	$909,660			
1845	Underground Conductors and Devices	$103,705,636		($103,705,636)	-									
1845-3	Underground Conductors and Devices - Bulk Delivery			$0	-	$0		$ -		-	$0			
1845-4	Underground Conductors and Devices - Primary		100.00%	$103,705,636	103,705,636	($9,183,983)		$ (7,602,324)		86,919,328	$3,886,580			
1845-5	Underground Conductors and Devices - Secondary		0.00%	$0	-	$0		$ -		-	$0			
1850	Line Transformers	$71,573,323		$0	71,573,323	($7,296,592)		$ (5,134,499)		59,142,233	$2,594,989			
1855	Services	$50,582,151		$0	50,582,151	($4,705,617)		$ (3,279,316)		42,597,218	$1,441,209			
1860	Meters	$38,859,558		$0	38,859,558	($597,855)		$ (7,726,512)		30,535,191	$4,092,927			
	Total	**$784,399,963**		**$0**	**$784,399,963**	**($34,278,306)**	**$0**	**($59,442,655)**	**$0**	**690,679,003**	**$27,435,725**	**$0**	**$0**	**$0**
	SUB TOTAL from I3	**$784,399,963**												

General Plant		Break out Functions				Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Net Asset	5705 Amortization Expense - Property, Plant, and Equipment	5710 Amortization of Limited Term Electric Plant	5715 Amortization of Intangibles and Other Electric Plant	5720 Amortization of Electric Plant Acquisition Adjustments
1905	Land	$0			-					$ -				
1906	Land Rights	$1,868,075			1,868,075			$ (123,704)		$ 1,744,371	$50,652			
1908	Buildings and Fixtures	$32,877,351			32,877,351			$ (4,552,892)		$ 28,324,459	$1,855,444			
1910	Leasehold Improvements	$0			-					$ -				

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Sheet I4 Break Out Worksheet -

Instructions:
This is an input sheet for the Break Out of Distribution Assets, Contributed Capital, Amortization, and Amortization Expenses.
*****Please see Instructions tab for detailed instructions*****

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	$782,594,971

RATE BASE AND DISTRIBUTION ASSETS		BALANCE SHEET ITEMS									EXPENSE ITEMS			
											5705	5710	5715	5720
Account	Description	Break out Functions	BREAK OUT (%)	BREAK OUT ($)	After BO	Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Asset net of Accumulated Depreciation and Contributed Capital	Amortization Expense - Property, Plant, and Equipment	Amortization of Limited Term Electric Plant	Amortization of Intangibles and Other Electric Plant	Amortization of Electric Plant Acquisition Adjustments
1915	Office Furniture and Equipment	$1,499,288			1,499,288			$ (597,999)		$ 901,290	$250,327			
1920	Computer Equipment - Hardware	$7,727,522			7,727,522			$ (3,620,427)		$ 4,107,095	$1,594,619			
1925	Computer Software	$51,325,406			51,325,406			$ (16,115,056)		$ 35,210,350	$7,476,010			
1930	Transportation Equipment	$13,184,543			13,184,543			$ (2,983,982)		$ 10,200,561	$1,375,967			
1935	Stores Equipment	$914,862			914,862			$ (160,648)		$ 754,214	$68,346			
1940	Tools, Shop and Garage Equipment	$4,024,656			4,024,656			$ (1,618,941)		$ 2,405,715	$590,896			
1945	Measurement and Testing Equipment	$229,016			229,016			$ (74,843)		$ 154,173	$27,266			
1950	Power Operated Equipment	$0			-			$ -		$ -	$0			
1955	Communication Equipment	$2,745,647			2,745,647			$ (601,070)		$ 2,144,577	$297,916			
1960	Miscellaneous Equipment	$913,030			913,030			$ (99,504)		$ 813,525	$57,812			
1970	Load Management Controls - Customer Premises	$134,245			134,245			$ (118,742)		$ 15,503	$27,781			
1975	Load Management Controls - Utility Premises	$17,974			17,974			$ (16,181)		$ 1,793	$3,587			
1980	System Supervisory Equipment	$7,005,560			7,005,560	($16,106)		$ (1,851,114)		$ 5,138,340	$749,601			
1990	Other Tangible Property	$0			-					$ -	($1,106,364)			
2005	Property Under Capital Leases	$0			-					$ -	$0			
2010	Electric Plant Purchased or Sold	$0			-					$ -	$0			
	Total	$124,467,177		$0	$124,467,177	($16,106)	$0	($32,535,103)	$0	$91,915,969	$13,319,860	$0	$0	$0
	SUB TOTAL from I3	$124,467,177												
	I3 Directly Allocated	$0												
	Grand Total	$908,867,140		$0	$908,867,140	($34,294,412)	$0	($91,977,757)	$0	$782,594,971	$40,755,585	$0	$0	$0

To be Prorated

1995	Contributed Capital - 1995	($34,294,412)		$34,294,412	Balanced			
2105	Accumulated Depreciation - 2105	($91,977,757)				$91,977,757	Balanced	
2120	Accumulated Depreciation - 2120	$0					$0	Balanced
	Total	**($126,272,169)**						
	Net Assets	**$782,594,971**	**Net Fixed Assets Match**					

Amortization Expenses

5705	Amortization Expense - Property, Plant, and Equipment	$40,755,585	($40,755,585)	Balanced			
5710	Amortization of Limited Term Electric Plant	$0		$0	Balanced		
5715	Amortization of Intangibles and Other Electric Plant	$0			$0	Balanced	
5720	Amortization of Electric Plant Acquisition Adjustments	$0				$0	Balanced
	Total Amortization Expense	**$40,755,585**					

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Sheet I5.1 Miscellaneous Data Worksheet -

Structure KM (kMs of Roads in Service Area that have distribution line)	4100
Deemed Equity Component of Rate Base (ref: RRWF 7. cell F24)	40%
Working Capital Allowance to be included in Rate Base (%)	14.2%
Portion of pole leasing revenue from Secondary - Remainder assumed to be Primary (%)	10%

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Sheet 15.2 Weighting Factors Worksheet -

	1	2	3	4	6	7	8	9	11	12	13
	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
Insert Weighting Factor for Services Account 1855	1.0	2.0	10.0	10.0	30.0	1.0	1.0	1.0	10.0	10.0	10.0
Insert Weighting Factor for Billing and Collecting	1.0	1.0	6.4	25.3	25.2	25.2	0.7	1.0	24.9	24.9	24.9

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,440,624,000

Total kWs from Load Forecast	10,124,953

Deficiency/sufficiency (RRWF 8. cell F51)	- 17,209,490

Miscellaneous Revenue (RRWF 5. cell F48)	11,699,538

			1	2	3	4	6	7	8	9	11	12	13
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Billing Data													
Forecast kWh	**CEN**	7,440,624,000	2,216,045,000	726,360,000	2,954,441,000	863,309,000	620,218,000	43,552,000	48,000	16,651,000			
Forecast kW	**CDEM**	10,124,953			7,027,979	1,847,365	1,121,449	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,499,198			1,756,995	461,841	280,362						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	7,440,624,000	2,216,045,000	726,360,000	2,954,441,000	863,309,000	620,218,000	43,552,000	48,000	16,651,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$159,359,893	$86,359,164	$20,171,698	$35,397,687	$10,269,766	$5,725,783	$872,268	$3,902	$549,494	$0	$10,131	$0
Transformer Ownership Allowance		$1,124,639	$0	$0	$790,648	$207,829	$126,163	$0	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$158,235,254	$86,359,164	$20,171,698	$34,607,039	$10,061,938	$5,599,620	$872,268	$3,902	$549,494	$0	$10,131	$0

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Sheet I6.2 Customer Data Worksheet -

			1	2	3	4	6	7	8	9	11	12	13
	ID	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
Billing Data													
Bad Debt 3 Year Historical Average	**BDHA**	$2,000,008	$1,354,005	$422,002	$150,001	$74,000	$0	$0	$0	$0	$0	$0	$0
Late Payment 3 Year Historical Average	**LPHA**	$884,964	$658,889	$119,577	$93,649	$12,109	$102	$156	$104	$377			
Number of Bills	**CNB**	3,903,839	3,568,119	294,147.00	39,545.00	912.00	132.00	180.00	660.00	120.00		24	
Number of Devices	**CDEV**							55,516	55	3,477			
Number of Connections (Unmetered)	**CCON**	7,233						3,701	55	3,477			
Total Number of Customers	**CCA**	325,320	297,343	24,512	3,295	76	11	15	55	10		2	
Bulk Customer Base	**CCB**	325,320	297,343	24,512	3,295	76	11	15	55	10		2	
Primary Customer Base	**CCP**	333,394	297,343	24,512	3,295	76	11	8,090	55	10		2	
Line Transformer Customer Base	**CCLT**	332,972	297,343	24,512	2,923	33	5	8,090	55	10			
Secondary Customer Base	**CCS**	323,583	297,343	24,512	1,648			15	55	10			
Weighted - Services	**CWCS**	370,078	297,343	49,025	16,477	-	-	3,701	55	3,477	-	-	-
Weighted Meter -Capital	**CWMC**	60,568,577	44,025,138	9,147,451	6,505,988	760,000	110,000	-	-	-	-	20,000	-
Weighted Meter Reading	**CWMR**	500,674	297,343	24,512	159,869	16,182	2,342	-	-	-	-	426	-
Weighted Bills	**CWNB**	4,157,610	3,568,119	302,982	254,405	23,055	3,329	4,531	466	125	-	598	-

Bad Debt Data

Historic Year:	2012	2,000,008	1,354,005	422,002	150,001	74,000							
Historic Year:	2013	2,000,008	1,354,005	422,002	150,001	74,000							
Historic Year:	2014	2,000,008	1,354,005	422,002	150,001	74,000							
Three-year average		**2,000,008**	**1,354,005**	**422,002**	**150,001**	**74,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

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Sheet Ty.1 Meter Capital Worksheet -

		Residential			GS <50			GS 50 to 1,499 kW			GS 1,500 to 4,999 kW			Large Use		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs
	Allocation Percentage Weighted Factor			72.69%			15%			11%			1%			0%
	Cost Relative to Residential Average Cost			1.00			2.52			13.34			67.54			67.54
	Total	297343	44025138	148.061794	24517	9147451	373.1825636	3295	6505988	1974.503187	76	760000	10000	11	110000	10000
Meter Types	Cost per Meter (Installed)															
Single Phase 200 Amp - Urban	88		0			0			0			0			0	
Single Phase 200 Amp - Rural	164		0			0			0			0			0	
Central Meter	250		0			0			0			0			0	
Network Meter (Costs to be updated)	225		0			0			0			0			0	
Three-phase - No demand	381		0			0			0			0			0	
Smart Meters	146	295.833	43191618			0			0			0			0	
Demand without IT (usually three-phase)	381		0			0			0			0			0	
Demand with IT	3,000		0			0			0			0			0	
Demand with IT and Interval Capability - Secondary	2,300		0			0			0			0			0	
Demand with IT and Interval Capability - Primary	10,000		0			0		271	2710000		76	760000		11	110000	
Demand with IT and Interval Capability -Special (WMP)	3,383		0			0		308	1041964			0			0	
Smart Meters	552	1.535	847320		26	13800			0			0			0	
Smart Meters	373		0		24.487	9133651			0			0			0	
LDC Specific 3	1,014					0		2.716	2754024			0			0	

		Street Light			Sentinel			Unmetered Scattered Load			Standby Power GS 50 to 1,499 kW			Standby Power GS 1,500 to 4,999 kW			Standby Power Large Use			TOTAL		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs	Number of Meters	Weighted Metering Costs	Weighted Average Costs
	Allocation Percentage Weighted Factor			0%			0%			0%			0%			0%			0%			100%
	Cost Relative to Residential Average Cost			-			-			-			-			67.54			-			1.26
	Total	0	0	-	0	0	-	0	0	-	0	0	-	2	20000	10000	0	0	-	325239	60568577	186.2279032
Meter Types	Cost per Meter (Installed)																					
Single Phase 200 Amp - Urban	88		0			0			0			0			0			0		0	0	
Single Phase 200 Amp - Rural	164		0			0			0			0			0			0		0	0	
Central Meter	250		0			0			0			0			0			0		0	0	
Network Meter (Costs to be updated)	225		0			0			0			0			0			0		0	0	
Three-phase - No demand	381		0			0			0			0			0			0		0	0	
Smart Meters	146		0			0			0			0			0			0		295.833	43191618	
Demand without IT (usually three-phase)	381		0			0			0			0			0			0		0	0	
Demand with IT	3,000		0			0			0			0			0			0		0	0	
Demand with IT and Interval Capability - Secondary	2,300		0			0			0			0			0			0		0	0	
Demand with IT and Interval Capability - Primary	10,000		0			0			0			0		2	20000			0		360	3600000	
Demand with IT and Interval Capability -Special (WMP)	3,383		0			0			0			0			0			0		308	1041964	
Smart Meters	552		0			0			0			0			0			0		1.535	847320	
Smart Meters	373		0			0			0			0			0			0		24.487	9133651	
LDC Specific 3	1,014		0			0			0			0			0			0		2.716	2754024	

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Sheet 17.2 Meter Reading Worksheet -

Weighting Factors based on Contractor Pricing

Description		1 Residential			2 GS <50			3 GS 50 to 1,499 kW			4 GS 1,500 to 4,999 kW			6 Large Use			7 Street Light		
		Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs
	Allocation Percentage Weighted Factor			59.39%			4.90%			31.93%			3.23%			0.47%			0.00%
	Cost Relative to Residential Average Cost			1.00			1.00			48.51			212.92			212.92			0.00
	Total	297,343	297,343	1.00	24,512	24,512	1.00	3,295	159,869	48.51	76	16,182	212.92	11	2,342	212.92	-	-	0
	Factor																		
Residential - Urban - Outside	1.00		0			0			0			0			0			0	
Residential - Urban - Outside with other services	1.00		0			0			0			0			0			0	
Residential - Urban - Inside	6.00		0			0			0			0			0			0	
Residential - Urban - Inside - with other services	1.00		0			0			0			0			0			0	
Residential - Rural - Outside	14.00		0			0			0			0			0			0	
Residential - Rural - Outside with other services	2.00		0			0			0			0			0			0	
Smart Meter	1.00	297,343	297,343		24,512	24,512		2,567	2,567			0			0			0	
Smart Meter with Demand			0			0			0			0			0			0	
GS - Walkino	8.00		0			0			0			0			0			0	
GS - Walking - with other services	3.00		0			0			0			0			0			0	
GS - Vehicle with other services -- TOU Read	14.00		0			0			0			0			0			0	
GS - Vehicle with other services	3.00		0			0			0			0			0			0	
LDC Specific 3			0			0			0			0			0			0	
LDC Specific 4	0.00		0			0			0			0			0			0	
Interval	212.92		0			0		739	157,312		76	16,182		11	2,342			0	
LDC Specific 5			0			0			0			0			0			0	
LDC Specific 6			0			0			0			0			0			0	

Description		8 Sentinel			9 Unmetered Scattered Load			11 Standby Power GS 50 to 1,499 kW			12 Standby Power GS 1,500 to 4,999 kW			13 Standby Power Large Use			TOTAL		
		Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs	Units	Weighted Factor	Weighted Average Costs
	Allocation Percentage Weighted Factor			0.00%			0.00%			0.00%			0.09%			0.00%			100.00%
	Cost Relative to Residential Average Cost			0.00			0.00			0.00			212.92			0.00			689.27
	Total	-	-	0	-	-	0	-	-	0	2	426	212.92	-	-	0	325,240	500,674	689
	Factor																		
Residential - Urban - Outside	1.00		0			0			0			0			0		-	-	
Residential - Urban - Outside with other services	1.00		0			0			0			0			0		-	-	
Residential - Urban - Inside	6.00		0			0			0			0			0		-	-	
Residential - Urban - Inside - with other services	1.00		0			0			0			0			0		-	-	
Residential - Rural - Outside	14.00		0			0			0			0			0		-	-	
Residential - Rural - Outside with other services	2.00		0			0			0			0			0		-	-	
Smart Meter	1.00		0			0			0			0			0		324,412	324,412	
Smart Meter with Demand			0			0			0			0			0		-	-	
GS - Walkino	8.00		0			0			0			0			0		-	-	
GS - Walking - with other services	3.00		0			0			0			0			0		-	-	
GS - Vehicle with other services -- TOU Read	14.00		0			0			0			0			0		-	-	
GS - Vehicle with other services	3.00		0			0			0			0			0		-	-	
LDC Specific 3			0			0			0			0			0		-	-	
LDC Specific 4	0.00		0			0			0			0			0		-	-	
Interval	212.92		0			0			0		2	426			0		828	176,262	
LDC Specific 5			0			0			0			0			0		-	-	
LDC Specific 6			0			0			0			0			0		-	-	

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731		-	
Bulk Delivery CP	BCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731	-	-	
Total Sytem CP	DCP1	1,282,883	436,953	153,148	508,176	105,363	77,512	-	-	1,731	-	-	
4 CP													
Transformation CP	TCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356		-	
Bulk Delivery CP	BCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356	-	-	
Total Sytem CP	DCP4	5,006,360	1,792,729	491,382	1,920,564	460,783	316,194	17,335	15	7,356	-	-	
12 CP													
Transformation CP	TCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468		230	
Bulk Delivery CP	BCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468	-	230	
Total Sytem CP	DCP12	13,857,647	4,705,908	1,390,100	5,366,758	1,372,626	949,343	50,166	48	22,468	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,457,990	497,262	153,148	527,926	156,830	105,588	13,805	14	2,265		1,152	
Primary NCP	PNCP1	1,457,990	497,262	153,148	527,926	156,830	105,588	13,805	14	2,265		1,152	
Line Transformer NCP	LTNCP1	1,245,101	497,262	153,148	459,296	69,005	49,626	13,805	14	2,265	-	680	
Secondary NCP	SNCP1	930,458	497,262	153,148	263,963			13,805	14	2,265	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906		3,836	
Primary NCP	PNCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906		3,836	
Line Transformer NCP	LTNCP4	4,878,062	1,961,254	576,965	1,818,362	266,079	190,823	53,358	54	8,906	-	2,263	
Secondary NCP	SNCP4	3,625,543	1,961,254	576,965	1,025,007			53,358	54	8,906	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,887		7,657	
Primary NCP	PNCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,887		7,657	
Line Transformer NCP	LTNCP12	13,421,320	5,439,974	1,578,908	5,005,186	722,507	514,194	130,015	131	25,887	-	4,517	
Secondary NCP	SNCP12	10,051,460	5,439,974	1,578,908	2,876,544			130,015	131	25,887	-		

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WARNING Do not use this sheet for Rate Classes

WARNING Do not use this sheet for Rate Classes

WARNING Do not use this sheet for Rate Classes

Rate Class Code	Description	Street Lighting	Sentinel Lighting	Unmetered Scattered Load	Residential	GS < 50	GS 50 to 4,999 kW	GS 5,000 to 4,999 kW - Interval Meter	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Residential - Retail	Residential - Wholesale	Street Lighting - Retail	Street Lighting - Wholesale	Microfits	Microfits 2	Microfits 3	Microfits 4	Microfits 5	Microfits 6
1000	Total																					
1005	Cost of Power - Wholesale Market Service Charge (WMSC)																					
1006	Cost of Power - Ontario Electricity Support Program (OESP)																					
1007	Cost of Power - Rural or Remote Electricity Rate Protection (RRRP)																					
1008	Cost of Power - Transmission - Network																					
1009	Cost of Power - Transmission - Connection																					
1010	Cost of Power - Transformation																					
1011	Cost of Power - Distribution - Volumetric																					
1012	Cost of Power - Distribution - Fixed																					
1013	Cost of Power - Distribution - Low Voltage																					
1014	Cost of Power - Retail Transmission - Network																					
1015	Cost of Power - Retail Transmission - Connection																					
1016	Cost of Power - Retail Transformation																					
1017	Cost of Power - Retail Distribution - Volumetric																					
1018	Cost of Power - Retail Distribution - Fixed																					
1019	Cost of Power - Retail Distribution - Low Voltage																					
1020	Cost of Power - Retail Market Service Charge (MSC)																					
1021	Cost of Power - Retail Ontario Electricity Support Program (OESP)																					
1022	Cost of Power - Retail Rural or Remote Electricity Rate Protection (RRRP)																					
1023	Cost of Power - Retail Wholesale Market Service Charge (WMSC)																					
1024	Cost of Power - Retail Cost of Power - Commodity																					
1025	Cost of Power - Retail Cost of Power - Commodity - Time of Use																					
1026	Cost of Power - Retail Cost of Power - Commodity - Time of Use - Off Peak																					
1027	Cost of Power - Retail Cost of Power - Commodity - Time of Use - Mid Peak																					
1028	Cost of Power - Retail Cost of Power - Commodity - Time of Use - On Peak																					
1029	Cost of Power - Retail Cost of Power - Commodity - Time of Use - Total																					
1030	Cost of Power - Retail Cost of Power - Commodity - Non Time of Use																					
1031	Cost of Power - Retail Cost of Power - Commodity - Non Time of Use - Total																					
1032	Cost of Power - Retail Cost of Power - Commodity - Total																					
1033	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted																					
1034	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Time of Use																					
1035	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Non Time of Use																					
1036	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total																					
1037	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Time of Use																					
1038	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Non Time of Use																					
1039	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total																					
1040	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Time of Use																					
1041	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Non Time of Use																					
1042	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total																					
1043	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Time of Use																					
1044	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Non Time of Use																					
1045	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total																					
1046	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Time of Use																					
1047	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Non Time of Use																					
1048	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total																					
1049	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Time of Use																					
1050	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Non Time of Use																					
1051	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total																					
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1097	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
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1104	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1105	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1106	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1107	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1108	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1109	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1110	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1111	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1112	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1113	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1114	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1115	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1116	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1117	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1118	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1119	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1120	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1121	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1122	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1123	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1124	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1125	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1126	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1127	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1128	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1129	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1130	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1131	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
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1139	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1140	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
1141	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total																					
1142	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1143	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
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1145	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1146	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
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1148	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Time of Use																					
1149	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
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1170	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Total - Non Time of Use																					
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1172	Cost of Power - Retail Cost of Power - Commodity - Total - Adjusted -

Write Data 0	Write Data 1	Write Data 2	Write Data 3	Write Data 4	Write Data 5

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Customer Unit Cost per month - Avoided Cost	$4.54	$7.07	$41.02	$168.91	$88.29	$0.21	$1.86	-$0.03	0	$202.43	0
Customer Unit Cost per month - Directly Related	$7.89	$11.57	$70.56	$296.83	$216.92	$0.49	$3.71	-$0.02	0	$326.81	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$16.51	$24.62	$100.01	$531.04	$585.58	$14.15	$13.31	$7.85	0	$274.75	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

Ontario Energy Board

2016 Cost Allocation Model

Sheet O2.1 Line Transformer Worksheet -

Line Transformers Demand Unit Cost for PLCC
Adjustment to Customer Related Cost
Allocation by rate classification

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >50-Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use	14 Rate class 3	15 Rate class 4	16 Rate class 5	17 Rate class 6	18 Rate class 7	19 Rate class 8	20 Rate class 9
Depreciation on Acct 1850 Line Transformers	$1,686,743	$577,369	$209,005	$704,923	$103,396	$0	$74,164	$15,708	$0	$1,299	$0	$0	$680	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on General Plant Assigned to Line Transformers	$740,027	$255,610	$91,909	$307,401	$44,921	$0	$32,222	$6,994	$0	$582	$0	$0	$388	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5035 - Overhead Distribution Transformers- Operation	$5,069	$1,735	$628	$2,119	$311	$0	$223	$47	$0	$4	$0	$0	$3	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5055 - Underground Distribution Transformers - Operation	$24,357	$8,337	$3,018	$10,179	$1,493	$0	$1,071	$227	$0	$19	$0	$0	$13	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5180 - Maintenance of Line Transformers	$328,344	$112,392	$40,685	$137,221	$20,127	$0	$14,437	$3,058	$0	$253	$0	$0	$171	$0	$0	$0	$0	$0	$0	$0	$0
Allocation of General Expenses	$1,021,762	$349,747	$126,607	$427,014	$62,633	$0	$44,925	$9,515	$0	$787	$0	$0	$533	$0	$0	$0	$0	$0	$0	$0	$0
Admin and General Assigned to Line Transformers	$332,115	$110,795	$40,804	$141,172	$20,795	$0	$15,029	$3,128	$0	$260	$0	$0	$173	$0	$0	$0	$0	$0	$0	$0	$0
PILs on Line Transformers	$277,394	$94,952	$34,372	$115,928	$17,004	$0	$12,197	$2,583	$0	$214	$0	$0	$145	$0	$0	$0	$0	$0	$0	$0	$0
Debt Return on Line Transformers	$1,113,328	$381,090	$137,953	$465,281	$68,246	$0	$48,951	$10,368	$0	$858	$0	$0	$581	$0	$0	$0	$0	$0	$0	$0	$0
Equity Return on Line Transformers	$1,908,914	$653,418	$236,534	$797,772	$117,015	$0	$83,932	$17,777	$0	$1,470	$0	$0	$995	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$7,458,052**	**$2,545,405**	**$921,515**	**$3,109,012**	**$455,940**	**$0**	**$327,150**	**$69,405**	**$0**	**$5,745**	**$0**	**$0**	**$3,880**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Line Tranformer NCP	4,339,794	1,485,504	537,745	1,813,685	266,025	0	190,814	40,415	0	3,343	0	0	2,263	0	0	0	0	0	0	0	0
PLCC Amount	538,267	475,749	39,220	4,677	54	0	8	12,943	54	5,563	0	0	0	0	0	0	0	0	0	0	0
Adjustment to Customer Related Cost for PLCC	**$922,316**	**$815,194**	**$67,209**	**$8,017**	**$92**	**$0**	**$14**	**$22,228**	**$0**	**$9,562**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$0	$5,966,042	$1,244,499	$5,044	$398,117	$0	$0	$43,115	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Accumulated Depreciation	($22,551,208)	($15,422,596)	($3,471,369)	($9,345,354)	($2,309,415)	$0	($1,560,266)	($325,467)	($1,319)	($104,117)	$0	$0	($11,276)	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,339	$26,388,797	$6,521,176	$0	$4,405,776	$919,032	$3,725	$294,000	$0	$0	$31,839	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$0	$638,456	$133,180	$540	$42,604	$0	$0	$4,614	$0	$0	$0	$0	$0	$0	$0	$0
Total Net Fixed Assets Excluding General Plant	**$690,679,003**	**$324,883,401**	**$73,620,590**	**$199,860,418**	**$49,573,409**	**$0**	**$33,491,328**	**$6,817,138**	**$27,201**	**$2,166,973**	**$0**	**$0**	**$238,544**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Administration and General Expense	$41,883,619	$24,868,789	$4,295,843	$8,716,096	$2,074,446	$0	$1,309,912	$316,100	$2,455	$97,069	$0	$0	$12,905	$0	$0	$0	$0	$0	$0	$0	$0
Total O&M	**$45,411,945**	**$27,498,028**	**$4,667,220**	**$9,231,438**	**$2,187,800**	**$0**	**$1,371,108**	**$336,662**	**$2,737**	**$103,015**	**$0**	**$0**	**$13,938**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Line Transformer Rate Base																					
Acct 1850 - Line Transformers - Gross Assets	$46,522,660	$15,924,628	$5,764,640	$19,442,728	$2,851,794	$0	$2,045,532	$433,245	$0	$35,833	$0	$0	$24,261	$0	$0	$0	$0	$0	$0	$0	$0
Line Transformers - Accumulated Depreciation	($8,080,209)	($2,765,842)	($1,001,222)	($3,376,877)	($495,309)	$0	($355,275)	($75,247)	$0	($6,224)	$0	$0	($4,214)	$0	$0	$0	$0	$0	$0	$0	$0
Line Transformers - Net Fixed Assets	$38,442,451	$13,158,786	$4,763,418	$16,065,851	$2,356,485	$0	$1,690,257	$357,998	$0	$29,610	$0	$0	$20,047	$0	$0	$0	$0	$0	$0	$0	$0
General Plant Assigned to Line Transformers - NFA	$5,106,681	$1,763,882	$634,231	$2,121,273	$309,886	$0	$222,353	$46,262	$0	$4,017	$0	$0	$2,676	$0	$0	$0	$0	$0	$0	$0	$0
Line Transformer Net Fixed Assets Including General Plant	$43,549,132	$14,922,669	$5,397,649	$18,187,123	$2,666,471	$0	$1,912,610	$404,260	$0	$33,627	$0	$0	$22,723	$0	$0	$0	$0	$0	$0	$0	$0
General Expenses																					
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$2,574,809	$823,727	$287,114	$1,011,382	$255,553	$0	$173,262	$20,142	$2	$2,273	$0	$0	$1,353	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5065 - Miscellaneous Distribution Expense	$8,233,185	$2,633,942	$918,074	$3,233,987	$817,155	$0	$554,020	$64,407	$5	$7,269	$0	$0	$4,327	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$10,807,994**	**$3,457,669**	**$1,205,188**	**$4,245,369**	**$1,072,708**	**$0**	**$727,282**	**$84,550**	**$7**	**$9,542**	**$0**	**$0**	**$5,680**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Acct 1850 - Line Transformers - Gross Assets	$46,522,660	$15,924,628	$5,764,640	$19,442,728	$2,851,794	$0	$2,045,532	$433,245	$0	$35,833	$0	$0	$24,261	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1815 - 1855	$492,107,484	$157,433,693	$54,874,400	$193,299,337	$48,842,335	$0	$33,114,442	$3,849,694	$326	$434,449	$0	$0	$258,607	$0	$0	$0	$0	$0	$0	$0	$0

Ontario Energy Board

2016 Cost Allocation Model

Sheet O1.2 Primary Cost PLCC Adjustment Worksheet -

Primary Conductors and Poles Cost Pool Demand Unit Cost for PLCC Adjustment to Customer Related Cost

Allocation by Rate Classification

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >5k - Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use	14 Rate class 3	15 Rate class 4	16 Rate class 5	17 Rate class 6	18 Rate class 7	19 Rate class 8	20 Rate class 9
Depreciation on Acct 1835.4 Primary Poles, Towers & Fixtures	$1,390,667	$367,400	$131,187	$458,879	$147,487	$0	$196,043	$9,898	$0	$815	$0	$0	$898	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1835.5 Primary Overhead Conductors	$1,306,085	$454,115	$178,867	$680,136	$293,106	$0	$196,043	$13,445	$0	$1,117	$0	$0	$1,225	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1840.4 Primary Underground Conduit	$1,558,969	$451,771	$163,539	$621,846	$183,872	$0	$123,469	$12,291	$0	$1,017	$0	$0	$1,166	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1845.4 Primary Underground Conductors	$2,720,606	$788,400	$285,397	$1,085,203	$320,880	$0	$215,469	$21,449	$0	$1,774	$0	$0	$2,034	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on General Plant Assigned to Primary C&P	$3,930,638	$1,150,919	$413,831	$1,560,443	$459,689	$0	$308,688	$31,491	$0	$2,621	$0	$0	$2,957	$0	$0	$0	$0	$0	$0	$0	$0
Primary C&P Operations and Maintenance	$5,734,333	$1,640,855	$594,018	$2,292,389	$690,672	$0	$463,782	$44,446	$0	$3,692	$0	$0	$4,378	$0	$0	$0	$0	$0	$0	$0	$0
Allocation of General Expenses	$5,103,336	$1,478,887	$535,250	$2,035,632	$601,910	$0	$404,179	$40,235	$0	$3,328	$0	$0	$3,816	$0	$0	$0	$0	$0	$0	$0	$0
Admin and General Assigned to Primary C&P	$5,342,438	$1,484,054	$546,751	$2,144,418	$654,888	$0	$440,082	$41,712	$0	$3,439	$0	$0	$4,054	$0	$0	$0	$0	$0	$0	$0	$0
PILs on Primary C&P	$1,475,323	$427,532	$154,764	$588,481	$174,006	$0	$116,844	$11,631	$0	$962	$0	$0	$1,103	$0	$0	$0	$0	$0	$0	$0	$0
Debt Return on Primary C&P	$5,921,247	$1,715,908	$621,151	$2,361,883	$698,378	$0	$468,956	$46,663	$0	$3,861	$0	$0	$4,427	$0	$0	$0	$0	$0	$0	$0	$0
Equity Return on Primary C&P	$10,152,583	$2,942,100	$1,065,026	$4,049,689	$1,197,440	$0	$804,073	$80,043	$0	$6,620	$0	$0	$7,591	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$44,895,142**	**$12,937,038**	**$4,689,880**	**$17,938,942**	**$5,339,337**	**$0**	**$3,582,625**	**$353,303**	**$0**	**$29,282**	**$0**	**$0**	**$33,735**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Primary NCP	5,126,170	1,485,504	537,745	2,044,741	604,603	0	405,987	40,415	0	3,343	0	0	3,833	0	0	0	0	0	0	0	0
PLCC Amount	538,944	475,749	39,220	5,273	122	0	18	12,943	54	5,563	0	0	3	0	0	0	0	0	0	0	0
Adjustment to Customer Related Cost for PLCC	**$4,694,676**	**$4,143,230**	**$342,049**	**$46,258**	**$1,072**	**$0**	**$155**	**$113,149**	**$0**	**$48,734**	**$0**	**$0**	**$28**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
General Plant - Gross Assets	$124,467,177	$38,971,911	$13,273,708	$35,734,151	$8,830,591	$0	$5,966,042	$1,244,499	$5,044	$398,117	$0	$0	$43,115	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Accumulated Depreciation	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$0	[illegible]	[illegible]	[illegible]	[illegible]	$0	$0	[illegible]	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Net Fixed Assets	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$0	[illegible]	[illegible]	[illegible]	[illegible]	$0	$0	[illegible]	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Depreciation	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$0	[illegible]	[illegible]	[illegible]	[illegible]	$0	$0	[illegible]	$0	$0	$0	$0	$0	$0	$0	$0
Total Net Fixed Assets Excluding General Plant	**$690,679,003**	**$324,883,401**	**$73,620,590**	**$199,860,418**	**$49,573,409**	**$0**	**$33,491,326**	**$6,817,138**	**$27,201**	**$2,166,973**	**$0**	**$0**	**$238,544**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Administration and General Expense	**$40,693,619**	**$24,968,789**	**$4,295,843**	**$8,716,096**	**$2,074,448**	**$0**	**$1,309,912**	**$316,100**	**$2,455**	**$97,069**	**$0**	**$0**	**$12,905**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total O&M	**$45,413,945**	**$27,498,028**	**$4,667,220**	**$9,231,438**	**$2,187,800**	**$0**	**$1,371,106**	**$336,662**	**$2,737**	**$103,015**	**$0**	**$0**	**$13,938**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Primary Conductors and Poles Gross Assets																					
Acct 1835.4 Primary Poles, Towers & Fixtures	$48,171,784	$13,959,621	$5,053,316	$19,214,892	$5,681,591	$0	$3,815,152	$379,785	$0	$31,412	$0	$0	$36,016	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835.5 Primary Overhead Conductors	$62,584,292	$18,136,197	$6,565,217	$24,963,792	$7,381,465	$0	$4,958,606	$493,413	$0	$40,810	$0	$0	$46,792	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840.4 Primary Underground Conduit	$48,014,072	$14,203,706	$5,141,674	$19,550,866	$5,780,934	$0	$3,881,860	$386,426	$0	$31,961	$0	$0	$36,646	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845.4 Primary Underground Conductors	$72,593,945	$21,038,878	$7,615,249	$28,958,469	$8,562,048	$0	$5,749,380	$572,329	$0	$47,337	$0	$0	$54,276	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$232,364,094**	**$67,336,401**	**$24,375,456**	**$92,686,019**	**$27,406,038**	**$0**	**$18,402,977**	**$1,831,954**	**$0**	**$151,519**	**$0**	**$0**	**$173,730**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Primary Conductors and Poles Accumulated Depreciation																					
Acct 1835.4 Primary Poles, Towers & Fixtures	($3,905,586)	($1,131,793)	($409,704)	($1,557,871)	($460,642)	$0	($309,318)	($30,792)	$0	($2,547)	$0	$0	($2,920)	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835.5 Primary Overhead Conductors	($5,353,720)	($1,554,343)	($562,685)	($2,139,495)	($632,621)	$0	($424,801)	($42,287)	$0	($3,498)	$0	$0	($4,010)	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840.4 Primary Underground Conduit	($6,887,720)	($1,995,981)	($722,536)	($2,747,393)	($812,368)	$0	($545,500)	($54,303)	$0	($4,491)	$0	$0	($5,150)	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845.4 Primary Underground Conductors	($11,760,418)	($3,405,133)	($1,232,642)	($4,687,038)	($1,385,890)	$0	($930,620)	($92,640)	$0	($7,662)	$0	$0	($8,785)	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**($27,907,442)**	**($8,087,251)**	**($2,927,546)**	**($11,131,796)**	**($3,291,526)**	**$0**	**($2,210,238)**	**($220,022)**	**$0**	**($18,198)**	**$0**	**$0**	**($20,865)**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Primary Conductor & Poels - Net Fixed Assets	$204,456,652	$59,249,150	$21,447,910	$81,554,223	$24,114,512	$0	$16,192,739	$1,611,932	$0	$133,321	$0	$0	$152,864	$0	$0	$0	$0	$0	$0	$0	$0
General Plant Assigned to Primary C&P - NFA	$27,124,039	$7,942,111	$2,855,710	$10,768,104	$3,172,164	$0	$2,130,151	$217,308	$0	$18,088	$0	$0	$20,403	$0	$0	$0	$0	$0	$0	$0	$0
Primary C&P Net Fixed Assets Including General Plant	$231,580,691	$67,191,261	$24,303,620	$92,322,327	$27,286,676	$0	$18,322,890	$1,829,240	$0	$151,409	$0	$0	$173,268	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835.3 Bulk Poles, Towers & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835.5 Bulk Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840.3 Bulk Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845.3 Bulk Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Acct 1835.6 Secondary Poles, Towers & Fixtures	$20,645,050	$9,904,508	$3,585,385	$6,816,594	$0	$0	$0	$316,278	$0	$22,287	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835.6 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840.6 Secondary Underground Conduit	$20,019,832	$9,604,558	$3,476,804	$6,610,159	$0	$0	$0	$306,699	$0	$21,612	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845.6 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$40,664,882**	**$19,509,065**	**$7,062,189**	**$13,426,753**	**$0**	**$0**	**$0**	**$622,977**	**$0**	**$43,899**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Operations and Maintenance																					
Acct 5020 Overhead Distribution Lines & Feeders - Labour	$138,064	$44,130	$15,975	$53,581	$13,725	$0	$9,217	$1,250	$0	$99	$0	$0	$87	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	$21,407	$6,843	$2,477	$8,308	$2,128	$0	$1,429	$194	$0	$15	$0	$0	$13	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5040 Underground Distribution Lines & Feeders - Labour	$328,788	$104,108	$37,686	$127,955	$33,297	$0	$22,359	$2,938	$0	$234	$0	$0	$211	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5045 Underground Distribution Lines & Feeders - Other	$1,993,426	$631,200	$228,461	$775,784	$201,879	$0	$135,560	$17,811	$0	$1,420	$0	$0	$1,280	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5090 Underground Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5095 Overhead Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	$405,432	$140,595	$50,895	$153,363	$33,473	$0	$22,477	$4,101	$0	$316	$0	$0	$212	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5125 Maintenance of Overhead Conductors & Devices	$615,798	$176,451	$64,538	$245,631	$72,630	$0	$48,771	$4,855	$0	$402	$0	$0	$490	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5135 Overhead Distribution Lines & Feeders - Right of Way	$2,454,874	$784,662	$284,044	$952,709	$244,048	$0	$163,877	$22,222	$0	$1,766	$0	$0	$1,547	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5145 Maintenance of Underground Conduit	$46,806	$16,142	$5,842	$17,738	$3,920	$0	$2,632	$470	$0	$36	$0	$0	$25	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5150 Maintenance of Underground Conductors & Devices	$776,455	$210,243	$76,110	$280,407	$85,573	$0	$57,461	$6,736	$0	$475	$0	$0	$542	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$6,730,128**	**$2,116,381**	**$766,120**	**$2,624,471**	**$690,672**	**$0**	**$463,782**	**$59,561**	**$0**	**$4,762**	**$0**	**$0**	**$4,378**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
General Expenses																					
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$2,574,809	$823,727	$287,114	$1,011,382	$255,553	$0	$172,282	$20,142	$2	$2,273	$0	$0	$1,353	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5085 - Miscellaneous Distribution Expense	$8,233,185	$2,633,942	$918,074	$3,233,987	$817,155	$0	$554,020	$64,407	$5	$7,269	$0	$0	$4,327	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$10,807,994**	**$3,457,669**	**$1,205,188**	**$4,245,369**	**$1,072,708**	**$0**	**$727,282**	**$84,550**	**$7**	**$9,542**	**$0**	**$0**	**$5,680**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Primary Conductors and Poles Gross Assets	$232,364,094	$67,336,401	$24,375,456	$92,686,019	$27,406,038	$0	$18,402,977	$1,831,954	$0	$151,519	$0	$0	$173,730	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1815 - 1855	$492,107,494	$157,433,893	$54,874,400	$193,299,337	$48,842,335	$0	$33,114,442	$3,849,694	$326	$434,449	$0	$0	$258,607	$0	$0	$0	$0	$0	$0	$0	$0

Ontario Energy Board

2016 Cost Allocation Model

Sheet O2.1 Secondary Cost PLCC Adjustment Worksheet -

Secondary Conductors and Poles Cost Pool Demand Unit Cost for PLCC Adjustment to Customer Related Cost

Allocation by Rate Classification

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >50-Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use	14 Rate class 3	15 Rate class 4	16 Rate class 5	17 Rate class 6	18 Rate class 7	19 Rate class 8	20 Rate class 9
Depreciation on Acct 1830-5 Secondary Poles, Towers & Fixtures	$535,067	$257,127	$93,079	$176,963	$0	$0	$0	$8,211	$0	$579	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1840-5 Secondary Underground Conduit	$909,660	$550,833	$130,811	$211,606	$0	$0	$0	$12,869	$46	$3,556	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on General Plant Assigned to Secondary C&P	$698,528	$337,148	$121,227	$238,557	$0	$0	$0	$10,828	$0	$768	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Secondary C&P Operations and Maintenance	$895,794	$475,426	$172,102	$332,282	$0	$0	$0	$15,114	$0	$1,070	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Allocation of General Expenses	$893,109	$428,471	$155,105	$294,887	$0	$0	$0	$13,682	$0	$964	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Admin and General Assigned to Primary C&P	$917,119	$439,968	$158,458	$313,544	$0	$0	$0	$14,191	$0	$1,008	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PILs on Secondary C&P	$292,192	$135,240	$45,336	$86,194	$0	$0	$0	$3,989	$0	$282	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Return on Secondary C&P	$1,156,262	$555,053	$199,955	$380,165	$0	$0	$0	$17,611	$0	$1,244	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Equity Return on Secondary C&P	$1,795,458	$861,854	$311,987	$593,355	$0	$0	$0	$27,351	$0	$1,933	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$8,055,418**	**$3,968,724**	**$1,370,013**	**$2,542,032**	**$0**	**$0**	**$0**	**$122,487**	**$46**	**$11,297**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Secondary NCP	3,096,399	1,485,504	527,745	1,022,371	0	0	0	47,436	0	3,343	0	0	0	0	0	0	0	0	0	0	0
PLCC Amount	538,801	475,749	39,220	5,273	0	0	0	12,943	54	5,563	0	0	0	0	0	0	0	0	0	0	0
Adjustment to Customer Related Cost for PLCC	**$1,436,470**	**$1,271,028**	**$99,939**	**$13,121**	**$0**	**$0**	**$0**	**$33,399**	**$0**	**$18,892**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$0	$5,966,042	$1,244,499	$5,044	$398,117	$0	$0	$43,115	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Accumulated Depreciation	($32,551,206)	($15,422,566)	($3,471,368)	($9,341,354)	($2,309,410)	$0	($1,560,266)	($326,457)	($1,319)	($104,117)	$0	$0	($11,276)	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,339	$26,388,797	$6,521,176	$0	$4,405,776	$919,022	$3,725	$294,000	$0	$0	$31,839	$0	$0	$0	$0	$0	$0	$0	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$0	$638,456	$133,180	$540	$42,604	$0	$0	$4,614	$0	$0	$0	$0	$0	$0	$0	$0
Total Net Fixed Assets Excluding General Plant	**$50,679,003**	**$24,893,401**	**$73,020,590**	**$199,860,418**	**$49,573,409**	**$0**	**$33,495,326**	**$6,817,138**	**$27,201**	**$2,166,973**	**$0**	**$0**	**$238,544**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Administration and General Expense	**$41,092,019**	**$24,868,749**	**$4,296,843**	**$8,704,096**	**$2,074,948**	**$0**	**$1,308,912**	**$316,100**	**$2,455**	**$97,069**	**$0**	**$0**	**$12,905**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total O&M	**$45,411,945**	**$27,466,028**	**$4,667,220**	**$9,291,438**	**$2,187,900**	**$0**	**$1,371,108**	**$356,662**	**$2,737**	**$103,015**	**$0**	**$0**	**$13,938**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Secondary Conductors and Poles Gross Plant																					
Acct 1830-5 Secondary Poles, Towers & Fixtures	$20,645,050	$9,904,508	$3,585,385	$6,816,594	$0	$0	$0	$316,278	$0	$22,287	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-5 Secondary Underground Conduit	$20,019,832	$9,604,558	$3,476,804	$6,610,159	$0	$0	$0	$306,699	$0	$21,612	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$40,664,883***	***$19,509,065***	***$7,062,189***	***$13,426,753***	***$0***	***$0***	***$0***	***$622,977***	***$0***	***$43,899***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Secondary Conductors and Poles Accumulated Depreciation																					
Acct 1830-5 Secondary Poles, Towers & Fixtures	($1,673,825)	($803,020)	($290,689)	($552,664)	$0	$0	$0	($25,643)	$0	($1,807)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-5 Secondary Underground Conduit	($2,813,294)	($1,349,680)	($488,379)	($928,811)	$0	$0	$0	($43,098)	$0	($3,037)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***($4,487,117)***	***($2,152,704)***	***($779,069)***	***($1,481,559)***	***$0***	***$0***	***$0***	***($68,741)***	***$0***	***($4,844)***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Secondary Conductor & Pools - Net Fixed Assets	$36,177,766	$17,356,361	$6,282,920	$11,945,194	$0	$0	$0	$554,235	$0	$39,055	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
General Plant Assigned to Secondary C&P - NFA	$4,635,312	$2,336,551	$636,548	$1,577,197	$0	$0	$0	$76,719	$0	$5,299	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Secondary C&P Net Fixed Assets Including General Plant	$40,998,078	$19,692,912	$7,119,468	$13,522,391	$0	$0	$0	$628,953	$0	$44,354	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1820-3 Bulk Poles, Towers & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-3 Bulk Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-3 Bulk Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-3 Bulk Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Acct 1830-4 Primary Poles, Towers & Fixtures	$48,171,784	$13,959,621	$5,053,318	$19,214,892	$5,681,591	$0	$3,815,152	$279,785	$0	$31,412	$0	$0	$36,016	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-4 Primary Overhead Conductors	$62,584,262	$18,136,197	$6,585,217	$24,963,792	$7,381,465	$0	$4,958,606	$463,413	$0	$40,810	$0	$0	$46,792	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-4 Primary Underground Conduit	$49,014,072	$14,203,706	$5,141,674	$19,550,956	$5,790,934	$0	$3,880,880	$386,426	$0	$31,961	$0	$0	$36,646	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-4 Primary Underground Conductors	$73,580,945	$21,056,878	$7,615,249	$29,356,459	$8,550,068	$0	$5,736,350	$572,229	$0	$47,247	$0	$0	$54,275	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$232,354,064***	***$67,356,401***	***$24,375,456***	***$92,686,019***	***$27,404,038***	***$0***	***$18,492,977***	***$1,831,854***	***$0***	***$151,519***	***$0***	***$0***	***$172,730***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Operations and Maintenance																					
Acct 5005 Overhead Distribution Lines & Feeders - Labour	$158,064	$44,135	$15,875	$53,531	$15,735	$0	$8,317	$1,765	$0	$66	$0	$0	$27	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	$21,467	$6,943	$2,477	$8,308	$2,128	$0	$1,429	$194	$0	$15	$0	$0	$13	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5030 Overhead Distribution Lines & Feeders - Labour	$709,766	$234,178	$77,665	$177,905	$39,767	$0	$77,766	$7,938	$0	$734	$0	$0	$711	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5035 Underground Distribution Lines & Feeders - Other	$1,983,426	$631,205	$228,491	$775,794	$201,979	$0	$135,580	$17,811	$0	$1,420	$0	$0	$1,288	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5040 Underground Distribution Lines & Feeders - Labour	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5045 Underground Distribution Lines & Feeders - Board Built	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	$405,422	$140,595	$50,895	$153,363	$33,473	$0	$22,477	$4,101	$0	$316	$0	$0	$212	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5125 Maintenance of Overhead Conductors & Devices	$615,766	$179,451	$64,598	$245,031	$77,030	$0	$48,771	$4,855	$0	$403	$0	$0	$400	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5130 Overhead Distribution Lines & Feeders - Right of Way	$2,454,874	$784,662	$284,084	$952,709	$244,068	$0	$163,877	$22,222	$0	$1,766	$0	$0	$1,547	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5135 Maintenance of Underground Conduit	$1,000,000	$319,541	$115,710	$388,132	$99,450	$0	$66,775	$9,055	$0	$720	$0	$0	$630	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5140 Maintenance of Underground Conductors & Devices	$705,553	$225,411	$81,610	$273,832	$70,172	$0	$47,101	$6,385	$0	$508	$0	$0	$445	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$8,759,138**	**$2,116,281**	**$750,120**	**$2,024,471**	**$590,672**	**$0**	**$463,782**	**$59,541**	**$0**	**$4,762**	**$0**	**$0**	**$4,378**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
General Expenses																					
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$2,574,859	$823,727	$287,314	$1,011,382	$255,013	$0	$173,262	$20,142	$2	$2,273	$0	$0	$1,353	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5085 - Miscellaneous Distribution Expense	$9,233,185	$2,633,942	$918,074	$3,223,997	$817,155	$0	$554,020	$64,457	$5	$7,269	$0	$0	$4,327	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$11,807,994**	**$3,457,669**	**$1,205,188**	**$4,245,369**	**$1,072,168**	**$0**	**$727,282**	**$84,550**	**$7**	**$9,542**	**$0**	**$0**	**$5,680**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Secondary Conductors and Poles Gross Assets	$40,664,883	$19,509,065	$7,062,189	$13,426,753	$0	$0	$0	$622,977	$0	$43,899	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1815 - 1855	$452,107,484	$167,433,692	$64,874,450	$193,299,137	$48,842,335	$0	$33,111,442	$3,849,694	$326	$434,449	$0	$0	$258,667	$0	$0	$0	$0	$0	$0	$0	$0

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet O3.1 Line Transformers Unit Cost Worksheet -

ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
Depreciation on Acct 1850 Line Transformers	$2,594,989	$1,380,073	$275,178	$712,814	$103,486	$74,178	$37,546	$149	$10,686	$0	$880	$0
Depreciation on General Plant Assigned to Line Transformers	$1,141,979	$610,980	$121,008	$310,842	$44,960	$32,228	$16,717	$67	$4,788	$0	$388	$0
Acct 5035 - Overhead Distribution Transformers- Operation	$7,799	$4,148	$827	$2,142	$311	$223	$113	$0	$32	$0	$3	$0
Acct 5055 - Underground Distribution Transformers - Operation	$37,472	$19,928	$3,974	$10,293	$1,494	$1,071	$542	$2	$154	$0	$13	$0
Acct 5160 - Maintenance of Line Transformers	$505,145	$268,647	$53,567	$138,758	$20,145	$14,440	$7,309	$29	$2,080	$0	$171	$0
Allocation of General Expenses	$1,600,750	$860,656	$169,016	$432,567	$62,747	$44,978	$23,383	$95	$6,775	$0	$533	$0
Admin and General Assigned to Line Transformers	$506,869	$264,735	$53,723	$142,753	$20,813	$15,031	$7,477	$28	$2,136	$0	$173	$0
PILs on Line Transformers	$426,760	$226,961	$45,254	$117,226	$17,019	$12,199	$6,175	$24	$1,757	$0	$145	$0
Debt Return on Line Transformers	$1,712,812	$910,912	$181,630	$470,490	$68,305	$48,961	$24,782	$98	$7,053	$0	$581	$0
Equity Return on Line Transformers	$2,936,790	$1,561,851	$311,423	$806,703	$117,117	$83,948	$42,492	$169	$12,093	$0	$995	$0
Total	**$11,471,364**	**$6,108,891**	**$1,215,599**	**$3,144,587**	**$456,397**	**$327,255**	**$166,537**	**$663**	**$47,555**	**$0**	**$3,880**	**$0**
Billed kW without Line Transformer Allowance		0	0	5,270,984	1,385,524	841,087	123,144	216	0	0	4,800	0
Billed kWh without Line Transformer Allowance		2,216,045,000	726,360,000	2,954,441,000	863,309,000	620,218,000	43,552,000	48,000	16,651,000	0	0	0
Line Transformation Unit Cost ($/kW)		**$0.0000**	**$0.0000**	**$0.5966**	**$0.3294**	**$0.3891**	**$1.3524**	**$3.0688**	**$0.0000**	**$0.0000**	**$0.8084**	**$0.0000**
Line Transformation Unit Cost ($/kWh)		**$0.0028**	**$0.0017**	**$0.0011**	**$0.0005**	**$0.0005**	**$0.0038**	**$0.0138**	**$0.0029**	**$0.0000**	**$0.0000**	**$0.0000**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
General Plant - Accumulated Depreciation	($32,551,208)	($15,422,596)	($3,471,399)	($9,345,354)	($2,309,415)	($1,560,266)	($325,467)	($1,319)	($104,117)	$0	($11,276)	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,309	$26,388,797	$6,521,176	$4,405,776	$919,032	$3,725	$294,000	$0	$31,839	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$638,456	$133,180	$540	$42,604	$0	$4,614	$0
Total Net Fixed Assets Excluding General Plant	$690,679,003	$324,883,401	$73,620,590	$199,860,418	$49,573,409	$33,491,328	$6,817,138	$27,201	$2,166,973	$0	$238,544	$0
Total Administration and General Expense	$41,693,619	$24,868,789	$4,295,843	$8,716,096	$2,074,448	$1,309,912	$316,100	$2,455	$97,069	$0	$12,905	$0
Total O&M	$45,411,945	$27,498,028	$4,667,220	$9,231,438	$2,187,800	$1,371,108	$336,662	$2,737	$103,015	$0	$13,938	$0
Line Transformer Rate Base												
Acct 1850 - Line Transformers - Gross Assets	$71,573,323	$38,064,301	$7,589,780	$19,660,372	$2,854,284	$2,045,916	$1,035,577	$4,108	$294,725	$0	$24,261	$0
Line Transformers - Accumulated Depreciation	($12,431,090)	($6,611,133)	($1,318,218)	($3,414,678)	($495,741)	($355,342)	($179,862)	($713)	($51,189)	$0	($4,214)	$0
Line Transformers - Net Fixed Assets	$59,142,233	$31,453,168	$6,271,562	$16,245,694	$2,358,542	$1,690,575	$855,715	$3,394	$243,536	$0	$20,047	$0
General Plant Assigned to Line Transformers - NFA	$7,880,418	$4,216,171	$835,035	$2,145,019	$310,256	$222,395	$115,361	$465	$33,041	$0	$2,676	$0
Line Transformer Net Fixed Assets Including General Plant	$67,022,651	$35,669,339	$7,106,597	$18,390,712	$2,668,799	$1,912,970	$971,075	$3,859	$276,577	$0	$22,723	$0
General Expenses												
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$3,678,298	$1,755,106	$385,201	$1,045,997	$260,100	$176,449	$40,800	$173	$13,117	$0	$1,356	$0
Acct 5085 - Miscellaneous Distribution Expense	$11,761,693	$5,612,110	$1,231,716	$3,344,671	$831,693	$564,211	$130,460	$552	$41,943	$0	$4,337	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$15,439,991**	**$7,367,216**	**$1,616,917**	**$4,390,668**	**$1,091,792**	**$740,660**	**$171,260**	**$725**	**$55,060**	**$0**	**$5,693**	**$0**
Acct 1850 - Line Transformers - Gross Assets	$71,573,323	$38,064,301	$7,589,780	$19,660,372	$2,854,284	$2,045,916	$1,035,577	$4,108	$294,725	$0	$24,261	$0
Acct 1815 - 1855	$691,622,354	$325,830,531	$72,608,887	$199,557,816	$49,664,352	$33,690,702	$7,584,582	$31,234	$2,395,053	$0	$259,199	$0

Ontario Energy Board

2016 Cost Allocation Model

Sheet O3.2 Substation Transformers Unit Cost Worksheet -

ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
Depreciation on Acct 1820-2 Distribution Station Equipment	$3,057,462	$886,017	$320,734	$1,219,569	$360,610	$242,148	$24,105	$0	$1,994	$0	$2,286	$0
Depreciation on Acct 1825-2 Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1805-2 Land Station <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1806-2 Land Rights Station <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1808-2 Buildings and Fixtures < 50 KV	$722,313	$245,290	$72,457	$279,736	$71,546	$49,483	$2,615	$3	$1,171	$0	$12	$0
Depreciation on Acct 1810-2 Leasehold Improvements <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on General Plant Assigned to Substation Transformers	$735,660	$260,375	$73,247	$281,417	$69,142	$48,204	$1,999	$3	$1,380	$0	($107)	$0
Acct 5012 - Station Buildings and Fixtures Expense	$343,662	$116,704	$34,474	$133,093	$34,040	$23,543	$1,244	$1	$557	$0	$6	$0
Acct 5016 - Distributon Station Equipment - Labour	$233,163	$67,568	$24,459	$93,005	$27,500	$18,466	$1,838	$0	$152	$0	$174	$0
Acct 5017 - Distributon Station Equipment - Other	$57,317	$16,610	$6,013	$22,863	$6,760	$4,539	$452	$0	$37	$0	$43	$0
Acct 5114 - Maintenance of Distribution Station Equipment	$709,895	$205,719	$74,469	$283,165	$83,728	$56,223	$5,597	$0	$463	$0	$531	$0
Allocation of General Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Admin and General Assigned to SubstationTransformers	$931,806	$262,178	$96,591	$376,756	$111,876	$75,692	$7,405	$0	$615	$0	$693	$0
PILs on SubstationTransformers	$275,868	$96,721	$27,393	$106,129	$26,172	$18,246	$738	$1	$506	$0	($40)	$0
Debt Return on Substation Transformers	$1,107,203	$388,193	$109,943	$425,952	$105,043	$73,232	$2,964	$5	$2,033	$0	($161)	$0
Equity Return on Substation Transformers	$1,898,413	$665,597	$188,508	$730,339	$180,107	$125,564	$5,082	$8	$3,485	$0	($276)	$0
Total	**$10,072,762**	**$3,210,972**	**$1,028,288**	**$3,952,024**	**$1,076,525**	**$735,341**	**$54,039**	**$21**	**$12,393**	**$0**	**$3,160**	**$0**
Billed kW without Substation Transformer Allowance		0	0	7,027,979	1,847,365	1,121,449	123,144	216	0	0	4,800	0
Billed kWh without Substation Transformer Allowance		2.216.045.000	726.360.000	2.954.441.000	863.309.000	620.218.000	43.552.000	48.000	16.651.000	0	0	0
Substation Transformation Unit Cost ($/kW)		**$0.0000**	**$0.0000**	**$0.5623**	**$0.5827**	**$0.6557**	**$0.4388**	**$0.0969**	**$0.0000**	**$0.0000**	**$0.6584**	**$0.0000**
Substation Transformation Unit Cost ($/kWh)		**$0.0014**	**$0.0014**	**$0.0013**	**$0.0012**	**$0.0012**	**$0.0012**	**$0.0004**	**$0.0007**	**$0.0000**	**$0.0000**	**$0.0000**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
General Plant - Accumulated Depreciation	($32,551,208)	($15,422,596)	($3,471,399)	($9,345,354)	($2,309,415)	($1,560,266)	($325,467)	($1,319)	($104,117)	$0	($11,276)	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,309	$26,388,797	$6,521,176	$4,405,776	$919,032	$3,725	$294,000	$0	$31,839	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$638,456	$133,180	$540	$42,604	$0	$4,614	$0
Total Net Fixed Assets Excluding General Plant	$690,679,003	$324,883,401	$73,620,590	$199,860,418	$49,573,409	$33,491,328	$6,817,138	$27,201	$2,166,973	$0	$238,544	$0
Total Administration and General Expense	$41,693,619	$24,868,789	$4,295,843	$8,716,096	$2,074,448	$1,309,912	$316,100	$2,455	$97,069	$0	$12,905	$0
Total O&M	$45,411,945	$27,498,028	$4,667,220	$9,231,438	$2,187,800	$1,371,108	$336,662	$2,737	$103,015	$0	$13,938	$0
Substation Transformer Rate Base Gross Plant												
Acct 1820-2 Distribution Station Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1825-2 Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1805-2 Land Station <50 kV	$23,579,177	$8,007,236	$2,365,295	$9,131,690	$2,335,561	$1,615,334	$85,359	$82	$38,230	$0	$391	$0
Acct 1806-2 Land Rights Station <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1808-2 Buildings and Fixtures < 50 KV	$24,842,887	$8,436,378	$2,492,061	$9,621,097	$2,460,734	$1,701,907	$89,934	$87	$40,278	$0	$412	$0
Acct 1810-2 Leasehold Improvements <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$48,422,064***	***$16,443,614***	***$4,857,356***	***$18,752,786***	***$4,796,296***	***$3,317,241***	***$175,292***	***$169***	***$78,508***	***$0***	***$803***	***$0***
Substation Transformers - Accumulated Depreciation												
Acct 1820-2 Distribution Station Equipment	($8,458,040)	($2,451,041)	($887,265)	($3,373,766)	($997,578)	($669,867)	($66,683)	$0	($5,515)	$0	($6,324)	$0
Acct 1825-2 Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1805-2 Land Station <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1806-2 Land Rights Station <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1808-2 Buildings and Fixtures < 50 KV	($1,733,046)	($588,524)	($173,847)	($671,170)	($171,661)	($118,725)	($6,274)	($6)	($2,810)	$0	($29)	$0
Acct 1810-2 Leasehold Improvements <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***($10,191,086)***	***($3,039,565)***	***($1,061,112)***	***($4,044,936)***	***($1,169,240)***	***($788,593)***	***($72,957)***	***($6)***	***($8,325)***	***$0***	***($6,352)***	***$0***
Substation Transformers - Net Fixed Assets	$38,230,978	$13,404,049	$3,796,243	$14,707,850	$3,627,056	$2,528,648	$102,335	$163	$70,183	$0	($5,550)	$0
General Plant Assigned to SubstationTransformers - NFA	$5,076,549	$1,796,759	$505,456	$1,941,968	$477,124	$332,643	$13,796	$22	$9,522	$0	($741)	$0
Substation Transformer NFA Including General Plant	$43,307,527	$15,200,808	$4,301,699	$16,649,818	$4,104,180	$2,861,291	$116,132	$185	$79,705	$0	($6,290)	$0
General Expenses												
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$3,678,298	$1,755,106	$385,201	$1,045,997	$260,100	$176,449	$40,800	$173	$13,117	$0	$1,356	$0
Acct 5085 - Miscellaneous Distribution Expense	$11,761,693	$5,612,110	$1,231,716	$3,344,671	$831,693	$564,211	$130,460	$552	$41,943	$0	$4,337	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$15,439,991	$7,367,216	$1,616,917	$4,390,668	$1,091,792	$740,660	$171,260	$725	$55,060	$0	$5,693	$0
Acct 1820-2 Distribution Station Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1825-2 Storage Battery Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1815 - 1855	$691,622,354	$325,830,531	$72,608,887	$199,557,816	$49,664,352	$33,690,702	$7,584,582	$31,234	$2,395,053	$0	$259,199	$0

Ontario Energy Board

2016 Cost Allocation Model

Sheet O3.3 Primary Conductors and Poles Cost Pool Worksheet -

ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
Depreciation on Acct 1830-4 Primary Poles. Towers & Fixtures	$1,786,524	$835,482	$170,187	$504,073	$147,618	$99,061	$22,730	$88	$6,347	$0	$938	$0
Depreciation on Acct 1835-4 Primary Overhead Conductors	$2,435,833	$1,139,136	$232,041	$687,277	$201,270	$135,065	$30,991	$120	$8,654	$0	$1,279	$0
Depreciation on Acct 1840-4 Primary Underground Conduit	$2,227,099	$1,041,520	$212,156	$628,382	$184,022	$123,490	$28,336	$109	$7,913	$0	$1,170	$0
Depreciation on Acct 1845-4 Primary Underground Conductors	$3,886,580	$1,817,589	$370,241	$1,096,609	$321,143	$215,507	$49,449	$191	$13,809	$0	$2,041	$0
Depreciation on General Plant Assigned to Primary C&P	$5,632,109	$2,653,346	$536,856	$1,576,845	$460,066	$308,742	$72,599	$285	$20,403	$0	$2,967	$0
Primary C&P Operations and Maintenance	$8,187,920	$3,806,024	$772,445	$2,316,638	$691,238	$463,864	$103,898	$402	$29,017	$0	$4,393	$0
Allocation of General Expenses	$7,409,226	$3,510,030	$704,183	$2,060,711	$602,972	$404,645	$95,365	$378	$27,113	$0	$3,829	$0
Admin and General Assigned to Primary C&P	$7,568,310	$3,442,109	$710,980	$2,187,312	$655,425	$443,161	$97,553	$360	$27,343	$0	$4,068	$0
PILs on Primary C&P	$2,107,605	$985,638	$200,773	$594,666	$174,149	$116,865	$26,815	$104	$7,488	$0	$1,107	$0
Debt Return on Primary C&P	$8,458,925	$3,955,882	$805,809	$2,386,709	$698,950	$469,039	$107,624	$416	$30,054	$0	$4,442	$0
Equity Return on Primary C&P	$14,503,688	$6,782,763	$1,381,641	$4,092,255	$1,198,422	$804,215	$184,532	$713	$51,531	$0	$7,617	$0
Total	**$64,203,819**	**$29,969,520**	**$6,097,312**	**$18,131,476**	**$5,335,276**	**$3,583,653**	**$819,892**	**$3,165**	**$229,674**	**$0**	**$33,850**	**$0**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
General Plant - Accumulated Depreciation	($32,551,208)	($15,422,596)	($3,471,399)	($9,345,354)	($2,309,415)	($1,560,266)	($325,467)	($1,319)	($104,117)	$0	($11,276)	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,309	$26,388,797	$6,521,176	$4,405,776	$919,032	$3,725	$294,000	$0	$31,839	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$638,456	$133,180	$540	$42,604	$0	$4,614	$0
Total Net Fixed Assets Excluding General Plant	**$690,679,003**	**$324,883,401**	**$73,620,590**	**$199,860,418**	**$49,573,409**	**$33,491,328**	**$6,817,138**	**$27,201**	**$2,166,973**	**$0**	**$238,544**	**$0**
Total Administration and General Expense	**$41,693,619**	**$24,868,789**	**$4,295,843**	**$8,716,096**	**$2,074,448**	**$1,309,912**	**$316,100**	**$2,455**	**$97,069**	**$0**	**$12,905**	**$0**
Total O&M	**$45,411,945**	**$27,498,028**	**$4,667,220**	**$9,231,438**	**$2,187,800**	**$1,371,108**	**$336,662**	**$2,737**	**$103,015**	**$0**	**$13,938**	**$0**
Primary Conductors and Poles Gross Assets												
Acct 1830-4 Primary Poles. Towers & Fixtures	$68,816,835	$32,182,732	$6,555,585	$19,416,856	$5,686,249	$3,815,826	$875,563	$3,381	$244,505	$0	$36,139	$0
Acct 1835-4 Primary Overhead Conductors	$89,406,132	$41,811,478	$8,516,949	$25,226,182	$7,387,517	$4,957,482	$1,137,523	$4,393	$317,658	$0	$46,951	$0
Acct 1840-4 Primary Underground Conduit	$70,020,103	$32,745,450	$6,670,210	$19,756,362	$5,785,673	$3,882,546	$890,872	$3,440	$248,780	$0	$36,771	$0
Acct 1845-4 Primary Underground Conductors	$103,705,636	$48,498,753	$9,879,139	$29,260,826	$8,569,067	$5,750,376	$1,319,457	$5,095	$368,464	$0	$54,460	$0
Subtotal	**$331,948,706**	**$155,238,412**	**$31,621,883**	**$93,660,225**	**$27,428,506**	**$18,406,229**	**$4,223,415**	**$16,309**	**$1,179,406**	**$0**	**$174,321**	**$0**
Primary Conductors and Poles Accumulated Depreciation												
Acct 1830-4 Primary Poles. Towers & Fixtures	($5,579,409)	($2,609,254)	($531,502)	($1,574,245)	($461,020)	($309,373)	($70,987)	($274)	($19,824)	$0	($2,930)	$0
Acct 1835-4 Primary Overhead Conductors	($7,662,457)	($3,583,408)	($729,936)	($2,161,983)	($633,139)	($424,876)	($97,490)	($376)	($27,225)	$0	($4,024)	$0
Acct 1840-4 Primary Underground Conduit	($9,839,601)	($4,601,566)	($937,334)	($2,776,270)	($813,034)	($545,596)	($125,190)	($483)	($34,960)	$0	($5,167)	$0
Acct 1845-4 Primary Underground Conductors	($16,786,308)	($7,850,248)	($1,599,086)	($4,736,302)	($1,387,032)	($930,784)	($213,574)	($825)	($59,641)	$0	($8,815)	$0
Subtotal	**($39,867,774)**	**($18,644,477)**	**($3,797,858)**	**($11,248,800)**	**($3,294,224)**	**($2,210,629)**	**($507,242)**	**($1,959)**	**($141,649)**	**$0**	**($20,936)**	**$0**
Primary Conductor & Pools - Net Fixed Assets	$292,080,932	$136,593,935	$27,824,025	$82,411,425	$24,134,281	$16,195,600	$3,716,174	$14,350	$1,037,757	$0	$153,385	$0
General Plant Assigned to Primary C&P - NFA	$38,865,330	$18,309,868	$3,704,666	$10,881,286	$3,174,764	$2,130,527	$500,985	$1,965	$140,795	$0	$20,473	$0
Primary C&P Net Fixed Assets Including General Plant	$330,946,262	$154,903,803	$31,528,691	$93,292,711	$27,309,046	$18,326,128	$4,217,158	$16,315	$1,178,552	$0	$173,857	$0
Acct 1830-3 Bulk Poles. Towers & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-3 Bulk Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-3 Bulk Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-3 Bulk Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Acct 1830-5 Secondary Poles. Towers & Fixtures	$29,492,929	$17,859,050	$4,241,138	$6,860,673	$0	$0	$415,289	$1,476	$115,304	$0	$0	$0
Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-5 Secondary Underground Conduit	$28,599,760	$17,318,203	$4,112,698	$6,652,904	$0	$0	$402,712	$1,431	$111,812	$0	$0	$0
Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	**$58,092,690**	**$35,177,253**	**$8,353,836**	**$13,513,577**	**$0**	**$0**	**$818,001**	**$2,907**	**$227,116**	**$0**	**$0**	**$0**
Operations and Maintenance												
Acct 5020 Overhead Distribution Lines & Feeders - Labour	$197,234	$96,511	$20,293	$54,115	$13,737	$9,218	$2,552	$10	$712	$0	$87	$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	$30,582	$14,964	$3,147	$8,391	$2,130	$1,429	$396	$2	$110	$0	$14	$0
Acct 5030 Underground Distribution Lines & Feeders - Labour	$469,697	$228,812	$47,967	$129,238	$33,324	$22,363	$6,066	$23	$1,692	$0	$212	$0
Acct 5045 Underground Distribution Lines & Feeders - Other	$2,847,751	$1,387,275	$290,820	$783,562	$202,044	$135,584	$36,779	$140	$10,262	$0	$1,284	$0
Acct 5090 Underground Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5095 Overhead Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5120 Maintenance of Poles. Towers & Fixtures	$579,188	$294,819	$63,608	$154,813	$33,500	$22,481	$7,605	$29	$2,120	$0	$213	$0
Acct 5125 Maintenance of Overhead Conductors & Devices	$879,712	$411,404	$83,803	$248,213	$72,690	$48,779	$11,193	$43	$3,126	$0	$462	$0
Acct 5135 Overhead Distribution Lines & Feeders - Right of Way	$3,506,963	$1,716,029	$360,824	$962,207	$244,248	$163,905	$45,368	$173	$12,657	$0	$1,552	$0
Acct 5145 Maintenance of Underground Conduit	$66,866	$33,944	$7,311	$17,906	$3,923	$2,632	$877	$3	$244	$0	$25	$0
Acct 5150 Maintenance of Underground Conductors & Devices	$1,036,475	$484,716	$98,736	$292,444	$85,643	$57,472	$13,187	$51	$3,683	$0	$544	$0
Total	**$9,614,468**	**$4,668,475**	**$976,508**	**$2,650,889**	**$691,238**	**$463,864**	**$124,022**	**$473**	**$34,605**	**$0**	**$4,393**	**$0**
General Expenses												
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$3,678,298	$1,755,106	$385,201	$1,045,997	$260,100	$176,449	$40,800	$173	$13,117	$0	$1,356	$0
Acct 5085 - Miscellaneous Distribution Expense	$11,761,693	$5,612,110	$1,231,716	$3,344,671	$831,693	$564,211	$130,460	$552	$41,943	$0	$4,337	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$15,439,991**	**$7,367,216**	**$1,616,917**	**$4,390,668**	**$1,091,792**	**$740,660**	**$171,260**	**$725**	**$55,060**	**$0**	**$5,693**	**$0**
Primary Conductors and Poles Gross Assets	$331,948,706	$155,238,412	$31,621,883	$93,660,225	$27,428,506	$18,406,229	$4,223,415	$16,309	$1,179,406	$0	$174,321	$0
Acct 1815 - 1855	$691,622,354	$325,830,531	$72,608,887	$199,557,816	$49,664,352	$33,690,702	$7,584,582	$31,234	$2,395,053	$0	$259,199	$0

Grouping of Operation and Maintenance	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
1830	$ 579,188	$ 294,819	$ 63,608	$ 154,813	$ 33,500	$ 22,481	$ 7,605	$ 29	$ 2,120	$ -	$ 213	$ -
1835	$ 879,712	$ 411,404	$ 83,803	$ 248,213	$ 72,690	$ 48,779	$ 11,193	$ 43	$ 3,126	$ -	$ 462	$ -
1840	$ 66,866	$ 33,944	$ 7,311	$ 17,906	$ 3,923	$ 2,632	$ 877	$ 3	$ 244	$ -	$ 25	$ -
1845	$ 1,036,475	$ 484,716	$ 98,736	$ 292,444	$ 85,643	$ 57,472	$ 13,187	$ 51	$ 3,683	$ -	$ 544	$ -
1830 & 1835	$ 3,734,779	$ 1,827,504	$ 384,263	$ 1,024,713	$ 260,114	$ 174,553	$ 48,315	$ 184	$ 13,479	$ -	$ 1,653	$ -
1840 & 1845	$ 3,317,448	$ 1,616,087	$ 338,787	$ 912,800	$ 235,369	$ 157,947	$ 42,845	$ 163	$ 11,954	$ -	$ 1,496	$ -
Total	**$ 9,614,468**	**$ 4,668,475**	**$ 976,508**	**$ 2,650,889**	**$ 691,238**	**$ 463,864**	**$ 124,022**	**$ 473**	**$ 34,605**	**$ -**	**$ 4,393**	**$ -**

Ontario Energy Board

2016 Cost Allocation Model

Sheet O3.4 Secondary Cost Pool Worksheet -

ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
Depreciation on Acct 1830-5 Secondary Poles, Towers & Fixtures	$765,653	$463,631	$110,102	$178,107	$0	$0	$10,781	$38	$2,993	$0	$0	$0
Depreciation on Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on Acct 1840-5 Secondary Underground Conduit	$909,660	$550,833	$130,811	$211,606	$0	$0	$12,809	$46	$3,556	$0	$0	$0
Depreciation on Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Depreciation on General Plant Assigned to Secondary C&P	$999,595	$607,920	$143,399	$230,035	$0	$0	$14,217	$51	$3,973	$0	$0	$0
Secondary C&P Operations and Maintenance	$1,426,548	$862,451	$204,064	$334,251	$0	$0	$20,123	$72	$5,588	$0	$0	$0
Allocation of General Expenses	$1,302,493	$795,378	$186,030	$297,326	$0	$0	$18,470	$67	$5,221	$0	$0	$0
Admin and General Assigned to Primary C&P	$1,307,629	$779,987	$187,826	$315,592	$0	$0	$18,894	$64	$5,265	$0	$0	$0
PILs on Secondary C&P	$372,932	$225,824	$53,628	$86,752	$0	$0	$5,251	$19	$1,458	$0	$0	$0
Debt Return on Secondary C&P	$1,496,772	$906,350	$215,239	$348,181	$0	$0	$21,076	$75	$5,852	$0	$0	$0
Equity Return on Secondary C&P	$2,566,368	$1,554,030	$369,048	$596,991	$0	$0	$36,137	$128	$10,033	$0	$0	$0
Total	**$11,147,651**	**$6,746,404**	**$1,600,147**	**$2,598,840**	**$0**	**$0**	**$157,759**	**$560**	**$43,940**	**$0**	**$0**	**$0**
General Plant - Gross Assets	$124,467,177	$58,971,911	$13,273,708	$35,734,151	$8,830,591	$5,966,042	$1,244,499	$5,044	$398,117	$0	$43,115	$0
General Plant - Accumulated Depreciation	($32,551,208)	($15,422,596)	($3,471,399)	($9,345,354)	($2,309,415)	($1,560,266)	($325,467)	($1,319)	($104,117)	$0	($11,276)	$0
General Plant - Net Fixed Assets	$91,915,969	$43,549,315	$9,802,309	$26,388,797	$6,521,176	$4,405,776	$919,032	$3,725	$294,000	$0	$31,839	$0
General Plant - Depreciation	$13,319,860	$6,310,881	$1,420,486	$3,824,092	$945,006	$638,456	$133,180	$540	$42,604	$0	$4,614	$0
Total Net Fixed Assets Excluding General Plant	**$690,679,003**	**$324,883,401**	**$73,620,590**	**$199,860,418**	**$49,573,409**	**$33,491,328**	**$6,817,138**	**$27,201**	**$2,166,973**	**$0**	**$238,544**	**$0**
Total Administration and General Expense	**$41,693,619**	**$24,868,789**	**$4,295,843**	**$8,716,096**	**$2,074,448**	**$1,309,912**	**$316,100**	**$2,455**	**$97,069**	**$0**	**$12,905**	**$0**
Total O&M	**$45,411,945**	**$27,498,028**	**$4,667,220**	**$9,231,438**	**$2,187,800**	**$1,371,108**	**$336,662**	**$2,737**	**$103,015**	**$0**	**$13,938**	**$0**
Secondary Conductors and Poles Gross Plant												
Acct 1830-5 Secondary Poles, Towers & Fixtures	$29,492,929	$17,859,050	$4,241,138	$6,860,673	$0	$0	$415,289	$1,476	$115,304	$0	$0	$0
Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-5 Secondary Underground Conduit	$28,599,760	$17,318,203	$4,112,698	$6,652,904	$0	$0	$402,712	$1,431	$111,812	$0	$0	$0
Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$58,092,690***	***$35,177,253***	***$8,353,836***	***$13,513,577***	***$0***	***$0***	***$818,001***	***$2,907***	***$227,116***	***$0***	***$0***	***$0***
Secondary Conductors and Poles Accumulated Depreciation												
Acct 1830-5 Secondary Poles, Towers & Fixtures	($2,391,175)	($1,447,944)	($343,855)	($556,237)	$0	$0	($33,670)	($120)	($9,348)	$0	$0	$0
Acct 1835-5 Secondary Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-5 Secondary Underground Conduit	($4,018,992)	($2,433,647)	($577,938)	($934,902)	$0	$0	($56,591)	($201)	($15,712)	$0	$0	$0
Acct 1845-5 Secondary Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***($6,410,167)***	***($3,881,591)***	***($921,794)***	***($1,491,139)***	***$0***	***$0***	***($90,261)***	***($321)***	***($25,061)***	***$0***	***$0***	***$0***
Secondary Conductor & Pools - Net Fixed Assets	$51,682,523	$31,295,662	$7,432,042	$12,022,438	$0	$0	$727,739	$2,586	$202,055	$0	$0	$0
General Plant Assigned to Secondary C&P - NFA	$6,897,878	$4,195,058	$989,549	$1,587,396	$0	$0	$98,108	$354	$27,413	$0	$0	$0
Secondary C&P Net Fixed Assets Including General Plant	$58,580,401	$35,490,720	$8,421,591	$13,609,834	$0	$0	$825,847	$2,940	$229,468	$0	$0	$0
Acct 1830-3 Bulk Poles, Towers & Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1835-3 Bulk Overhead Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1840-3 Bulk Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 1845-3 Bulk Underground Conductors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Acct 1830-4 Primary Poles, Towers & Fixtures	$68,816,835	$32,182,732	$6,555,585	$19,416,856	$5,686,249	$3,815,826	$875,563	$3,381	$244,505	$0	$36,139	$0
Acct 1835-4 Primary Overhead Conductors	$89,406,132	$41,811,478	$8,516,949	$25,226,182	$7,387,517	$4,957,482	$1,137,523	$4,393	$317,658	$0	$46,951	$0
Acct 1840-4 Primary Underground Conduit	$70,020,103	$32,745,450	$6,670,210	$19,756,362	$5,785,673	$3,882,546	$890,872	$3,440	$248,780	$0	$36,771	$0
Acct 1845-4 Primary Underground Conductors	$103,705,636	$48,498,753	$9,879,139	$29,260,826	$8,569,067	$5,750,376	$1,319,457	$5,095	$368,464	$0	$54,460	$0
Subtotal	***$331,948,706***	***$155,238,412***	***$31,621,883***	***$93,660,225***	***$27,428,506***	***$18,406,229***	***$4,223,415***	***$16,309***	***$1,179,406***	***$0***	***$174,321***	***$0***
Operations and Maintenance												
Acct 5020 Overhead Distribution Lines & Feeders - Labour	$197,234	$96,511	$20,293	$54,115	$13,737	$9,218	$2,552	$10	$712	$0	$87	$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	$30,582	$14,964	$3,147	$8,391	$2,130	$1,429	$396	$2	$110	$0	$14	$0
Acct 5040 Underground Distribution Lines & Feeders - Labour	$469,697	$228,812	$47,967	$129,238	$33,324	$22,363	$6,066	$23	$1,692	$0	$212	$0
Acct 5045 Underground Distribution Lines & Feeders - Other	$2,847,751	$1,387,275	$290,820	$783,562	$202,044	$135,584	$36,779	$140	$10,262	$0	$1,284	$0
Acct 5090 Underground Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5095 Overhead Distribution Lines & Feeders - Rental Paid	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	$579,188	$294,819	$63,608	$154,813	$33,500	$22,481	$7,605	$29	$2,120	$0	$213	$0
Acct 5125 Maintenance of Overhead Conductors & Devices	$879,712	$411,404	$83,803	$248,213	$72,690	$48,779	$11,193	$43	$3,126	$0	$462	$0
Acct 5135 Overhead Distribution Lines & Feeders - Right of Way	$3,506,963	$1,716,029	$360,824	$962,207	$244,248	$163,905	$45,368	$173	$12,657	$0	$1,552	$0
Acct 5145 Maintenance of Underground Conduit	$66,866	$33,944	$7,311	$17,906	$3,923	$2,632	$877	$3	$244	$0	$25	$0
Acct 5150 Maintenance of Underground Conductors & Devices	$1,036,475	$484,716	$98,736	$292,444	$85,643	$57,472	$13,187	$51	$3,683	$0	$544	$0
Total	**$9,614,468**	**$4,668,475**	**$976,508**	**$2,650,889**	**$691,238**	**$463,864**	**$124,022**	**$473**	**$34,605**	**$0**	**$4,393**	**$0**
General Expenses												
Acct 5005 - Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Acct 5010 - Load Dispatching	$3,678,298	$1,755,106	$385,201	$1,045,997	$260,100	$176,449	$40,800	$173	$13,117	$0	$1,356	$0
Acct 5085 - Miscellaneous Distribution Expense	$11,761,693	$5,612,110	$1,231,716	$3,344,671	$831,693	$564,211	$130,460	$552	$41,943	$0	$4,337	$0
Acct 5105 - Maintenance Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$15,439,991**	**$7,367,216**	**$1,616,917**	**$4,390,668**	**$1,091,792**	**$740,660**	**$171,260**	**$725**	**$55,060**	**$0**	**$5,693**	**$0**
Secondary Conductors and Poles Gross Assets	$58,092,690	$35,177,253	$8,353,836	$13,513,577	$0	$0	$818,001	$2,907	$227,116	$0	$0	$0
Acct 1815 - 1855	$691,622,354	$325,830,531	$72,608,887	$199,557,816	$49,664,352	$33,690,702	$7,584,582	$31,234	$2,395,053	$0	$259,199	$0

Grouping of Operation and Maintenance	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
1830	$ 579,188	$ 294,819	$ 63,608	$ 154,813	$ 33,500	$ 22,481	$ 7,605	$ 29	$ 2,120	$ -	$ 213	$ -
1835	$ 879,712	$ 411,404	$ 83,803	$ 248,213	$ 72,690	$ 48,779	$ 11,193	$ 43	$ 3,126	$ -	$ 462	$ -
1840	$ 66,866	$ 33,944	$ 7,311	$ 17,906	$ 3,923	$ 2,632	$ 877	$ 3	$ 244	$ -	$ 25	$ -
1845	$ 1,036,475	$ 484,716	$ 98,736	$ 292,444	$ 85,643	$ 57,472	$ 13,187	$ 51	$ 3,683	$ -	$ 544	$ -
1830 & 1835	$ 3,734,779	$ 1,827,504	$ 384,263	$ 1,024,713	$ 260,114	$ 174,553	$ 48,315	$ 184	$ 13,479	$ -	$ 1,653	$ -
1840 & 1845	$ 3,317,448	$ 1,616,087	$ 338,787	$ 912,800	$ 235,369	$ 157,947	$ 42,845	$ 153	$ 11,954	$ -	$ 1,496	$ -
Total	**$ 9,614,468**	**$ 4,668,475**	**$ 976,508**	**$ 2,650,889**	**$ 691,238**	**$ 463,864**	**$ 124,022**	**$ 473**	**$ 34,605**	**$ -**	**$ 4,393**	**$ -**

Ontario Energy Board

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Sheet O2.5 USL Metering Credit Worksheet -

ALLOCATION BY RATE CLASSIFICATION

Description	GS <50
Depreciation on Acct 1860 Metering	$618,140
Depreciation on General Plant Assigned to Metering	$88,980
Acct 5065 - Meter expense	$104,168
Acct 5070 & 5075 - Customer Premises	$0
Acct 5175 - Meter Maintenance	$277,905
Acct 5310 - Meter Reading	$18,166
Admin and General Assigned to Metering	$368,391
PILs on Metering	$33,277
Debt Return on Metering	$133,557
Equity Return on Metering	$228,996
Total	$1,871,578
Number of Customers	24,512
Metering Unit Cost ($/Customer/Month)	**$6.36**
General Plant - Gross Assets	$13,273,708
General Plant - Accumulated Depreciation	($3,471,399)
General Plant - Net Fixed Assets	$9,802,309
General Plant - Depreciation	$1,420,486
Total Net Fixed Assets Excluding General Plant	$73,620,590
Total Administration and General Expense	$4,295,843
Total O&M	$4,667,220
Metering Rate Base	
Acct 1860 - Metering - Gross Assets	$5,868,817
Metering - Accumulated Depreciation	($1,257,199)
Metering - Net Fixed Assets	$4,611,618
General Plant Assigned to Metering - NFA	$614,020
Metering Net Fixed Assets Including General Plant	$5,225,638

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Sheet O3.6 MicroFIT Charge Worksheet -

Instructions:
More Instructions provided on the first tab in this workbook.

ALLOCATION BY RATE CLASSIFICATION

Description	Residential	Monthly Unit Cost
Customer Premises - Operations Labour (5070)	$ -	$ -
Customer Premises - Materials and Expenses (5075)	$ -	$ -
Meter Expenses (5065)	$ 501,341.08	$ 0.14
Maintenance of Meters (5175)	$ 1,337,511.04	$ 0.37
Meter Reading Expenses (5310)	$ 220,355.44	$ 0.06
Customer Billing (5315)	$ 8,619,115.15	$ 2.42
Amortization Expense - General Plant Assigned to Meters	$ 431,138.17	$ 0.12
Admin and General Expenses allocated to O&M expenses for meters	$ 1,623,168.45	$ 0.45
Allocated PILS (general plant assigned to meters)	$ 18,930.55	$ 0.01
Interest Expense	$ 75,978.22	$ 0.02
Income Expenses	$ 130,272.38	$ 0.04
Total Cost	$ 12,957,810.48	$ 3.63
Number of Residential Customers	297343.25	

Ontario Energy Board

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Sheet O4 Summary of Allocators by Class & Accounts -

ALLOCATION BY RATE CLASSIFICATION

USoA Account #	Accounts	O1 Grouping	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
1565	Conservation and Demand Management Expenditures and Recoveries	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1608	Franchises and Consents	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805	Land	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-1	Land Station >50 kV	do	$1,451,796	$493,015	$145,634	$562,248	$143,803	$99,458	$5,256	$5	$2,354	$0	$24	$0
1805-2	Land Station <50 kV	do	$23,579,177	$8,007,236	$2,365,295	$9,131,690	$2,335,561	$1,615,334	$85,359	$82	$38,230	$0	$391	$0
1806	Land Rights	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-1	Land Rights Station >50 kV	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-2	Land Rights Station <50 kV	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808	Buildings and Fixtures	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-1	Buildings and Fixtures > 50 kV	dp	$4,044,191	$1,373,364	$405,684	$1,566,225	$400,585	$277,055	$14,640	$14	$6,557	$0	$67	$0
1808-2	Buildings and Fixtures < 50 KV	do	$24,842,887	$8,436,378	$2,492,061	$9,621,097	$2,460,734	$1,701,907	$89,934	$87	$40,278	$0	$412	$0
1810	Leasehold Improvements	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-1	Leasehold Improvements >50 kV	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-2	Leasehold Improvements <50 kV	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815	Transformer Station Equipment - Normally Primary above 50 kV	do	$93,555,012	$31,770,279	$9,384,770	$36,231,771	$9,266,798	$6,409,155	$338,678	$326	$151,683	$0	$1,551	$0
1820	Distribution Station Equipment - Normally Primary below 50 kV	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)	dp	$79,000,835	$22,893,520	$8,287,345	$31,512,067	$9,317,704	$6,256,778	$622,841	$0	$51,515	$0	$59,066	$0
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)	dp	$6,869,638	$2,045,988	$670,620	$2,727,720	$797,060	$572,623	$40,210	$44	$15,373	$0	$0	$0
1825	Storage Battery Equipment	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1825-1	Storage Battery Equipment > 50 kV	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1825-2	Storage Battery Equipment <50 kV	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830	Poles, Towers and Fixtures	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830-4	Poles, Towers and Fixtures - Primary	dp	$68,816,835	$32,182,732	$6,555,585	$19,416,856	$5,686,249	$3,815,826	$875,563	$3,381	$244,505	$0	$36,139	$0
1830-5	Poles, Towers and Fixtures - Secondary	do	$29,492,929	$17,859,050	$4,241,138	$6,860,673	$0	$0	$415,289	$1,476	$115,304	$0	$0	$0
1835	Overhead Conductors and Devices	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835-4	Overhead Conductors and Devices - Primary	do	$89,406,132	$41,811,478	$8,516,949	$25,226,182	$7,387,517	$4,957,482	$1,137,523	$4,393	$317,658	$0	$46,951	$0
1835-5	Overhead Conductors and Devices - Secondary	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840	Underground Conduit	dp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840-3	Underground Conduit - Bulk Delivery	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840-4	Underground Conduit - Primary	dp	$70,020,103	$32,745,450	$6,670,210	$19,756,362	$5,785,673	$3,882,546	$890,872	$3,440	$248,780	$0	$36,771	$0
1840-5	Underground Conduit - Secondary	do	$28,599,760	$17,318,203	$4,112,698	$6,652,904	$0	$0	$402,712	$1,431	$111,812	$0	$0	$0
1845	Underground Conductors and Devices	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1845-3	Underground Conductors and Devices - Bulk Delivery	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1845-4	Underground Conductors and Devices - Primary	do	$103,705,636	$48,498,753	$9,879,139	$29,260,826	$8,569,067	$5,750,376	$1,319,457	$5,095	$368,464	$0	$54,460	$0
1845-5	Underground Conductors and Devices - Secondary	do	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1850	Line Transformers	dp	$71,573,323	$38,064,301	$7,589,780	$19,660,372	$2,854,284	$2,045,916	$1,035,577	$4,108	$294,725	$0	$24,261	$0
1855	Services	dp	$50,582,151	$40,640,778	$6,700,653	$2,252,083	$0	$0	$505,861	$7,540	$475,235	$0	$0	$0
1860	Meters	dp	$38,859,558	$28,245,626	$5,868,817	$4,174,109	$487,600	$70,574	$0	$0	$0	$0	$12,832	$0
1905	Land	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	gp	$1,868,075	$885,084	$199,219	$536,319	$132,535	$89,542	$18,678	$76	$5,975	$0	$647	$0
1908	Buildings and Fixtures	gp	$32,877,351	$15,577,120	$3,506,180	$9,438,988	$2,332,554	$1,575,899	$328,728	$1,332	$105,160	$0	$11,389	$0
1910	Leasehold Improvements	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	gp	$1,499,288	$710,355	$159,890	$430,441	$106,370	$71,865	$14,991	$61	$4,796	$0	$519	$0
1920	Computer Equipment - Hardware	gp	$7,727,522	$3,661,260	$824,096	$2,218,548	$548,246	$370,401	$77,264	$313	$24,717	$0	$2,677	$0
1925	Computer Software	gp	$51,325,406	$24,317,714	$5,473,559	$14,735,369	$3,641,391	$2,460,163	$513,183	$2,080	$164,168	$0	$17,779	$0
1930	Transportation Equipment	gp	$13,184,543	$6,246,769	$1,406,056	$3,785,243	$935,406	$631,970	$131,827	$534	$42,172	$0	$4,567	$0
1935	Stores Equipment	gp	$914,862	$433,457	$97,565	$262,654	$64,907	$43,852	$9,147	$37	$2,926	$0	$317	$0
1940	Tools, Shop and Garage Equipment	gp	$4,024,656	$1,906,861	$429,206	$1,155,467	$285,538	$192,912	$40,241	$163	$12,873	$0	$1,394	$0
1945	Measurement and Testing Equipment	gp	$229,016	$108,507	$24,423	$65,750	$16,248	$10,977	$2,290	$9	$733	$0	$79	$0
1950	Power Operated Equipment	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	gp	$2,745,647	$1,300,873	$292,807	$788,267	$194,796	$131,606	$27,453	$111	$8,782	$0	$951	$0
1960	Miscellaneous Equipment	gp	$913,030	$432,589	$97,369	$262,128	$64,777	$43,764	$9,129	$37	$2,920	$0	$316	$0
1970	Load Management Controls - Customer Premises	gp	$134,245	$63,605	$14,316	$38,541	$9,524	$6,435	$1,342	$5	$429	$0	$47	$0
1975	Load Management Controls - Utility Premises	gp	$17,974	$8,516	$1,917	$5,160	$1,275	$862	$180	$1	$57	$0	$6	$0
1980	System Supervisory Equipment	gp	$7,005,560	$3,319,199	$747,103	$2,011,275	$497,025	$335,795	$70,046	$284	$22,408	$0	$2,427	$0
1990	Other Tangible Property	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995	Contributions and Grants - Credit	co	($34,294,412)	($18,605,287)	($3,693,651)	($8,277,262)	($1,861,385)	($1,258,570)	($431,588)	($2,181)	($151,904)	$0	($12,584)	$0
2005	Property Under Capital Leases	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2010	Electric Plant Purchased or Sold	gp	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	accum dep	($91,977,757)	($44,320,057)	($10,043,535)	($25,820,857)	($6,367,257)	($4,265,396)	($856,511)	($3,360)	($267,712)	$0	($33,072)	$0
2120	Accumulated Amortization of Electric Utility Plant - Intangibles	accum dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3046	Balance Transferred From Income	NI	($34,296,633)	($16,132,540)	($3,655,733)	($9,924,349)	($2,461,637)	($1,663,059)	($338,515)	($1,351)	($107,604)	$0	($11,845)	$0
	blank row													
4080	Distribution Services Revenue	CREV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4082	Retail Services Revenues	mi	($171,228)	($102,940)	($17,619)	($35,280)	($8,379)	($5,270)	($1,283)	($10)	($393)	$0	($53)	$0
4084	Service Transaction Requests (STR) Revenues	mi	($6,132)	($3,686)	($631)	($1,263)	($300)	($189)	($46)	($0)	($14)	$0	($2)	$0
4086	SSS Admin Charge	mi	($891,797)	($558,162)	($229,814)	($71,202)	($32,438)	($21)	($14)	$0	($146)	$0	$0	$0
4090	Electric Services Incidental to Energy Sales	mi	($341,400)	($205,246)	($35,130)	($70,343)	($16,705)	($10,508)	($2,558)	($20)	($784)	$0	($105)	$0
4205	Interdepartmental Rents	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4210	Rent from Electric Property	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4215	Other Utility Operating Income	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4220	Other Electric Revenues	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4225	Late Payment Charges	mi	($898,752)	($669,154)	($121,440)	($95,108)	($12,298)	($104)	($159)	($106)	($383)	$0	$0	$0
4235	Miscellaneous Service Revenues	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4235-1	Account Set Up Charges	mi	($1,992,321)	($1,709,838)	($145,188)	($121,911)	($11,048)	($1,595)	($2,171)	($223)	($60)	$0	($287)	$0
4235-90	Miscellaneous Service Revenues - Residual	mi	($3,918,204)	($2,355,577)	($403,179)	($807,320)	($191,725)	($120,598)	($29,363)	($234)	($9,000)	$0	($1,207)	$0
4240	Provision for Rate Refunds	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4245	Government Assistance Directly Credited to Income	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4305	Regulatory Debits	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4310	Regulatory Credits	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4315	Revenues from Electric Plant Leased to Others	mi	($1,839,502)	($1,105,886)	($189,283)	($379,017)	($90,010)	($56,618)	($13,785)	($110)	($4,225)	$0	($567)	$0
4320	Expenses of Electric Plant Leased to Others	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4325	Revenues from Merchandise, Jobbing, Etc.	mi	($5,459,437)	($3,305,821)	($561,095)	($1,109,806)	($263,018)	($164,835)	($40,474)	($329)	($12,385)	$0	($1,676)	$0
4330	Costs and Expenses of Merchandising, Jobbing, Etc.	mi	$4,045,020	$2,431,817	$416,228	$833,450	$197,931	$124,502	$30,313	$241	$9,292	$0	$1,247	$0
4335	Profits and Losses from Financial Instrument Hedges	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4340	Profits and Losses from Financial Instrument Investments	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4345	Gains from Disposition of Future Use Utility Plant	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4350	Losses from Disposition of Future Use Utility Plant	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4355	Gain on Disposition of Utility and Other Property	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4360	Loss on Disposition of Utility and Other Property	mi	($198,349)	($119,245)	($20,410)	($40,869)	($9,706)	($6,105)	($1,486)	($12)	($456)	$0	($61)	$0
4365	Gains from Disposition of Allowances for Emission	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4370	Losses from Disposition of Allowances for Emission	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4375	Revenues from Non-Utility Operations	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4380	Expenses of Non-Utility Operations	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4390	Miscellaneous Non-Operating Income	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4395	Rate-Payer Benefit Including Interest	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4398	Foreign Exchange Gains and Losses, Including Amortization	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4405	Interest and Dividend Income	mi	($27,436)	($16,494)	($2,823)	($5,653)	($1,342)	($844)	($206)	($2)	($63)	$0	($8)	$0
4415	Equity in Earnings of Subsidiary Companies	mi	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4705	Power Purchased	cop	$760,837,744	$226,600,710	$74,273,623	$302,105,069	$88,277,283	$63,420,120	$4,453,391	$4,908	$1,702,641	$0	$0	$0
4708	Charges-WMS	cop	$45,456,690	$13,538,390	$4,437,521	$18,049,442	$5,274,177	$3,789,072	$266,070	$293	$101,725	$0	$0	$0
4710	Cost of Power Adjustments	cop	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4712	Charges-One-Time	cop	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4714	Charges-NW	cop	$53,789,954	$16,020,291	$5,251,021	$21,358,322	$6,241,056	$4,483,696	$314,847	$347	$120,374	$0	$0	$0
4715	System Control and Load Dispatching	cop	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4716	Charges-CN	cop	$30,702,632	$9,144,181	$2,997,217	$12,191,063	$3,562,317	$2,559,238	$179,711	$198	$68,708	$0	$0	$0
4730	Rural Rate Assistance Expense	cop	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4750	Charges-LV	cop	$455,000	$135,513	$44,417	$180,666	$52,792	$37,927	$2,663	$3	$1,018	$0	$0	$0
4751	Charges-Smart Metering Entity	cop	$3,043,466	$2,736,179	$225,564	$15,162	$0	$0	$34,058	$508	$31,996	$0	$0	$0
5005	Operation Supervision and Engineering	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5010	Load Dispatching	di	$3,678,298	$1,755,106	$385,201	$1,045,997	$260,100	$176,449	$40,800	$173	$13,117	$0	$1,356	$0
5012	Station Buildings and Fixtures Expense	di	$343,662	$116,704	$34,474	$133,093	$34,040	$23,543	$1,244	$1	$557	$0	$6	$0
5014	Transformer Station Equipment - Operation Labour	di	$106,833	$36,279	$10,717	$41,374	$10,582	$7,319	$387	$0	$173	$0	$2	$0
5015	Transformer Station Equipment - Operation Supplies and Expenses	di	$29,491	$10,015	$2,958	$11,421	$2,921	$2,020	$107	$0	$48	$0	$0	$0

5016	Distribution Station Equipment - Operation Labour	di	$233,163	$67,568	$24,459	$93,005	$27,500	$18,466	$1,838	$0	$152	$0	$174	$0
5017	Distribution Station Equipment - Operation Supplies and Expenses	di	$57,317	$16,610	$6,013	$22,863	$6,760	$4,539	$452	$0	$37	$0	$43	$0
5020	Overhead Distribution Lines and Feeders - Operation Labour	di	$197,234	$96,511	$20,293	$54,115	$13,737	$9,218	$2,552	$10	$712	$0	$87	$0
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	di	$30,582	$14,964	$3,147	$8,391	$2,130	$1,429	$396	$2	$110	$0	$14	$0
5030	Overhead Subtransmission Feeders - Operation	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5035	Overhead Distribution Transformers- Operation	di	$7,799	$4,148	$827	$2,142	$311	$223	$113	$0	$32	$0	$3	$0
5040	Underground Distribution Lines and Feeders - Operation Labour	di	$469,697	$228,812	$47,967	$129,238	$33,324	$22,363	$6,066	$23	$1,692	$0	$212	$0
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	di	$2,847,751	$1,387,275	$290,820	$783,562	$202,044	$135,584	$36,779	$140	$10,262	$0	$1,284	$0
5050	Underground Subtransmission Feeders - Operation	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5055	Underground Distribution Transformers - Operation	di	$37,472	$19,928	$3,974	$10,293	$1,494	$1,071	$542	$2	$154	$0	$13	$0
5065	Meter Expense	cu	$689,731	$501,341	$104,168	$74,088	$8,655	$1,253	$0	$0	$0	$0	$228	$0
5070	Customer Premises - Operation Labour	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5075	Customer Premises - Materials and Expenses	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5085	Miscellaneous Distribution Expense	di	$11,761,693	$5,612,110	$1,231,716	$3,344,671	$831,693	$564,211	$130,460	$552	$41,943	$0	$4,337	$0
5090	Underground Distribution Lines and Feeders - Rental Paid	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5095	Overhead Distribution Lines and Feeders - Rental Paid	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5096	Other Rent	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5105	Maintenance Supervision and Engineering	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5110	Maintenance of Buildings and Fixtures - Distribution Stations	di	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5112	Maintenance of Transformer Station Equipment	di	$330,675	$112,294	$33,171	$128,063	$32,754	$22,653	$1,197	$1	$536	$0	$5	$0
5114	Maintenance of Distribution Station Equipment	di	$709,895	$205,719	$74,469	$283,165	$83,728	$56,223	$5,597	$0	$463	$0	$531	$0
5120	Maintenance of Poles, Towers and Fixtures	di	$579,188	$294,819	$63,608	$154,813	$33,500	$22,481	$7,605	$29	$2,120	$0	$213	$0
5125	Maintenance of Overhead Conductors and Devices	di	$879,712	$411,404	$83,803	$248,213	$72,690	$48,779	$11,193	$43	$3,126	$0	$462	$0
5130	Maintenance of Overhead Services	di	$575,820	$462,649	$76,279	$25,637	$0	$0	$5,759	$86	$5,410	$0	$0	$0
5135	Overhead Distribution Lines and Feeders - Right of Way	di	$3,506,963	$1,716,029	$360,824	$962,207	$244,248	$163,905	$45,368	$173	$12,657	$0	$1,552	$0
5145	Maintenance of Underground Conduit	di	$66,866	$33,944	$7,311	$17,906	$3,923	$2,632	$877	$3	$244	$0	$25	$0
5150	Maintenance of Underground Conductors and Devices	di	$1,036,475	$484,716	$98,736	$292,444	$85,643	$57,472	$13,187	$51	$3,683	$0	$544	$0
5155	Maintenance of Underground Services	di	$355,577	$285,692	$47,104	$15,831	$0	$0	$3,556	$53	$3,341	$0	$0	$0
5160	Maintenance of Line Transformers	di	$505,145	$268,647	$53,567	$138,758	$20,145	$14,440	$7,309	$29	$2,080	$0	$171	$0
5175	Maintenance of Meters	cu	$1,840,111	$1,337,511	$277,905	$197,656	$23,089	$3,342	$0	$0	$0	$0	$608	$0
5305	Supervision	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5310	Meter Reading Expense	cu	$371,040	$220,355	$18,166	$118,476	$11,992	$1,736	$0	$0	$0	$0	$316	$0
5315	Customer Billing	cu	$10,043,085	$8,619,115	$731,880	$614,539	$55,692	$8,041	$10,946	$1,125	$302	$0	$1,444	$0
5320	Collecting	cu	$2,141,494	$1,837,860	$156,059	$131,039	$11,875	$1,715	$2,334	$240	$64	$0	$308	$0
5325	Collecting- Cash Over and Short	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5330	Collection Charges	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5335	Bad Debt Expense	cu	$1,979,175	$1,339,901	$417,606	$148,439	$73,229	$0	$0	$0	$0	$0	$0	$0
5340	Miscellaneous Customer Accounts Expenses	cu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5405	Supervision	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5410	Community Relations - Sundry	ad	$6,162,315	$3,731,431	$633,333	$1,252,689	$296,880	$186,057	$45,684	$371	$13,979	$0	$1,891	$0
5415	Energy Conservation	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5420	Community Safety Program	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5425	Miscellaneous Customer Service and Informational Expenses	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5505	Supervision	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5510	Demonstrating and Selling Expense	ad	$261,592	$158,400	$26,885	$53,177	$12,603	$7,898	$1,939	$16	$593	$0	$80	$0
5515	Advertising Expense	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5520	Miscellaneous Sales Expense	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5605	Executive Salaries and Expenses	ad	$3,268,460	$1,979,131	$335,917	$664,420	$157,464	$98,684	$24,231	$197	$7,414	$0	$1,003	$0
5610	Management Salaries and Expenses	ad	$8,998,638	$5,448,892	$924,837	$1,829,263	$433,525	$271,693	$66,711	$542	$20,413	$0	$2,762	$0
5615	General Administrative Salaries and Expenses	ad	$2,349,300	$1,422,558	$241,450	$477,571	$113,182	$70,932	$17,417	$142	$5,329	$0	$721	$0
5620	Office Supplies and Expenses	ad	$4,071,458	$2,465,366	$418,445	$827,655	$196,150	$122,928	$30,184	$245	$9,236	$0	$1,250	$0
5625	Administrative Expense Transferred Credit	ad	$769,912	$466,200	$79,128	$156,509	$37,092	$23,246	$5,708	$46	$1,747	$0	$236	$0
5630	Outside Services Employed	ad	$1,066,760	$645,949	$109,636	$216,853	$51,393	$32,208	$7,908	$64	$2,420	$0	$327	$0
5635	Property Insurance	ad	$725,333	$343,659	$77,353	$208,241	$51,460	$34,767	$7,252	$29	$2,320	$0	$251	$0
5640	Injuries and Damages	ad	$927,756	$561,779	$95,350	$188,596	$44,696	$28,011	$6,878	$56	$2,105	$0	$285	$0
5645	Employee Pensions and Benefits	ad	$622,805	$377,123	$64,009	$126,605	$30,005	$18,804	$4,617	$38	$1,413	$0	$191	$0
5650	Franchise Requirements	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5655	Regulatory Expenses	ad	$1,365,775	$827,010	$140,368	$277,638	$65,799	$41,236	$10,125	$82	$3,098	$0	$419	$0
5660	General Advertising Expenses	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5665	Miscellaneous General Expenses	ad	$2,713,269	$1,642,950	$278,857	$551,559	$130,716	$81,921	$20,115	$164	$6,155	$0	$833	$0
5670	Rent	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5675	Maintenance of General Plant	ad	$6,092,313	$3,689,042	$626,138	$1,238,459	$293,508	$183,943	$45,165	$367	$13,820	$0	$1,870	$0
5680	Electrical Safety Authority Fees	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5685	Independent Market Operator Fees and Penalties	cop	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5705	Amortization Expense - Property, Plant, and Equipment	dep	$40,755,585	$19,986,126	$4,475,383	$11,210,142	$2,738,787	$1,829,603	$380,276	$1,511	$119,133	$0	$14,625	$0
5710	Amortization of Limited Term Electric Plant	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5715	Amortization of Intangibles and Other Electric Plant	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5720	Amortization of Electric Plant Acquisition Adjustments	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5730	Amortization of Unrecovered Plant and Regulatory Study Costs	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5735	Amortization of Deferred Development Costs	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5740	Amortization of Deferred Charges	dep	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6005	Interest on Long Term Debt	INT	$20,002,681	$9,408,914	$2,132,118	$5,788,136	$1,435,690	$969,939	$197,430	$788	$62,757	$0	$6,908	$0
6105	Taxes Other Than Income Taxes	ad	$2,087,844	$982,086	$222,547	$604,155	$149,855	$101,240	$20,607	$82	$6,551	$0	$721	$0
6110	Income Taxes	Inout	$4,983,819	$2,344,302	$531,233	$1,442,158	$357,713	$241,668	$49,191	$196	$15,637	$0	$1,721	$0
6205-1	Sub-account LEAP Funding	ad	$210,088	$127,213	$21,592	$42,707	$10,121	$6,343	$1,557	$13	$477	$0	$64	$0
6210	Life Insurance	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6215	Penalties	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6225	Other Deductions	ad	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
			$1,783,731,936	**$696,861,365**	**$181,787,944**	**$604,708,239**	**$165,395,972**	**$116,004,140**	**$13,866,822**	**$42,715**	**$4,758,823**	**$0**	**$305,916**	**$0**
				$1,783,731,936										

Grouping by Allocator	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
1808	$ 343,662	$ 116,704	$ 34,474	$ 133,093	$ 34,040	$ 23,543	$ 1,244	$ 1	$ 557	$ -	$ 6	$ -
1815	$ 466,999	$ 158,588	$ 46,846	$ 180,858	$ 46,257	$ 31,993	$ 1,691	$ 2	$ 757	$ -	$ 8	$ -
1820	$ 1,000,375	$ 289,897	$ 104,941	$ 399,032	$ 117,989	$ 79,229	$ 7,887	$ -	$ 652	$ -	$ 748	$ -
1830	$ 579,188	$ 294,819	$ 63,608	$ 154,813	$ 33,500	$ 22,481	$ 7,605	$ 29	$ 2,120	$ -	$ 213	$ -
1835	$ 879,712	$ 411,404	$ 83,803	$ 248,213	$ 72,690	$ 48,779	$ 11,193	$ 43	$ 3,126	$ -	$ 462	$ -
1840	$ 66,866	$ 33,944	$ 7,311	$ 17,906	$ 3,923	$ 2,632	$ 877	$ 3	$ 244	$ -	$ 25	$ -
1845	$ 1,036,475	$ 484,716	$ 98,736	$ 292,444	$ 85,643	$ 57,472	$ 13,187	$ 51	$ 3,683	$ -	$ 544	$ -
1850	$ 550,416	$ 292,724	$ 58,367	$ 151,193	$ 21,950	$ 15,734	$ 7,964	$ 32	$ 2,267	$ -	$ 187	$ -
1855	$ 931,397	$ 748,341	$ 123,383	$ 41,469	$ -	$ -	$ 9,315	$ 139	$ 8,751	$ -	$ -	$ -
1860	$ 1,840,111	$ 1,337,511	$ 277,905	$ 197,656	$ 23,089	$ 3,342	$ -	$ -	$ -	$ -	$ 608	$ -
1815-1855	$ 15,439,991	$ 7,367,216	$ 1,616,917	$ 4,390,668	$ 1,091,792	$ 740,660	$ 171,260	$ 725	$ 55,060	$ -	$ 5,693	$ -
1830 & 1835	$ 3,734,779	$ 1,827,504	$ 384,263	$ 1,024,713	$ 260,114	$ 174,553	$ 48,315	$ 184	$ 13,479	$ -	$ 1,653	$ -
1840 & 1845	$ 3,317,448	$ 1,616,087	$ 338,787	$ 912,800	$ 235,369	$ 157,947	$ 42,845	$ 163	$ 11,954	$ -	$ 1,496	$ -
BCP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
BDHA	$ 1,979,175	$ 1,339,901	$ 417,606	$ 148,439	$ 73,229	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Break Out	-$ 85,516,584	-$ 42,939,218	-$ 9,261,804	-$ 22,887,977	-$ 5,489,854	-$ 3,694,364	-$ 907,824	-$ 4,030	-$ 300,483	$ -	-$ 31,031	$ -
CCA	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CDMPP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CEN	$ 91,362,225	$ 27,210,460	$ 8,918,858	$ 36,277,106	$ 10,600,432	$ 7,615,557	$ 534,768	$ 589	$ 204,455	$ -	$ -	$ -
CEN EWMP	$ 809,792,900	$ 243,010,791	$ 78,981,125	$320,350,339	$ 93,604,252	$ 67,247,118	$ 4,756,182	$ 5,712	$ 1,837,380	$ -	$ -	$ -
CREV	-$ 891,797	-$ 558,162	-$ 229,814	-$ 71,202	-$ 32,438	-$ 21	-$ 14	$ -	-$ 146	$ -	$ -	$ -
CWCS	$ 50,582,151	$ 40,640,778	$ 6,700,653	$ 2,252,083	$ -	$ -	$ 505,861	$ 7,540	$ 475,235	$ -	$ -	$ -
CWMC	$ 39,549,289	$ 28,746,968	$ 5,972,985	$ 4,248,196	$ 496,255	$ 71,826	$ -	$ -	$ -	$ -	$ 13,059	$ -
CWMR	$ 371,040	$ 220,355	$ 18,166	$ 118,476	$ 11,992	$ 1,736	$ -	$ -	$ -	$ -	$ 316	$ -
CWNB	$ 11,665,819	$ 10,145,103	$ 834,559	$ 638,691	$ 42,183	-$ 6,211	$ 9,393	$ 1,335	-$ 825	$ -	$ 1,592	$ -
DCP	$ 48,422,064	$ 16,443,614	$ 4,857,356	$ 18,752,786	$ 4,796,296	$ 3,317,241	$ 175,292	$ 169	$ 78,508	$ -	$ 803	$ -
LPHA	-$ 898,752	-$ 669,154	-$ 121,440	-$ 95,108	-$ 12,298	-$ 104	-$ 159	-$ 106	-$ 383	$ -	$ -	$ -
LTNCP	$ 71,573,323	$ 38,064,301	$ 7,589,780	$ 19,660,372	$ 2,854,284	$ 2,045,916	$ 1,035,577	$ 4,108	$ 294,725	$ -	$ 24,261	$ -
NFA	-$ 10,701,993	-$ 5,512,868	-$ 1,127,218	-$ 2,791,794	-$ 684,525	-$ 454,113	-$ 96,923	-$ 495	-$ 30,497	$ -	-$ 3,560	$ -
NFA ECC	$ 125,192,510	$ 59,315,570	$ 13,351,061	$ 35,942,392	$ 8,882,051	$ 6,000,809	$ 1,251,751	$ 5,074	$ 400,437	$ -	$ 43,366	$ -
O&M	$ 38,880,442	$ 23,543,045	$ 3,995,944	$ 7,903,700	$ 1,873,133	$ 1,173,904	$ 288,240	$ 2,343	$ 88,199	$ -	$ 11,933	$ -
PNCP	$ 410,949,541	$ 178,131,931	$ 39,909,228	$125,172,292	$ 36,746,210	$ 24,663,007	$ 4,846,256	$ 16,309	$ 1,230,921	$ -	$ 233,387	$ -
SNCP	$ 58,092,690	$ 35,177,253	$ 8,353,836	$ 13,513,577	$ -	$ -	$ 818,001	$ 2,907	$ 227,116	$ -	$ -	$ -
TCP	$ 99,050,999	$ 33,636,658	$ 9,936,089	$ 38,360,244	$ 9,811,186	$ 6,785,667	$ 358,574	$ 346	$ 160,594	$ -	$ 1,642	$ -
Total	**$ 1,789,642,461**	**$ 700,926,780**	**$ 182,336,311**	**$605,637,470**	**##########**	**$ 116,126,334**	**$ 13,898,356**	**$ 43,171**	**$ 4,767,883**	**$ -**	**$ 307,410**	**$ -**

Ontario Energy Board

2016 Cost Allocation Model

Sheet 8a Details of Allocators for Rates and Account 1576 Worksheet

Uniform System of Accounts - Detail Accounts

Categorizers

| Uniform System of Accounts | Accounts | Distribution Revenue | Purchased Power Allocator (Kwh Sales to Non-Wholesale Customers) | MS-CAP TB | Customer | Customer | Customer | Customer | Customer | MS-CAP & LVDS | MS-CAP & LVDS | Large Users | Street Light | Sentinel | Unmetered Scattered Load | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | MS-CAP | MS-CAP & LVDS | MS-CAP & LVDS | MS-CAP & LVDS | Large Users | Street Light | Sentinel | Unmetered Scattered Load | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | MS-CAP | MS-CAP & LVDS | MS-CAP & LVDS | MS-CAP & LVDS | Large Users | Street Light | Sentinel | Unmetered Scattered Load | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Weekly/Daily Usage | Allocators 1 | Allocators 2

Ontario Energy Board

2016 Cost Allocation Model

Sheet O6 Composite Allocator Detail Worksheet - -

Notes:
Worksheet Details How Various Composite Allocators are Derived

Demand Allocators can be found in columns C to AG
Customer Allocators can be found in columns AJ to BU

	Demand Allocators													Customer Allocators												
	Demand Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499	Standby Power GS 1,500 to 4,999	Standby Power Large Use	Customer Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499	Standby Power GS 1,500 to 4,999	Standby Power Large Use	Total
Composite allocators																										
Rate Base																										
1820.1 Leased Station (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1820.2 Leased Station (49.9%)		$455,015	$145,034	$102,248	$14,953	$49,458	$5,250	$0	$2,250	$0	$24	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1820.3 Leased Station (49.9%)		$1,179,000	$375,800	$264,900	$38,750	$128,200	$13,600	$0	$5,800	$0	$62	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1820 Total	$78,500,000	$2,633,000	$1,023,000	$183,000	$1,276,000	$1,712,700	$93,000	$67	$40,100	$0	$123	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$78,500,000
1830.1 Leased Stable Station (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.2 Leased Stable Station (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.3 Leased Stable Station (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830 Total																										
1840.1 Unamortized Deferred Charges (49.9%)		$1,173,300	$600,000	$1,153,200	$400,000	$777,000	$14,000	$0	$6,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840.2 Unamortized Deferred Charges (49.9%)		$4,439,000	$1,400,000	$983,000	$143,000	$475,000	$50,000	$0	$22,000	$0	$232	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840.3 Unamortized Deferred Charges (49.9%)	$78,500,000	$3,609,700	$2,987,100	$11,107,500	$2,051,100	$3,978,900	$320,570	$103	$68,830	$0	$679	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$78,500,000
1840 Total																										
1860.1 Unamortized Development (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.2 Unamortized Development (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.3 Unamortized Development (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860 Total																										
1915.1 Transformer Station Equipment - Normally Primary (49.9%)	$99,999,912	$11,779,279	$9,384,770	$36,215,771	$8,096,799	$8,499,155	$338,679	$320	$191,600	$0	$1,333	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$99,999,912
1915.2 Distribution Station Equipment - Normally Primary(49.9%) Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915.3 Distribution Station Equipment - Normally Primary(49.9%) Primary	$79,000,835	$2,093,920	$8,267,345	$31,512,067	$13,717,704	$8,296,778	$622,641	$0	$51,315	$0	$99,066	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$79,000,835
1915 Total	$178,999,747	$13,873,199	$17,652,115	$67,727,838	$21,814,503	$16,795,933	$961,320	$320	$242,915	$0	$100,399	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$178,999,747
1920.1 Station Buildings (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920.2 Station Buildings (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920.3 Station Buildings (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920 Total																										
1925.1 Distribution Station Equipment - Normally Primary(49.9%) Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925.2 Distribution Station Equipment - Normally Primary(49.9%) Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925.3 Distribution Station Equipment - Normally Primary(49.9%) Primary	$79,000,835	$2,093,920	$8,267,345	$31,512,067	$13,717,704	$8,296,778	$622,641	$0	$51,315	$0	$99,066	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$79,000,835
1925 Total	$158,000,670	$4,187,839	$16,534,690	$63,024,134	$27,435,408	$16,593,556	$1,245,282	$0	$102,630	$0	$198,132	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$158,000,670
1930.1 Power Plant (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930.2 Power Plant (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930.3 Power Plant (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930 Total																										
1940.1 Poles, Towers and Fixtures (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1940.2 Poles, Towers and Fixtures (49.9%)	$119,000,000	$3,155,000	$12,450,000	$47,500,000	$20,675,000	$12,500,000	$937,000	$0	$77,300	$0	$149,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$119,000,000
1940.3 Poles, Towers and Fixtures (49.9%)	$158,000,000	$4,188,000	$16,500,000	$63,000,000	$27,400,000	$16,600,000	$1,243,000	$0	$102,500	$0	$198,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$158,000,000
1940 Total																										
1955.1 Overhead Conductors and Cables (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955.2 Overhead Conductors and Cables - Primary (49.9%)	$119,139,000	$9,583,000	$24,663,750	$7,381,000	$1,958,000	$400,000	$0	$0	$0	$0	$0	$0	$0	$29,621,000	$23,675,250	$1,951,750	$262,000	$0	$0	$0	$0	$0	$0	$0	$0	$29,621,000
1955.3 Overhead Conductors and Cables - Primary (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955 Total	$119,139,000	$9,583,000	$24,663,750	$7,381,000	$1,958,000	$400,000	$0	$0	$0	$0	$0	$0	$0	$29,621,000	$23,675,250	$1,951,750	$262,000	$0	$0	$0	$0	$0	$0	$0	$0	$29,621,000
1960.1 Underground Conduit (49.9%)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1960.2 Underground Conduit - Primary		$11,777,700	$3,117,273	$13,000,000	$5,190,000	$1,000,000	$700,000	$0	$77,300	$0	$148,400	$0	$0	$31,016,000	$18,618,700	$1,378,000	$669,000	$0	$0	$0	$0	$0	$0	$0	$0	$31,016,000
1960.3 Underground Conduit - Secondary		$8,616,000	$1,216,000	$4,215,000	$0	$0	$700,000	$0	$77,300	$0	$0	$0	$0	$8,616,000	$7,773,000	$843,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,616,000
1960 Total	$0	$20,393,700	$4,333,273	$17,215,000	$5,190,000	$1,000,000	$1,400,000	$0	$154,600	$0	$148,400	$0	$0	$39,632,000	$26,391,700	$2,221,000	$669,000	$0	$0	$0	$0	$0	$0	$0	$0	$39,632,000
1965.1 Underground Conductors and Cables - Sub Transmission (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1965.2 Underground Conductors and Cables - Primary	$21,036,878	$7,610,249	$28,956,669	$9,563,648	$5,749,360	$572,329	$0	$47,337	$0	$94,276	$0	$32,131,691	$27,442,879	$2,263,950	$364,356	$7,024	$1,016	$747,128	$5,095	$321,127	$0	$185	$0	$33,151,680
1965.3 Underground Conductors and Cables - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1965 Total	$21,036,878	$7,610,249	$28,956,669	$9,563,648	$5,749,360	$572,329	$0	$47,337	$0	$94,276	$0	$32,131,691	$27,442,879	$2,263,950	$364,356	$7,024	$1,016	$747,128	$5,095	$321,127	$0	$185	$0	$33,151,680
1970 Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970.1 Services (49.9%)	$12,000,000	$4,000,000	$2,000,000	$4,000,000	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970 Total	$12,000,000	$4,000,000	$2,000,000	$4,000,000	$2,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975.1 Street Lighting (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980.1 Smart Meters (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990.1 Other Distribution Assets (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995.1 Contributions and Grants (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2005.1 Land (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2005 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2006.1 Buildings and Fixtures (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2006 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2008.1 Computer Software (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2008 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2010.1 Equipment for Rental (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2010 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2015.1 Furniture (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2015 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2020.1 Office Equipment (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2020 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2030.1 Transportation (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2030 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2040.1 Stores Equipment (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2040 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2055.1 Tools and Equipment (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2055 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2060.1 Stand By Power Equipment (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2060 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2065.1 Other Tangible Property (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2065 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2075.1 Water Rights (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2075 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2080.1 Rail Car (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2080 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2085.1 Other (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2085 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2095.1 Work in Progress (49.9%)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2095 Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$ 87,765,525	$ 20,170,139	$ 2,231,951	$ 7,732,313	$ 1,180,037	$ 1,111,529	$ 238,252	$ 16	$ 16,546	$ -	$ 21,058	$ -	$ 29,191,017	$ 21,266,333	$ 2,485,205	$ 1,489,889	$ 264,252	$ 29,545	$ 179,388	$ 2,727	$ 39,420	$ -	$ 2,922	$ -	$ -

Grouping of Operating and Maintenance Distribution Costs (lines 108 - 148)

	Demand Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499	Standby Power GS 1,500 to 4,999	Standby Power Large Use	Customer Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499	Standby Power GS 1,500 to 4,999	Standby Power Large Use	Total
5005	$ 329,605	$ 118,750	$ 32,472	$ 139,589	$ 14,583	$ 19,425	$ 1,742	$ 1	$ 237	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5010	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5012	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5014	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5016	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5017	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5020	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5025	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5030	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5035	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5040	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5045	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5050	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5055	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5060	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5065	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5070	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5075	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5080	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5085	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5090	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5095	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5096	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5097	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5098	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5099	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5100	$ 1,502,570	$ 538,800	$ 148,000	$ 635,000	$ 66,000	$ 88,500	$ 7,900	$ 0	$ 1,100	$ -	$ -	$ -	$ -	$ -	$ -

Ontario Energy Board

2016 Cost Allocation Model

Sheet O1 Amortization Expense Worksheet -

Categorization and Allocation of Contributed Capital Contributed Capital - 1995

Account	Description	Contributed Capital	Demand Allocators 1 Demand	2 Customer	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	12 Sub-total
1805	Communication and Demand Management	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-1	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-2	Land Rights, HP,KV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-1	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-2	Land Rights, Station >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1807	Buildings and Fixtures - Leased	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-1	Buildings and Fixtures > 50 kV	(987,141)	(987,141)	$0	(987,141)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(987,141)
1808-2	Buildings and Fixtures < 50 kV	(987,141)	(987,141)	$0	(987,141)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(87,070)	(987,141)
1809	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-1	Leasehold Improvements >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-2	Leasehold Improvements <50 kV (Offset)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810	Transformer Station Equipment - Normally Primary above 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-1	Distribution Station Equipment - Normally Primary below 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-2	Distribution Station Equipment - Normally Primary below 50 kV (Step)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meter)	$(136,343)	$(136,343)	$0	$(136,343)	$(19,011)	$(14,330)	$(11,391)	$(10,081)	$(13,758)	$(1,575)	$(89)	$(120)	$0	$(136,343)	$0	$0
1811	Distribution Station Equipment - Normally Primary below 50 kV (Meter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812	Power Station Equipment	$(811,950)	$0	$(811,950)	$(811,950)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$(811,950)	$0	$(811,950)
1812-1	Power Station Equipment > 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812-2	Power Station Equipment < 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813	Poles, Towers and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-2	Poles, Towers and Fixtures - Primary - Retirement	(4,797,329)	(4,797,329)	$0	(4,797,329)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,797,329)
1813-3	Poles, Towers and Fixtures - Secondary	(9,532,430)	(9,532,430)	$0	(9,532,430)	(8,992,730)	(8,072,899)	$0	$0	(59,350)	$0	$0	$0	$0	(9,532,430)	$0	(9,532,430)
1813-4	Poles, Towers and Fixtures - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814	Underground Conduits and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814-1	Underground Conduits and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815	Overhead Conductors and Devices - Primary	$(2,611,339)	$(1,323,213)	$(700,182)	$(2,011,395)	$(979,700)	$(131,175)	$(273,281)	$(213,014)	$(516,785)	$(11,412)	$0	$(1,367)	$0	$(1,925,518)	$(85,877)	$(2,011,395)
1815-1	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-2	Overhead Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-3	Overhead Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-4	Overhead Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-5	Overhead Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-6	Overhead Conductors and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-7	Overhead Conductors and Devices - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-1	Underground Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-2	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-3	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-4	Underground Conduit - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-5	Underground Conduit - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-1	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-2	Line Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-3	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1818	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	TOTAL - 1995	$(23,332,192)	$(21,317,656)	$(2,014,536)	$(23,332,192)	$(18,104,535)	$(12,361,728)	$(12,672,996)	$(12,535,500)	$(14,294,997)	$(4,124,311)	$(89)	$(89,076)	$0	$(2,874,291)	$(1,197,124)	$(23,332,192)

Account	Description	Customer Allocators 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	12 Sub-total	A & G Allocators 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	12 Sub-total
1805	Communication and Demand Management	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-1	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-2	Land Rights, HP,KV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-1	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-2	Land Rights, Station >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1807	Buildings and Fixtures - Leased	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-1	Buildings and Fixtures > 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-2	Buildings and Fixtures < 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-1	Leasehold Improvements >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-2	Leasehold Improvements <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810	Transformer Station Equipment - Normally Primary above 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-1	Distribution Station Equipment - Normally Primary below 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-2	Distribution Station Equipment - Normally Primary below 50 kV (Step)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meter)	$(19,011)	$(14,330)	$(11,391)	$(10,081)	$(13,758)	$(1,575)	$(89)	$(120)	$0	$(136,343)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1811	Distribution Station Equipment - Normally Primary below 50 kV (Meter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812	Power Station Equipment	$(811,950)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$(811,950)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812-1	Power Station Equipment > 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812-2	Power Station Equipment < 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813	Poles, Towers and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-2	Poles, Towers and Fixtures - Primary - Retirement	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,024,254)	(4,797,329)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-3	Poles, Towers and Fixtures - Secondary	(8,072,899)	$0	$0	$0	(59,350)	$0	$0	$0	$0	(9,532,430)	$0	(9,532,430)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-4	Poles, Towers and Fixtures - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814	Underground Conduits and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814-1	Underground Conduits and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815	Overhead Conductors and Devices - Primary	$(979,700)	$(131,175)	$(273,281)	$(213,014)	$(516,785)	$(11,412)	$0	$(1,367)	$0	$(1,925,518)	$(85,877)	$(2,011,395)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-1	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-2	Overhead Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-3	Overhead Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-4	Overhead Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-5	Overhead Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-6	Overhead Conductors and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-7	Overhead Conductors and Devices - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-1	Underground Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-2	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-3	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-4	Underground Conduit - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-5	Underground Conduit - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-1	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-2	Line Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-3	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1818	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	TOTAL - 1995	$(13,908,814)	$(4,170,759)	$(4,309,926)	$(4,248,349)	$(4,614,147)	$(1,037,241)	$(89)	$(1,487)	$0	$(11,594,291)	$(85,877)	$(23,332,192)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Accumulated Depreciation - 2105 Capital Contribution

Account	Description	Accumulated Depreciation	Demand Allocators 1 Demand	2 Customer	Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	12 Sub-total
1805	Communication and Demand Management	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-1	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1805-2	Land Rights, HP,KV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-1	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1806-2	Land Rights, Station >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1807	Buildings and Fixtures - Leased	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-1	Buildings and Fixtures > 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1808-2	Buildings and Fixtures < 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-1	Leasehold Improvements >50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1809-2	Leasehold Improvements <50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810	Transformer Station Equipment - Normally Primary above 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-1	Distribution Station Equipment - Normally Primary below 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-2	Distribution Station Equipment - Normally Primary below 50 kV (Step)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1810-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1811	Distribution Station Equipment - Normally Primary below 50 kV (Meter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812	Power Station Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812-1	Power Station Equipment > 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1812-2	Power Station Equipment < 50 kV	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813	Poles, Towers and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-2	Poles, Towers and Fixtures - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-3	Poles, Towers and Fixtures - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1813-4	Poles, Towers and Fixtures - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814	Underground Conduits and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1814-1	Underground Conduits and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-1	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-2	Overhead Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-3	Overhead Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-4	Overhead Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-5	Overhead Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-6	Overhead Conductors and Devices - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1815-7	Overhead Conductors and Devices - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-1	Underground Conduit - Multi Phase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-2	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-3	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-4	Underground Conduit - Primary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1816-5	Underground Conduit - Secondary - Retirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-1	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-2	Line Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1817-3	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1818	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	TOTAL - 2105	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

| Account | Description | Customer Allocators 1 Residential | 2 GS <50 | 3 GS 50 to 1,499 kW | 4 GS 1,500 to 4,999 kW | 5 Large Use | 6 Street Light | 7 Sentinel |

Account	Description	Demand	Customer	Total	Demand Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1830.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.2	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.3	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835.1	Underground Conductors and Devices - Primary	$1,999,560	$1,720,608	$3,720,168	$1,169,974	$3,890,560	$756,633	$286,397	$1,099,203	$320,880	$215,489	$21,439	$0	$1,774	$0	$2,253
1835.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840	Underground Conduit	$7,044,488	$7,248,745	$14,293,233	$6,006,745	$7,744,349	$1,577,766	$594,285	$2,281,401	$666,180	$447,174	$44,508	$0	$3,682	$0	$4,677
1845	Transformers	$7,044,488	$7,248,745	$14,293,233	$6,006,745	$7,744,349	$1,577,766	$594,285	$2,281,401	$666,180	$447,174	$44,508	$0	$3,682	$0	$4,677
1850	Services	$7,044,488	$7,248,745	$14,293,233	$6,006,745	$7,744,349	$1,577,766	$594,285	$2,281,401	$666,180	$447,174	$44,508	$0	$3,682	$0	$4,677
1855	Meters	$7,044,488	$7,248,745	$14,293,233	$6,006,745	$7,744,349	$1,577,766	$594,285	$2,281,401	$666,180	$447,174	$44,508	$0	$3,682	$0	$4,677
	Sub-Total	$27,133,024	$27,466,843	$54,599,867	$23,190,209	$27,923,607	$6,309,064	$2,377,141	$9,125,604	$2,664,720	$1,788,696	$178,032	$0	$14,729	$0	$18,708
	General Plant															
1905	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1908	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920	Computer Equipment - Hardware	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925	Computer Software	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1935	Stores Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1940	Tools, Shop and Garage Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1945	Measurement and Testing Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1950	Power Operated Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970	Load Management Controls - Customer Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975	Load Management Controls - Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980	System Supervisory Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995	Contributions & Grants - Credit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total - GPP	$27,133,024	$27,466,843	$54,599,867	$23,190,209	$27,923,607	$6,309,064	$2,377,141	$9,125,604	$2,664,720	$1,788,696	$178,032	$0	$14,729	$0	$18,708

Account	Description	Customer Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1830.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.2	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.3	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835.1	Underground Conductors and Devices - Primary	$1,729,409	$1,529,190	$84,664	$11,406	$292	$38	$38,092	$191	$12,235	$0	$7	$0
1835.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840	Underground Conduit	$6,372,775	$5,637,375	$312,203	$42,079	$1,077	$140	$140,574	$704	$45,146	$0	$26	$0
1845	Transformers	$6,372,775	$5,637,375	$312,203	$42,079	$1,077	$140	$140,574	$704	$45,146	$0	$26	$0
1850	Services	$6,372,775	$5,637,375	$312,203	$42,079	$1,077	$140	$140,574	$704	$45,146	$0	$26	$0
1855	Meters	$6,372,775	$5,637,375	$312,203	$42,079	$1,077	$140	$140,574	$704	$45,146	$0	$26	$0
	Sub-Total	$24,540,509	$21,708,690	$1,202,276	$162,022	$4,146	$538	$541,307	$2,711	$173,673	$0	$100	$0
	General Plant												
1905	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1908	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920	Computer Equipment - Hardware	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925	Computer Software	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1935	Stores Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1940	Tools, Shop and Garage Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1945	Measurement and Testing Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1950	Power Operated Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970	Load Management Controls - Customer Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975	Load Management Controls - Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980	System Supervisory Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995	Contributions & Grants - Credit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total - GPP	$24,540,509	$21,708,690	$1,202,276	$162,022	$4,146	$538	$541,307	$2,711	$173,673	$0	$100	$0

Account	Description	A & G Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1830.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.2	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1830.3	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835.1	Underground Conductors and Devices - Primary	$7	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1835.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1840	Underground Conduit	$26	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1845	Transformers	$26	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1850	Services	$26	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1855	Meters	$26	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub-Total	$100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	General Plant												
1905	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1908	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920	Computer Equipment - Hardware	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925	Computer Software	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1935	Stores Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1940	Tools, Shop and Garage Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1945	Measurement and Testing Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1950	Power Operated Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970	Load Management Controls - Customer Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975	Load Management Controls - Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980	System Supervisory Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995	Contributions & Grants - Credit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total - GPP	$100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Transcription and Allocation of Amortization of Limited Term Electric Plant - 3731

Account	Description	Demand	Customer	Total	Demand Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1855	Transformer Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.1	Distribution Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.2	Distribution Station Equipment - Normally Energized (Winter below 50 kV Bulk)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.3	Distribution Station Equipment - Normally Energized (Winter below 50 kV Primary)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.4	Distribution Station Equipment - Normally Energized (Winter below 50 kV Secondary Delivery)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865	Poles, Towers and Fixtures - Substation Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.2	Poles, Towers and Fixtures - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.2	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.1	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.2	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.3	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.4	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.1	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1885	Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1890	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1895	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	General Plant															
1905	Land	$0														
1906	Land Rights	$0														
1908	Buildings and Fixtures	$0														
1910	Leasehold Improvements	$0														
1915	Office Furniture and Equipment	$0														
1920	Computer Equipment - Hardware	$0														
1925	Computer Software	$0														
1930	Transportation Equipment	$0														
1935	Stores Equipment	$0														
1940	Tools, Shop and Garage Equipment	$0														
1945	Measurement and Testing Equipment	$0														
1950	Power Operated Equipment	$0														
1955	Communication Equipment	$0														
1960	Miscellaneous Equipment	$0														
1970	Load Management Controls - Customer Premises	$0														
1975	Load Management Controls - Utility Premises	$0														
1980	System Supervisory Equipment	$0														
1985	Miscellaneous Fixed Assets	$0														
1990	Other Tangible Property	$0														
1995	Contributions & Grants - Credit	$0														
	Sub - Total	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total - GPP	$0			$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Account	Description	Customer Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1855	Transformer Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.1	Distribution Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.2	Distribution Station Equipment - Normally Energized (Winter below 50 kV Bulk)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.3	Distribution Station Equipment - Normally Energized (Winter below 50 kV Primary)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.4	Distribution Station Equipment - Normally Energized (Winter below 50 kV Secondary Delivery)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865	Poles, Towers and Fixtures - Substation Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.2	Poles, Towers and Fixtures - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.2	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.1	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.2	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.3	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.4	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.1	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1885	Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1890	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1895	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	General Plant												
1905	Land	$0											
1906	Land Rights	$0											
1908	Buildings and Fixtures	$0											
1910	Leasehold Improvements	$0											
1915	Office Furniture and Equipment	$0											
1920	Computer Equipment - Hardware	$0											
1925	Computer Software	$0											
1930	Transportation Equipment	$0											
1935	Stores Equipment	$0											
1940	Tools, Shop and Garage Equipment	$0											
1945	Measurement and Testing Equipment	$0											
1950	Power Operated Equipment	$0											
1955	Communication Equipment	$0											
1960	Miscellaneous Equipment	$0											
1970	Load Management Controls - Customer Premises	$0											
1975	Load Management Controls - Utility Premises	$0											
1980	System Supervisory Equipment	$0											
1985	Miscellaneous Fixed Assets	$0											
1990	Other Tangible Property	$0											
1995	Contributions & Grants - Credit	$0											
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Total - GPP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Account	Description	A & G Allocation 1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 Large Use	6 Street Light	7 Sentinel	8 Unmetered Scattered Load	9 Standby Power GS 50 to 1,499 kW	10 Standby Power GS 1,500 to 4,999 kW	11 Standby Power Large Use	Sub-total
1855	Transformer Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.1	Distribution Station Equipment - Normally Energized (Winter)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.2	Distribution Station Equipment - Normally Energized (Winter below 50 kV Bulk)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.3	Distribution Station Equipment - Normally Energized (Winter below 50 kV Primary)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1860.4	Distribution Station Equipment - Normally Energized (Winter below 50 kV Secondary Delivery)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865	Poles, Towers and Fixtures - Substation Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.1	Poles, Towers and Fixtures - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1865.2	Poles, Towers and Fixtures - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.1	Overhead Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1870.2	Overhead Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.1	Underground Conduit	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.2	Underground Conduit - Bulk Delivery	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.3	Underground Conduit - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1875.4	Underground Conduit - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.1	Underground Conductors and Devices - Primary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1880.2	Underground Conductors and Devices - Secondary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1885	Transformers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1890	Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1895	Meters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Sub - Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	General Plant												
1905	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1908	Buildings and Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1920	Computer Equipment - Hardware	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1925	Computer Software	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1930	Transportation Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1935	Stores Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1940	Tools, Shop and Garage Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1945	Measurement and Testing Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1950	Power Operated Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1960	Miscellaneous Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1970	Load Management Controls - Customer Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1975	Load Management Controls - Utility Premises	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1980	System Supervisory Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1985	Miscellaneous Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
1990	Other Tangible Property

USoA A/C #	Accounts	Categorization		
		Demand	Customer	Customer Component
	Distribution Plant			
1805	Land	DCP		0%
1805-1	Land Station >50 kV	TCP		0%
1805-2	Land Station <50 kV	DCP		0%
1806	Land Rights	DCP		0%
1806-1	Land Rights Station >50 kV	TCP		0%
1806-2	Land Rights Station <50 kV	DCP		0%
1808	Buildings and Fixtures	DCP		0%
1808-1	Buildings and Fixtures > 50 kV	TCP		0%
1808-2	Buildings and Fixtures < 50 KV	DCP		0%
1810	Leasehold Improvements	DCP		0%
1810-1	Leasehold Improvements >50 kV	TCP		0%
1810-2	Leasehold Improvements <50 kV	DCP		0%
1815	Transformer Station Equipment - Normally Primary above 50 kV	TCP		0%
1820	Distribution Station Equipment - Normally Primary below 50 kV	DCP		0%
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)	DCP		0%
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)	PNCP		0%
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		CEN	100%
1825	Storage Battery Equipment	DCP		0%
1825-1	Storage Battery Equipment > 50 kV	TCP		0%
1825-2	Storage Battery Equipment <50 kV	DCP		0%
1830	Poles, Towers and Fixtures	DNCP	CCA	30%
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery	BCP		0%
1830-4	Poles, Towers and Fixtures - Primary	PNCP	CCP	30%
1830-5	Poles, Towers and Fixtures - Secondary	SNCP	CCS	30%
1835	Overhead Conductors and Devices	DNCP	CCA	30%
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery	BCP		0%
1835-4	Overhead Conductors and Devices - Primary	PNCP	CCP	30%
1835-5	Overhead Conductors and Devices - Secondary	SNCP	CCS	30%
1840	Underground Conduit	DNCP	CCA	30%
1840-3	Underground Conduit - Bulk Delivery	BCP		0%
1840-4	Underground Conduit - Primary	PNCP	CCP	30%
1840-5	Underground Conduit - Secondary	SNCP	CCS	30%
1845	Underground Conductors and Devices	DNCP	CCA	30%
1845-3	Underground Conductors and Devices - Bulk Delivery	BCP		0%
1845-4	Underground Conductors and Devices - Primary	PNCP	CCP	30%
1845-5	Underground Conductors and Devices - Secondary	SNCP	CCS	30%
1850	Line Transformers	LTNCP	CCLT	35%
1855	Services		CWCS	100%
1860	Meters		CWMC	100%
	blank row			
1565	Conservation and Demand Management Expenditures and Recoveries		CDMPP	100%
	Accumulated Amortization			

2105x	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	See I4 BO Assets and O7		
	Operation			
4751	Charges - Smart Metering Entity		CCS	100%
5005	Operation Supervision and Engineering	1815-1855 D	1815-1855 C	30%
5010	Load Dispatching	1815-1855 D	1815-1855 C	30%
5012	Station Buildings and Fixtures Expense	1808 D		0%
5014	Transformer Station Equipment - Operation Labour	1815 D		0%
5015	Transformer Station Equipment - Operation Supplies and Expenses	1815 D		0%
5016	Distribution Station Equipment - Operation Labour	1820 D		0%
5017	Distribution Station Equipment - Operation Supplies and Expenses	1820 D		0%
5020	Overhead Distribution Lines and Feeders - Operation Labour	1830 & 1835 D	1830 & 1835 C	30%
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	1830 & 1835 D	1830 & 1835 C	30%
5030	Overhead Subtransmission Feeders - Operation	1830 & 1835 D		0%
5035	Overhead Distribution Transformers- Operation	1850 D	1850 C	35%
5040	Underground Distribution Lines and Feeders - Operation Labour	1840 & 1845 D	1840 & 1845 C	30%
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	1840 & 1845 D	1840 & 1845 C	30%
5050	Underground Subtransmission Feeders - Operation	1840 & 1845 D		0%
5055	Underground Distribution Transformers - Operation	1850 D	1850 C	35%
5065	Meter Expense		CWMC	100%
5070	Customer Premises - Operation Labour		CCA	100%
5075	Customer Premises - Materials and Expenses		CCA	100%
5085	Miscellaneous Distribution Expense	1815-1855 D	1815-1855 C	30%
5090	Underground Distribution Lines and Feeders - Rental Paid	1840 & 1845 D	1840 & 1845 C	30%
5095	Overhead Distribution Lines and Feeders - Rental Paid	1830 & 1835 D	1830 & 1835 C	30%
	Maintenance			
5105	Maintenance Supervision and Engineering	1815-1855 D	1815-1855 C	30%
5110	Maintenance of Buildings and Fixtures - Distribution Stations	1808 D		0%
5112	Maintenance of Transformer Station Equipment	1815 D		0%
5114	Maintenance of Distribution Station Equipment	1820 D		0%
5120	Maintenance of Poles, Towers and Fixtures	1830 D	1830 C	30%
5125	Maintenance of Overhead Conductors and Devices	1835 D	1835 C	30%
5130	Maintenance of Overhead Services		1855 C	100%
5135	Overhead Distribution Lines and Feeders - Right of Way	1830 & 1835 D	1830 & 1835 C	30%
5145	Maintenance of Underground Conduit	1840 D	1840 C	30%

5150	Maintenance of Underground Conductors and Devices	1845 D	1845 C	30%
5155	Maintenance of Underground Services		1855 C	100%
5160	Maintenance of Line Transformers	1850 D	1850 C	35%
5175	Maintenance of Meters		1860 C	100%

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet E2 Allocator Worksheet -

Details:
The worksheet below details how allocators are derived.

				1	2	3	4	6	7	8	9	11	12	13
Explanation	**ID and Factors**	**Total**		**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Demand Allocators														
1 cp														
Transformation CP	**TCP1**	100.00%		34.06%	11.94%	39.61%	8.21%	6.04%	0.00%	0.00%	0.13%	0.00%	0.00%	0.00%
Bulk Delivery (SubTransmission) CP	**BCP1**	100.00%		34.06%	11.94%	39.61%	8.21%	6.04%	0.00%	0.00%	0.13%	0.00%	0.00%	0.00%
Distribution CP (Total System)	**DCP1**	100.00%		34.06%	11.94%	39.61%	8.21%	6.04%	0.00%	0.00%	0.13%	0.00%	0.00%	0.00%
4 cp														
Transformation CP	**TCP4**	100.00%		35.81%	9.82%	38.36%	9.20%	6.32%	0.35%	0.00%	0.15%	0.00%	0.00%	0.00%
Bulk Delivery (SubTransmission) CP	**BCP4**	100.00%		35.81%	9.82%	38.36%	9.20%	6.32%	0.35%	0.00%	0.15%	0.00%	0.00%	0.00%
Distribution CP (Total System)	**DCP4**	100.00%		35.81%	9.82%	38.36%	9.20%	6.32%	0.35%	0.00%	0.15%	0.00%	0.00%	0.00%
12 cp														
Transformation CP	**TCP12**	100.00%		33.96%	10.03%	38.73%	9.91%	6.85%	0.36%	0.00%	0.16%	0.00%	0.00%	0.00%
Bulk Delivery (SubTransmission) CP	**BCP12**	100.00%		33.96%	10.03%	38.73%	9.91%	6.85%	0.36%	0.00%	0.16%	0.00%	0.00%	0.00%
Distribution CP (Total System)	**DCP12**	100.00%		33.96%	10.03%	38.73%	9.91%	6.85%	0.36%	0.00%	0.16%	0.00%	0.00%	0.00%
NON CO_INCIDENT PEAK														
1 NCP														
Distribution NCP (Total System)	**DNCP1**	100.00%		28.55%	10.82%	39.74%	11.83%	7.97%	0.93%	0.00%	0.07%	0.00%	0.09%	0.00%
Primary NCP	**PNCP1**	100.00%		28.59%	10.83%	39.80%	11.85%	7.98%	0.80%	0.00%	0.07%	0.00%	0.09%	0.00%
Line Transformer NCP	**LTNCP1**	100.00%		34.07%	12.91%	41.25%	6.21%	4.47%	0.95%	0.00%	0.08%	0.00%	0.06%	0.00%
Secondary NCP	**SNCP1**	100.00%		47.40%	17.96%	32.99%	0.00%	0.00%	1.54%	0.00%	0.11%	0.00%	0.00%	0.00%
4 NCP														
Distribution NCP (Total System)	**DNCP4**	100.00%		28.94%	10.48%	39.83%	11.78%	7.91%	0.92%	0.00%	0.07%	0.00%	0.07%	0.00%
Primary NCP	**PNCP4**	100.00%		28.98%	10.49%	39.89%	11.79%	7.92%	0.79%	0.00%	0.07%	0.00%	0.07%	0.00%
Line Transformer NCP	**LTNCP4**	100.00%		34.23%	12.39%	41.79%	6.13%	4.40%	0.93%	0.00%	0.08%	0.00%	0.05%	0.00%
Secondary NCP	**SNCP4**	100.00%		47.98%	17.37%	33.02%	0.00%	0.00%	1.53%	0.00%	0.11%	0.00%	0.00%	0.00%
12 NCP														
Distribution NCP (Total System)	**DNCP12**	100.00%		28.51%	10.38%	40.76%	11.66%	7.77%	0.80%	0.00%	0.07%	0.00%	0.05%	0.00%
Primary NCP	**PNCP12**	100.00%		28.55%	10.40%	40.82%	11.68%	7.78%	0.65%	0.00%	0.07%	0.00%	0.05%	0.00%
Line Transformer NCP	**LTNCP12**	100.00%		33.99%	12.38%	42.27%	6.12%	4.35%	0.77%	0.00%	0.08%	0.00%	0.04%	0.00%
Secondary NCP	**SNCP12**	100.00%		47.41%	17.26%	33.89%	0.00%	0.00%	1.33%	0.00%	0.11%	0.00%	0.00%	0.00%
Demand Allocators - Composite														
DEMAND 1815-1855	**1815-1855 D**	100.00%		31.99%	11.15%	39.28%	9.93%	6.73%	0.78%	0.00%	0.09%	0.00%	0.05%	0.00%
DEMAND 1808	**1808 D**	100.00%		33.96%	10.03%	38.73%	9.91%	6.85%	0.36%	0.00%	0.16%	0.00%	0.00%	0.00%
DEMAND 1815	**1815 D**	100.00%		33.96%	10.03%	38.73%	9.91%	6.85%	0.36%	0.00%	0.16%	0.00%	0.00%	0.00%
DEMAND 1820	**1820 D**	100.00%		28.98%	10.49%	39.89%	11.79%	7.92%	0.79%	0.00%	0.07%	0.00%	0.07%	0.00%
DEMAND 1815 & 1820	**1815 & 1820 D**	100.00%		31.68%	10.24%	39.26%	10.77%	7.34%	0.56%	0.00%	0.12%	0.00%	0.04%	0.00%
DEMAND 1830	**1830 D**	100.00%		34.68%	12.55%	37.83%	8.26%	5.54%	1.01%	0.00%	0.08%	0.00%	0.05%	0.00%
DEMAND 1835	**1835 D**	100.00%		28.98%	10.49%	39.89%	11.79%	7.92%	0.79%	0.00%	0.07%	0.00%	0.07%	0.00%
DEMAND 1830 & 1835	**1830 & 1835 D**	100.00%		31.96%	11.57%	38.81%	9.94%	6.68%	0.91%	0.00%	0.07%	0.00%	0.06%	0.00%
DEMAND 1840	**1840 D**	100.00%		34.49%	12.48%	37.90%	8.37%	5.62%	1.00%	0.00%	0.08%	0.00%	0.05%	0.00%
DEMAND 1845	**1845 D**	100.00%		28.98%	10.49%	39.89%	11.79%	7.92%	0.79%	0.00%	0.07%	0.00%	0.07%	0.00%
DEMAND 1840 & 1845	**1840 & 1845 D**	100.00%		31.66%	11.46%	38.92%	10.13%	6.80%	0.89%	0.00%	0.07%	0.00%	0.06%	0.00%
DEMAND 1850	**1850 D**	100.00%		34.23%	12.39%	41.79%	6.13%	4.40%	0.93%	0.00%	0.08%	0.00%	0.05%	0.00%
DEMAND 1855	**1855 D**	-		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DEMAND 1860	**1860 D**	-		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CUSTOMER ALLOCATORS														
Billing Data														
kWh	**CEN**	100.00%		29.78%	9.76%	39.71%	11.60%	8.34%	0.59%	0.00%	0.22%	0.00%	0.00%	0.00%
kW	**CDEM**	100.00%		0.00%	0.00%	69.41%	18.25%	11.08%	1.22%	0.00%	0.00%	0.00%	0.05%	0.00%
kWh - Excl WMP	**CEN EWMP**	100.00%		29.78%	9.76%	39.71%	11.60%	8.34%	0.59%	0.00%	0.22%	0.00%	0.00%	0.00%
Dollar Billed	**CREV**	100.00%		54.58%	12.75%	21.87%	6.36%	3.54%	0.55%	0.00%	0.35%	0.00%	0.01%	0.00%
Bad Debt 3 Year Historical Average	**BDHA**	100.00%		67.70%	21.10%	7.50%	3.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Late Payment 3 Year Historical Average	**LPHA**	100.00%		74.45%	13.51%	10.58%	1.37%	0.01%	0.02%	0.01%	0.04%	0.00%	0.00%	0.00%
Number of Bills	**CNB**	100.00%		91.40%	7.53%	1.01%	0.02%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
Number of Connections (Unmetered)	**CCON**	100.00%		0.00%	0.00%	0.00%	0.00%	0.00%	51.17%	0.76%	48.07%	0.00%	0.00%	0.00%
Embedded Distributor	**ED**	100.00%		0.00%	0.00%	0.00%		0.00%	0.00%		0.00%	0.00%	0.00%	0.00%
Total Number of Customer	**CCA**	100.00%		89.43%	7.37%	0.99%	0.02%	0.00%	1.11%	0.02%	1.05%	0.00%	0.00%	0.00%
Subtransmission Customer Base	**CCB**	100.00%		89.43%	7.37%	0.99%	0.02%	0.00%	1.11%	0.02%	1.05%	0.00%	0.00%	0.00%
Primary Feeder Customer Base	**CCP**	100.00%		88.27%	7.28%	0.98%	0.02%	0.00%	2.40%	0.02%	1.03%	0.00%	0.00%	0.00%
Line Transformer Customer Base	**CCLT**	100.00%		88.38%	7.29%	0.87%	0.01%	0.00%	2.40%	0.02%	1.03%	0.00%	0.00%	0.00%
Secondary Feeder Customer Base	**CCS**	100.00%		89.90%	7.41%	0.50%	0.00%	0.00%	1.12%	0.02%	1.05%	0.00%	0.00%	0.00%
Weighted - Services	**CWCS**	100.00%		80.35%	13.25%	4.45%	0.00%	0.00%	1.00%	0.01%	0.94%	0.00%	0.00%	0.00%
Weighted Meter -Capital	**CWMC**	100.00%		72.69%	15.10%	10.74%	1.25%	0.18%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%
Weighted Meter Reading	**CWMR**	100.00%		59.39%	4.90%	31.93%	3.23%	0.47%	0.00%	0.00%	0.00%	0.00%	0.09%	0.00%
Weighted Bills	**CWNB**	100.00%		85.82%	7.29%	6.12%	0.55%	0.08%	0.11%	0.01%	0.00%	0.00%	0.01%	0.00%
CUSTOMER ALLOCATORS - Composite														
CUSTOMER 1815-1855	**1815-1855 C**	100.00%		84.40%	8.89%	3.14%	0.41%	0.29%	1.87%	0.02%	0.98%	0.00%	0.00%	0.00%
CUSTOMER 1808	**1808 C**	-		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CUSTOMER 1815	**1815 C**	-		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

	A	B	C	D	E	F	G	I	J	K	L	N	O	P	X	Y	Z
102	CUSTOMER 1820	**1820 C**	**100.00%**	**29.78%**	**9.76%**	**39.71%**	**11.60%**	**8.34%**	**0.59%**	**0.00%**	**0.22%**	**0.00%**	**0.00%**	**0.00%**			
103	CUSTOMER 1815 & 1820	**1815 & 1820 C**	**100.00%**	**29.78%**	**9.76%**	**39.71%**	**11.60%**	**8.34%**	**0.59%**	**0.00%**	**0.22%**	**0.00%**	**0.00%**	**0.00%**			
104	CUSTOMER 1830	**1830 C**	**100.00%**	**88.76%**	**7.32%**	**0.83%**	**0.02%**	**0.00%**	**2.02%**	**0.02%**	**1.04%**	**0.00%**	**0.00%**	**0.00%**			
105	CUSTOMER 1835	**1835 C**	**100.00%**	**88.27%**	**7.28%**	**0.98%**	**0.02%**	**0.00%**	**2.40%**	**0.02%**	**1.03%**	**0.00%**	**0.00%**	**0.00%**			
106	CUSTOMER 1830 & 1835	**1830 & 1835 C**	**100.00%**	**88.53%**	**7.30%**	**0.90%**	**0.02%**	**0.00%**	**2.20%**	**0.02%**	**1.04%**	**0.00%**	**0.00%**	**0.00%**			
107	CUSTOMER 1840	**1840 C**	**100.00%**	**88.74%**	**7.32%**	**0.84%**	**0.02%**	**0.00%**	**2.03%**	**0.02%**	**1.04%**	**0.00%**	**0.00%**	**0.00%**			
108	CUSTOMER 1845	**1845 C**	**100.00%**	**88.27%**	**7.28%**	**0.98%**	**0.02%**	**0.00%**	**2.40%**	**0.02%**	**1.03%**	**0.00%**	**0.00%**	**0.00%**			
109	CUSTOMER 1840 & 1845	**1840 & 1845 C**	**100.00%**	**88.50%**	**7.30%**	**0.91%**	**0.02%**	**0.00%**	**2.22%**	**0.02%**	**1.03%**	**0.00%**	**0.00%**	**0.00%**			
110	CUSTOMER 1850	**1850 C**	**100.00%**	**88.38%**	**7.29%**	**0.87%**	**0.01%**	**0.00%**	**2.40%**	**0.02%**	**1.03%**	**0.00%**	**0.00%**	**0.00%**			
111	CUSTOMER 1855	**1855 C**	**100.00%**	**80.35%**	**13.25%**	**4.45%**	**0.00%**	**0.00%**	**1.00%**	**0.01%**	**0.94%**	**0.00%**	**0.00%**	**0.00%**			
112	CUSTOMER 1860	**1860 C**	**100.00%**	**72.69%**	**15.10%**	**10.74%**	**1.25%**	**0.18%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.03%**	**0.00%**			
113																	
114	**Composite Allocators**																
115	Net Fixed Assets	**NFA**	**100.00%**	**47.04%**	**10.66%**	**28.94%**	**7.18%**	**4.85%**	**0.99%**	**0.00%**	**0.31%**	**0.00%**	**0.03%**	**0.00%**			
116	Net Fixed Assets Excluding Capital Contribution	**NFA ECC**	**100.00%**	**47.38%**	**10.66%**	**28.71%**	**7.09%**	**4.79%**	**1.00%**	**0.00%**	**0.32%**	**0.00%**	**0.03%**	**0.00%**			
117	5005-5340	**O&M**	**100.00%**	**60.55%**	**10.28%**	**20.33%**	**4.82%**	**3.02%**	**0.74%**	**0.01%**	**0.23%**	**0.00%**	**0.03%**	**0.00%**			
118	Account Setup	**Acct**	**100.00%**	**60.55%**	**10.28%**	**20.33%**	**4.82%**	**3.02%**	**0.74%**	**0.01%**	**0.23%**	**0.00%**	**0.03%**	**0.00%**			
119	Access to Poles	**POLE**	**100.00%**	**48.14%**	**10.01%**	**27.72%**	**7.44%**	**4.99%**	**1.29%**	**0.00%**	**0.36%**	**0.00%**	**0.05%**	**0.00%**			
120	5005-6225	**OM&A**	**100.00%**	**60.12%**	**10.29%**	**20.60%**	**4.89%**	**3.08%**	**0.75%**	**0.01%**	**0.23%**	**0.00%**	**0.03%**	**0.00%**			
121																	
122	Standard Supply Admin Charge Revenue	**SSSA**	**100.00%**	**62.59%**	**25.77%**	**7.98%**	**3.64%**	**0.00%**	**0.00%**	**0.00%**	**0.02%**	**0.00%**	**0.00%**	**0.00%**			

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet 15 Demand Allocator Worksheet -

Instructions:
Input sheet for Demand Allocators.

PLCC WATTS
400

		1	2	3	4	5	6	7	8	9	10	11	12	13
Customer Classes	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
CCA	332,473	297,343	24,512	2,295	76	11	3,701	65	2,477	0	2	0
CCB	332,473	297,343	24,512	2,295	76	11	3,701	65	2,477	0	2	0
CCP	334,862	297,343	24,512	2,923	33	5	8,090	65	2,477	0	0	0
CCLT	336,439	297,343	24,512	2,923	33	5	8,090	65	2,477	0	0	0
CCS	334,736	297,343	24,512	1,448	0	0	3,701	65	2,477	0	0	0
PLCC-CCA	132,969	118,937	9,805	1,318	30	4	1,480	22	1,391	0	1	0
PLCC-CCB	132,969	118,937	9,805	1,318	30	4	1,480	22	1,391	0	1	0
PLCC-CCP	134,745	118,937	9,805	1,318	30	4	3,236	22	1,391	0	1	0
PLCC-CCLT	134,574	118,937	9,805	1,169	13	2	3,236	22	1,391	0	0	0
PLCC-CCS	132,295	118,937	9,805	659	0	0	1,480	22	1,391	0	0	0
1NCP												
1NCP1	1,457,990	497,262	153,148	527,926	156,830	105,589	13,805	14	2,265	0	1,152	0
1NCP1	1,457,990	497,262	153,148	527,926	156,830	105,589	13,805	14	2,265	0	1,152	0
LTNCP1	1,245,151	497,262	153,148	459,294	69,906	49,624	13,805	14	2,265	0	680	0
3NCP1	931,658	497,262	153,148	263,963	0	0	13,805	14	2,265	0	0	0
PLCC - 1NCP												
1NCP1A	1,325,009	379,335	143,343	536,409	156,769	105,583	12,335	0	874	0	1,151	0
1NCP1A	1,323,253	379,335	143,343	536,408	156,769	105,583	10,570	0	874	0	1,151	0
LTNCP1A	1,116,033	379,335	143,343	458,126	68,991	49,624	10,570	0	874	0	680	0
3NCP1A	766,171	379,335	143,343	263,304	0	0	12,335	0	874	0	0	0
4NCP												
4NCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906	0	3,926	0
4NCP4	5,665,114	1,961,254	576,965	2,050,013	604,725	406,005	53,358	54	8,906	0	3,926	0
LTNCP4	4,978,062	1,961,254	576,965	1,818,362	266,079	190,823	53,358	54	8,906	0	2,263	0
3NCP4	3,615,413	1,961,254	576,965	1,035,057	0	0	53,358	54	8,906	0	0	0
PLCC - 4NCP												
4NCP4A	5,132,192	1,495,934	537,745	2,044,781	604,803	405,987	47,436	0	3,343	0	3,923	0
4NCP4A	5,132,192	1,495,934	537,745	2,044,781	604,803	405,987	40,415	0	3,343	0	3,923	0
LTNCP4A	4,329,764	1,495,934	537,745	1,813,391	266,031	190,864	40,415	0	3,343	0	2,263	0
3NCP4A	3,096,299	1,495,934	537,745	1,032,271	0	0	47,436	0	3,343	0	0	0
12NCP												
12NCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,687	0	7,667	0
12NCP12	15,671,749	5,439,974	1,578,908	5,753,087	1,642,061	1,094,028	130,015	131	25,687	0	7,667	0
LTNCP12	13,401,319	5,439,974	1,578,908	5,005,196	722,367	514,169	130,015	131	25,687	0	4,517	0
3NCP12	10,051,460	5,439,974	1,578,908	2,676,543	0	0	130,015	131	25,687	0	0	0
PLCC - 12NCP												
12NCP12A	14,076,012	4,012,727	1,461,249	5,737,269	1,641,896	1,093,975	112,250	0	9,197	0	7,647	0
PNCP12A	14,054,947	4,012,727	1,461,249	5,737,269	1,641,896	1,093,975	91,186	0	9,197	0	7,647	0
LTNCP12A	11,995,547	4,012,727	1,461,249	4,991,151	722,367	514,169	91,186	0	9,197	0	4,517	0
3NCP12A	8,964,959	4,012,727	1,461,249	2,668,635	0	0	112,250	0	9,197	0	0	0

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
1565	Conservation and Demand Management Expenditures and Recoveries	CDM Expenditures and Recoveries	dp			O&M	
1608	Franchises and Consents	Other Distribution Assets	gp				
1805	Land		dp	DDCP			
1805-1	Land Station >50 kV		dp	TCP	TCP12		
1805-2	Land Station <50 kV		dp	DCP	DCP12		
1806	Land Rights		dp	DDCP			
1806-1	Land Rights Station >50 kV		dp	TCP	TCP12		
1806-2	Land Rights Station <50 kV		dp	DCP	DCP12		
1808	Buildings and Fixtures		dp	DDCP			
1808-1	Buildings and Fixtures > 50 kV		dp	TCP	TCP12		
1808-2	Buildings and Fixtures < 50 KV		dp	DCP	DCP12		
1810	Leasehold Improvements		dp	DDCP			
1810-1	Leasehold Improvements >50 kV		dp	TCP	TCP12		
1810-2	Leasehold Improvements <50 kV		dp	DCP	DCP12		
1815	Transformer Station Equipment - Normally Primary above 50 kV		dp	TCP	TCP12		
1820	Distribution Station Equipment - Normally Primary below 50 kV		dp	DCP	DCP12		
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)		dp	DCP	DCP12		
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)		dp	PNCP	PNCP4		
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		dp			CEN	
1825	Storage Battery Equipment		dp	DDCP			
1825-1	Storage Battery Equipment > 50 kV		dp	TCP	TCP12		
1825-2	Storage Battery Equipment <50 kV		dp	DCP	DCP12		
1830	Poles, Towers and Fixtures		dp	DDNCP			
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery		dp	BCP	BCP12		
1830-4	Poles, Towers and Fixtures - Primary		dp	PNCP	PNCP4	CCP	x
1830-5	Poles, Towers and Fixtures - Secondary		dp	SNCP	SNCP4	CCS	x
1835	Overhead Conductors and Devices		dp	DDNCP			
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery		dp	BCP	BCP12		

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
1835-4	Overhead Conductors and Devices - Primary		dp	PNCP	PNCP4	CCP	x
1835-5	Overhead Conductors and Devices - Secondary		dp	SNCP	SNCP4	CCS	x
1840	Underground Conduit		dp	DDNCP			
1840-3	Underground Conduit - Bulk Delivery	Land and Buildings	dp	BCP	BCP12		
1840-4	Underground Conduit - Primary	Land and Buildings	dp	PNCP	PNCP4	CCP	x
1840-5	Underground Conduit - Secondary	Land and Buildings	dp	SNCP	SNCP4	CCS	x
1845	Underground Conductors and Devices	Land and Buildings	dp	DDNCP			
1845-3	Underground Conductors and Devices - Bulk Delivery	TS Primary Above 50	dp	BCP	BCP12		
1845-4	Underground Conductors and Devices - Primary	DS	dp	PNCP	PNCP4	CCP	x
1845-5	Underground Conductors and Devices - Secondary	Other Distribution Assets	dp	SNCP	SNCP4	CCS	x
1850	Line Transformers	Poles, Wires	dp	LTNCP	LTNCP4	CCLT	x
1855	Services	Services and Meters	dp			CWCS	
1860	Meters	Services and Meters	dp			CWMC	
1905	Land	Land and Buildings	gp				
1906	Land Rights	Land and Buildings	gp				
1908	Buildings and Fixtures	General Plant	gp				
1910	Leasehold Improvements	General Plant	gp				
1915	Office Furniture and Equipment	Equipment	gp				
1920	Computer Equipment - Hardware	IT Assets	gp				
1925	Computer Software	IT Assets	gp				
1930	Transportation Equipment	Equipment	gp				
1935	Stores Equipment	Equipment	gp				
1940	Tools, Shop and Garage Equipment	Equipment	gp				
1945	Measurement and Testing Equipment	Equipment	gp				
1950	Power Operated Equipment	Equipment	gp				
1955	Communication Equipment	Equipment	gp				
1960	Miscellaneous Equipment	Equipment	gp				
1970	Load Management Controls - Customer Premises	Other Distribution Assets	gp				
1975	Load Management Controls - Utility Premises	Other Distribution Assets	gp				
1980	System Supervisory Equipment	Other Distribution Assets	gp				
1990	Other Tangible Property	Other Distribution Assets	gp				
1995	Contributions and Grants - Credit	Contributions and Grants	co		Break out	Breakout	

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
2005	Property Under Capital Leases	Other Distribution Assets	gp				
2010	Electric Plant Purchased or Sold	Other Distribution Assets	gp				
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	Accumulated Amortization	accum dep		Break out	Breakout	
2120	Accumulated Amortization of Electric Utility Plant - Intangibles	Accumulated Amortization	accum dep		Break out	Breakout	
3046	Balance Transferred From Income	Equity	NI				
	blank row						
4080	Distribution Services Revenue	Distribution Services Revenue	CREV				
4082	Retail Services Revenues	Other Distribution Revenue	mi				
4084	Service Transaction Requests (STR) Revenues	Other Distribution Revenue	mi				
4086	SSS Admin Charge	Other Distribution Revenue	mi				
4090	Electric Services Incidental to Energy Sales	Other Distribution Revenue	mi				
4205	Interdepartmental Rents	Other Distribution Revenue	mi				
4210	Rent from Electric Property	Other Distribution Revenue	mi				
4215	Other Utility Operating Income	Other Distribution Revenue	mi				
4220	Other Electric Revenues	Other Distribution Revenue	mi				
4225	Late Payment Charges	Late Payment Charges	mi				
4235	Miscellaneous Service Revenues	Specific Service Charges	mi				
4235-1	Account Set Up Charges	Specific Service Charges	mi				
4235-90	Miscellaneous Service Revenues - Residual	Specific Service Charges	mi				
4240	Provision for Rate Refunds	Other Distribution Revenue	mi				
4245	Government Assistance Directly Credited to Income	Other Distribution Revenue	mi				
4305	Regulatory Debits	Other Income & Deductions	mi				
4310	Regulatory Credits	Other Income & Deductions	mi				
4315	Revenues from Electric Plant Leased to Others	Other Income & Deductions	mi				
4320	Expenses of Electric Plant Leased to Others	Other Income & Deductions	mi				
4325	Revenues from Merchandise, Jobbing, Etc.	Other Income & Deductions	mi				
4330	Costs and Expenses of Merchandising, Jobbing, Etc.	Other Income & Deductions	mi				

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
4335	Profits and Losses from Financial Instrument Hedges	Other Income & Deductions	mi				
4340	Profits and Losses from Financial Instrument Investments	Other Income & Deductions	mi				
4345	Gains from Disposition of Future Use Utility Plant	Other Income & Deductions	mi				
4350	Losses from Disposition of Future Use Utility Plant	Other Income & Deductions	mi				
4355	Gain on Disposition of Utility and Other Property	Other Income & Deductions	mi				
4360	Loss on Disposition of Utility and Other Property	Other Income & Deductions	mi				
4365	Gains from Disposition of Allowances for Emission	Other Income & Deductions	mi				
4370	Losses from Disposition of Allowances for Emission	Other Income & Deductions	mi				
4375	Revenues from Non-Utility Operations	Other Income & Deductions	mi				
4380	Expenses of Non-Utility Operations	Other Income & Deductions	mi				
4390	Miscellaneous Non-Operating Income	Other Income & Deductions	mi				
4395	Rate-Payer Benefit Including Interest	Other Income & Deductions	mi				
4398	Foreign Exchange Gains and Losses, Including Amortization	Other Income & Deductions	mi				
4405	Interest and Dividend Income	Other Income & Deductions	mi				
4415	Equity in Earnings of Subsidiary Companies	Other Income & Deductions	mi				
4705	Power Purchased	Power Supply Expenses (Working Capital)	cop				
4708	Charges-WMS	Power Supply Expenses (Working Capital)	cop				
4710	Cost of Power Adjustments	Power Supply Expenses (Working Capital)	cop				
4712	Charges-One-Time	Power Supply Expenses (Working Capital)	cop				
4714	Charges-NW	Power Supply Expenses (Working Capital)	cop				
4715	System Control and Load Dispatching	Other Power Supply Expenses	cop				
4716	Charges-CN	Power Supply Expenses (Working Capital)	cop				
4730	Rural Rate Assistance Expense	Power Supply Expenses (Working Capital)	cop				
4750	Charges-LV	Power Supply Expenses (Working Capital)	cop				

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
4751	Charges - Smart Metering Entity	Power Supply Expenses (Working Capital)	cop			CCS	
5005	Operation Supervision and Engineering	Operation (Working Capital)	di	1815-1855 D	1815-1855 D	1815-1855 C	x
5010	Load Dispatching	Operation (Working Capital)	di	1815-1855 D	1815-1855 D	1815-1855 C	x
5012	Station Buildings and Fixtures Expense	Operation (Working Capital)	di	1808 D	1808 D	1808 C	
5014	Transformer Station Equipment - Operation Labour	Operation (Working Capital)	di	1815 D	1815 D	1815 C	
5015	Transformer Station Equipment - Operation Supplies and Expenses	Operation (Working Capital)	di	1815 D	1815 D	1815 C	
5016	Distribution Station Equipment - Operation Labour	Operation (Working Capital)	di	1820 D	1820 D	1820 C	
5017	Distribution Station Equipment - Operation Supplies and Expenses	Operation (Working Capital)	di	1820 D	1820 D	1820 C	
5020	Overhead Distribution Lines and Feeders - Operation Labour	Operation (Working Capital)	di	1830 & 1835 D	1830 & 1835	1830 & 1835 C	x
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	Operation (Working Capital)	di	1830 & 1835 D	1830 & 1835	1830 & 1835 C	x
5030	Overhead Subtransmission Feeders - Operation	Operation (Working Capital)	di	1830 & 1835 D	1830 & 1835	1830 & 1835 C	
5035	Overhead Distribution Transformers- Operation	Operation (Working Capital)	di	1850 D	1850 D	1850 C	x
5040	Underground Distribution Lines and Feeders - Operation Labour	Operation (Working Capital)	di	1840 & 1845 D	1840 & 1845	1840 & 1845 C	x
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	Operation (Working Capital)	di	1840 & 1845 D	1840 & 1845	1840 & 1845 C	x
5050	Underground Subtransmission Feeders - Operation	Operation (Working Capital)	di	1840 & 1845 D	1840 & 1845	1840 & 1845 C	
5055	Underground Distribution Transformers - Operation	Operation (Working Capital)	di	1850 D	1850 D	1850 C	x
5065	Meter Expense	Operation (Working Capital)	cu			CWMC	
5070	Customer Premises - Operation Labour	Operation (Working Capital)	cu			CCA	
5075	Customer Premises - Materials and Expenses	Operation (Working Capital)	cu			CCA	
5085	Miscellaneous Distribution Expense	Operation (Working Capital)	di	1815-1855 D	1815-1855 D	1815-1855 C	x
5090	Underground Distribution Lines and Feeders - Rental Paid	Operation (Working Capital)	di	1840 & 1845 D	1840 & 1845	1840 & 1845 C	x
5095	Overhead Distribution Lines and Feeders - Rental Paid	Operation (Working Capital)	di	1830 & 1835 D	1830 & 1835	1830 & 1835 C	x

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
5096	Other Rent	Operation (Working Capital)	di				
5105	Maintenance Supervision and Engineering	Maintenance (Working Capital)	di	1815-1855 D	1815-1855 D	1815-1855 C	x
5110	Maintenance of Buildings and Fixtures - Distribution Stations	Maintenance (Working Capital)	di	1808 D	1808 D	1808 C	
5112	Maintenance of Transformer Station Equipment	Maintenance (Working Capital)	di	1815 D	1815 D	1815 C	
5114	Maintenance of Distribution Station Equipment	Maintenance (Working Capital)	di	1820 D	1820 D	1820 C	
5120	Maintenance of Poles, Towers and Fixtures	Maintenance (Working Capital)	di	1830 D	1830 D	1830 C	x
5125	Maintenance of Overhead Conductors and Devices	Maintenance (Working Capital)	di	1835 D	1835 D	1835 C	x
5130	Maintenance of Overhead Services	Maintenance (Working Capital)	di	1855 D	1855 D	1855 C	
5135	Overhead Distribution Lines and Feeders - Right of Way	Maintenance (Working Capital)	di	1830 & 1835 D	1830 & 1835	1830 & 1835 C	x
5145	Maintenance of Underground Conduit	Maintenance (Working Capital)	di	1840 D	1840 D	1840 C	x
5150	Maintenance of Underground Conductors and Devices	Maintenance (Working Capital)	di	1845 D	1845 D	1845 C	x
5155	Maintenance of Underground Services	Maintenance (Working Capital)	di	1855 D	1855 D	1855 C	
5160	Maintenance of Line Transformers	Maintenance (Working Capital)	di	1850 D	1850 D	1850 C	x
5175	Maintenance of Meters	Maintenance (Working Capital)	cu	1860 D	1860 D	1860 C	
5305	Supervision	Billing and Collection (Working Capital)	cu			CWNB	
5310	Meter Reading Expense	Billing and Collection (Working Capital)	cu			CWMR	
5315	Customer Billing	Billing and Collection (Working Capital)	cu			CWNB	
5320	Collecting	Billing and Collection (Working Capital)	cu			CWNB	
5325	Collecting- Cash Over and Short	Billing and Collection (Working Capital)	cu			CWNB	
5330	Collection Charges	Billing and Collection (Working Capital)	cu			CWNB	
5335	Bad Debt Expense	Bad Debt Expense (Working Capital)	cu			BDHA	
5340	Miscellaneous Customer Accounts Expenses	Billing and Collection (Working Capital)	cu			CWNB	
5405	Supervision	Community Relations (Working Capital)	ad				

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
5410	Community Relations - Sundry	Community Relations (Working Capital)	ad				
5415	Energy Conservation	Community Relations - CDM (Working Capital)	ad				
5420	Community Safety Program	Community Relations (Working Capital)	ad				
5425	Miscellaneous Customer Service and Informational Expenses	Community Relations (Working Capital)	ad				
5505	Supervision	Other Distribution Expenses	ad				
5510	Demonstrating and Selling Expense	Other Distribution Expenses	ad				
5515	Advertising Expense	Advertising Expenses	ad				
5520	Miscellaneous Sales Expense	Other Distribution Expenses	ad				
5605	Executive Salaries and Expenses	Administrative and General Expenses (Working Capital)	ad				
5610	Management Salaries and Expenses	Administrative and General Expenses (Working Capital)	ad				
5615	General Administrative Salaries and Expenses	Administrative and General Expenses (Working Capital)	ad				
5620	Office Supplies and Expenses	Administrative and General Expenses (Working Capital)	ad				
5625	Administrative Expense Transferred Credit	Administrative and General Expenses (Working Capital)	ad				
5630	Outside Services Employed	Administrative and General Expenses (Working Capital)	ad				
5635	Property Insurance	Insurance Expense (Working Capital)	ad				
5640	Injuries and Damages	Administrative and General Expenses (Working Capital)	ad				
5645	Employee Pensions and Benefits	Administrative and General Expenses (Working Capital)	ad				
5650	Franchise Requirements	Administrative and General Expenses (Working Capital)	ad				
5655	Regulatory Expenses	Administrative and General Expenses (Working Capital)	ad				
5660	General Advertising Expenses	Advertising Expenses	ad				
5665	Miscellaneous General Expenses	Administrative and General Expenses (Working Capital)	ad				

Uniform System of Accounts - Detail Accounts:					Classification and Allocation		
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint
5670	Rent	Administrative and General Expenses (Working Capital)	ad				
5675	Maintenance of General Plant	Administrative and General Expenses (Working Capital)	ad				
5680	Electrical Safety Authority Fees	Administrative and General Expenses (Working Capital)	ad				
5685	Independent Market Operator Fees and Penalties	Power Supply Expenses (Working Capital)	cop				
5705	Amortization Expense - Property, Plant, and Equipment	Amortization of Assets	dep	PRORATED	Break out	Breakout	
5710	Amortization of Limited Term Electric Plant	Amortization of Assets	dep	PRORATED	Break out	Breakout	
5715	Amortization of Intangibles and Other Electric Plant	Amortization of Assets	dep	PRORATED	Break out	Breakout	
5720	Amortization of Electric Plant Acquisition Adjustments	Other Amortization - Unclassified	dep	PRORATED	Break out	Breakout	
5730	Amortization of Unrecovered Plant and Regulatory Study Costs	Amortization of Assets	dep				
5735	Amortization of Deferred Development Costs	Amortization of Assets	dep				
5740	Amortization of Deferred Charges	Amortization of Assets	dep				
6005	Interest on Long Term Debt	Interest Expense - Unclassifed	INT				
6105	Taxes Other Than Income Taxes	Other Distribution Expenses	ad				
6110	Income Taxes	Income Tax Expense - Unclassified	Input				
6205-1	Sub-account LEAP Funding	Charitable Contributions	ad				
6210	Life Insurance	Insurance Expense (Working Capital)	ad				
6215	Penalties	Other Distribution Expenses	ad				
6225	Other Deductions	Other Distribution Expenses	ad				

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-XXXX

Sheet E5 Reconciliation Worksheet -

Details:
The worksheet below shows reconciliation of costs included and excluded in the Trial Balance.

USoA Account #	Accounts	Financial Statement	Financial Statement - Asset Break Out includes Acc Dep and Contributed Capital	Adjusted TB	Excluded from COSS	Excluded	Included	Balance in O5	Difference	Balance in O4 Summary	Difference
1565	Conservation and Demand Management Expenditures and Recoveries	$0		$0		$0	$0	$0	$0	$0	$0
1608	Franchises and Consents	$0		$0		$0	$0	$0	$0	$0	$0
1805	Land		$0	$0		$0	$0	$0	$0	$0	$0
1805-1	Land Station >50 kV		$1,451,796	$1,451,796		$0	$1,451,796	$1,451,796	$0	$1,451,796	$0
1805-2	Land Station <50 kV		$23,579,177	$23,579,177		$0	$23,579,177	$23,579,177	$0	$23,579,177	$0
1806	Land Rights		$0	$0		$0	$0	$0	$0	$0	$0
1806-1	Land Rights Station >50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1806-2	Land Rights Station <50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1808	Buildings and Fixtures		$0	$0		$0	$0	$0	$0	$0	$0
1808-1	Buildings and Fixtures > 50 kV		$4,044,191	$4,044,191		$0	$4,044,191	$4,044,191	$0	$4,044,191	$0
1808-2	Buildings and Fixtures < 50 KV		$24,842,887	$24,842,887		$0	$24,842,887	$24,842,887	$0	$24,842,887	$0
1810	Leasehold Improvements		$0	$0		$0	$0	$0	$0	$0	$0
1810-1	Leasehold Improvements >50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1810-2	Leasehold Improvements <50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1815	Transformer Station Equipment - Normally Primary above 50 kV		$93,555,012	$93,555,012		$0	$93,555,012	$93,555,012	$0	$93,555,012	$0
1820	Distribution Station Equipment - Normally Primary below 50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)		$0	$0		$0	$0	$0	$0	$0	$0
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)		$79,000,835	$79,000,835		$0	$79,000,835	$79,000,835	$0	$79,000,835	$0
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		$6,869,638	$6,869,638		$0	$6,869,638	$6,869,638	$0	$6,869,638	$0
1825	Storage Battery Equipment		$0	$0		$0	$0	$0	$0	$0	$0
1825-1	Storage Battery Equipment > 50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1825-2	Storage Battery Equipment <50 kV		$0	$0		$0	$0	$0	$0	$0	$0
1830	Poles, Towers and Fixtures		$0	$0		$0	$0	$0	$0	$0	$0
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery		$0	$0		$0	$0	$0	$0	$0	$0
1830-4	Poles, Towers and Fixtures - Primary		$68,816,835	$68,816,835		$0	$68,816,835	$68,816,835	$0	$68,816,835	$0
1830-5	Poles, Towers and Fixtures - Secondary		$29,492,929	$29,492,929		$0	$29,492,929	$29,492,929	$0	$29,492,929	$0
1835	Overhead Conductors and Devices		$0	$0		$0	$0	$0	$0	$0	$0
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery		$0	$0		$0	$0	$0	$0	$0	$0
1835-4	Overhead Conductors and Devices - Primary		$89,406,132	$89,406,132		$0	$89,406,132	$89,406,132	$0	$89,406,132	$0

1835-5	Overhead Conductors and Devices - Secondary		$0	$0	$0	$0	$0	$0	$0	$0	$0
1840	Underground Conduit		$0	$0	$0	$0	$0	$0	$0	$0	$0
1840-3	Underground Conduit - Bulk Delivery		$0	$0	$0	$0	$0	$0	$0	$0	$0
1840-4	Underground Conduit - Primary		$70,020,103	$70,020,103	$0	$70,020,103	$70,020,103	$0	$70,020,103	$0
1840-5	Underground Conduit - Secondary		$28,599,760	$28,599,760	$0	$28,599,760	$28,599,760	$0	$28,599,760	$0
1845	Underground Conductors and Devices		$0	$0	$0	$0	$0	$0	$0	$0
1845-3	Underground Conductors and Devices - Bulk Delivery		$0	$0	$0	$0	$0	$0	$0	$0
1845-4	Underground Conductors and Devices - Primary		$103,705,636	###########	$0	###########	$103,705,636	$0	###########	$0
1845-5	Underground Conductors and Devices - Secondary		$0	$0	$0	$0	$0	$0	$0	$0
1850	Line Transformers		$71,573,323	$71,573,323	$0	$71,573,323	$71,573,323	$0	$71,573,323	$0
1855	Services		$50,582,151	$50,582,151	$0	$50,582,151	$50,582,151	$0	$50,582,151	$0
1860	Meters		$38,859,558	$38,859,558	$0	$38,859,558	$38,859,558	$0	$38,859,558	$0
1905	Land	$0	$0	$0	$0	$0	$0	$0	$0	$0
1906	Land Rights	$0	$1,868,075	$1,868,075	$0	$1,868,075	$1,868,075	$0	$1,868,075	$0
1908	Buildings and Fixtures	$0	$32,877,351	$32,877,351	$0	$32,877,351	$32,877,351	$0	$32,877,351	$0
1910	Leasehold Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0
1915	Office Furniture and Equipment	$0	$1,499,288	$1,499,288	$0	$1,499,288	$1,499,288	$0	$1,499,288	$0
1920	Computer Equipment - Hardware	$0	$7,727,522	$7,727,522	$0	$7,727,522	$7,727,522	$0	$7,727,522	$0
1925	Computer Software	$0	$51,325,406	$51,325,406	$0	$51,325,406	$51,325,406	$0	$51,325,406	$0
1930	Transportation Equipment	$0	$13,184,543	$13,184,543	$0	$13,184,543	$13,184,543	$0	$13,184,543	$0
1935	Stores Equipment	$0	$914,862	$914,862	$0	$914,862	$914,862	$0	$914,862	$0
1940	Tools, Shop and Garage Equipment	$0	$4,024,656	$4,024,656	$0	$4,024,656	$4,024,656	$0	$4,024,656	$0
1945	Measurement and Testing Equipment	$0	$229,016	$229,016	$0	$229,016	$229,016	$0	$229,016	$0
1950	Power Operated Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0
1955	Communication Equipment	$0	$2,745,647	$2,745,647	$0	$2,745,647	$2,745,647	$0	$2,745,647	$0
1960	Miscellaneous Equipment	$0	$913,030	$913,030	$0	$913,030	$913,030	$0	$913,030	$0
1970	Load Management Controls - Customer Premises	$0	$134,245	$134,245	$0	$134,245	$134,245	$0	$134,245	$0
1975	Load Management Controls - Utility Premises	$0	$17,974	$17,974	$0	$17,974	$17,974	$0	$17,974	$0
1980	System Supervisory Equipment	$0	$7,005,560	$7,005,560	$0	$7,005,560	$7,005,560	$0	$7,005,560	$0
1990	Other Tangible Property	$0	$0	$0	$0	$0	$0	$0	$0	$0
1995	Contributions and Grants - Credit	($34,294,412)	$0	###########	$0	###########	($34,294,412)	$0	###########	$0
2005	Property Under Capital Leases	$0	$0	$0	$0	$0	$0	$0	$0	$0
2010	Electric Plant Purchased or Sold	$0	$0	$0	$0	$0	$0	$0	$0	$0
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	($91,977,757)		###########	$0	###########	($91,977,757)	$0	###########	$0
2120	Accumulated Amortization of Electric Utility Plant - Intangibles	$0		$0	$0	$0	$0	$0	$0	$0
3046	Balance Transferred From Income	($34,296,633)		###########	$0	###########	($34,296,633)	$0	###########	$0
	blank row									
4080	Distribution Services Revenue	$0		$0	$0	$0	$0	$0	$0	$0
4082	Retail Services Revenues	($171,228)		($171,228)	$0	($171,228)	($171,228)	$0	($171,228)	$0
4084	Service Transaction Requests (STR) Revenues	($6,132)		($6,132)	$0	($6,132)	($6,132)	$0	($6,132)	$0
4086	SSS Admin Charge	($891,797)		($891,797)	$0	($891,797)	($891,797)	$0	($891,797)	$0
4090	Electric Services Incidental to Energy Sales	($341,400)		($341,400)	$0	($341,400)	($341,400)	$0	($341,400)	$0
4205	Interdepartmental Rents	$0		$0	$0	$0	$0	$0	$0	$0
4210	Rent from Electric Property	$0		$0	$0	$0	$0	$0	$0	$0
4215	Other Utility Operating Income	$0		$0	$0	$0	$0	$0	$0	$0
4220	Other Electric Revenues	$0		$0	$0	$0	$0	$0	$0	$0
4225	Late Payment Charges	($898,752)		($898,752)	$0	($898,752)	($898,752)	$0	($898,752)	$0
4235	Miscellaneous Service Revenues	$0		$0	$0	$0	$0	$0	$0	$0
4240	Provision for Rate Refunds	$0		$0	$0	$0	$0	$0	$0	$0
4245	Government Assistance Directly Credited to Income	$0		$0	$0	$0	$0	$0	$0	$0
4305	Regulatory Debits	$0		$0	$0	$0	$0	$0	$0	$0
4310	Regulatory Credits	$0		$0	$0	$0	$0	$0	$0	$0
4315	Revenues from Electric Plant Leased to Others	($1,839,502)		($1,839,502)	$0	($1,839,502)	($1,839,502)	$0	($1,839,502)	$0

4320	Expenses of Electric Plant Leased to Others	$0	$0	$0	$0	$0	$0	$0	$0	$0
4325	Revenues from Merchandise, Jobbing, Etc.	($5,459,437)	($5,459,437)	$0	($5,459,437)	($5,459,437)	$0	($5,459,437)	$0
4330	Costs and Expenses of Merchandising, Jobbing, Etc.	$4,045,020	$4,045,020	$0	$4,045,020	$4,045,020	$0	$4,045,020	$0
4335	Profits and Losses from Financial Instrument Hedges	$0	$0	$0	$0	$0	$0	$0	$0
4340	Profits and Losses from Financial Instrument Investments	$0	$0	$0	$0	$0	$0	$0	$0
4345	Gains from Disposition of Future Use Utility Plant	$0	$0	$0	$0	$0	$0	$0	$0
4350	Losses from Disposition of Future Use Utility Plant	$0	$0	$0	$0	$0	$0	$0	$0
4355	Gain on Disposition of Utility and Other Property	$0	$0	$0	$0	$0	$0	$0	$0
4360	Loss on Disposition of Utility and Other Property	($198,349)	($198,349)	$0	($198,349)	($198,349)	$0	($198,349)	$0
4365	Gains from Disposition of Allowances for Emission	$0	$0	$0	$0	$0	$0	$0	$0
4370	Losses from Disposition of Allowances for Emission	$0	$0	$0	$0	$0	$0	$0	$0
4375	Revenues from Non-Utility Operations	$0	$0	$0	$0	$0	$0	$0	$0
4380	Expenses of Non-Utility Operations	$0	$0	$0	$0	$0	$0	$0	$0
4390	Miscellaneous Non-Operating Income	$0	$0	$0	$0	$0	$0	$0	$0
4395	Rate-Payer Benefit Including Interest	$0	$0	$0	$0	$0	$0	$0	$0
4398	Foreign Exchange Gains and Losses, Including Amortization	$0	$0	$0	$0	$0	$0	$0	$0
4405	Interest and Dividend Income	($27,436)	($27,436)	$0	($27,436)	($27,436)	$0	($27,436)	$0
4415	Equity in Earnings of Subsidiary Companies	$0	$0	$0	$0	$0	$0	$0	$0
4705	Power Purchased	$760,837,744	###########	$0	###########	$760,837,744	$0	###########	$0
4708	Charges-WMS	$45,456,690	$45,456,690	$0	$45,456,690	$45,456,690	$0	$45,456,690	$0
4710	Cost of Power Adjustments	$0	$0	$0	$0	$0	$0	$0	$0
4712	Charges-One-Time	$0	$0	$0	$0	$0	$0	$0	$0
4714	Charges-NW	$53,789,954	$53,789,954	$0	$53,789,954	$53,789,954	$0	$53,789,954	$0
4715	System Control and Load Dispatching	$0	$0	$0	$0	$0	$0	$0	$0
4716	Charges-CN	$30,702,632	$30,702,632	$0	$30,702,632	$30,702,632	$0	$30,702,632	$0
4730	Rural Rate Assistance Expense	$0	$0	$0	$0	$0	$0	$0	$0
4750	Charges-LV	$455,000	$455,000	$0	$455,000	$455,000	$0	$455,000	$0
4751	Charges - Smart Metering Entity	$3,043,466	$3,043,466	$0	$3,043,466	$3,043,466	$0	$3,043,466	$0
5005	Operation Supervision and Engineering	$0	$0	$0	$0	$0	$0	$0	$0
5010	Load Dispatching	$3,678,298	$3,678,298	$0	$3,678,298	$3,678,298	$0	$3,678,298	$0
5012	Station Buildings and Fixtures Expense	$343,662	$343,662	$0	$343,662	$343,662	$0	$343,662	$0
5014	Transformer Station Equipment - Operation Labour	$106,833	$106,833	$0	$106,833	$106,833	$0	$106,833	$0
5015	Transformer Station Equipment - Operation Supplies and Expenses	$29,491	$29,491	$0	$29,491	$29,491	$0	$29,491	$0
5016	Distribution Station Equipment - Operation Labour	$233,163	$233,163	$0	$233,163	$233,163	$0	$233,163	$0
5017	Distribution Station Equipment - Operation Supplies and Expenses	$57,317	$57,317	$0	$57,317	$57,317	$0	$57,317	$0
5020	Overhead Distribution Lines and Feeders - Operation Labour	$197,234	$197,234	$0	$197,234	$197,234	$0	$197,234	$0
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	$30,582	$30,582	$0	$30,582	$30,582	$0	$30,582	$0
5030	Overhead Subtransmission Feeders - Operation	$0	$0	$0	$0	$0	$0	$0	$0
5035	Overhead Distribution Transformers- Operation	$7,799	$7,799	$0	$7,799	$7,799	$0	$7,799	$0
5040	Underground Distribution Lines and Feeders - Operation Labour	$469,697	$469,697	$0	$469,697	$469,697	$0	$469,697	$0
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	$2,847,751	$2,847,751	$0	$2,847,751	$2,847,751	$0	$2,847,751	$0

5050	Underground Subtransmission Feeders - Operation	$0	$0		$0	$0	$0	$0	$0	$0
5055	Underground Distribution Transformers - Operation	$37,472	$37,472		$0	$37,472	$37,472	$0	$37,472	$0
5065	Meter Expense	$689,731	$689,731		$0	$689,731	$689,731	$0	$689,731	$0
5070	Customer Premises - Operation Labour	$0	$0		$0	$0	$0	$0	$0	$0
5075	Customer Premises - Materials and Expenses	$0	$0		$0	$0	$0	$0	$0	$0
5085	Miscellaneous Distribution Expense	$11,761,693	$11,761,693		$0	$11,761,693	$11,761,693	$0	$11,761,693	$0
5090	Underground Distribution Lines and Feeders - Rental Paid	$0	$0		$0	$0	$0	$0	$0	$0
5095	Overhead Distribution Lines and Feeders - Rental Paid	$0	$0		$0	$0	$0	$0	$0	$0
5096	Other Rent	$0	$0		$0	$0	$0	$0	$0	$0
5105	Maintenance Supervision and Engineering	$0	$0		$0	$0	$0	$0	$0	$0
5110	Maintenance of Buildings and Fixtures - Distribution Stations	$0	$0		$0	$0	$0	$0	$0	$0
5112	Maintenance of Transformer Station Equipment	$330,675	$330,675		$0	$330,675	$330,675	$0	$330,675	$0
5114	Maintenance of Distribution Station Equipment	$709,895	$709,895		$0	$709,895	$709,895	$0	$709,895	$0
5120	Maintenance of Poles, Towers and Fixtures	$579,188	$579,188		$0	$579,188	$579,188	$0	$579,188	$0
5125	Maintenance of Overhead Conductors and Devices	$879,712	$879,712		$0	$879,712	$879,712	$0	$879,712	$0
5130	Maintenance of Overhead Services	$575,820	$575,820		$0	$575,820	$575,820	$0	$575,820	$0
5135	Overhead Distribution Lines and Feeders - Right of Way	$3,506,963	$3,506,963		$0	$3,506,963	$3,506,963	$0	$3,506,963	$0
5145	Maintenance of Underground Conduit	$66,866	$66,866		$0	$66,866	$66,866	$0	$66,866	$0
5150	Maintenance of Underground Conductors and Devices	$1,036,475	$1,036,475		$0	$1,036,475	$1,036,475	$0	$1,036,475	$0
5155	Maintenance of Underground Services	$355,577	$355,577		$0	$355,577	$355,577	$0	$355,577	$0
5160	Maintenance of Line Transformers	$505,145	$505,145		$0	$505,145	$505,145	$0	$505,145	$0
5175	Maintenance of Meters	$1,840,111	$1,840,111		$0	$1,840,111	$1,840,111	$0	$1,840,111	$0
5305	Supervision	$0	$0		$0	$0	$0	$0	$0	$0
5310	Meter Reading Expense	$371,040	$371,040		$0	$371,040	$371,040	$0	$371,040	$0
5315	Customer Billing	$10,043,085	$10,043,085		$0	$10,043,085	$10,043,085	$0	$10,043,085	$0
5320	Collecting	$2,141,494	$2,141,494		$0	$2,141,494	$2,141,494	$0	$2,141,494	$0
5325	Collecting- Cash Over and Short	$0	$0		$0	$0	$0	$0	$0	$0
5330	Collection Charges	$0	$0		$0	$0	$0	$0	$0	$0
5335	Bad Debt Expense	$1,979,175	$1,979,175		$0	$1,979,175	$1,979,175	$0	$1,979,175	$0
5340	Miscellaneous Customer Accounts Expenses	$0	$0		$0	$0	$0	$0	$0	$0
5405	Supervision	$0	$0		$0	$0	$0	$0	$0	$0
5410	Community Relations - Sundry	$6,162,315	$6,162,315		$0	$6,162,315	$6,162,315	$0	$6,162,315	$0
5415	Energy Conservation	$0	$0		$0	$0	$0	$0	$0	$0
5420	Community Safety Program	$0	$0		$0	$0	$0	$0	$0	$0
5425	Miscellaneous Customer Service and Informational Expenses	$0	$0		$0	$0	$0	$0	$0	$0
5505	Supervision	$0	$0		$0	$0	$0	$0	$0	$0
5510	Demonstrating and Selling Expense	$261,592	$261,592		$0	$261,592	$261,592	$0	$261,592	$0
5515	Advertising Expense	$0	$0		$0	$0	$0	$0	$0	$0
5520	Miscellaneous Sales Expense	$0	$0		$0	$0	$0	$0	$0	$0
5605	Executive Salaries and Expenses	$3,268,460	$3,268,460		$0	$3,268,460	$3,268,460	$0	$3,268,460	$0
5610	Management Salaries and Expenses	$8,998,638	$8,998,638		$0	$8,998,638	$8,998,638	$0	$8,998,638	$0
5615	General Administrative Salaries and Expenses	$2,349,300	$2,349,300		$0	$2,349,300	$2,349,300	$0	$2,349,300	$0
5620	Office Supplies and Expenses	$4,071,458	$4,071,458		$0	$4,071,458	$4,071,458	$0	$4,071,458	$0
5625	Administrative Expense Transferred Credit	$769,912	$769,912		$0	$769,912	$769,912	$0	$769,912	$0
5630	Outside Services Employed	$1,066,760	$1,066,760		$0	$1,066,760	$1,066,760	$0	$1,066,760	$0
5635	Property Insurance	$725,333	$725,333		$0	$725,333	$725,333	$0	$725,333	$0
5640	Injuries and Damages	$927,756	$927,756		$0	$927,756	$927,756	$0	$927,756	$0
5645	Employee Pensions and Benefits	$622,805	$622,805		$0	$622,805	$622,805	$0	$622,805	$0
5650	Franchise Requirements	$0	$0		$0	$0	$0	$0	$0	$0
5655	Regulatory Expenses	$1,365,775	$1,365,775		$0	$1,365,775	$1,365,775	$0	$1,365,775	$0

5660	General Advertising Expenses	$0	$0		$0	$0	$0	$0	$0	$0
5665	Miscellaneous General Expenses	$2,713,269	$2,713,269		$0	$2,713,269	$2,713,269	$0	$2,713,269	$0
5670	Rent	$0	$0		$0	$0	$0	$0	$0	$0
5675	Maintenance of General Plant	$6,092,313	$6,092,313		$0	$6,092,313	$6,092,313	$0	$6,092,313	$0
5680	Electrical Safety Authority Fees	$0	$0		$0	$0	$0	$0	$0	$0
5685	Independent Market Operator Fees and Penalties	$0	$0		$0	$0	$0	$0	$0	$0
5705	Amortization Expense - Property, Plant, and Equipment	$40,755,585	$40,755,585		$0	$40,755,585	$40,755,585	$0	$40,755,585	$0
5710	Amortization of Limited Term Electric Plant	$0	$0		$0	$0	$0	$0	$0	$0
5715	Amortization of Intangibles and Other Electric Plant	$0	$0		$0	$0	$0	$0	$0	$0
5720	Amortization of Electric Plant Acquisition Adjustments	$0	$0		$0	$0	$0	$0	$0	$0
5730	Amortization of Unrecovered Plant and Regulatory Study Costs	$0	$0		$0	$0	$0	$0	$0	$0
5735	Amortization of Deferred Development Costs	$0	$0		$0	$0	$0	$0	$0	$0
5740	Amortization of Deferred Charges	$0	$0		$0	$0	$0	$0	$0	$0
6005	Interest on Long Term Debt	$20,002,681	$20,002,681		$0	$20,002,681	$20,002,681	$0	$20,002,681	$0
6105	Taxes Other Than Income Taxes	$2,087,844	$2,087,844		$0	$2,087,844	$2,087,844	$0	$2,087,844	$0
6110	Income Taxes	$4,983,819	$4,983,819		$0	$4,983,819	$4,983,819	$0	$4,983,819	$0
6205-1	Sub-account LEAP funding	$210,088	$210,088		$0	$210,088	$210,088	$0	$210,088	$0
6210	Life Insurance	$0	$0		$0	$0	$0	$0	$0	$0
6215	Penalties	$0	$0		$0	$0	$0	$0	$0	$0
6225	Other Deductions	$0	$0		$0	$0	$0	$0	$0	$0
	Total	**$880,775,321**	**$908,867,140**	###########		**$0**	###########	**$1,789,642,461**	**$0**	###########	**$0**
					Control	**$1,789,642,461**					

Grouping by Allocator	Adjusted TB	Excluded from COSS	Excluded	Included	Balance in O5	Difference	Balance in O4 Summary	Difference
1808	$ 343,662	$ -	$ -	$ 343,662	$ 343,662	$ -	$ 343,662	$ -
1815	$ 466,999	$ -	$ -	$ 466,999	$ 466,999	$ -	$ 466,999	$ -
1820	$ 1,000,375	$ -	$ -	$ 1,000,375	$ 1,000,375	$ -	$ 1,000,375	$ -
1830	$ 579,188	$ -	$ -	$ 579,188	$ 579,188	$ -	$ 579,188	$ -
1835	$ 879,712	$ -	$ -	$ 879,712	$ 879,712	$ -	$ 879,712	$ -
1840	$ 66,866	$ -	$ -	$ 66,866	$ 66,866	$ -	$ 66,866	$ -
1845	$ 1,036,475	$ -	$ -	$ 1,036,475	$ 1,036,475	$ -	$ 1,036,475	$ -
1850	$ 550,416	$ -	$ -	$ 550,416	$ 550,416	$ -	$ 550,416	$ -
1855	$ 931,397	$ -	$ -	$ 931,397	$ 931,397	$ -	$ 931,397	$ -
1860	$ 1,840,111	$ -	$ -	$ 1,840,111	$ 1,840,111	$ -	$ 1,840,111	$ -
1815-1855	$ 15,439,991	$ -	$ -	$ 15,439,991	$ 15,439,991	$ -	$ 15,439,991	$ -
1830 & 1835	$ 3,734,779	$ -	$ -	$ 3,734,779	$ 3,734,779	$ -	$ 3,734,779	$ -
1840 & 1845	$ 3,317,448	$ -	$ -	$ 3,317,448	$ 3,317,448	$ -	$ 3,317,448	$ -
BCP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
BDHA	$ 1,979,175	$ -	$ -	$ 1,979,175	$ 1,979,175	$ -	$ 1,979,175	$ -
Break Out	$ (85,516,584)	$ -	$ -	$ (85,516,584)	$ (85,516,584)	$ -	$ (85,516,584)	$ 0
CCA	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CDMPP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CEN	$ 91,362,225	$ -	$ -	$ 91,362,225	$ 91,362,225	$ -	$ 91,362,225	$ -
CEN EWMP	$ 806,294,434	$ -	$ -	$ 806,294,434	$ 806,294,434	$ -	$ 806,294,434	$ -
CREV	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CWCS	$ 50,582,151	$ -	$ -	$ 50,582,151	$ 50,582,151	$ -	$ 50,582,151	$ -
CWMC	$ 39,549,289	$ -	$ -	$ 39,549,289	$ 39,549,289	$ -	$ 39,549,289	$ -
CWMR	$ 371,040	$ -	$ -	$ 371,040	$ 371,040	$ -	$ 371,040	$ -
CWNB	$ 11,665,819	$ -	$ -	$ 11,665,819	$ 11,665,819	$ -	$ 11,665,819	$ -
DCP	$ 48,422,064	$ -	$ -	$ 48,422,064	$ 48,422,064	$ -	$ 48,422,064	$ -
LPHA	$ (898,752)	$ -	$ -	$ (898,752)	$ (898,752)	$ -	$ (898,752)	$ -
LTNCP	$ 71,573,323	$ -	$ -	$ 71,573,323	$ 71,573,323	$ -	$ 71,573,323	$ -

NFA	$ (10,701,993)	$ -	$ -	$ (10,701,993)	$ (10,701,993)	$ -	$ (10,701,993)	$ -
NFA ECC	$ 125,192,510	$ -	$ -	$ 125,192,510	$ 125,192,510	$ -	$ 125,192,510	$ -
O&M	$ 38,880,442	$ -	$ -	$ 38,880,442	$ 38,880,442	$ -	$ 38,880,442	$ -
PNCP	$ 410,949,541	$ -	$ -	$ 410,949,541	$ 410,949,541	$ -	$ 410,949,541	$ -
SNCP	$ 58,092,690	$ -	$ -	$ 58,092,690	$ 58,092,690	$ -	$ 58,092,690	$ -
TCP	$ 99,050,999	$ -	$ -	$ 99,050,999	$ 99,050,999	$ -	$ 99,050,999	$ -
Total	**$ 1,787,035,793**	**$ -**	**$ -**	**$ 1,787,035,793**	**$ 1,787,035,793**	**$ -**	**$ 1,787,035,792**	**$ 0**

Ontario Energy Board

2015 Cost Allocation Model

Sheet E5 Reconciliation Worksheet -

If you have completed the Cost Allocation filing model and prepared to submit your findings to the Ontario Energy Board, please note that you have two saving options. The 2014 Filing Requirements request that a copy of Option 1 be filed in live Excel format.

OPTION #1 - Detailed
Step 1: Save this file as "LDCname_Detailed_CA_model_RUN#.xls"
Step 2: Print and submit sheets I6, I8, O1, and O2 within Exhibit 7 of the application

OPTION #2 - Rolled Up (Note that the rolled-up version is no longer required in a COS filing.)
Step 1: Save this file as "LDCname_Detailed_CA_model_RUN#.xls"
Step 2: **Click on the Option 2 Button**
Step 3: **Save this file as "LDCname_RolledUp_CA_model_RUN#.xls"**

Ontario Energy Board

2016 Cost Allocation Model

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,379,644,000

Total kWs from Load Forecast	10,034,217

Deficiency/sufficiency (RRWF 8. cell F51)	- 27,670,798

Miscellaneous Revenue (RRWF 5. cell F48)	11,565,131

For 2017 Year

			1	2	3	4	6	7	8	9	11	12	13
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Billing Data													
Forecast kWh	**CEN**	7,379,644,000	2,198,259,000	716,896,000	2,907,445,000	877,400,000	619,253,000	43,653,000	48,000	16,690,000			
Forecast kW	**CDEM**	10,034,217			6,908,640	1,877,691	1,119,726	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,476,514			1,727,160	469,423	279,932						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	7,379,644,000	2,198,259,000	716,896,000	2,907,445,000	877,400,000	619,253,000	43,653,000	48,000	16,690,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$158,986,352	$86,397,220	$19,995,810	$35,058,607	$10,375,565	$5,720,075	$872,268	$3,776	$552,900	$0	$10,131	$0
Transformer Ownership Allowance		$1,114,431	$0	$0	$777,222	$211,240	$125,969	$0	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$157,871,920	$86,397,220	$19,995,810	$34,281,385	$10,164,325	$5,594,105	$872,268	$3,776	$552,900	$0	$10,131	$0

Ontario Energy Board

2016 Cost Allocation Model

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

For 2017 Year

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,270,901	433,446	151,153	500,093	107,082	77,391	-	-	1,736		-	
Bulk Delivery CP	BCP1	1,270,901	433,446	151,153	500,093	107,082	77,391	-	-	1,736	-	-	
Total Sytem CP	DCP1	1,270,901	433,446	151,153	500,093	107,082	77,391	-	-	1,736	-	-	
4 CP													
Transformation CP	TCP4	4,962,106	1,778,343	484,980	1,890,014	468,304	315,703	17,376	14	7,373		-	
Bulk Delivery CP	BCP4	4,962,106	1,778,343	484,980	1,890,014	468,304	315,703	17,376	14	7,373	-	-	
Total Sytem CP	DCP4	4,962,106	1,778,343	484,980	1,890,014	468,304	315,703	17,376	14	7,373	-	-	
12 CP													
Transformation CP	TCP12	13,737,495	4,668,145	1,371,988	5,281,389	1,395,030	947,866	50,282	45	22,520		230	
Bulk Delivery CP	BCP12	13,737,495	4,668,145	1,371,988	5,281,389	1,395,030	947,866	50,282	45	22,520	-	230	
Total Sytem CP	DCP12	13,737,495	4,668,145	1,371,988	5,281,389	1,395,030	947,866	50,282	45	22,520	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,446,038	493,272	151,153	519,528	159,390	105,423	13,837	13	2,270		1,152	
Primary NCP	PNCP1	1,446,038	493,272	151,153	519,528	159,390	105,423	13,837	13	2,270		1,152	
Line Transformer NCP	LTNCP1	1,232,894	493,272	151,153	451,990	70,131	49,549	13,837	13	2,270	-	680	
Secondary NCP	SNCP1	920,309	493,272	151,153	259,765			13,837	13	2,270	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,618,628	1,945,515	569,448	2,017,404	614,595	405,373	53,482	50	8,927		3,836	
Primary NCP	PNCP4	5,618,628	1,945,515	569,448	2,017,404	614,595	405,373	53,482	50	8,927		3,836	
Line Transformer NCP	LTNCP4	4,830,068	1,945,515	569,448	1,789,437	270,422	190,526	53,482	50	8,927	-	2,263	
Secondary NCP	SNCP4	3,586,123	1,945,515	569,448	1,008,702			53,482	50	8,927	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,541,461	5,396,320	1,558,336	5,661,573	1,668,863	1,092,326	130,317	122	25,948		7,657	
Primary NCP	PNCP12	15,541,461	5,396,320	1,558,336	5,661,573	1,668,863	1,092,326	130,317	122	25,948		7,657	
Line Transformer NCP	LTNCP12	13,288,821	5,396,320	1,558,336	4,925,569	734,300	513,394	130,317	122	25,948	-	4,517	
Secondary NCP	SNCP12	9,941,829	5,396,320	1,558,336	2,830,787			130,317	122	25,948	-		

Ontario Energy Board

2016 Cost Allocation Model

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Sheet O1 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

For 2017 Year

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >50-Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$157,871,920	$86,397,220	$19,995,810	$34,281,385	$10,164,325	$0	$5,594,105	$872,268	$3,776	$552,900	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,565,131	$7,621,021	$1,287,007	$1,881,874	$446,724	$0	$244,502	$61,953	$728	$18,570	$0	$2,753	$0
		Miscellaneous Revenue input equals Output												
	Total Revenue at Existing Rates	$169,437,051	$94,018,240	$21,282,817	$36,163,259	$10,611,049	$0	$5,838,608	$934,221	$4,504	$571,470	$0	$12,884	$0
	Factor required to recover deficiency (1 + D)	1.1753												
	Distribution Revenue at Status Quo Rates	$185,542,719	$101,540,382	$23,500,550	$40,290,011	$11,945,863	$0	$6,574,605	$1,025,154	$4,438	$649,809	$0	$11,906	$0
	Miscellaneous Revenue (mi)	$11,565,131	$7,621,021	$1,287,007	$1,881,874	$446,724	$0	$244,502	$61,953	$728	$18,570	$0	$2,753	$0
	Total Revenue at Status Quo Rates	$197,107,850	$109,161,402	$24,787,557	$42,171,884	$12,392,588	$0	$6,819,107	$1,087,107	$5,166	$668,378	$0	$14,660	$0
	Expenses													
di	Distribution Costs (di)	$29,267,179	$14,070,218	$3,044,679	$8,161,616	$2,123,252	$0	$1,410,673	$337,881	$1,297	$105,957	$0	$11,605	$0
cu	Customer Related Costs (cu)	$17,618,384	$14,319,552	$1,751,482	$1,323,589	$189,173	$0	$16,413	$13,547	$1,292	$374	$0	$2,962	$0
ad	General and Administration (ad)	$43,046,577	$25,672,818	$4,413,988	$8,955,951	$2,193,637	$0	$1,363,783	$330,317	$2,323	$100,253	$0	$13,506	$0
dep	Depreciation and Amortization (dep)	$44,057,757	$21,655,778	$4,808,150	$12,017,745	$3,021,027	$0	$1,984,437	$422,081	$1,530	$130,915	$0	$16,094	$0
INPUT	PILs (INPUT)	$4,835,440	$2,268,428	$512,070	$1,394,190	$357,491	$0	$237,348	$48,784	$176	$15,233	$0	$1,720	$0
INT	Interest	$22,224,279	$10,425,976	$2,353,538	$6,407,869	$1,643,073	$0	$1,090,881	$224,217	$807	$70,014	$0	$7,905	$0
	Total Expenses	$161,049,616	$88,412,771	$16,883,906	$38,260,960	$9,527,654	$0	$6,103,535	$1,376,827	$7,425	$422,746	$0	$53,792	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$36,058,234	$16,915,838	$3,818,545	$10,396,577	$2,665,838	$0	$1,769,922	$363,785	$1,309	$113,595	$0	$12,825	$0
	Revenue Requirement (includes NI)	$197,107,850	$105,328,608	$20,702,452	$48,657,537	$12,193,492	$0	$7,873,457	$1,740,613	$8,734	$536,341	$0	$66,617	$0
		Revenue Requirement Input equals Output												
	Rate Base Calculation													
	Net Assets													
dp	Distribution Plant - Gross	$871,506,831	$414,607,213	$92,753,184	$247,373,089	$63,022,135	$0	$41,787,785	$8,837,982	$32,419	$2,781,240	$0	$311,783	$0
gp	General Plant - Gross	$143,786,337	$68,169,947	$15,239,856	$40,986,411	$10,452,182	$0	$6,939,732	$1,475,949	$5,434	$465,544	$0	$51,283	$0
accum dep	Accumulated Depreciation	($134,744,907)	($65,304,057)	($14,664,083)	($37,358,511)	($9,465,102)	$0	($6,228,565)	($1,275,210)	($4,575)	($395,793)	$0	($49,010)	$0
co	Capital Contribution	($53,474,700)	($28,994,002)	($5,733,714)	($12,847,355)	($2,981,328)	$0	($1,980,713)	($677,634)	($3,115)	($237,049)	$0	($19,791)	$0
	Total Net Plant	$827,073,561	$388,479,100	$87,595,243	$238,153,633	$61,027,887	$0	$40,518,239	$8,361,088	$30,163	$2,613,942	$0	$294,265	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$911,714,427	$273,437,511	$88,495,848	$358,000,053	$108,031,563	$0	$76,246,717	$5,408,923	$6,381	$2,087,431	$0	$0	$0
	OM&A Expenses	$89,932,139	$54,062,588	$9,210,149	$18,441,156	$4,506,063	$0	$2,790,869	$681,746	$4,912	$206,583	$0	$28,074	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$1,001,646,566*	*$327,500,099*	*$97,705,996*	*$376,441,209*	*$112,537,626*	*$0*	*$79,037,586*	*$6,090,668*	*$11,293*	*$2,294,014*	*$0*	*$28,074*	*$0*
	Working Capital	$142,233,812	$46,505,014	$13,874,251	$53,454,652	$15,980,343	$0	$11,223,337	$864,875	$1,604	$325,750	$0	$3,986	$0
	Total Rate Base	$969,307,373	$434,984,115	$101,469,495	$291,608,285	$77,008,230	$0	$51,741,576	$9,225,963	$31,767	$2,939,692	$0	$298,252	$0
		Rate Base Input equals Output												
	Equity Component of Rate Base	$387,722,949	$173,993,646	$40,587,798	$116,643,314	$30,803,292	$0	$20,696,630	$3,690,385	$12,707	$1,175,877	$0	$119,301	$0
	Net Income on Allocated Assets	$36,058,234	$20,748,632	$7,903,650	$3,910,924	$2,864,934	$0	$715,573	($289,721)	($2,258)	$245,633	$0	($39,132)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$36,058,234	$20,748,632	$7,903,650	$3,910,924	$2,864,934	$0	$715,573	($289,721)	($2,258)	$245,633	$0	($39,132)	$0
	RATIOS ANALYSIS													
	REVENUE TO EXPENSES STATUS QUO%	100.00%	103.64%	119.73%	86.67%	101.63%	0.00%	86.61%	62.46%	59.16%	124.62%	0.00%	22.01%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($27,670,798)	($11,310,368)	$580,365	($12,494,279)	($1,582,443)	$0	($2,034,849)	($806,391)	($4,229)	$35,129	$0	($53,733)	$0
		Deficiency Input equals Output												
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	$0	$3,832,794	$4,085,105	($6,485,653)	$199,096	$0	($1,054,350)	($653,506)	($3,567)	$132,037	$0	($51,957)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	11.92%	19.47%	3.35%	9.30%	0.00%	3.46%	-7.85%	-17.77%	20.89%	0.00%	-32.80%	0.00%

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Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

For 2017 Year

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
Customer Unit Cost per month - Avoided Cost	$4.66	$7.29	$42.48	$174.27	$89.95	$0.21	$1.92	-$0.03	0	$205.86	0
Customer Unit Cost per month - Directly Related	$8.08	$11.85	$72.56	$304.25	$220.63	$0.50	$3.81	-$0.02	0	$332.36	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$17.03	$25.33	$102.63	$547.54	$601.31	$15.03	$13.90	$8.16	0	$271.11	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

Ontario Energy Board

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,366,004,000

Total kWs from Load Forecast	9,986,854

Deficiency/sufficiency (RRWF 8. cell F51)	- 37,991,282

Miscellaneous Revenue (RRWF 5. cell F48)	11,722,041

For 2018 Year

			1	2	3	4	6	7	8	9	11	12	13
	ID	Total	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
Billing Data													
Forecast kWh	CEN	7,366,004,000	2,206,411,000	709,791,000	2,875,422,000	895,369,000	618,467,000	43,765,000	48,000	16,731,000			
Forecast kW	CDEM	9,986,854			6,824,350	1,916,044	1,118,300	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,464,674			1,706,088	479,011	279,575						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	CEN EWMP	7,366,004,000	2,206,411,000	709,791,000	2,875,422,000	895,369,000	618,467,000	43,765,000	48,000	16,731,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$159,421,148	$87,038,947	$19,869,160	$34,845,925	$10,509,367	$5,715,350	$872,268	$3,651	$556,350	$0	$10,131	$0
Transformer Ownership Allowance		$1,109,103	$0	$0	$767,739	$215,555	$125,809	$0	$0	$0	$0	$0	$0
Net Class Revenue	CREV	$158,312,045	$87,038,947	$19,869,160	$34,078,185	$10,293,812	$5,589,542	$872,268	$3,651	$556,350	$0	$10,131	$0

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

For 2018 Year

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,267,602	435,054	149,655	494,585	109,276	77,293	-	-	1,740		-	
Bulk Delivery CP	BCP1	1,267,602	435,054	149,655	494,585	109,276	77,293	-	-	1,740	-	-	
Total Sytem CP	DCP1	1,267,602	435,054	149,655	494,585	109,276	77,293	-	-	1,740	-	-	
4 CP													
Transformation CP	TCP4	4,952,332	1,784,940	480,173	1,869,197	477,895	315,302	17,420	13	7,391		-	
Bulk Delivery CP	BCP4	4,952,332	1,784,940	480,173	1,869,197	477,895	315,302	17,420	13	7,391	-	-	
Total Sytem CP	DCP4	4,952,332	1,784,940	480,173	1,869,197	477,895	315,302	17,420	13	7,391	-	-	
12 CP													
Transformation CP	TCP12	13,710,594	4,685,463	1,358,391	5,223,220	1,423,600	946,663	50,411	42	22,576		230	
Bulk Delivery CP	BCP12	13,710,594	4,685,463	1,358,391	5,223,220	1,423,600	946,663	50,411	42	22,576	-	230	
Total Sytem CP	DCP12	13,710,594	4,685,463	1,358,391	5,223,220	1,423,600	946,663	50,411	42	22,576	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,443,818	495,101	149,655	513,806	162,654	105,290	13,873	12	2,276		1,152	
Primary NCP	PNCP1	1,443,818	495,101	149,655	513,806	162,654	105,290	13,873	12	2,276		1,152	
Line Transformer NCP	LTNCP1	1,229,661	495,101	149,655	447,011	71,567	49,486	13,873	12	2,276	-	680	
Secondary NCP	SNCP1	917,820	495,101	149,655	256,903			13,873	12	2,276	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,610,210	1,952,732	563,804	1,995,184	627,182	404,858	53,619	46	8,949		3,836	
Primary NCP	PNCP4	5,610,210	1,952,732	563,804	1,995,184	627,182	404,858	53,619	46	8,949		3,836	
Line Transformer NCP	LTNCP4	4,817,385	1,952,732	563,804	1,769,728	275,960	190,284	53,619	46	8,949	-	2,263	
Secondary NCP	SNCP4	3,576,742	1,952,732	563,804	997,592			53,619	46	8,949	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,516,859	5,416,339	1,542,892	5,599,216	1,703,041	1,090,940	130,651	112	26,011		7,657	
Primary NCP	PNCP12	15,516,859	5,416,339	1,542,892	5,599,216	1,703,041	1,090,940	130,651	112	26,011		7,657	
Line Transformer NCP	LTNCP12	13,253,921	5,416,339	1,542,892	4,871,318	749,338	512,742	130,651	112	26,011	-	4,517	
Secondary NCP	SNCP12	9,915,614	5,416,339	1,542,892	2,799,608			130,651	112	26,011	-		

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Sheet O1 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

For 2018 Year

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	5 GS >50-Intermediate	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$158,312,045	$87,038,947	$19,869,160	$34,078,185	$10,293,812	$0	$5,589,542	$872,268	$3,651	$556,350	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,722,041	$7,730,090	$1,297,507	$1,898,225	$461,956	$0	$248,844	$63,096	$679	$18,832	$0	$2,812	$0
		Miscellaneous Revenue Input equals Output												
	Total Revenue at Existing Rates	$170,034,086	$94,769,037	$21,166,667	$35,976,410	$10,755,768	$0	$5,838,385	$935,364	$4,329	$575,182	$0	$12,943	$0
	Factor required to recover deficiency (1 + D)	1.2400												
	Distribution Revenue at Status Quo Rates	$196,303,327	$107,926,310	$24,637,306	$42,256,173	$12,764,092	$0	$6,930,904	$1,081,593	$4,527	$689,861	$0	$12,562	$0
	Miscellaneous Revenue (mi)	$11,722,041	$7,730,090	$1,297,507	$1,898,225	$461,956	$0	$248,844	$63,096	$679	$18,832	$0	$2,812	$0
	Total Revenue at Status Quo Rates	$208,025,368	$115,656,400	$25,934,813	$44,154,397	$13,226,049	$0	$7,179,748	$1,144,689	$5,205	$708,693	$0	$15,374	$0
	Expenses													
di	Distribution Costs (di)	$30,216,898	$14,557,668	$3,119,607	$8,362,804	$2,244,675	$0	$1,459,388	$350,159	$1,220	$109,240	$0	$12,137	$0
cu	Customer Related Costs (cu)	$18,190,101	$14,797,938	$1,798,612	$1,364,399	$193,961	$0	$16,750	$13,822	$1,214	$381	$0	$3,023	$0
ad	General and Administration (ad)	$44,443,438	$26,544,202	$4,525,559	$9,185,651	$2,314,748	$0	$1,411,277	$342,374	$2,184	$103,370	$0	$14,073	$0
dep	Depreciation and Amortization (dep)	$46,943,424	$23,130,709	$5,080,505	$12,708,889	$3,291,729	$0	$2,117,586	$455,057	$1,496	$140,002	$0	$17,449	$0
INPUT	PILs (INPUT)	$6,154,952	$2,885,603	$645,762	$1,766,538	$468,179	$0	$304,297	$62,772	$203	$19,356	$0	$2,242	$0
INT	Interest	$24,165,341	$11,329,346	$2,535,365	$6,935,714	$1,838,147	$0	$1,194,718	$246,453	$799	$75,996	$0	$8,804	$0
	Total Expenses	$170,114,154	$93,245,466	$17,705,409	$40,323,996	$10,351,439	$0	$6,504,017	$1,470,636	$7,117	$448,347	$0	$57,729	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$37,911,214	$17,773,771	$3,977,547	$10,880,927	$2,883,732	$0	$1,874,305	$386,642	$1,253	$119,225	$0	$13,812	$0
	Revenue Requirement (includes NI)	$208,025,368	$111,019,237	$21,682,955	$51,204,923	$13,235,171	$0	$8,378,322	$1,857,278	$8,370	$567,572	$0	$71,540	$0
		Revenue Requirement Input equals Output												
	Rate Base Calculation													
	Net Assets													
dp	Distribution Plant - Gross	$963,390,694	$459,972,516	$101,744,332	$270,960,613	$71,183,192	$0	$46,192,937	$9,871,753	$32,839	$3,080,495	$0	$352,017	$0
gp	General Plant - Gross	$160,744,133	$76,374,351	$16,885,615	$45,475,637	$11,968,773	$0	$7,779,478	$1,672,984	$5,585	$523,044	$0	$58,666	$0
accum dep	Accumulated Depreciation	($181,131,605)	($88,297,799)	($19,570,719)	($49,654,054)	($12,937,323)	$0	($8,334,217)	($1,730,201)	($5,661)	($535,109)	$0	($66,522)	$0
co	Capital Contribution	($71,622,683)	($38,916,198)	($7,623,803)	($17,081,626)	($4,087,405)	$0	($2,658,101)	($907,537)	($3,801)	($317,574)	$0	($26,639)	$0
	Total Net Plant	$871,380,539	$409,132,870	$91,435,425	$249,700,570	$66,127,237	$0	$42,980,096	$8,907,000	$28,962	$2,750,856	$0	$317,522	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$947,558,773	$285,391,883	$91,246,474	$368,891,926	$114,864,148	$0	$79,341,238	$5,642,837	$6,519	$2,173,747	$0	$0	$0
	OM&A Expenses	$92,850,437	$55,899,808	$9,443,777	$18,912,855	$4,753,384	$0	$2,887,416	$706,354	$4,618	$212,992	$0	$29,233	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$1,040,409,211*	*$341,291,692*	*$100,690,251*	*$387,804,781*	*$119,617,532*	*$0*	*$82,228,654*	*$6,349,191*	*$11,138*	*$2,386,739*	*$0*	*$29,233*	*$0*
	Working Capital	$147,738,108	$48,463,420	$14,298,016	$55,068,279	$16,985,690	$0	$11,676,469	$901,585	$1,582	$338,917	$0	$4,151	$0
	Total Rate Base	$1,019,118,647	$457,596,291	$105,733,441	$304,768,849	$83,112,927	$0	$54,656,565	$9,808,585	$30,544	$3,089,773	$0	$321,673	$0
		Rate Base Input equals Output												
	Equity Component of Rate Base	$407,647,459	$183,038,516	$42,293,376	$121,907,540	$33,245,171	$0	$21,862,626	$3,923,434	$12,218	$1,235,909	$0	$128,669	$0
	Net Income on Allocated Assets	$37,911,214	$22,410,934	$8,229,404	$3,830,402	$2,874,610	$0	$675,731	($325,948)	($1,912)	$260,346	$0	($42,355)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$37,911,214	$22,410,934	$8,229,404	$3,830,402	$2,874,610	$0	$675,731	($325,948)	($1,912)	$260,346	$0	($42,355)	$0
	RATIOS ANALYSIS													
	REVENUE TO EXPENSES STATUS QUO%	100.00%	104.18%	119.61%	86.23%	99.93%	0.00%	85.69%	61.63%	62.19%	124.86%	0.00%	21.49%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($37,991,282)	($16,250,200)	($516,288)	($15,228,513)	($2,479,402)	$0	($2,539,937)	($921,914)	($4,041)	$7,610	$0	($58,597)	$0
		Deficiency Input equals Output												
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	$0	$4,637,163	$4,251,857	($7,050,525)	($9,122)	$0	($1,198,574)	($712,589)	($3,165)	$141,121	$0	($56,166)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	12.24%	19.46%	3.14%	8.65%	0.00%	3.09%	-8.31%	-15.65%	21.07%	0.00%	-32.92%	0.00%

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Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

For 2018 Year

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	GS <50	GS 50 to 1,499 kW	GS 1,500 to 4,999 kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load	Standby Power GS 50 to 1,499 kW	Standby Power GS 1,500 to 4,999 kW	Standby Power Large Use
Customer Unit Cost per month - Avoided Cost	$4.77	$7.47	$43.64	$177.02	$87.28	$0.21	$1.95	-$0.03	0	$210.52	0
Customer Unit Cost per month - Directly Related	$8.24	$12.09	$74.19	$308.69	$219.65	$0.51	$3.87	-$0.02	0	$338.74	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$17.53	$26.02	$105.24	$565.81	$632.27	$15.81	$14.45	$8.48	0	$276.33	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,364,071,000

Total kWs from Load Forecast	9,962,801

Deficiency/sufficiency (RRWF 8. cell F51)	- 47,020,791

Miscellaneous Revenue (RRWF 5. cell F48)	11,801,959

For 2019 Year

			1	2	3	4	6	7	8	9	11	12	13
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Billing Data													
Forecast kWh	**CEN**	7,364,071,000	2,214,984,000	704,193,000	2,852,593,000	914,569,000	617,036,000	43,876,000	48,000	16,772,000			
Forecast kW	**CDEM**	9,962,801			6,761,930	1,957,009	1,115,702	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,458,660			1,690,483	489,252	278,926						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	7,364,071,000	2,214,984,000	704,193,000	2,852,593,000	914,569,000	617,036,000	43,876,000	48,000	16,772,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$159,976,740	$87,685,777	$19,773,873	$34,712,342	$10,652,281	$5,706,743	$872,268	$3,525	$559,799	$0	$10,131	$0
Transformer Ownership Allowance		$1,106,397	$0	$0	$760,717	$220,164	$125,516	$0	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$158,870,343	$87,685,777	$19,773,873	$33,951,625	$10,432,118	$5,581,227	$872,268	$3,525	$559,799	$0	$10,131	$0

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

For 2019 Year

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,266,355	436,746	148,474	490,658	111,619	77,114	-	-	1,744		-	
Bulk Delivery CP	BCP1	1,266,355	436,746	148,474	490,658	111,619	77,114	-	-	1,744	-	-	
Total Sytem CP	DCP1	1,266,355	436,746	148,474	490,658	111,619	77,114	-	-	1,744	-	-	
4 CP													
Transformation CP	TCP4	4,950,222	1,791,878	476,386	1,854,357	488,143	314,572	17,464	12	7,410		-	
Bulk Delivery CP	BCP4	4,950,222	1,791,878	476,386	1,854,357	488,143	314,572	17,464	12	7,410	-	-	
Total Sytem CP	DCP4	4,950,222	1,791,878	476,386	1,854,357	488,143	314,572	17,464	12	7,410	-	-	
12 CP													
Transformation CP	TCP12	13,705,140	4,703,675	1,347,677	5,181,751	1,454,127	944,473	50,539	38	22,631		230	
Bulk Delivery CP	BCP12	13,705,140	4,703,675	1,347,677	5,181,751	1,454,127	944,473	50,539	38	22,631	-	230	
Total Sytem CP	DCP12	13,705,140	4,703,675	1,347,677	5,181,751	1,454,127	944,473	50,539	38	22,631	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,443,767	497,026	148,474	509,727	166,142	105,046	13,908	11	2,282		1,152	
Primary NCP	PNCP1	1,443,767	497,026	148,474	509,727	166,142	105,046	13,908	11	2,282		1,152	
Line Transformer NCP	LTNCP1	1,228,317	497,026	148,474	443,462	73,102	49,372	13,908	11	2,282	-	680	
Secondary NCP	SNCP1	916,565	497,026	148,474	254,864			13,908	11	2,282	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,610,179	1,960,323	559,357	1,979,344	640,631	403,922	53,755	42	8,971		3,836	
Primary NCP	PNCP4	5,610,179	1,960,323	559,357	1,979,344	640,631	403,922	53,755	42	8,971		3,836	
Line Transformer NCP	LTNCP4	4,812,109	1,960,323	559,357	1,755,678	281,877	189,844	53,755	42	8,971	-	2,263	
Secondary NCP	SNCP4	3,572,120	1,960,323	559,357	989,672			53,755	42	8,971	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,515,671	5,437,392	1,530,723	5,554,762	1,739,561	1,088,415	130,983	103	26,075		7,657	
Primary NCP	PNCP12	15,515,671	5,437,392	1,530,723	5,554,762	1,739,561	1,088,415	130,983	103	26,075		7,657	
Line Transformer NCP	LTNCP12	13,239,399	5,437,392	1,530,723	4,832,643	765,407	511,556	130,983	103	26,075	-	4,517	
Secondary NCP	SNCP12	9,902,658	5,437,392	1,530,723	2,777,381			130,983	103	26,075	-		

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Sheet 01 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

For 2019 Year

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$158,870,343	$87,685,777	$19,773,873	$33,951,625	$10,432,118	$5,581,227	$872,268	$3,525	$559,799	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,801,959	$7,792,977	$1,300,748	$1,898,886	$473,296	$250,076	$63,595	$626	$18,915	$0	$2,841	$0
		Miscellaneous Revenue Input equals Output											
	Total Revenue at Existing Rates	$170,672,303	$95,478,754	$21,074,621	$35,850,511	$10,905,414	$5,831,303	$935,863	$4,151	$578,715	$0	$12,971	$0
	Factor required to recover deficiency (1 + D)	1.2960											
	Distribution Revenue at Status Quo Rates	$205,891,134	$113,638,101	$25,626,339	$44,000,273	$13,519,708	$7,233,100	$1,130,433	$4,568	$725,483	$0	$13,129	$0
	Miscellaneous Revenue (mi)	$11,801,959	$7,792,977	$1,300,748	$1,898,886	$473,296	$250,076	$63,595	$626	$18,915	$0	$2,841	$0
	Total Revenue at Status Quo Rates	$217,693,094	$121,431,078	$26,927,086	$45,899,159	$13,993,004	$7,483,176	$1,194,028	$5,194	$744,398	$0	$15,970	$0
	Expenses												
di	Distribution Costs (di)	$31,197,437	$15,053,153	$3,198,356	$8,580,892	$2,370,795	$1,505,363	$362,485	$1,139	$112,610	$0	$12,644	$0
cu	Customer Related Costs (cu)	$18,780,370	$15,300,916	$1,849,125	$1,395,431	$199,058	$17,121	$14,105	$1,134	$389	$0	$3,090	$0
ad	General and Administration (ad)	$45,885,628	$27,445,981	$4,643,787	$9,421,758	$2,440,360	$1,455,974	$354,520	$2,040	$106,585	$0	$14,622	$0
dep	Depreciation and Amortization (dep)	$48,823,718	$24,153,670	$5,249,410	$13,093,170	$3,490,100	$2,193,751	$477,711	$1,419	$146,103	$0	$18,385	$0
INPUT	PILs (INPUT)	$8,540,033	$4,004,400	$888,594	$2,438,812	$666,643	$423,280	$88,015	$256	$26,857	$0	$3,175	$0
INT	Interest	$25,418,563	$11,918,702	$2,644,813	$7,258,882	$1,984,198	$1,259,850	$261,969	$762	$79,938	$0	$9,449	$0
	Total Expenses	$178,645,748	$97,876,823	$18,474,085	$42,188,945	$11,151,154	$6,855,338	$1,558,806	$6,750	$472,483	$0	$61,363	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$39,047,346	$18,309,205	$4,062,894	$11,150,909	$3,048,075	$1,935,349	$402,430	$1,171	$122,799	$0	$14,515	$0
	Revenue Requirement (includes NI)	$217,693,094	$116,186,027	$22,536,979	$53,339,855	$14,199,229	$8,790,688	$1,961,236	$7,921	$595,282	$0	$75,878	$0
		Revenue Requirement Input equals Output											
	Rate Base Calculation												
	Net Assets												
dp	Distribution Plant - Gross	$1,052,537,668	$504,503,783	$110,414,720	$293,334,912	$79,326,053	$50,276,100	$10,883,926	$32,693	$3,374,465	$0	$391,017	$0
gp	General Plant - Gross	$171,441,496	$81,667,483	$17,866,950	$48,135,385	$13,048,943	$8,285,647	$1,806,858	$5,446	$561,040	$0	$63,743	$0
accum dep	Accumulated Depreciation	($230,395,232)	($112,869,871)	($24,734,307)	($62,503,149)	($16,750,249)	($10,542,532)	($2,219,195)	($6,576)	($684,013)	$0	($85,340)	$0
co	Capital Contribution	($89,416,864)	($48,668,996)	($9,453,492)	($21,192,503)	($5,219,683)	($3,315,942)	($1,132,114)	($4,292)	($396,536)	$0	($33,306)	$0
	Total Net Plant	$904,167,068	$424,632,400	$94,093,871	$257,774,644	$70,405,063	$44,703,274	$9,339,475	$27,270	$2,854,956	$0	$336,114	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$928,733,588	$279,346,850	$88,810,617	$359,760,102	$115,342,580	$77,818,649	$5,533,504	$6,054	$2,115,232	$0	$0	$0
	OM&A Expenses	$95,863,434	$57,800,051	$9,691,269	$19,398,082	$5,010,212	$2,978,458	$731,111	$4,313	$219,585	$0	$30,355	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$1,024,597,022*	*$337,146,901*	*$98,501,886*	*$379,158,183*	*$120,352,792*	*$80,797,107*	*$6,264,615*	*$10,366*	*$2,334,817*	*$0*	*$30,355*	*$0*
	Working Capital	$145,492,777	$47,874,860	$13,987,268	$53,840,462	$17,090,097	$11,473,189	$889,575	$1,472	$331,544	$0	$4,310	$0
	Total Rate Base	$1,049,659,845	$472,507,259	$108,081,139	$311,615,106	$87,495,160	$56,176,463	$10,229,051	$28,742	$3,186,500	$0	$340,424	$0
		Rate Base Input equals Output											
	Equity Component of Rate Base	$419,863,938	$189,002,904	$43,232,456	$124,646,043	$34,998,064	$22,470,585	$4,091,620	$11,497	$1,274,600	$0	$136,170	$0
	Net Income on Allocated Assets	$39,047,346	$23,554,255	$8,453,001	$3,710,214	$2,841,850	$627,838	($364,778)	($1,556)	$271,915	$0	($45,394)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$39,047,346	$23,554,255	$8,453,001	$3,710,214	$2,841,850	$627,838	($364,778)	($1,556)	$271,915	$0	($45,394)	$0
	RATIOS ANALYSIS												
	REVENUE TO EXPENSES STATUS QUO%	100.00%	104.51%	119.48%	86.05%	98.55%	85.13%	60.88%	65.58%	125.05%	0.00%	21.05%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($47,020,791)	($20,707,273)	($1,462,358)	($17,489,344)	($3,293,815)	($2,959,385)	($1,025,373)	($3,770)	($16,567)	$0	($62,907)	$0
		Deficiency Input equals Output											
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	($0)	$5,245,051	$4,390,107	($7,440,695)	($206,225)	($1,307,511)	($767,208)	($2,727)	$149,116	$0	($59,909)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	12.46%	19.55%	2.98%	8.12%	2.79%	-8.92%	-13.53%	21.33%	0.00%	-33.34%	0.00%

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Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

For 2019 Year

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Customer Unit Cost per month - Avoided Cost	$4.89	$7.67	$43.87	$181.16	$90.20	$0.22	$1.98	-$0.03	0	$215.75	0
Customer Unit Cost per month - Directly Related	$8.41	$12.33	$74.45	$314.30	$224.02	$0.52	$3.94	-$0.02	0	$345.42	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$18.00	$26.66	$106.35	$584.65	$662.73	$16.51	$14.94	$8.75	0	$277.62	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	7,364,398,000

Total kWs from Load Forecast	9,953,606

Deficiency/sufficiency (RRWF 8. cell F51)	- 53,049,194

Miscellaneous Revenue (RRWF 5. cell F48)	11,897,833

For 2020 Year

			1	2	3	4	6	7	8	9	11	12	13
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Billing Data													
Forecast kWh	**CEN**	7,364,398,000	2,217,628,000	699,744,000	2,835,387,000	935,554,000	615,195,000	44,015,000	48,000	16,827,000			
Forecast kW	**CDEM**	9,953,606			6,711,579	2,001,525	1,112,342	123,144	216			4,800	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		2,456,362			1,677,895	500,381	278,086						
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	7,364,398,000	2,217,628,000	699,744,000	2,835,387,000	935,554,000	615,195,000	44,015,000	48,000	16,827,000	-	-	-
Existing Monthly Charge			$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41
Existing Distribution kWh Rate			$0.0234	$0.0210						$0.0219			
Existing Distribution kW Rate					$3.5691	$3.4887	$3.3129	$3.9997	$10.0361		$2	$1	$2
Existing TOA Rate					$0.45	$0.45	$0.45						
Additional Charges													
Distribution Revenue from Rates		$160,463,532	$88,188,231	$19,702,481	$34,620,270	$10,807,584	$5,695,612	$872,268	$3,399	$563,555	$0	$10,131	$0
Transformer Ownership Allowance		$1,105,363	$0	$0	$755,053	$225,172	$125,138	$0	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$159,358,170	$88,188,231	$19,702,481	$33,865,217	$10,582,413	$5,570,474	$872,268	$3,399	$563,555	$0	$10,131	$0

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Sheet I8 Demand Data Worksheet -

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

For 2020 Year

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
CO-INCIDENT PEAK													
1 CP													
Transformation CP	TCP1	1,265,316	437,267	147,536	487,699	114,180	76,884	-	-	1,750		-	
Bulk Delivery CP	BCP1	1,265,316	437,267	147,536	487,699	114,180	76,884	-	-	1,750	-	-	
Total Sytem CP	DCP1	1,265,316	437,267	147,536	487,699	114,180	76,884	-	-	1,750	-	-	
4 CP													
Transformation CP	TCP4	4,948,510	1,794,019	473,377	1,843,172	499,344	313,634	17,520	11	7,434		-	
Bulk Delivery CP	BCP4	4,948,510	1,794,019	473,377	1,843,172	499,344	313,634	17,520	11	7,434	-	-	
Total Sytem CP	DCP4	4,948,510	1,794,019	473,377	1,843,172	499,344	313,634	17,520	11	7,434	-	-	
12 CP													
Transformation CP	TCP12	13,701,771	4,709,296	1,339,163	5,150,496	1,487,492	941,655	50,699	35	22,705		230	
Bulk Delivery CP	BCP12	13,701,771	4,709,296	1,339,163	5,150,496	1,487,492	941,655	50,699	35	22,705	-	230	
Total Sytem CP	DCP12	13,701,771	4,709,296	1,339,163	5,150,496	1,487,492	941,655	50,699	35	22,705	-	230	
NON CO_INCIDENT PEAK													
1 NCP													
Classification NCP from Load Data Provider	DNCP1	1,443,898	497,620	147,536	506,652	169,954	104,733	13,952	10	2,289		1,152	
Primary NCP	PNCP1	1,443,898	497,620	147,536	506,652	169,954	104,733	13,952	10	2,289		1,152	
Line Transformer NCP	LTNCP1	1,226,878	497,620	147,536	440,787	74,779	49,224	13,952	10	2,289	-	680	
Secondary NCP	SNCP1	914,734	497,620	147,536	253,327			13,952	10	2,289	-		
4 NCP													
Classification NCP from Load Data Provider	DNCP4	5,610,740	1,962,665	555,823	1,967,405	655,330	402,716	53,925	38	9,000		3,836	
Primary NCP	PNCP4	5,610,740	1,962,665	555,823	1,967,405	655,330	402,716	53,925	38	9,000		3,836	
Line Transformer NCP	LTNCP4	4,806,425	1,962,665	555,823	1,745,088	288,345	189,277	53,925	38	9,000	-	2,263	
Secondary NCP	SNCP4	3,565,155	1,962,665	555,823	983,703			53,925	38	9,000	-		
12 NCP													
Classification NCP from Load Data Provider	DNCP12	15,516,152	5,443,890	1,521,052	5,521,257	1,779,475	1,085,168	131,398	94	26,161		7,657	
Primary NCP	PNCP12	15,516,152	5,443,890	1,521,052	5,521,257	1,779,475	1,085,168	131,398	94	26,161		7,657	
Line Transformer NCP	LTNCP12	13,223,604	5,443,890	1,521,052	4,803,494	782,969	510,029	131,398	94	26,161	-	4,517	
Secondary NCP	SNCP12	9,883,224	5,443,890	1,521,052	2,760,629			131,398	94	26,161	-		

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Sheet 01 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

For 2020 Year

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 1,499 kW	4 GS 1,500 to 4,999 kW	6 Large Use	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	11 Standby Power GS 50 to 1,499 kW	12 Standby Power GS 1,500 to 4,999 kW	13 Standby Power Large Use
crev	Distribution Revenue at Existing Rates	$159,358,170	$88,188,231	$19,702,481	$33,865,217	$10,582,413	$5,570,474	$872,268	$3,399	$563,555	$0	$10,131	$0
mi	Miscellaneous Revenue (mi)	$11,897,833	$7,859,662	$1,305,471	$1,908,562	$486,001	$251,468	$64,170	$574	$19,069	$0	$2,856	$0
		Miscellaneous Revenue Input equals Output											
	Total Revenue at Existing Rates	$171,256,003	$96,047,893	$21,007,953	$35,773,779	$11,068,414	$5,821,941	$936,439	$3,973	$582,624	$0	$12,986	$0
	Factor required to recover deficiency (1 + D)	1.3329											
	Distribution Revenue at Status Quo Rates	$212,407,364	$117,545,462	$26,261,296	$45,138,705	$14,105,222	$7,424,844	$1,162,640	$4,531	$751,159	$0	$13,503	$0
	Miscellaneous Revenue (mi)	$11,897,833	$7,859,662	$1,305,471	$1,908,562	$486,001	$251,468	$64,170	$574	$19,069	$0	$2,856	$0
	Total Revenue at Status Quo Rates	$224,305,197	$125,405,124	$27,566,768	$47,047,267	$14,591,224	$7,676,312	$1,226,811	$5,105	$770,228	$0	$16,359	$0
	Expenses												
di	Distribution Costs (di)	$32,209,794	$15,548,191	$3,282,129	$8,817,893	$2,505,515	$1,550,665	$374,977	$1,055	$116,308	$0	$13,061	$0
cu	Customer Related Costs (cu)	$19,389,793	$15,801,247	$1,897,472	$1,450,608	$204,010	$17,459	$14,399	$1,050	$397	$0	$3,151	$0
ad	General and Administration (ad)	$47,374,616	$28,340,366	$4,764,780	$9,700,408	$2,574,888	$1,500,527	$366,628	$1,889	$110,059	$0	$15,071	$0
dep	Depreciation and Amortization (dep)	$50,160,773	$24,877,446	$5,360,530	$13,372,645	$3,648,798	$2,236,222	$494,221	$1,317	$150,621	$0	$18,974	$0
INPUT	PILs (INPUT)	$7,654,566	$3,574,666	$790,192	$2,187,185	$615,328	$381,021	$79,124	$205	$23,995	$0	$2,851	$0
INT	Interest	$26,843,574	$12,535,892	$2,771,101	$7,670,174	$2,157,874	$1,336,193	$277,478	$718	$84,147	$0	$9,997	$0
	Total Expenses	$183,633,115	$100,677,807	$18,866,203	$43,198,914	$11,706,412	$7,022,088	$1,606,827	$6,233	$485,528	$0	$63,105	$0
	Direct Allocation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NI	Allocated Net Income (NI)	$40,672,081	$18,993,775	$4,198,637	$11,621,476	$3,269,506	$2,024,535	$420,421	$1,088	$127,496	$0	$15,147	$0
	Revenue Requirement (includes NI)	$224,305,197	$119,671,582	$23,064,840	$54,820,390	$14,975,918	$9,046,623	$2,027,248	$7,321	$613,024	$0	$78,252	$0
		Revenue Requirement Input equals Output											
	Rate Base Calculation												
	Net Assets												
dp	Distribution Plant - Gross	$1,148,407,757	$550,352,775	$119,691,587	$318,973,208	$88,591,019	$54,744,314	$11,913,980	$32,001	$3,681,456	$0	$427,417	$0
gp	General Plant - Gross	$185,763,614	$88,350,951	$19,215,412	$52,054,205	$14,507,535	$8,983,389	$1,968,413	$5,305	$609,210	$0	$69,193	$0
accum dep	Accumulated Depreciation	($281,791,870)	($138,181,971)	($30,048,726)	($76,132,318)	($20,911,133)	($12,835,420)	($2,731,026)	($7,255)	($839,398)	$0	($104,620)	$0
co	Capital Contribution	($107,316,506)	($58,427,494)	($11,279,844)	($25,338,418)	($6,416,600)	($3,973,647)	($1,359,744)	($4,621)	($476,116)	$0	($40,022)	$0
	Total Net Plant	$945,062,995	$442,094,262	$97,578,429	$269,556,677	$75,770,821	$46,918,636	$9,791,621	$25,430	$2,975,152	$0	$351,967	$0
	Directly Allocated Net Fixed Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
COP	Cost of Power (COP)	$945,198,501	$284,625,934	$89,810,054	$363,913,458	$120,075,563	$78,958,442	$5,649,194	$6,161	$2,159,695	$0	$0	$0
	OM&A Expenses	$98,974,203	$59,689,803	$9,944,380	$19,968,910	$5,284,412	$3,068,651	$756,004	$3,994	$226,764	$0	$31,283	$0
	Directly Allocated Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Subtotal	*$1,044,172,704*	*$344,315,737*	*$99,754,434*	*$383,882,368*	*$125,359,976*	*$82,027,093*	*$6,405,198*	*$10,155*	*$2,386,459*	*$0*	*$31,283*	*$0*
	Working Capital	$148,272,524	$48,892,835	$14,165,130	$54,511,296	$17,801,117	$11,647,847	$909,538	$1,442	$338,877	$0	$4,442	$0
	Total Rate Base	$1,093,335,519	$490,987,096	$111,743,559	$324,067,973	$93,571,938	$58,566,484	$10,701,159	$26,872	$3,314,029	$0	$356,410	$0
		Rate Base Input equals Output											
	Equity Component of Rate Base	$437,334,207	$196,394,839	$44,697,423	$129,627,189	$37,428,775	$23,426,593	$4,280,464	$10,749	$1,325,612	$0	$142,564	$0
	Net Income on Allocated Assets	$40,672,081	$24,727,317	$8,700,565	$3,848,354	$2,884,812	$654,224	($380,016)	($1,128)	$284,700	$0	($46,746)	$0
	Net Income on Direct Allocation Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Net Income	$40,672,081	$24,727,317	$8,700,565	$3,848,354	$2,884,812	$654,224	($380,016)	($1,128)	$284,700	$0	($46,746)	$0
	RATIOS ANALYSIS												
	REVENUE TO EXPENSES STATUS QUO%	100.00%	104.79%	119.52%	85.82%	97.43%	84.85%	60.52%	69.73%	125.64%	0.00%	20.91%	0.00%
	EXISTING REVENUE MINUS ALLOCATED COSTS	($53,049,194)	($23,623,689)	($2,056,887)	($19,046,611)	($3,907,504)	($3,224,681)	($1,090,809)	($3,347)	($30,399)	$0	($65,266)	$0
		Deficiency Input equals Output											
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	($0)	$5,733,542	$4,501,928	($7,773,122)	($384,695)	($1,370,310)	($800,437)	($2,216)	$157,204	$0	($61,893)	$0
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	12.59%	19.47%	2.97%	7.71%	2.79%	-8.88%	-10.50%	21.48%	0.00%	-32.79%	0.00%

Ontario Energy Board

2016 Cost Allocation Model

EB-2015-0004

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

For 2020 Year

Summary

	1	2	3	4	6	7	8	9	11	12	13
	Residential	**GS <50**	**GS 50 to 1,499 kW**	**GS 1,500 to 4,999 kW**	**Large Use**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**	**Standby Power GS 50 to 1,499 kW**	**Standby Power GS 1,500 to 4,999 kW**	**Standby Power Large Use**
Customer Unit Cost per month - Avoided Cost	$4.97	$7.78	$45.79	$182.07	$87.33	$0.22	$2.00	-$0.03	0	$218.57	0
Customer Unit Cost per month - Directly Related	$8.54	$12.47	$77.10	$316.27	$222.22	$0.52	$4.01	-$0.02	0	$349.18	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$18.26	$26.99	$109.38	$597.72	$674.31	$16.95	$15.20	$8.85	0	$279.43	0
Existing Approved Fixed Charge	$9.67	$16.72	$260.82	$4,193.93	$15,231.32	$0.57	$2.62	$4.43	$122.41	$122.41	$122.41

Response to OEB Staff Interrogatory Question #2

Reference: **A-2-1**

Question #2:

1 Staff 2. Custom IR Annual Updates

Hydro Ottawa has proposed a Custom IR in which there will be annual updates as well as a resetting of the inflation factor in the incremental formula for OM&A and the cost of capital for the final two years of the term. OEB staff would like to assemble a comprehensive list of Hydro Ottawa's proposal for annual rate adjustments. Please explain Hydro Ottawa's annual adjustments with respect to:

i) Changes in the cost of capital
ii) Changes in working capital
iii) Changes in tax rates
iv) Changes in third party pass through charges
v) Disposition of deferral and variance accounts
vi) Forecast revenue variances arising from changes in forecast customer count
vii) Forecast revenue variances arising from changes kWh and kW forecasts
viii) Cost impact from new or changes to regional or municipal plans
ix) Changes to OEB or Government policy (load transfers, cost allocation, environment, etc.)
x) Directives from the ministry or the OEB
xi) Changes to Ontario Market Rules or OEB codes that would impact costs or revenues
xii) Changes to the Distribution System Code
xiii) Changes in accounting policies

For each adjustment proposed, including rate riders and deferral accounts, please provide:

xiv) A reference to the OEB policy or to a precedent that provides for the adjustment. If no OEB policy or precedent exists for a proposed adjustment, please describe the particular circumstances of Hydro Ottawa that justifies the need for the adjustment.

xv) A best estimate of the materiality of the variance the adjustment is designed to address.

xvi) Hydro Ottawa's estimate of the annual time and cost (including intevernor participation) of implementing these annual updates.

xvii) If Hydro Ottawa considers there are other items that should be considered for annual update, please include them in this list.

Reference: Exhibit A Tab 2 Schedule 1 Page 10

Capital investments made during the IRM years of the OEB's price cap IR plan are recognized in rate base only upon rebasing. Hydro Ottawa indicates in its July 7, 2015 presentation that the main reason it is pursuing a custom IR option is that it provides "a timely return on needed capital investments"; it goes on to note that a guiding principle of the application is that it will permit earning "an appropriate rate of return in a timely manner to permit continued investment in capital assets". This approach has evident benefits for the shareholder relative to Price Cap IR.

i) What are the benefits of custom IR for customers?

ii) Please provide a table that shows forecast annual net income under price cap IR with the forecast capital requirements that Hydro Ottawa anticipates in this plan.

iii) Are there investments in capital that Hydro Ottawa would not make in reliability and system service if it were not pursuing custom IR from 2016-2020 and instead were on Price Cap IR?

Response:

Annual Updates

i. Hydro Ottawa proposes to adjust for all cost of capital parameters once in 2018 to reset for 2019 and 2020.

ii. Hydro Ottawa does not propose to adjust annually for changes in working capital.

iii. Hydro Ottawa does not propose to adjust annually for changes in tax rates. However, in the event of an unforeseen tax change that is materially impacting, Hydro Ottawa reserves the right to file a Z factor application.

iv. Hydro Ottawa does not propose to adjust annually for changes in third party pass through charges.

v. Per Exhibit I-1-2, Hydro Ottawa proposes to dispose of Group 1 balances on an annual basis if necessary, as contemplated in Boards Filling Requirements for Electricity Distribution Rate Applications – 2014 Edition for 2015 Rate Applications, Section 3.2.3. On page 10 there is a pre-set disposition threshold of $0.001 per kWh and consistent with a letter from the Board dated July 25, 2014, distributors may now elect to dispose of Group 1 account balances below the threshold.

For Group 2 accounts Hydro Ottawa proposes to dispose of these balances when applying for 2019 & 2020 rates, with the exception of Lost Revenue Adjustment Mechanism Variance Account ("LRAMVA"), which may be disposed of on an annual basis using a separate rate rider. This is consistent with the Boards Filling Requirements for Electricity Distribution Rate Applications – 2014 Edition for 2015 Rate Applications Section 3.2.4.1 on page 9, which allows distributors to apply for

disposition of the LRAMVA balance on an annual basis, if said balance is deemed significant by the applicant.

Please refer to Exhibit I-1-1, updated June 29, 2015, Section 2, Tables 1 and 2 for a list of Group 1 and Group 2 accounts.

Hydro Ottawa will not file an annual Incentive Regulation Mechanism ("IRM") to change distribution rates, however it will file an annual update to Hydro One Transmission and Connection Rates, as per Exhibit H-3-1. To be clear, Hydro Ottawa proposes to update the retail transmission service rates ("RTSRs") on an annual basis, 2017 through 2020, based on Board Approved adjustments to the Hydro One Uniform Transmission Rates ("UTRs") using the RTSR model, which is part of the IRM model. Given Hydro One UTRs are not typically approved in time for adjusting Hydro Ottawa's rates on January 1, Hydro Ottawa proposes to set each year's RTSRs using the previous year's UTRs. Hydro Ottawa proposes that the differences from the new yearly rates be captured in Uniform System of Accounts 1584 – RSVA Network and 1586 – RSVA Connection for future disposition.

vi. Hydro Ottawa does not propose to adjust annually for changes in forecast revenue variances arising from changes in forecast customer count.

vii. Hydro Ottawa does not propose to adjust annually for changes in forecast revenue variances arising from changes kWh and kW forecasts.

viii. Hydro Ottawa does not propose to adjust annually for changes in cost impact from new or changes to regional or municipal plans. However, in the event of an unforeseen cost impact that is materially impacting, Hydro Ottawa reserves the right to file a Z factor application.

ix. Hydro Ottawa does not propose to adjust annually for changes in changes to OEB or Government policy (load transfers, cost allocation, environment, etc.) However, in

the event of an unforeseen cost impact that is materially impacting, Hydro Ottawa reserves the right to file a Z factor application.

x. Hydro Ottawa does not propose to adjust annually for changes in directives from the ministry or the OEB. However, in the event of an unforeseen cost impact that is materially impacting, Hydro Ottawa reserves the right to file a Z factor application.

xi. Hydro Ottawa does not propose to adjust annually for changes in Ontario Market Rules or OEB codes that would impact costs or revenues. However, in the event of an unforeseen cost impact that is materially impacting, Hydro Ottawa reserves the right to file a Z factor application.

xii. Hydro Ottawa does not propose to adjust annually to recover costs associated with changes to the Distribution System Code.

xiii. Hydro Ottawa does not propose to adjust annually for changes in accounting policies.

xiv. Hydro Ottawa does not propose to file annual adjustments to it cost and revenues.

xv. Hydro Ottawa is not in a position at this time to accurately estimate the materiality associated with any of the variances its one-time adjustments are designed to address.

xvi. The annual time and cost (including intervener participation) of implementing the mid-plan updates can be accommodated within the Regulatory Cost budget providing a limited written process is adopted. Hydro Ottawa, however estimates that internal and external costs to review its Y factor application will amount to approximately $100K.

xvii. Hydro Ottawa has no other distribution specific items that should be considered for annual update.

Custom IR vs. Price Cap

The principle reason why Hydro Ottawa exercised the Custom IR option made available to it by the Board was in order to recover its large multi-year capital requirements. In Hydro Ottawa's July 7th presentation it indicated that "Custom IR offers a financial sustainability model to provide timely return on needed capital investments"[1], and "… to permit continued investment in capital assets <u>to meet customer expectations</u>".[2]

i. The benefits to Hydro Ottawa's customer of approving its Custom IR application arise from sustained or improved reliability resulting from increased investments in Hydro Ottawa's distribution infrastructure.

ii. See Table # 1 below that shows forecast annual net income (ROE) that Hydro Ottawa might expect to earn under price cap IR compared to Hydro Ottawa's forecast capital requirements. To respond to this question, Hydro Ottawa has assumed a non-adjusted full rebasing for 2016.

iii. Hydro Ottawa confirms that there are reliability enhancing investments it may not undertake if it were not pursuing custom IR from 2016-2020 and instead were on Price Cap IR. The precise nature of the investments not made would be determined by a re-prioritization process. Hydro Ottawa cautions, however, that the known and likely outcomes of reverting to a price cap model for rate setting may include non-paced investments leading to large rate hikes in the rebasing year.

[1] Slide 25, Hydro Ottawa's July 7, 2015 Presentation.
[2] Ibid, Slide26.

Table # 1 – Estimated Net Income (Price Cap) vs. Forecasted Capital

($000s)	2016	2017	2018	2019	2020	Total
HOL Custom IR capital funding request only	$120,168	$114,245	$113,344	$120,983	$119,537	$588,277
Estimated Annual Net Income under price cap (ROE)	$34,347	$29,197	$23,560	$18,375	$16,834	$122,313
Net Income as a percent of Capital Requirements	28.6%	25.6%	20.8%	15.2%	14.1%	N/A

Response to OEB Staff Interrogatory Question #3

Reference:

Question #3:

1 Staff 3. Custom IR and the Ability to Manage Within the Rates

At page 19 of the RRFE report, the Board indicates that distributors applying under the Custom IR option to demonstrate the ability to manage within the rates set, given that actual costs and revenue will vary from forecast [emphasis added]. Please indicate how Hydro Ottawa's proposed annual adjustments for variances in cost and revenue are consistent with demonstrating this ability.

i. Prior to filing this application, did Hydro Ottawa consider a set of costs and supporting forecasts for a five year term that would not have required planned annual adjustments? Why or why not?

ii. With Hydro Ottawa's proposed tiered earnings sharing mechanism, the customers would be receiving a tiered share of the earnings. In what way might the OEB's off-ramp of ± 300 basis points be altered for Hydro Ottawa's Custom IR?

Response:

Hydro Ottawa has not proposed to file annual adjustments to account for variances in cost and revenues. In this respect, Hydro Ottawa aligns with one of the key tenents of incentive regulation that maintains rates be decoupled from costs. In the words of the OEB "[t]his approach provides the opportunity for distributors to earn, and potentially exceed, the allowed rate of return on equity. It is not necessary, nor would it be appropriate, for ratebase to be re-calibrated annually."[1]

[1] Page 11 of the OEB's October 2012 Report of the Board, Renewed Regulatory Framework for Electricity Distributors.

Hydro Ottawa has proposed to make one-time adjustments to inflation and cost of capital parameters and to dispose of deferral and variance accounts where amounts reach the OEB designated threshold . Beyond this, Hydro Ottawa expects to adjust once to collect monies associated with its Y factor and to adjust for non-distribution transmission rates and LRAM.

Hydro Ottawa believes that permitting one-time adjustments over the five year period gives the company an opportunity to correct a rate impact trend that, left as is, could have serious long term consequences either to Hydro Ottawa or its customers. Allowing Hydro Ottawa to adjust mid-term acts as a safety measure to both it and its customers and permits a reasonable means of balancing the risks and rewards inherent to incentive regulation plans.

i) As noted above, Hydro Ottawa has not proposed to file annual adjustments for changes in costs and revenues.

ii) Hydro Ottawa interprets the OEB Staff's question to ask whether the OEB's +/- 300 basis point off-ramp could/should be altered in light of Hydro Ottawa's proposed earning sharing mechanism. Hydro Ottawa is not proposing to alter the OEB's policy on off-ramp principally because in light of its assymetrical ESM, it is not prepared to undertake more risk in the quantum of potential under-earnings.

Response to OEB Staff Interrogatory Question #4

Reference:

Question #4:

1 Staff 4. Custom IR and Comprehensive Rate Making
Reference

***Report of the OEB, Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors (EB-2010-0379)* (RRFE Report)**

In the RRFE Report, the OEB (p. 8) defined "targeted rate-setting" as treating OM&A and capital separately and distinguished this from "a comprehensive approach to rate-setting" (p. 9) that recognizes the interrelationship between capital expenditures and OM&A expenditures. The RRFE Report also found (p. 9) "rate-setting that is comprehensive creates stronger and more balanced incentives and is more compatible with the Board's implementation of an outcome-based framework." Table 1 on page 13 of the RRFE Report also shows that the Custom IR option must have comprehensive (i.e. capital and OM&A) coverage:

i. Given the application of the formula of I-X, please state whether or not Hydro Ottawa's Custom IR plan is more akin to what the Board describes in the RRFE report as a targeted rather than comprehensive approach to rate-setting? Please identify specifically any incentives that Hydro Ottawa has identified that ensure that its capital expenditures are subject to the same performance and productivity incentives as OM&A would be when subject to productivity and stretch factors.

ii. Please explain in detail how the Custom IR plan recognizes the interrelationship between capital expenditures and OM&A expenditures when the formula specifies different cost recovery mechanisms for changes in capital and OM&A costs.

Response:

i) Hydro Ottawa maintains that its Custom IR application aligns with the spirit and intent of principles and objectives set by the Board in the OEB *Report of the Board: Renewed Regulatory Framework for Electricity* ("RRFE"). Hydro Ottawa's Custom IR application rate setting method is a comprehensive rate setting approach in so far as both capital and OM&A are constrained to downwardly adjust costs irrespective of need. Hydro Ottawa interprets the interrogatory as suggesting that a) rates can only be comprehensively derived using a "formula" or "index" and that b) where rates are not comprehensively derived using a formula or index, the interrelationship and inter-dependencies between capital and OM&A requirements will not be captured.

Hydro Ottawa contends that neither conclusion is correct for the following reasons: First on page 18 of the RRFE the Board indicated that "[C]ustom IR method rates are set based on a five year forecast of revenue requirement and sales volume". It went on to note on page 19 of the RRFE that "[T]his rate setting method is intended to be customized to fit the specific applicant's circumstances." If the Board had intended Custom IR filers to set their five year rates exclusively using a formula covering capital and OM&A costs, it would have specifically stated such in the RRFE or alternatively it would have released filing guidelines for Custom IR applications explicitly containing this expectation.

Similarly, Hydro Ottawa disagrees with the suggestion that absent a formula or index approach to rate setting the interrelationship and inter-dependencies between capital and OM&A requirements cannot be captured. On the contrary the interrelationship

and interdependencies are explicitly captured in the forward looking budgeting exercise that adjusts needed capital funding requirements to reflect and account for staff and resource constraints. The delinking of distribution rate to distribution costs is an inherent feature of incentive and performance based regulation and is the key to incenting productivity and efficiency improvements as noted on page 11 of the RRFE.

Finally, Hydro Ottawa notes that the targeted rate setting method explored in the proceeding leading to the OEB *Report of the Board: Renewed Regulatory Framework for Electricity* ("RRFE") contemplated a pass through of all unreduced capital costs. Hydro Ottawa has not put forward in its application unreduced capital costs. On the contrary and as noted above and in several exhibits filed as part of its pre-filed evidence, Hydro Ottawa's capital funding requirements do not incorporate the full system needs but rather have an inherent gap between the funding need and the funding proposal. The "funding gap" is what Hydro Ottawa proposes to recover via productivity and efficiency savings. The funding gap was in part informed by the bottom up and top down budgeting exercise that Hydro Ottawa undertook to derive its capital budget. The gap was further informed by staff and third party resource availabilities which is directly tied to Hydro Ottawa's OM&A budgeting process and associated constraints.

With respect to the OEB Staff's question regarding measures to ensure capital expenditures are subject to the same performance and productivity incentives as OM&A. Please refer to Exhibit B-1-2 and response to interrogatory CCC # 44.

ii) As alluded to above, Hydro Ottawa does not interpret the RRFE as implying that a formulaic approach to rate setting is the only rate setting approach available to ensure distributors are incentivized to find productivity and efficiencies savings on behalf of customers. Hydro Ottawa's Custom IR application recognizes the interrelationship between capital and OM&A expenditures through the variety of constraints placed on both the capital and OM&A budgets and the built in

assumptions that tie achieving certain outputs with constrained inputs. Hydro Ottawa is cognizant of the important interdependencies between capital and OM&A and is confident its planning and budgeting presented in the current application acknowledge and address these interdependencies appropriately and with reasonable synergistic measures.

Response to OEB Staff Interrogatory Question #5

Reference:

1. Attachment D – 1(D) Power System Engineering, Inc. Report: Econometric Benchmarking of Hydro Ottawa's Historical and Projected Total Cost and Reliability Levels

2. Exhibit B Tab 1 Schedule 2

Question #5:

1 Staff 5. Benchmarking

Hydro Ottawa commissioned Power System Engineering, Inc. (PSE) to conduct an econometric benchmarking study of: (1) Hydro Ottawa's past and projected total cost performance, and (2) its historical reliability performance, in reference to the utility's 2016- 2020 Custom IR application.

The conclusions are given on page 9 of PSE report and are summarized by OEB staff:
Hydro Ottawa's average 2011 to 2013 total costs were estimated to be 37.1% below benchmark values.

By 2020, Hydro Ottawa is estimated to be below benchmark values by 13.9%.
Hydro Ottawa's System Average Interruption Frequency Index (SAIFI) for their 2012-2014 average is 25.6% above benchmark expectations.

Hydro Ottawa's System Average Interruption Duration Index (SAIDI) for their 2012-2014 average is 7.2% above benchmark expectations.

The general trend indicated in the conclusions in the PSE report is that cost performance will decrease in the 2016 – 2020 period while reliability improves relative to the respective benchmarks. It appears that there could be a trade-off between reliability and costs.

i. What forecast increases in expenses related to reliability is Hydro Ottawa planning that improves the forecast of reliability?

ii. What measures does Hydro Ottawa have as targets that would be used for investment decisions for addressing reliability?

iii. Run-to-failure is an asset management plan option. Has Hydro Ottawa any risk policy related to acceptable levels of outage frequency and duration?

iv. In planning to improve reliability, does Hydro Ottawa have cost/reliability targets?

Ottawa Hydro was ranked against 78 US distributors for SAIDI and SAIFI performance indices in the PSE study. Major Event Days (MED) were removed from the data to help normalize the analysis. However, a number of the utilities would not experience the weather that causes near MEDs that distributors in the north east would experience from road salt, ice storms and heavy snow, such as Mississippi Power Co., Southern California Edison Co., Tampa Electric Co., and El Paso Electric Co.

v. Please provide the cost and reliability rating for distributors experiencing similar weather, as would be found from distributors in NERC's regions of: Midwest Reliability Organization (MRO) Northeast Power Coordinating Council (NPCC) and ReliabilityFirst (RF). Please provide any explanation or comment on the results and replot Figure 1-2, Figure 1-5 and Figure 1-6.

Response:

i. Hydro Ottawa Limited prioritizes all investments which target reliability based on the process described in Exhibit B-1-2 as updated June 29, 2015, section 2 Asset Management Process. Figure 2.1.1, of the previously mentioned reference indicates that

Reliability and Customer Impact is an Asset Management Objective, and as such, System Average Interruption Duration Index, System Average Interruption Frequency Index and Feeders Experiencing Multiple Interruptions are used as categories against which all investments are scored (refer to Exhibit B-1-2 as updated June 29, 2015, Table 2.1.2). No specific targets have been set for these criteria; however, based on the prioritization methodology the investments which impact the areas seeing the poorest reliability are given a higher priority.

ii. Please see Interrogatory Response to OEB #5 part i.

Hydro Ottawa has annual targets for SAIFI, SAIDI, CAIDI and $FEMI_{10}$ as shown below.

Table OEB #5 – 1: Annual Reliability Targets

KPI	Target	2011	2012	2013	2014
Annual SAIFI	0.8	1.68	1.81	1.53	1.08
SAIFI Excl LoS	0.8	1.40	1.13	1.36	0.86
3-Yr Average SAIFI	0.8	1.41	1.63	1.67	1.47
Annual SAIDI	1.0	2.60	1.64	1.67	1.66
SAIDI Excl LoS	1.0	2.43	1.31	1.64	1.59
3-Yr Average SAIDI	1.0	1.82	1.86	1.96	1.66
Annual CAIDI	1.25	1.54	0.90	1.09	1.53
CAIDI Excl LoS	1.25	1.74	1.15	1.21	1.85
3-Yr Average CAIDI	1.25	1.29	1.14	1.17	1.13
$FEMI_{10}$	<12	12	13	13	8

Currently, Hydro Ottawa is working to develop Performance Matrices that will improve and enhance benchmarking, business plan development and accomplishment reporting processes by tracking effectiveness and efficiency of the investments made. The project will be complete in 2015. This will allow 2016 data to create a baseline to be compared to that of 2017 and on. The 2017 project list will be the first to be optimized using C55.

iii. Hydro Ottawa Limited does not have a policy stating a specific level of outage frequency or duration which is acceptable; however, an objective to achieve an overall SAIDI of 1.0 and SAIFI of 0.8 has been set internally.

iv. Hydro Ottawa Limited has not set a specific target value for cost/reliability.

Hydro Ottawa Limited prioritizes System Renewal and System Access investments based on the process described in Exhibit B-1-2 as updated June 29, 2015, Section 2 Asset Management Process, which includes factors associated with reliability.

Exhibit B-1-2, Section 2.1.2.3 indicates that:

> "Investments are prioritized to maximize the value (i.e. risk score per dollar of investment). This cost/benefit ratio is calculated as the present value of the project cost (maximum 5 year window) over the 5 year present value of the project Risk Score. Investments are then prioritized based on ranking of this cost/benefit ratio. Projects with the lowest cost/benefit ratio are given higher priority over those with higher cost/benefit ratios."

Project prioritization in the future will make use of CopperLeaf's C55 Asset Investment Planning Software which builds on the process outlined above.

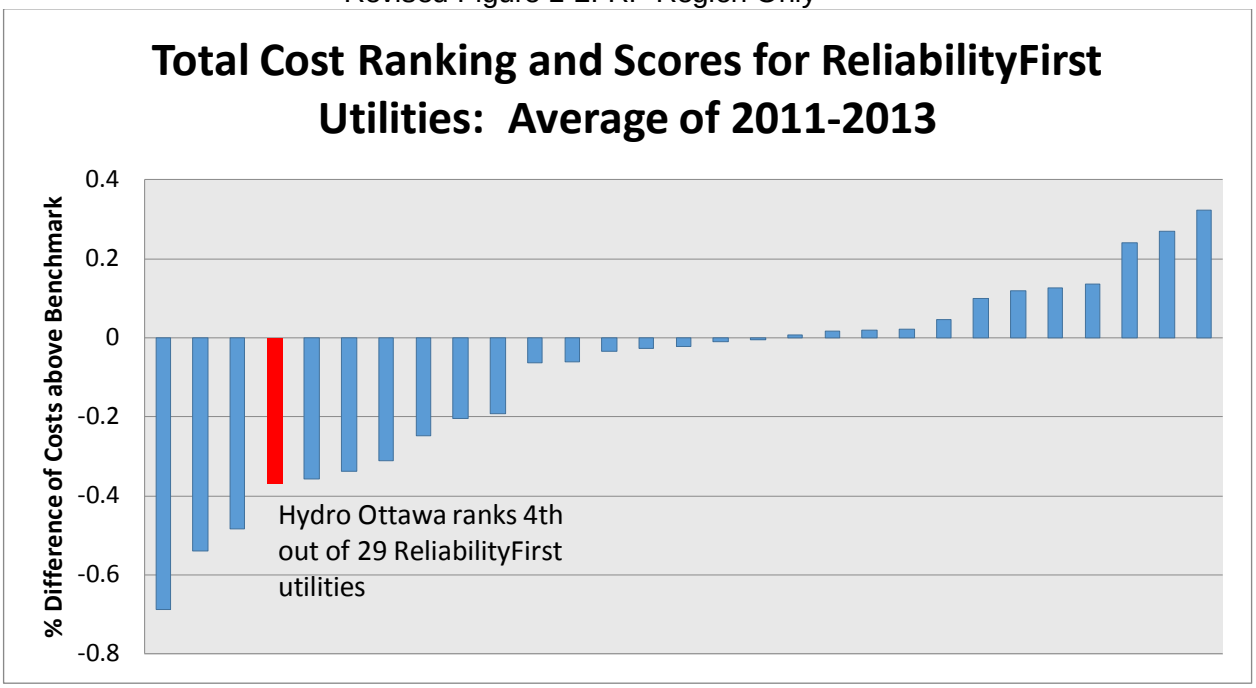
v. The figures and rankings are provided in the figures below. As they show, the rankings and results based on these more limited samples provide a very similar finding as the original PSE result (which used the full sample)—in each region, Hydro Ottawa has had strong cost performance (i.e., actual costs are lower than expected costs). Hydro Ottawa also is found to have poor SAIFI performance in each region (i.e., actual SAIFI is higher than expected SAIFI). Hydro Ottawa also is found to have below average SAIDI performance in each region. These findings are the same whether the full sample is analyzed, or the more limited samples.

Regarding the total cost rankings, Hydro Ottawa ranks 4th out of the 29 distributors in the RF region. The ranking table (Revised Figure 1-2) is provided below, limited only to the 29 RF distributors (the 29 count includes Hydro Ottawa). Within the RF region, Hydro

Ottawa shows a very strong cost performance score relative to the other distributors in the region.

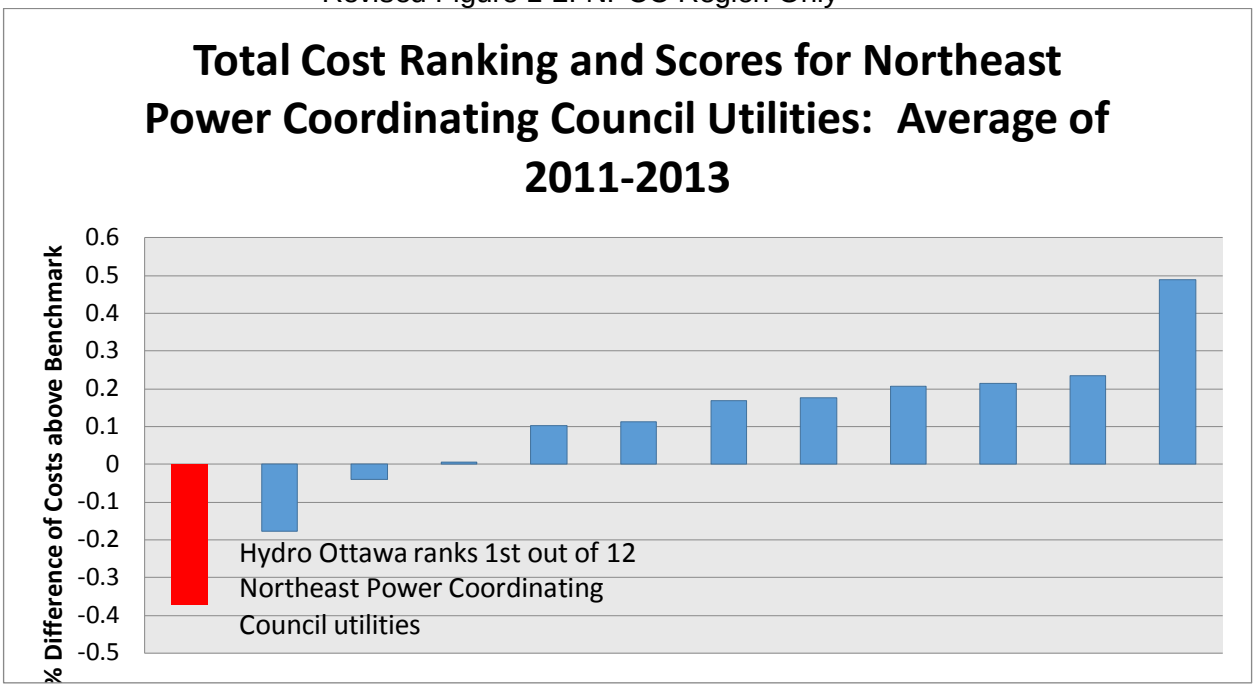
See also Hydro Ottawa Interrogatory Response to SIA #17 part a for a list of projects designed to reduce the impacts of severe weather events and improve Hydro Ottawa's reliability.

Revised Figure 1-2: RF Region Only



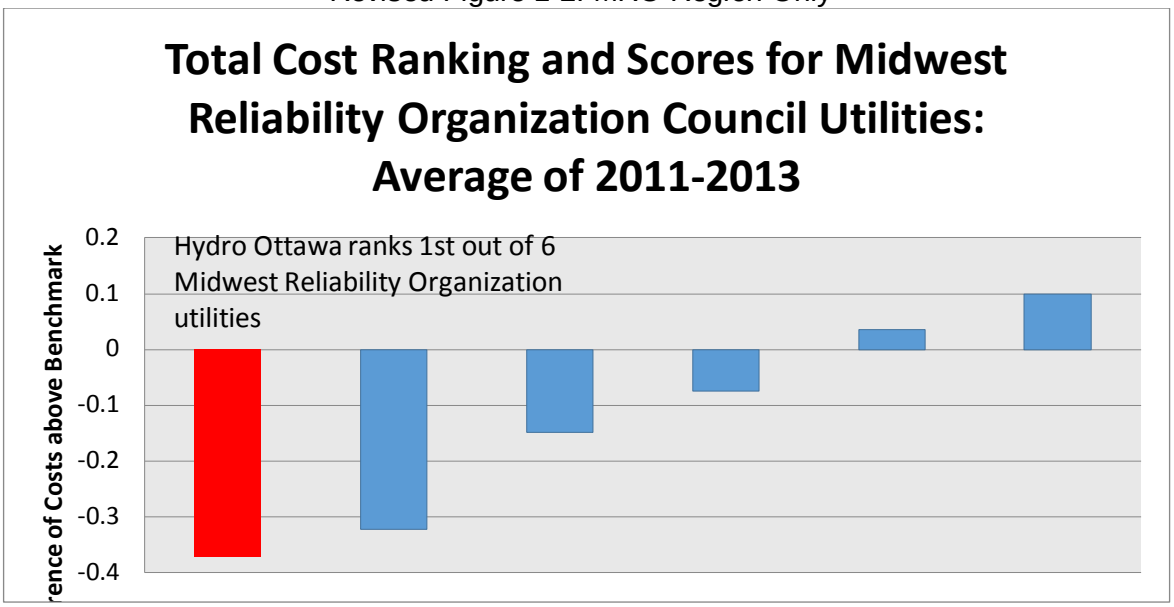
Moving to the NPCC region, Hydro Ottawa's cost performance is ranked first out of the twelve distributors (this count again includes Hydro Ottawa).

Revised Figure 1-2: NPCC Region Only



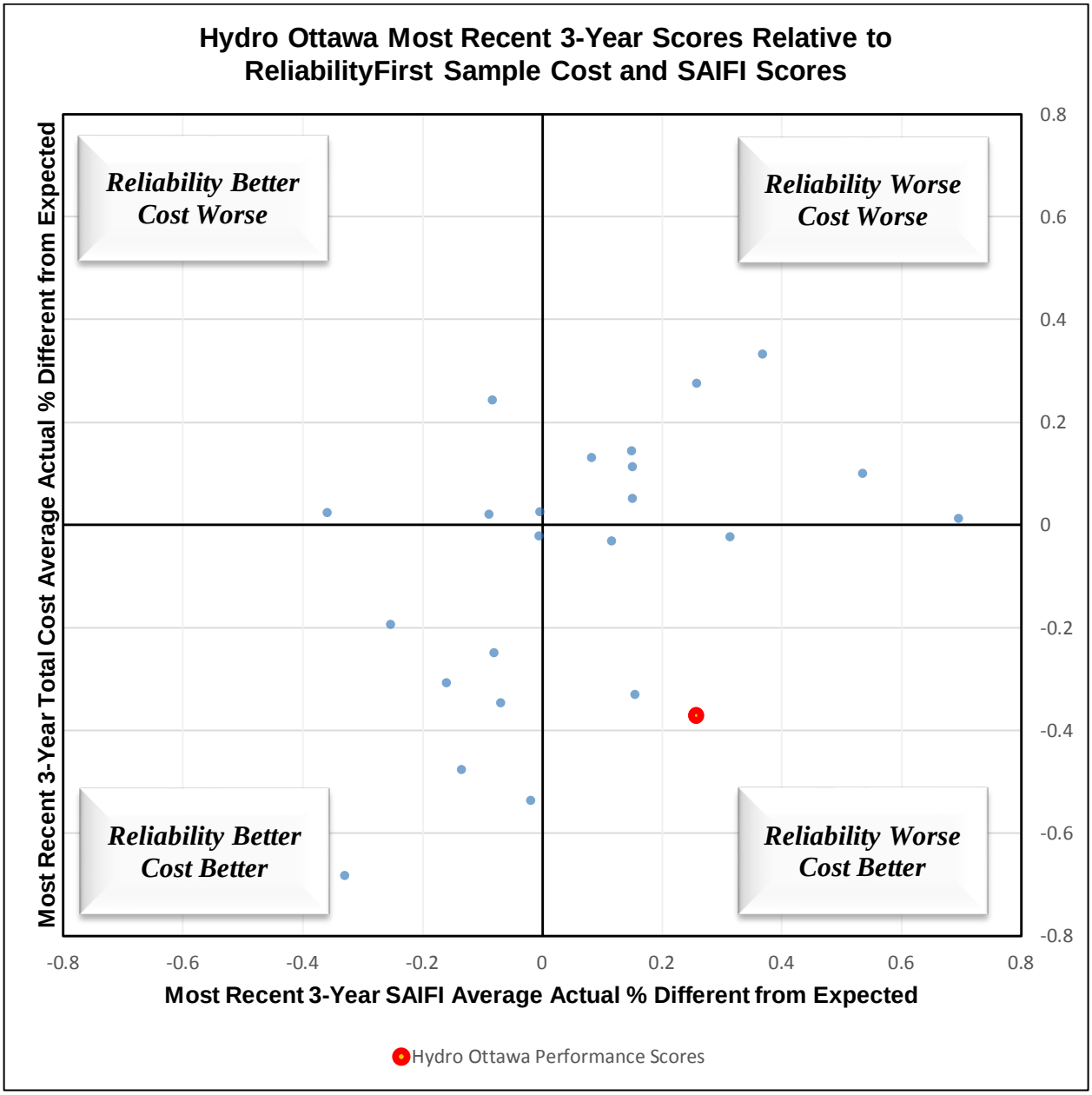
Moving to the MRO region, Hydro Ottawa's total cost performance ranks first out the six distributors.

Revised Figure 1-2: MRO Region Only



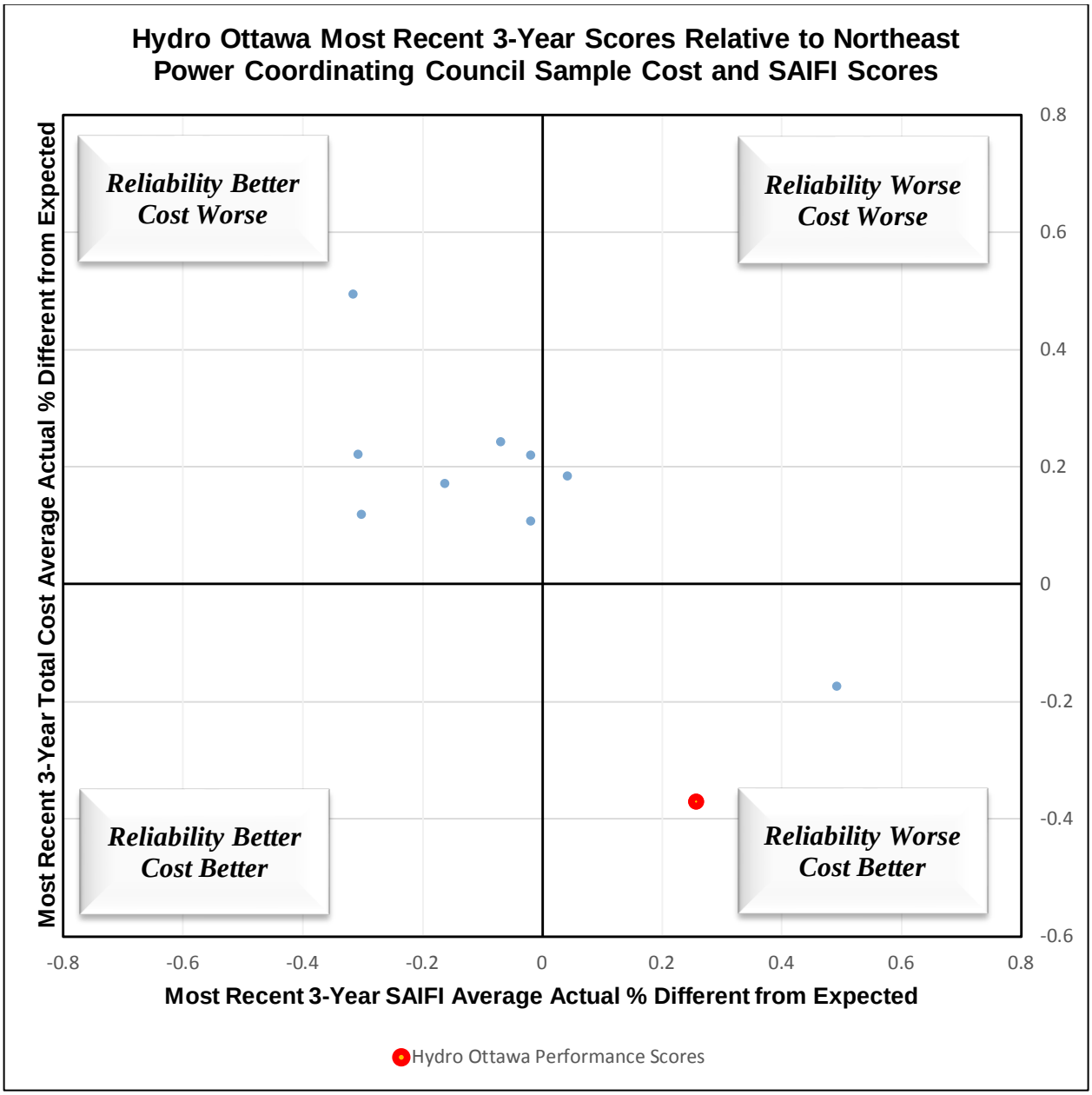
Moving to the reliability results, Hydro Ottawa's SAIFI performance ranks 19th out of the 24 Reliability First distributors with available reliability data. Very similar to the full sample, a result showing strong total cost performance and weak SAIFI performance is indicated by this smaller sample. The graph below, which is Figure 1-5 using only the RF sample, provides the relative position of Hydro Ottawa on both total cost and SAIFI performance.

Revised Figure 1-5: SF Region Only



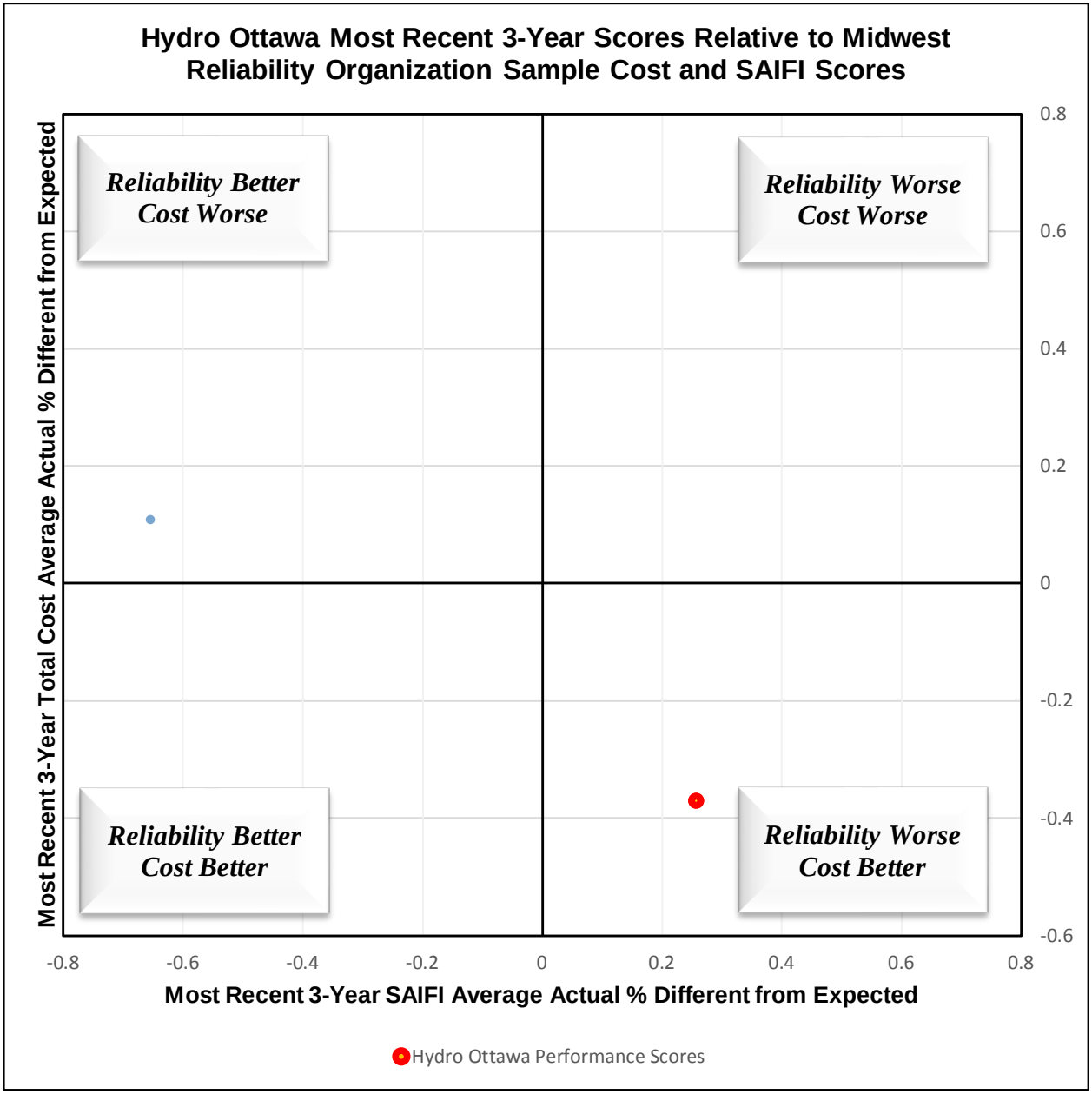
Hydro Ottawa's SAIFI performance ranks 10th out of the 11 NPCC distributors with available reliability data. Hydro Ottawa's total cost and SAIFI performance is illustrated in the reconstruction of Figure 1-5 below.

Revised Figure 1-5: NPCC Region Only



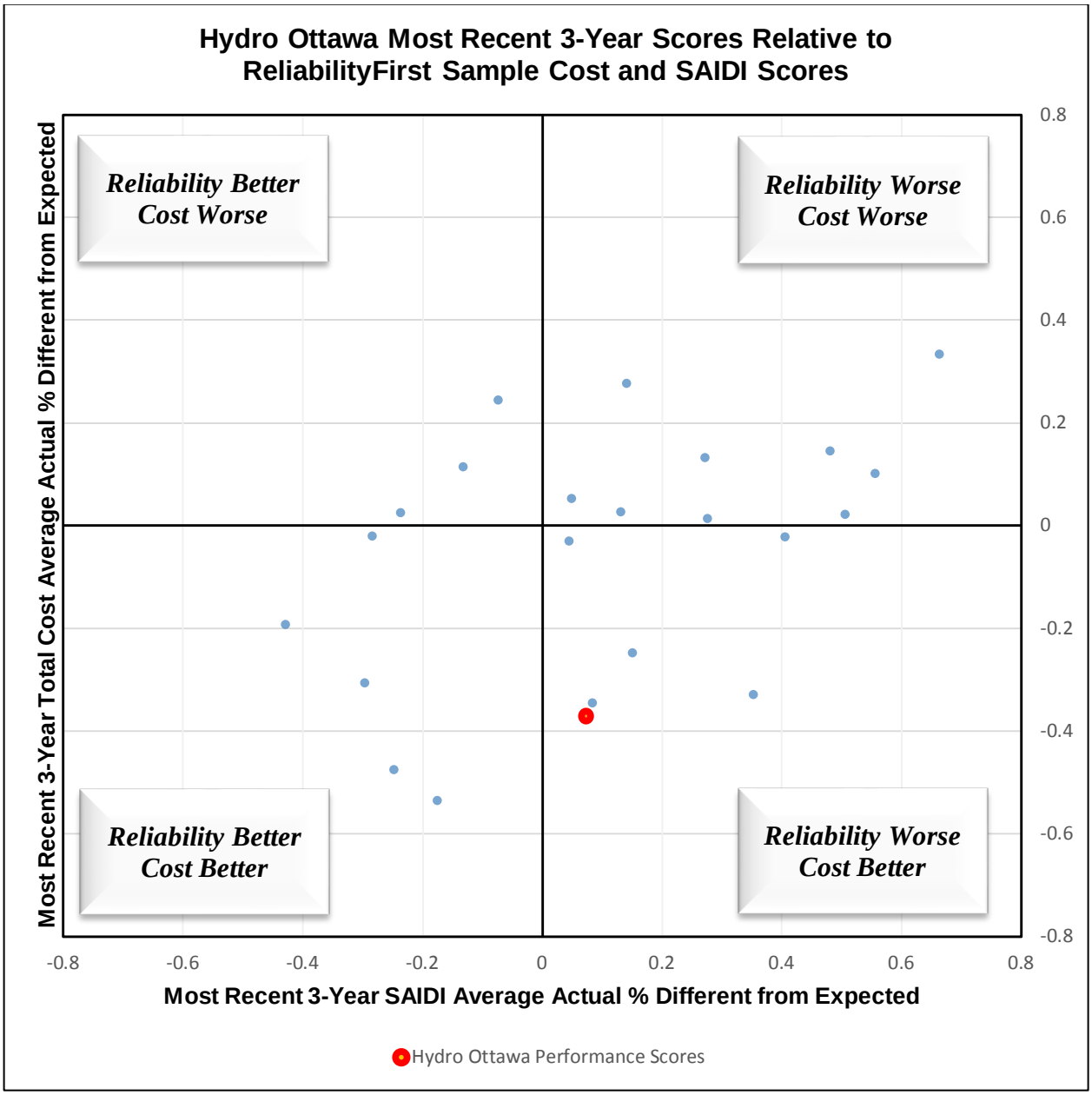
There is only one other distributor with available reliability data in the MRO region. Hydro Ottawa ranks 2nd out of 2 in that region for SAIFI performance.

Revised Figure 1-5: MRO Region Only



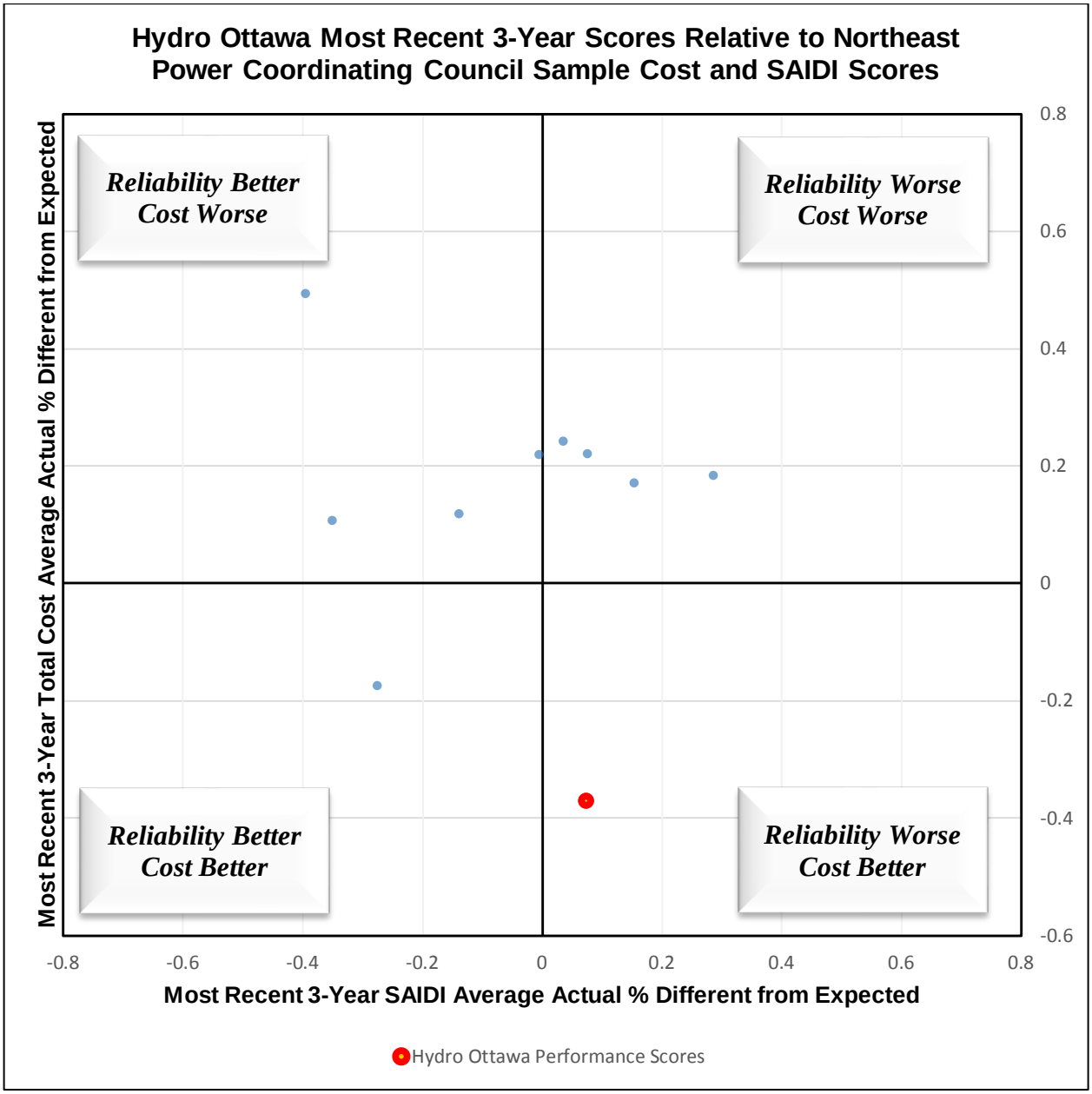
Moving to SAIDI performance rankings, Hydro Ottawa ranks 12th out of the 24 distributors in the RF region. A reconstruction of Figure 1-6 is provided below with the more limited sample.

Revised Figure 1-6: RF Region Only



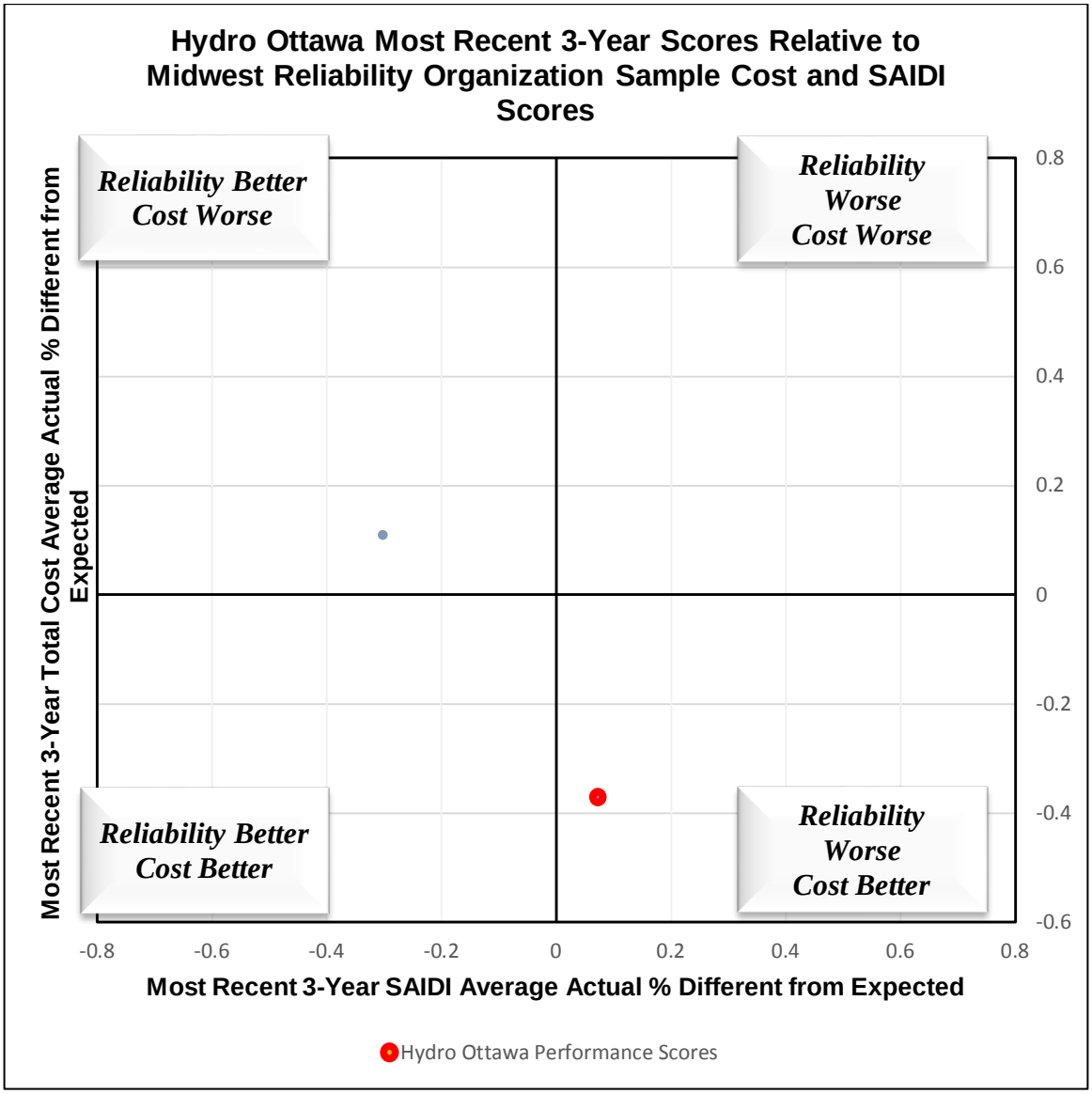
Hydro Ottawa's SAIDI performance ranks 8th out of the 11 distributors in the NPCC region. A reconstruction of Figure 1-6 is provided below with the more limited sample.

Revised Figure 1-5: NPCC Region Only



Hydro Ottawa's SAIDI performance ranks 2nd out of the 2 distributors in the MRO region. A reconstruction of Figure 1-6 is provided below with the more limited sample.

Revised Figure 1-5: MRO Region Only



Response to OEB Staff Interrogatory Question #6

Reference:

1. **Hydro Ottawa's RRFE Score Card http://www.ontarioenergyOEB.ca/oeb/Industry/Rules%20and%20Requirements/Electricity%20Distributor%20Scorecards**
2. **Exhibit D-1-4. Attachment 1 Balanced Productivity Metrics**

Question #6:

1 Staff 6. Scorecards

Reference 1 is Hydro Ottawa's scorecard for the period 2009 – 2013. Hydro Ottawa established few "distributor targets" in the RRFE scorecard. Similarly, Hydro Ottawa has filed in Reference 2 its own scorecard. Again targets are not provided.

i. Please provide any additional targets that Hydro Ottawa may have developed since the date of the finalization of these documents.

ii. Please state how Hydro Ottawa established the targets for system reliability in Reference 1.

iii. Is Hydro Ottawa is developing targets for the measures in both the OEB's scorecard and its own scorecard that do not have measures?

iv. Please provide details of the development of remaining targets for each scorecard and the state of progress.

Hydro Ottawa in Reference 1 has set a target range for SAIDI and SAIFI.

v. How were these ranges determined?

vi. How does this range compare to other distributors in North America?

vii. Was there any public input to the setting of the ranges?

viii. Has there been any marginal cost established in achieving reductions?

ix. Has Hydro Ottawa assessed the value of an avoided interruption to its customers, or the costs to them from temporary loss of service?

x. Has there been any analysis on diminishing returns of investment to reduce SAIDI and SAIFI?

xi. Has there been any analysis to determine the "sweet point" or optimal investment vs reliability?

xii. Was investment to improve reliability the driver for capital, or was the reliability plan fit into the capital budget.

xiii. Do critical customers have their own back-up generation?

xiv. What, if any benchmarks for the cost effectiveness of investments for improving reliability did Hydro Ottawa employ, consult or construct in the preparation of its capital plan?

Response:

Hydro Ottawa's Scorecard (OEB Scorecard and Corporate Productivity Scorecard)

To clarify, the question states that "Hydro Ottawa established a few "distributor targets" in the RRFE scorecard"; however, this is not the case, Hydro Ottawa has not identified any targets on the RRFE scorecard. The Column labelled "Target Distributor" is the targets as prescribed by the Board as identified within *Report of the Board – Performance Measurement for Electricity Distributors: A Scorecard Approach.* Page 36 states that "Where a target has been set by the Board for an individual distributor, it will be displayed in the distributor-specific target column (i.e., system reliability and conservation and demand management)".

i. Hydro Ottawa has not developed or added in any additional distributor-specific targets since the finalization of the OEB RRFE Scorecard. It has nevertheless proposed a number of new continuous improvement measures in the context of its Distribution System Plan (see Exhibit B-1-2, Section 1.3 Performance Measures for Continuous Improvement) filed as part of its current 2016-2020 rate application. Hydro Ottawa is further working with the OEB and industry representatives on the development and

finalization of targets related to safety and awaits the outcome of the Board's consultation initiated pursuant to EB-2014-0189 for determinations related to reliability specific targets.

With respect to Hydro Ottawa's Corporate Productivity Scorecard, the company has not developed targets since the finalization of the document. However, as indicated in Exhibit D-1-4, Hydro Ottawa intends to establish targets in a few key areas by year end 2015.

ii. Hydro Ottawa did not establish the targets for system reliability in Reference 1 as they were prescribed by the Board as described in *Report of the Board – Performance Measurement for Electricity Distributors: A Scorecard Approach.* Section 3.2.2 on page 21 states "Board staff also recommended that the existing performance guidelines associated with these two indicators, that a distributor remain within the range of its historical performance, should be displayed on the Scorecard as the distributor-specific targets (or target ranges as described on page 7)."

iii. Hydro Ottawa Limited is making the assumption that OEB #6 part iii is meant to read as follows: "Is Hydro Ottawa developing targets for the measures in both the OEB's scorecard and its own scorecard that do not have **targets**?"

With respect to measures in the OEB's scorecard, Hydro Ottawa will continue to work with the OEB and industry to develop and enhance benchmarks as deemed appropriate. With respect to Hydro Ottawa's own productivity scorecard, the company will continue to track progress for each measure and evolve the scorecard measures as necessary to measure performance to drive results and productivity improvements. Any new targets created over the five year plan will be measure areas deserving further study and measurement to drive continuous improvement. See Interrogatory Response to OEB #6 part i.

iv. Please refer to Interrogatory Response to OEB #6 part i.

SAIDI & SAIFI Target Range

v. The target ranges for Hydro Ottawa's SAIDI and SAIFI reliability as currently set out in its 2013 OEB scorecard were prescribed by the Board as described in *Report of the Board – Performance Measurement for Electricity Distributors: A Scorecard Approach.* Section 3.2.2 on page 21 states "Board staff also recommended that the existing performance guidelines associated with these two indicators, that a distributor remain within the range of its historical performance, should be displayed on the Scorecard as the distributor-specific targets (or target ranges as described on page 7)."

vi. The following charts depict the Distributor Target Ranges for SAIDI and SAIFI respectively, from the RRFE Scorecards posted at Reference 1, along with tables that show the overall minimum, maximum and median values from the ranges compared to Hydro Ottawa Limited's target range. For both SAIDI and SAIFI Target Ranges, Hydro Ottawa Limited's targets are within the low and high values for the minimum and maximum of the ranges of all other Ontario Utilities.

Table OEB #6 – 1: RRFE Scorecard SAIDI Ranges

Range Value	HOL	All Utilities	
		Calculation	Value
Low Value	1.05	Minimum	0.00
		Maximum	9.86
		Median	0.55
		Average	0.93
High Value	2.44	Minimum	0.30
		Maximum	49.41
		Median	2.12
		Average	3.77

Table OEB #6 – 2: RRFE Scorecard SAIFI Ranges

Range Value	HOL	All Utilities	
		Calculation	Value
Low Value	0.77	Minimum	0.00
		Maximum	3.42
		Median	0.76
		Average	0.78
High Value	1.40	Minimum	0.17
		Maximum	9.19
		Median	1.57
		Average	1.99

Figure OEB #6 – 1: RRFE SAIDI Scorecard Ranges

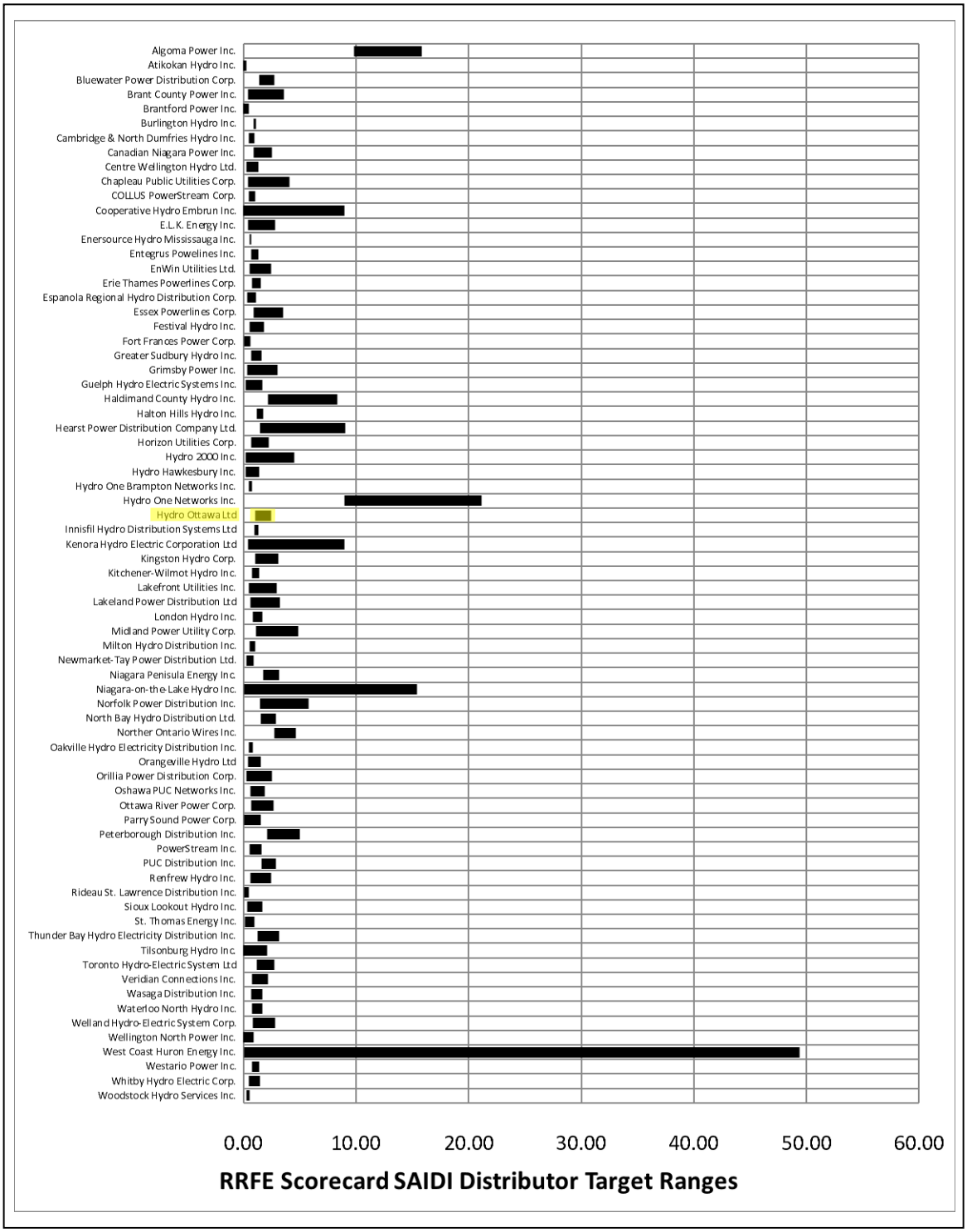
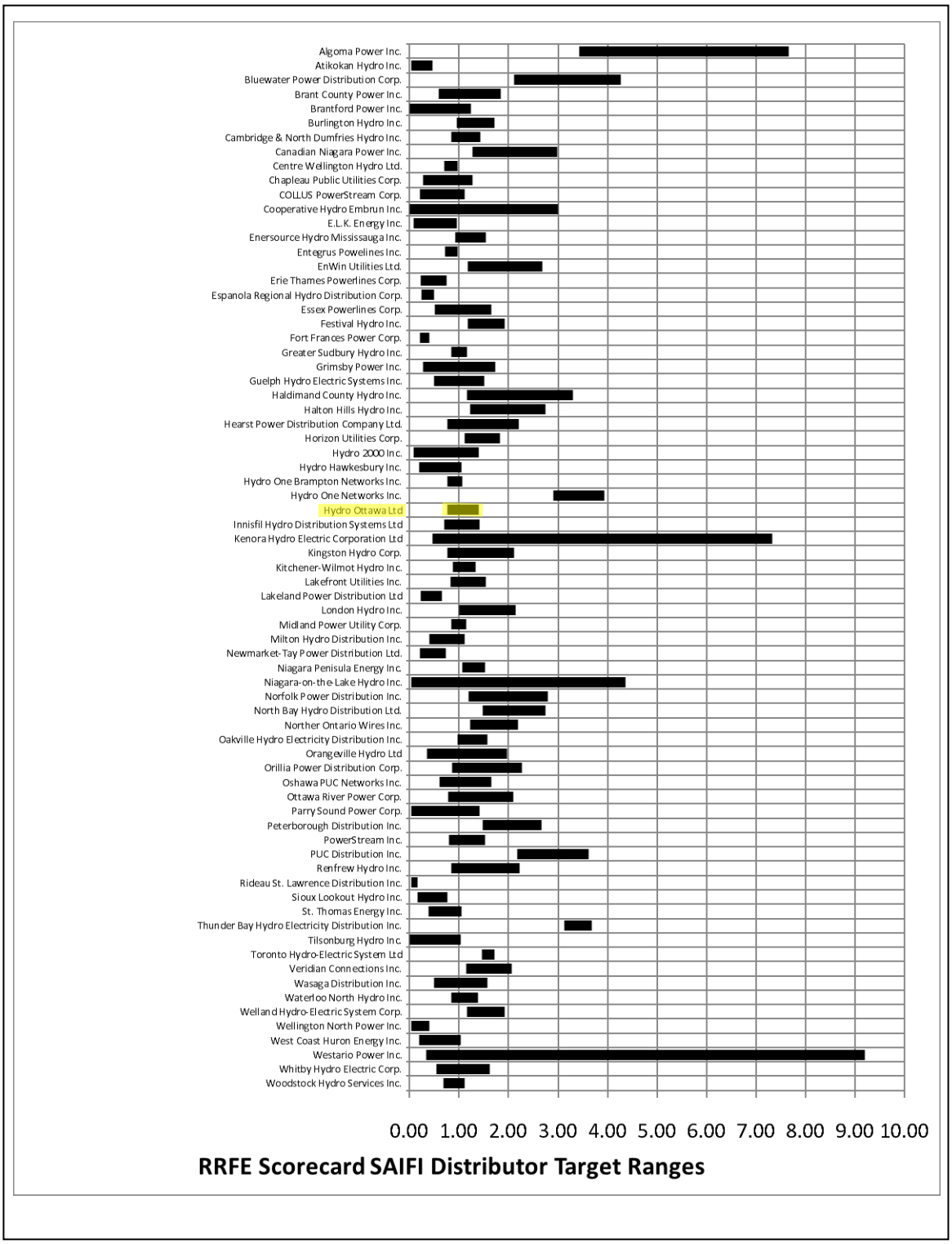


Figure OEB #6 – 2: RRFE SAIFI Scorecard Ranges



vii. Please refer to *Report of the Board – Performance Measurement for Electricity Distributors: A Scorecard Approach.* Hydro Ottawa did not consult specific customers but has been informed by the comments filed pursuant to the ongoing OEB proceedings initiated pursuant to docket EB-2010-0249.

viii. There have not been any marginal costs established in achieving reductions to SAIDI or SAIFI.

ix. Hydro Ottawa Limited has not assessed the value of an avoided interruption to its customers or the costs to them from temporary loss of service.

x. Hydro Ottawa Limited has not undertaken an analysis to derive the point at which it would encounter diminishing returns of investment to reduce SAIDI and SAIFI.

xi. Please see Attachment B-1(B) – Annual Planning Report – Asset Management Plan which outlines Hydro Ottawa Limited's approach to projecting asset investment needs to reduce equipment failure rates. Section 2 of Exhibit B-1-2 as updated June 29, 2015 describes Hydro Ottawa's Asset Management Process and how Reliability factors into the scoring of investments.

xii. Investments to sustain service performance and to avoid interruptions are one of the drivers of Hydro Ottawa's Capital plan. However the optimized Capital plan must fit within a defined budget constraint. Please see Section 2 of Exhibit B-1-2 as updated June 29, 2015 describes Hydro Ottawa's Asset Management Process and how Reliability factors into the scoring of investments.

xiii. Hydro Ottawa does not maintain records of customer owned backup generation.

xiv. Hydro Ottawa benchmarks the cost effectiveness of its investments on assets and functionality that improve reliability against its historical investment level. Hydro Ottawa also engaged Power System Engineering ("PSE") to conduct an econometric

benchmarking study of Hydro Ottawa's past and projected total cost performance and its historical reliability performance. Refer to Attachment D-1(D) PSE Benchmarking Report as updated and provided in response to interrogatory OEB # 7v).

Response to OEB Staff Interrogatory Question #7

Reference:

1. Exhibit A Tab 2 Schedule 1

2. *Report of the OEB, Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors (EB-2010-0379)* (RRFE report)

3. PEG Report, Productivity and Benchmarking Research in Support of Incentive Rate Setting in Ontario: Final Report to the Ontario Energy OEB, Corrected January 24, 2014

4. Exhibit D Tab 1 Schedule 2 Attachment D-1(A) Budget Memo

5. Exhibit D Tab 1 Schedule 4 Historical and Forward Looking Productivity Initiatives

6. Exhibit D Tab 1 Schedule 5 Attachment D-1(D) Econometric Benchmarking of Hydro Ottawa's Historical and Projected Total Cost and Reliability Levels

7. EB-2013-0416/EB-2014-0247 Decision Hydro One Networks Inc. March 12, 2015

Question #7:

1 Staff 7. Productivity

Hydro Ottawa is proposing to index its OM&A costs based on the formula I – X where I is an inflation factor and X is composed of a productivity factor and a stretch factor representing efficiency gains. Hydro Ottawa has averaged the four productivity factors submitted by experts found in Reference 3 and is proposing the average, -1.145% be the productivity factor to adjust the proposed inflation factor. On page 17 of the RRFE report, the OEB said: "The OEB has determined that the appropriate value for the productivity factor (Industry TFP) for Price Cap IR is zero." The OEB also said:

The OEB acknowledges that achieved productivity growth in the Ontario distribution sector has likely slowed in recent years. However, the OEB does not believe it appropriate for a rate setting regime to project and entrench declining productivity expectations into the future. The productivity component of the X-factor is intended to be

an external benchmark which all distributors are expected to achieve. Setting a productivity benchmark for the industry that would not encourage distributors to achieve and share productivity gains is inconsistent with the OEB's policy direction – doing so would be counter to facilitating a culture of continuous improvement.

Hydro Ottawa was categorized into Group 3 in the PEG report. Group 3 has a stretch Factor of -0.30%. OEB staff has developed the following table which compares Hydro Ottawa's proposal to an IRM application, using the inflation rate that Hydro Ottawa is proposing:

I-X Factor

	Proposal (%)	IRM (%)
Inflation	2.100	2.100
Productivity	-1.145	0.000
Stretch	0.000	0.300
IR Factor	3.245	1.800

i. Please confirm that the table is correct. If it is not, please correct the table.

ii. Why has Hydro Ottawa proposed a productivity factor below the OEB's views on using a productivity factor below zero?

iii. Why has Hydro Ottawa chosen the average of four productivity factors, submitted by experts found in the referenced OEB report?

iv. Regarding the PEG factors proposed by Hydro Ottawa, the OEB said on page 17, "In addition, the OEB agrees with the analysis by PEG (supported by the OM&A analysis by OEB Staff) that the 2012 TFP results appear anomalous and therefore may not be a reliable indicator of the future productivity trend." The

OEB did not approve the factors. If Hydro Ottawa is categorized into group 3, why wouldn't Hydro Ottawa employ the OEB's stretch factor?

v. Has Hydro Ottawa more recent productivity or stretch factors? If so please submit them.

vi. The purpose of Hydro Ottawa's budget memo in Reference 4 is stated to be a guideline for the preparation of 2015 – 2020 budgets and financial plans, and includes inflation rates for the period 2015 – 2020 to guide in setting the budgets. It appears that there are ground-up budgets with top down guidance for 2017 – 2020 that are not based on applying (I-X) to 2016 expenses. The budget memo also stated that productivity is as key area of focus. Does the Chief Financial Officer, have ultimate authority for ensuring that the guidelines are properly carried out?

vii. Please provide the OM&A budgets for 2017 – 2020 based on the assumed inflation rates provided in the budget memo and file, at a minimum, Appendix 2-JA Summary of Recoverable OM&A Expenses.

viii. In Reference 7 the OEB found: "The OEB expects Custom IR rate setting to include expectations for benchmark productivity and efficiency gains that are external to the company. The OEB does not equate Hydro One's embedded annual savings with productivity and efficiency incentives. …It is not sufficient to embed savings in cost forecasts. …The productivity and efficiency elements allow the OEB to move away from detailed input cost assessment and focus more on utility performance. These factors provide utilities with strong incentives to continually seek efficiencies and share expected savings with ratepayers 'up front', avoiding 'after the fact' regulatory scrutiny." Please provide the estimated the stretch factor or other productivity and efficiency index to be applied in each of the years 2016 – 2020 that would equate to the productivity or efficiency embedded in each year's forecast.

ix. The budget memo also refers to a placeholder value of 2.5% per year vacancy allowance and constraints on hiring, compensation and benefits. What is the vacancy allowance built into the costs underpinning the revenue requirement for each of the years 2016 – 2020 that were developed following the budget memo?

Response:

i. The table is correct in reflecting both percent escalators, the first as it relates to the escalator proposed by Hydro Ottawa in the context of its Custom IR proposal and the second escalator if Hydro Ottawa had filed under the 4th Generation IRM model .

ii. Hydro Ottawa has proposed a negative productivity factor based on the empirical evidence filed in the proceeding initiated by EB-2010-0379 0379 as set out in the OEB's November 2013 Report of the Board entitled *Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors* (EB-2010-0379) of four econometric experts who each concluded that the industry was experiencing negative productivity.

Contributed Statement by Steve Fenwick of PSE

"During the 4th Generation IR proceeding, PEG, PSE, and the other experts found evidence that the entire Ontario industry, taken as a whole, was experiencing negative productivity. There was unanimous agreement on this conclusion among the four experts who discussed productivity. In addition, PEG found evidence that the larger distributors (Toronto Hydro and Hydro One) had higher (in absolute terms) than average negative productivity. Furthermore, since the final Decision in the 4GIR proceeding, PEG has provided an annual benchmarking update, which now includes 2013 data. The trend variable in that model is 0.0167. This implies that costs in the Ontario industry as a whole are increasing by 1.67% above and beyond

inflation, outputs, and other variables. This provides evidence that the negative productivity trend is continuing within the Ontario industry. Given that: (1) the negative productivity trend in Ontario is continuing, (2) Hydro Ottawa is a relatively large distributor, and (3) Hydro Ottawa enters the Custom IR period as a statistically superior cost performer (based on the PSE benchmarking results), it is wholly unsurprising, in fact it is empirically expected, that Hydro Ottawa would require an X-Factor that includes a negative productivity trend."

In addition Hydro Ottawa notes the following statements that were entered into evidence in the proceeding initiated by EB-2010-0379:

"In our opinion (PSE), using the full industry TFP trend most directly matches the RRFE conclusion that the TFP trend be an "empirically derived productivity trend" and "based on Ontario Total Factor Productivity trends."[1]

"It is the most consistent, transparent, and empirical approach to calculate the full industry TFP trend and use that number as the basis for the productivity factor."[2]

iii. Hydro Ottawa averaged the findings of the four experts so as to give the findings of each expert equal weighting and to not demonstrate preference to any.

iv. Hydro Ottawa has not applied the OEB stretch factor for the following reasons:

- Hydro Ottawa has instead proposed an earnings sharing mechanism which according to the OEB is "somewhat analogous to a stretch factor";[3]
- The original and updated benchmarking evidence provided by Power System Engineering concluded that Hydro Ottawa would have a 0% stretch factor.
- Table 1 on page 13 does not mandate that Custom IR filers include a stretch factor in their rate setting formula;

[1] Page 7, PSE Expert Report: Recommendations on the Design of 4th Generation Incentive Reguation, June 13, 2013.
[2] Ibid, Page 8.
[3] Page 19 EB-2010-0379 Nov 2013

v. Find attached updated stretch factor evidence of Power System Engineering that factor's in an extreme temperature variable into the benchmarking model. See OEB Staff Q7- A.

vi. There were no ground up budgets with top-down guidance developed for OM&A. The OM&A budgets were derived by applying the I-X escalator to the 2016 expenses. Hydro Ottawa confirms that the Chief Financial Officer has ultimate authority for ensuring that the budget memo guidelines are properly carried out.

vii. Hydro Ottawa has performed detailed budgets for capital expenditures from 2015 to 2020 and for OM&A from 2015-2016, however OM&A from 2017 -2020 is based on a formulaic approach. At the time the budget memo was written (February 2014), the final decision on a formulaic approach was outstanding which is why the budget memo refers to the 2017-2020 financial plan. The 2017-2020 Financial plan as referred to and as contemplated in the budget memo was not prepared, as such, Hydro Ottawa has not completed Appendix 2-JA Summary of Recoverable OM&A Expenses for 2017-2020. Hydro Ottawa, however has prepared a high level OM&A budget for 2017 – 2020 based on the key costs drivers (refer to Table 1 below).

Table 1: High level OM&A Budget for 2017 – 2020 – based on the key cost drivers (in millions)

	2016	2017	2018	2019	2020
Opening Balance	$83.7	$87.1	$89.9	$92.9	$95.9
Compensation	2.7	2.2	2.3	2.3	2.5
Vegetation Management	(0.8)	0.3	0.3	0.3	0.4
Underground Locates	0.3	0.3	0.3	0.4	0.4
IT Maintenance	0.5	0.8	0.8	0.9	1.0
Bad Debt	0.4	0.1	0.1	0.1	0.1
Inflation & Other	0.3	0.6	0.6	0.6	0.6
Total per cost drivers	**$87.1**	**$91.3**	**$94.4**	**$97.5**	**$100.8**
Productivity via formula		(1.4)	(1.5)	(1.6)	(1.9)
Closing Balance	**$87.1**	**$89.9**	**$92.9**	**$95.9**	**$99.0**

The key cost drivers identified include:

- Compensation net of vacancy allowance – please see Interrogatory Response to OEB Staff Question #22 part i and Question #23.
- Vegetation Management – Hydro Ottawa implemented storm hardening in 2014 / 2015, no additional storm hardening work is projected in the reporting horizon, however costs are expected to increase based on contract pricing, also the costs to remove Emerald Ash Borer (EAB) infected trees are expected to continue (please see Interrogatory Response to CCC Question # 37)
- Underground Locates – please see Interrogatory Response to OEB Staff Question 22 part ii, Hydro Ottawa continues to seek efficiencies and productivity at managing underground locate program. The cost driver reflects to the increased demand and anticipated price increase with contract renewal.
- IT Maintenance – please see Interrogatory Response to CCC Question # 38, IT Maintenance costs are one of the key cost drivers as Hydro Ottawa continues to move toward leveraging more technology. The projection reflects the associated IT maintenance impacts based on IT related capital investments included in the Distribution System Plan.
- Bad Debt – please see Interrogatory Response to CCC Question #39, bad debt expense increases proportionate to the total electricity billing. Hydro Ottawa has taken an aggressive approach on this cost driver. The total electricity bills increased by almost 7% in the past four years, however Hydro Ottawa assumes a flat 0.2% bad debt of total electricity bill with only a growth rate of 3% on total electricity bills. This is similar to the pattern projected in the Ontario 2013 Long-Term Energy Plan provided by the Ministry of Energy. Please see Interrogatory Response to OEB Staff Question #22 part iii for a list of mitigation actions are taken by Hydro Ottawa to reduce bad debt.

In total, OM&A is projected to increase by an average annual growth rate of 3.73%. With the formulac approach Hydro Ottawa is committed to seek additional productivity and reduce OM&A by average of $1.6M per year to meet the target of a 3.245% increase. This is significantly lower than the spending from previous years (4% in 2013 and 7% in 2014).

viii. Table 2 below sets out Hydro Ottawa's inherent productivity savings that Hydro Ottawa has assumed is attainable in each in the test years after rebasing. This amount is already factored into Hydro Ottawa's revenue requirement proposals.

Table 2 – Estimated OM&A vs. Proposed OM&A

(000s)	2017	2018	2019	2020
Estimated OM&A	$91.3	$94.4	$97.5	$100.8
Proposed OM&A	$89.9	$92.9	$95.9	$99.0
Difference ($)	$1.4	$1.5	$1.6	$1.9

On page 11 of the Board's *Report of the Board on Rate Setting Parameters and Benchmarking* released November 2013 in the proceeding initiated by EB-2010-0379 the Board reiterated its expectation that productivity gains be included in each of the three rate-setting methods. The Board went on to note that this will help ensure that the benefits from increased productivity are appropriately shared throughout the rate setting term between the distributor/shareholder and its customers. The Board then noted the following:

> "Under Price Cap IR and Annual Index, <u>an X factor will be used for this purpose</u>." (Emphasis added).

What is discernible is that there is no mention of using an X factor for Custom IR applications.

ix. A 3.0% vacancy allowance was built into the costs underpinning the revenue requirement for each of the years 2016 – 2020.

Response to OEB Staff Interrogatory Question #8

Reference:

1. Exhibit A Tab 2 Schedule 1

2. *Report of the OEB Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach October 18, 2012*

Question 8:

1 Staff 8. Earnings Sharing Mechanism

Hydro Ottawa is proposing a tiered sharing of earnings described in the first reference in Table 5 – Hydro Ottawa's Earnings Sharing Proposal. In the second reference on page 19 the OEB states that a regulatory review may be initiated if the distributor performs outside of the ±300 basis points earnings dead band.

i. Please calculate the value of the additional 150 basis points of earnings for each year in the plan.
ii. What rationale has Hydro Ottawa for not sharing the first 150 basis points above the allowable ROE?
iii. What additional incentive does the retention of the first 150 basis points of earnings provide Hydro Ottawa that is not sufficiently rewarded in the rate plan? What specific actions will Hydro Ottawa perform as a result of the potential to retain additional income?
iv. Is there an additional benefit for the customer?
v. At what point of over-earnings would Hydro Ottawa expect its rates to be revisited by the OEB?
vi. Would Hydro Ottawa apply on its own initiative, or would it expect the OEB to initiate a review of the rates?

Response:

i. In Table 1 below, Hydro Ottawa estimates the value of the additional 150 basis points of earnings above the deemed ROE for each year in the plan. The calculations use the rate base shown in A-2-1, Table 7

Table 1 - Value of 150bps of ROE

(000's)	2016	2017	2018	2019	2020
Rate Base	$923,306	$970,582	$1,020,297	$1,050,724	$1,094,270
Equity – 40%	$369,322	$388,233	$408,119	$420,290	$437,708
150 bps of Equity (pre-tax)	$7,537	$7,923	$8,329	$8,577	$8,933
150 bps of Equity (after tax)	$5,540	$5,823	$6,122	$6,304	$6,566

ii. Hydro Ottawa has opted to not share earnings below the first 150 basis points above the allowable ROE in order that it may be rewarded for the risks assumed and undertaken during the five year term of its Custom IR.

iii. The additional incentive provided to Hydro Ottawa of retaining the first 150 basis points of earnings that is not provided in the rate plan is the opportunity to retain monies that could be potentially invested in other distributor benefiting innovations or initiatives. Hydro Ottawa has not considered any specific actions however; the potential to earn additional income acts as an incentive and motivator. See also response to interrogatory CCC # 9.

iv. Hydro Ottawa believes the earnings sharing mechanism is beneficial to its customers insofar as they are protected from bill impacts arising from any under earning Hydro Ottawa may experience during the course of the five year plan. This is a significant benefit in light of Hydro Ottawa's actual earned ROE in recent years.

v. In the eventuality that Hydro Ottawa over-earns 300bps above its deemed ROE, it would expect the Board to revisit its rates.

vi. Hydro Ottawa would apply on its own initiative for a review of the rates.

Response to OEB Staff Interrogatory Question #9

Reference:

1. Exhibit A Tab2 Schedule 1 page 8 line 11

2. Exhibit A Tab 3 Schedule 1 Customer Consultation Report pages 77-78

Question 9:

1 Staff 9. Customer Engagement

Hydro Ottawa provided Innovative Research Group Inc. with contact information for 40,000 residential and 8,000 commercial customers to conduct a customer survey. The survey was a combination of educating the customer, having customers reflect on their personal experience with the distribution system, and having them make value judgments on trade-offs between system reliability and bill impact.

i) What has Hydro Ottawa learned about customer expectations as a result of its customer engagements?

ii) How do these expectations affect planning (e.g. are resources shifted from one area to another based on these expectations)?

iii) What elements of the Distribution System Plan (DSP) were added or modified as a result of customer engagement?

iv) What elements of the DSP may have been changed due to the fact that a considerable number of customers agreed that Hydro Ottawa should reduce its investments to lessen bill impacts?

v) How did Hydro Ottawa balance the customer responses with the drivers of the DSP?

Considering the sampling:

vi) What was the response rate for residential customers (after the eight calls or hard refusal)?

vii) Did Hydro Ottawa make any attempt to correct for non-response bias besides the sample stratification (e.g. by follow-up calls to non-responders) in the residential class?

viii) Were 8,000 general service customers contacted or were 8,000 called? What was the response rate?

ix) Did Hydro Ottawa make any attempt to correct for non-response bias in the general service class?

Response:

i. Please see Exhibit A Tab 3 Schedule 1 Customer Engagement. Hydro Ottawa considers customer engagement an essential part of doing business. Through many customer engagement activities including customer consultations, regular general and transactional surveys, participation in customer associations, customer persona research, and ongoing contact with our customers through telephone calls to our call centre, social media, our website and our conservation programs – generally it can be said that customer expectations are rising, especially in the areas of billing (helping customers manage their bills) and outage communications. Customers are asking that we address these items by providing them choice, convenience and control. The Innovative Research Group's (INNOVATIVE) survey helped to validate the work that we have been doing – work that we have prioritized based on our ongoing customer engagement. Generally it can be said that customers feel that Hydro Ottawa's proposed rate increase is necessary. Although they may not like it, they understand

that investments need to be made to maintain and increase services and, therefore, the proposed increase is seen as reasonable for many.

ii. Please see Exhibit A, Tab 3 Schedule 1 Customer Engagement. Yes, based on customer input - plans, resources and projects are continually prioritized to best align with our customer's requirements.

iii. Please see Exhibit A, Tab 3 Schedule 1 Customer Engagement 2.1.2 Major Customer Consultations.

iv. Based upon the 2016 rate application customer engagement conducted and reported by Innovative Research Group (INNOVATIVE), the majority of Hydro Ottawa's customers who participated supported Hydro Ottawa's plans to invest in maintaining the distribution system and increasing services, provided such expenditures were made prudently and efficiently. The outcomes of this engagement were in alignment with Hydro Ottawa's DSP priorities.

v. As reflected in the DSP, Hydro Ottawa paced and prioritized expenditures in order to effectively balance the impact on rates and the customer mandate to maintain the distribution system and increase services.

vi. During the customer survey field window, 20,684 unique residential telephone numbers were called (approximately 1 percent of the residential customers in Hydro Ottawa's service territory). Of these numbers, a total of 783 were "out of scope", meaning they fell into one of the following categories:

- Not in service
- Fax/pager/modem (identified by agent)
- Changed number
- Invalid number
- Fax/modem (identified by dialer)
- No signal

- Add to DNC list

Before a randomly selected telephone number is retired from the sample database, eight attempts to reach potential respondents at each unique telephone number were made, or, until an interviewer received a hard refusal.

The percentage of all working numbers which yielded a completed interview was 5.2 percent, or, 1,036 completes out of 19,901 working numbers.

vii. Aside from the sample stratification, no other attempts were made to correct for non-response bias in the residential rate class survey. There is a significant cost involved when testing for non-response bias. INNOVATIVE engaged with randomly selected residential customers through focus groups and a telephone survey and found very similar responses across both methodologies. Given the consistency of the results, and given the mandate to be efficient and prudent in spending ratepayers' money, INNOVATIVE felt additional expenditure on further efforts to test for non-response bias were not justified.

viii. Eight thousand is the number of general service customers randomly selected by Hydro Ottawa to provide INNOVATIVE with a random sample. During the survey field window, 2,195 unique and randomly selected general service telephone numbers were called (approximately 1 percent of the general service customers in Hydro Ottawa's service territory). Of these numbers, a total of 324 were "out of scope", meaning they fell into one of the following categories:

- Not in service
- Fax/pager/modem (identified by agent)
- Changed number
- Invalid number
- Add to DNC list

Before a randomly selected telephone number is retired from the sample database, eight attempts to reach potential respondents at each unique telephone number were made, or, until an interviewer received a hard refusal.

The percentage of all working numbers which yielded a completed interview was 10.7 percent, or, 200 completes out of 1,871 working numbers.

ix. Aside from the sample stratification, no other attempts were made to correct for non-response bias in the general service rate class survey. There is a significant cost involved when testing for non-response bias. INNOVATIVE engaged with randomly selected general service customers through focus groups and a telephone survey, and INNOVATIVE found similar responses across both methodologies. Given the consistent results, and given the mandate to be efficient and prudent in spending ratepayers' money, INNOVATIVE felt additional expenditure on further efforts to test for non-response bias were not justified.

Response to OEB Staff Interrogatory Question #10

Reference:

Question 10:

1 Staff 10. Letters of Comment

The OEB received 36 letters of comment. Most commented on the rate increase, however another area of comment was the dividend payout by Hydro Ottawa.

In regard to the rate increase and recognizing that what the customer sees in its bills is not all driven by Hydro Ottawa's revenue requirement?

i. What efforts has Hydro Ottawa made to inform the media and its customers of Hydro Ottawa's business model (its cost structure, considering partners, such as IESO, Hydro One Networks Inc. that affects the total bill for the customer)?

In regard to the dividend comments:

ii. Please state the payout ratio for Hydro Ottawa for the years 2012 – 2015.

iii. What is Hydro Ottawa's dividend payout plan for 2016 – 2020?

iv. Please provide comparative distribution utility payouts for 2012 – 2015 with A – stable ratings..

Response:

i. To raise awareness and levels of understanding about Ontario's electricity industry and Hydro Ottawa's role, Hydro Ottawa has developed numerous communications

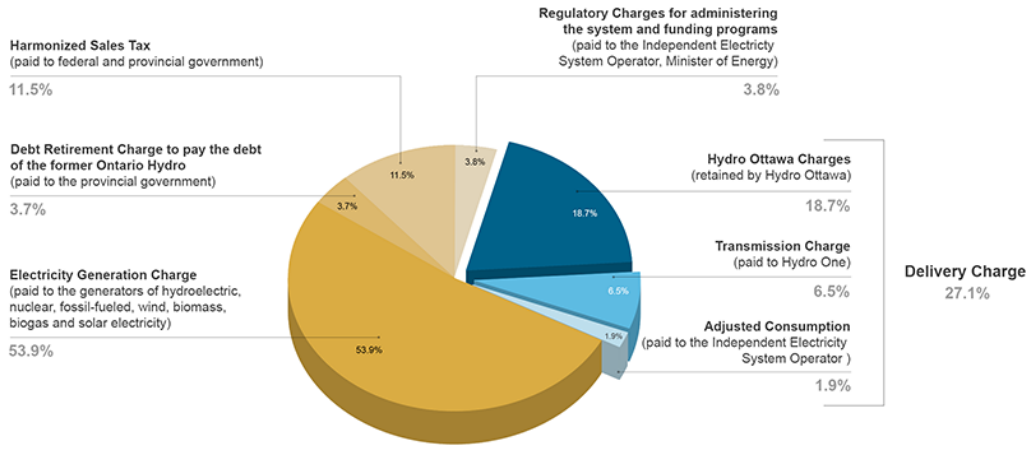
materials to increase public education. This includes website content, brochures, a microsite and social media activities.

For example, Hydro Ottawa's corporate website includes the following information at https://hydroottawa.com/accounts-and-billing/residential/billing:
AS A RESIDENTIAL CUSTOMER, ONLY 18.7% OF YOUR HYDRO PAYMENT GOES TO HYDRO OTTAWA.

Hydro Ottawa is responsible for the safe, reliable delivery of electricity to more than 319,500 customers in the City of Ottawa and the village of Casselman. As a community company, Hydro Ottawa is committed to delivering value to its customers by providing reliable service at competitive rates.

Hydro Ottawa's delivery charge represents only a small portion of your bill. This includes the costs to build and maintain the transmission and distribution lines, towers and poles and operate provincial and local electricity systems. We pass on the remaining charges, without mark-up, to the other companies responsible for generating electricity, transmitting it, and to regulators and the provincial government. A portion of these charges are fixed and do not change from month to month. The rest are variable and increase or decrease depending on the amount of electricity that you use. Please see the chart below for a break-down of these charges.

Rate Change Effective Date – May 1, 2015



The company website also includes brochures for residential, small business and business customers to assist them in understanding their bill.

In January 2015, Hydro Ottawa launched a microsite called Understanding Hydro Ottawa (http://static.hydroottawa.com/dashboard/en/). More specifically, the dashboard has a section dedicated to explain "What does my hydro bill pay for." This plain-language section and supporting infographics were shared with our customers, media and stakeholders via social channels such as LinkedIn, Facebook and Twitter.

ii. Hydro Ottawa has followed a consistent dividend payout amount of $15 million annually to its Holding Company (Hydro Ottawa Holding Inc.) for the fiscal years 2012, 2013 and 2014. No dividends have been declared or paid for the 2015 year. The table below outlines the dividend payout ratio for Hydro Ottawa from 2012 to 2014.

Dividends Payout Ratio			
	2012	**2013**	**2014**
Net Income	$26,413	$25,439	$27,871
Dividends	$15,000	$15,000	$15,000
Payout Ratio	57%	59%	54%

iii. From 2016 onwards, Hydro Ottawa will continue to closely emulate the 60% payout ratio of its Holding Company. The maintenance of a capital structure close to the deemed structure will influence the dividend payment as it has historically.

iv. Hydro Ottawa has not compared its dividend payout to other Ontario LDCs.

Response to OEB Staff Interrogatory Question #11

Reference:

1. Exhibit B Tab1 Schedule 2 page 27 Fig 1.02

2. Exhibit B Tab1 Schedule 2 page 23 lines 1 and 8

3. Exhibit B Tab1, Schedule 2 page 26, lines 1-11

4. *Ontario Energy OEB Report, Renewed Regulatory Framework for Electricity Distributors: A Performance-based Approach, October 18, 2012.*

Question 11:

2 Staff 11. Asset Planning - General

Reference 2 states, "Historically, HOL has produced an Annual Planning Report (APR) which covers the four main areas of planning described above, with a 20-year outlook, summarizing the outcomes of the process described in Section 2 of this DSP. As the DSP and the Annual Planning Report share a number of commonalities, the 2014 APR has been included in Attachment B-1(B), and is referenced throughout the DSP."

Hydro Ottawa indicates that the purpose of the DSP is to consolidate Hydro Ottawa's practices as they relate to planning and execution. Typically, practices are not as thoroughly documented as policies, and adherence to practices is not as strictly enforced as adherence to policies.

i. Please explain how the outcomes of the RRFE (Reference 4) are reflected in Hydro Ottawa's objectives.
ii. In Reference 1 are the outcomes of the RRFE intended to be captured in the box "Regulatory Compliance"?
iii. Is the DSP regarded by Hydro Ottawa as adjunct to the Annual Planning Report? If so, please explain.
iv. Please confirm whether Hydro Ottawa only has practices, or also has formal policies to govern the planning and execution of System Access, System Renewal,

System Service and general Plan investments through the Asset Management process.

v. Please provide the criteria used to set the asset management objectives and related initiatives.

.

Response:

Within the question preamble, the following statement is made: "Typically, practices are not as thoroughly documented as policies, and adherence to practices is not as strictly enforced as adherence to policies". To clarify, within Hydro Ottawa Limited, policies deal with corporate-wide governance, whereas practices, procedures and/or standards are developed for, and strictly followed by, the groups or divisions to which they relate.

i. The RRFE outcomes tie directly with Hydro Ottawa's Corporate Strategic Objectives as follows:

Table OEB #11 – 1: RRFE Outcomes and HOL Corporate Strategic Objectives

RRFE Outcome	HOL Corporate Strategic Objective
Customer Focus	Customer Value
Operational Effectiveness	Organizational Effectiveness
Public Policy Responsiveness	Corporate Citizenship
Financial Performance	Financial Strength

The definition of each of these categories is provided below.

RRFE Outcomes:

Customer Focus – services are provided in a manner that responds to identified customer preferences;

Operational Effectiveness – continuous improvement in productivity and cost performance is achieved; and utilities deliver on system reliability and quality objectives;

Public Policy Responsiveness – utilities deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board); and

Financial Performance – financial viability is maintained; and savings from operational effectiveness are sustainable.

Hydro Ottawa's Corporate Strategic Objectives:

Customer Value – we will deliver value across the entire customer experience – by providing reliable, responsive and innovative services at competitive rates

Financial Strength – we will create sustainable growth in our business and our earnings – by improving productivity and pursuing business growth opportunities that leverage our strengths – our core capabilities, our assets and our people

Organizational Effectiveness – we will achieve performance excellence – by cultivating a culture of innovation and continuous improvement

Corporate Citizenship – we will contribute to the wellbeing of the community – by acting at all times as a responsible and engaged corporate citizen

ii. In Reference 1, the outcomes of the RRFE are captured directly within each of HOL's Corporate Strategic Objectives as shown in the Interrogatory Response to OEB #11 part i.

iii. The DSP is intended to be a standalone document. The Annual Planning Report was included as an attachment as reference to HOL's historic documentation practices for Planning and Asset Management activities. It should be noted, that the DSP was created after the release of the Annual Planning Report, and as such, if any discrepancies are found, the DSP should be referred to as the most up-to-date material and data.

iv. HOL refers to the formal guidelines and processes that describe the planning execution of System Access, System Renewal, System Service and General Plant investments as practices. These practices are considered the same as "policies" as

described in the question preamble in the following statement: "Typically, practices are not as thoroughly documented as policies, and adherence to practices is not as strictly enforced as adherence to policies". These practices are documented as the Asset Management Process and are strictly observed when planning and executing investments.

v. The Asset Management Objectives and Initiatives were developed by the team responsible for the ongoing planning /asset management prioritization of distribution assets, through consideration of various aspects that may be affected by investments in alignment with the Corporate Strategic Objectives.

Response to OEB Staff Interrogatory Question #12

Reference: Exhibit B Tab 1 Schedule 2 Section 1.2.1.4 City of Ottawa Utility Coordinating Committee (UCC)

Question 12:

2 Staff 12. Regional Planning

Hydro Ottawa states that it meets every fall with the UCC. The UCC provides a forum for communication between invited utilities and the City of Ottawa in order to ensure safe and efficient management of the infrastructure within road allowances and other right-of-ways.

i. Please provide a summary of the outcomes of the meetings with the UCC.

Response:

i. In 1956 in Ottawa, a gas explosion due to a dig in on Slater Street killed several people and caused major utility damage. The UPUCC (now UCC) was formed based on a coroner's recommendation and subsequent city council order.

Hydro Ottawa Limited is a long standing member of the Utility Coordination Committee (UCC) which was formed primarily to ensure safety to the public and the stakeholders that work on underground infrastructure. The committee meets monthly to discuss on-going issues. A sub-committee meets quarterly to discuss technical standards. These meetings produce numerous outcomes including:

- UCC members (utilities and the City of Ottawa) have agreed upon cost sharing with respect to mutual joint initiatives around the stewardship of the public road allowance

- Hydro Ottawa Limited submits an annual works list to the UCC members to review for joint opportunities or conflicts
- UCC members now use Envista, a third party software platform, which acts as a depository of stakeholder's projects by geographic location and year for planning purposes
- Mutual improved efficiencies by simplifying portions of the road right-of-way process (ex. improve municipal consent circulation and permit process)
- The technical standards sub-committee puts in place standards agreed upon by the members (ex. tree planting, road cross section)
- Resolve various disputes (ex. identify ownership of unidentified plant and issue the roles and responsibilities going forward)

Every fall for several decades, we, along with the other participating utilities, have been providing the road authority with our proposed major works plan for the following year (mid-term planning function).

Response to OEB Staff Interrogatory Question #13

Reference:

1. Exhibit B Tab 1 Schedule 2 page 200 line 28

2. Exhibit B-1(C) pages 23-24

3. Exhibit B-1(C) page 24

4. Exhibit B-1(C) page 40 (Appendix C)

5. *Ontario Energy OEB Report, Renewed Regulatory Framework for Electricity Distributors: A Performance-based Approach, October 18, 2012.*

6. *OEB Chapter 5 Filing Requirements for Electricity Transmission and Distribution Applications, section 5.1.1.*

7. *OEB Report of the OEB: Supplemental Report on Smart Grid February 11, 2013*

Question 13:

2 Staff 13. Smart Grid

In Reference 5, the OEB states that the objectives of the renewed regulatory framework would best be met when there is no distinction between "smart grid" and more traditional investments included in rate base. Hydro Ottawa states in Reference 1 that smart grid is, "The integration and application of real-time monitoring, advanced sensing, communications, to accommodate existing and new forms of supply, delivery, and use in a secure, reliable and efficient electric power system, from generation source to end-user."

Reference 3 states, "The OEB is currently undertaking a process to establish the regulatory framework pertaining to Smart Grid deployment. It is therefore an opportunity to provide input to their process to hopefully steer their rules in a direction that is positive towards our GTAP development. Since 2012 the OEB has created a Smart Grid Working Group, and Advisory Council, to provide guidance on Smart Grid related programs."

i) Does Hydro Ottawa consider its definition of smart grid stated in Reference 1 consistent with that of the OEB as found in Reference 5? If not, please explain.

ii) Please state any differences Hydro Ottawa has identified in the treatment of "smart grid" investments in rate base?

iii) If there is a different rate base treatment identified for "smart grid" investments, how does Hydro Ottawa generally allocate such investment to the four categories required by Reference 6?

iv) Please identify which items on the list in Reference 3 cannot be classified as system access, system renewal, system service or general plant. Explain why.

v) With regard to Reference 3, is Hydro Ottawa aware that the OEB's process for providing guidance to distributors on the Minister's Smart Grid Directive is concluded and that the guidance is provided in References 5 and 7?

vi) Please identify which of the listed projects in Reference 4 cannot be classified as system access, system renewal, system service or general plant. If they cannot please explain.

Response:

i. Reference 1 is NERC's definition of "Smart Grid" and stands to embellish on the Board's definition in section 3.3 "…grid-enhancing advanced information and exchange systems and equipment (which are commonly referred to as smart grid)..." Quoting NERC's definition was not intended to define smart grid roles and responsibilities, rather help establish the foundational elements needed for achieving the OEB's RRFE three smart grid objectives.

ii. Hydro Ottawa considers its smart grid investments as integral to its capital programs and so treats them no differently than any other Grid investment.

iii. Hydro Ottawa does not have a different rate base treatment for smart grid investments.

iv. All items in Reference 3 can be classified under the four smart grid classifications.

v. Hydro Ottawa is aware of the RRFE outcome and is implementing it. Hydro Ottawa is engaged with the Ontario Smart Grid Forum, participating in Smart Grid Fund projects and planning with smart grid in mind as normal course of business.

vi. All of the projects listed in Reference 4 can be classified in the four RRFE categories. The categories in Reference 4 were strictly for mapping to HOL internal areas of responsibilities.

Response to OEB Staff Interrogatory Question #14

Reference:

1. Exhibit B Tab1 Schedule 2 page 51, line 18
2. Exhibit B Tab1 Schedule 2 page 53, line 3
3. Exhibit B Tab1 Schedule 2 page 55 lines 4 -8
4. Exhibit B Tab1 Schedule 2 page 56 lines 3 -7

Question 14:

2 Staff 14. Performance Measures and Continuous Improvement

Reference 1 states, "HOL's objective is to improve the System Reliability Performance Indicators from year to year." In addition, OEB staff is interested in any other performance measure to encourage continuous improvement.

i. Has Hydro set any targets for its worst performing feeders index (allowing for the lags) for 2016-2020? (Reference 2)
ii. Has Hydro set any targets for 2016-2020 for the Labour Allocation index; and, the Health and Safety and Environment indicators? (Reference 3)
iii. Please indicate the extent to which asset management KPIs factor into the relevant staff's performance appraisal processes. (Reference 4)

Response:

i. HOL has not set any specific targets for the Worst Performing Feeders; the objective is to see improvement by feeder from one year to the next. The Trend vs. Score for each of the feeders identified on the list will be tracked on a go forward basis should they continue to make the Worst Feeder List in subsequent years. Where a year over year

improvement is not being seen, the feeder will be re-evaluated to determine if there is a need for additional intervention to improve the reliability.

ii. Hydro Ottawa tracks the Labour Allocation index on the Corporate Productivity scorecard (See Attachment D-1(C) – Productivity Scorecard). The organization has yet to set targets for the metrics included in the scorecard. Hydro Ottawa anticipates being in a position to have targets in place by year end 2015.

iii. As outlined in Exhibit D-1-1, Page 29, performance contributions cascade from Hydro Ottawa's corporate performance scorecard, ensuring that individual performance is aligned to the advancement of the company's strategic direction. Performance against the following corporate priorities and associated KPIs is assessed through the individual contribution plans (performance appraisal process) of management employees with relevant accountabilities:

Table OEB #14 – 1: Corporate Priorities and Related Key Performance Indicators

Corporate Priority	KPI
System reliability	• System Reliability Performance Indicators • Worst Feeder Analysis • Defective Equipment Contribution to SAIFI
Enhancing operational performance and productivity	• Cost Efficiency • Labour Utilization

Response to OEB Staff Interrogatory Question #15

Reference:

1. **Exhibit B Tab 1 Schedule 2 p. 217 Section 3.4 Capital Expenditure Summary Table 3.4.1**
2. ***OEB Document Chapter 5 - Consolidated Distribution System Plan Filing Requirements*, Section 5.2 Distribution System Plans**
3. **Exhibit B Attachment B-(1)A Material Investments**
4. **Exhibit B Attachment B-(1)A Material Investments**
5. **Exhibit B Attachment B-(1)A Material Investments General Plant, Section 2.2.3 Main and Secondary Drivers**
6. **Exhibit B Attachment B-(1)A Material Investments General Plant, Section 3.2.3 Main and Secondary Drivers**
7. **Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.2.3 Main and Secondary Drivers**
8. **Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.2.3 Main and Secondary Drivers**
9. **Exhibit B Attachment B-(1)A Material Investments System Service, Section 5.1.2.3 Main and Secondary Drivers**
10. ***OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements Section 5.4.5.2* B1 a)**
11. **Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.5.2 Risks to Completion and Risk Mitigation Strategies**
12. **Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.5.2 Risks to Completion and Risk Mitigation Strategies**
13. **OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements, Section 5.4.5.2 A bullet 4**
14. **Exhibit B Attachment B-(1) A Material Investments System Service, Section 4.1 Telecommunications Master Plan**

15. Exhibit B Tab1 Schedule 2, page 32, Lines 9-11 through to page 33, line 27

16. Exhibit B Tab 1 Schedule 2 page 202 - 203

17. Exhibit B Tab 1 Schedule 3 Page 16

18. 1. Exhibit B Tab1 Schedule 2, Tables 3.4.1 and 3.4.2.

19. 2. Exhibit B Tab1 Schedule 2, pages 219, and 220.

20. Exhibit B-1(B) 2014 Reliability Plan, Section 4.4 Substation Automation page 27

21. 1. Exhibit B-1(B) 2014 Annual Planning Report, pages 16 & 19

22. 2. Exhibit B-1(B) 2014 System Capacity Plan, page 3

<u>Question 15:</u>

2 Staff 15. Capital Expenditure Plan

<u>Capital Expenditure Variances</u>

Reference

Exhibit B Tab 1 Schedule 2 p. 217 Section 3.4 Capital Expenditure Summary Table 3.4.1

Some of the variances in the Reference 1 do not look correct.

i. Please review and confirm all variances.

<u>Table of Alternate Section Headings</u>

References

1. *OEB Document Chapter 5 - Consolidated Distribution System Plan Filing Requirements*, Section 5.2 Distribution System Plans

2. Exhibit B Attachment B-(1)A Material Investments

In Reference 1 the OEB states “If a distributor’s application uses alternative section headings and/or arranges the information in a different order, the distributor shall demonstrate that these requirements are met by providing a table that clearly cross-

references the headings/subheadings used in the application as filed to the section headings/subheadings indicated"

ii. Please provide a cross reference table as indicated for the various section headings used in the material investment descriptions in Reference 2.

<u>Drivers for Specific Projects</u>

References

3. Exhibit B Attachment B-(1)A Material Investments

4. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 2.2.3 Main and Secondary Drivers

5. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 3.2.3 Main and Secondary Drivers

6. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.2.3 Main and Secondary Drivers

7. Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.2.3 Main and Secondary Drivers

8. Exhibit B Attachment B-(1)A Material Investments System Service, Section 5.1.2.3 Main and Secondary Drivers

9. *OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements Section 5.4.5.2* B1 a)

In References 1, 2 and 3 the drivers are listed for three General Plant information technology projects, and in References 4 and 5, the drivers are listed for two System Service projects. In Reference 6 the drivers for the General Plant and System Service Investment Category are listed and described. In Reference 7 the OEB has listed the criteria to show that main and secondary drivers demonstrate that an investment is consistent with the criteria used to evaluate any material investment.

iii. In References 1, 2, 3,4 and 5 please describe how the project drivers relate to the drivers specified in Reference 6 following the guidelines in Reference 7

Risks and Mitigation of Risks for Specific Project/Programs

References

1. Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.5.2 Risks to Completion and Risk Mitigation Strategies

2. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.5.2 Risks to Completion and Risk Mitigation Strategies

3. OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements, Section 5.4.5.2 A bullet 4

In References 1 and 2 the risks to completion of the project/program and mitigation strategies for these risks have not been detailed as described in Reference 3.

iv. Please list the risks for the completion (i.e. execution) of the project/program and how these will be mitigated.

Telecommunications Master Plan Project

Reference

Exhibit B Attachment B-(1) A Material Investments System Service, Section 4.1 Telecommunications Master Plan

In the Reference comments are made about the cost of Hydro Ottawa's current communications system. This is highlighted throughout the description by such comments as "long term financial viability of Hydro Ottawa's communications needs" (4.1.2.3), "containing future costs" (4.1.2.4), "the preferred alternative is the most cost efficient over the long term" (4.1.3.1.3) and "providing required connectivity at a drastically lower cost than the current solutions" (4.1.3.2). However, no costing information about the expected or avoided costs of the current communications system is given.

v. Please provide information about the expected and avoided costs of the current communications system and how this will provide benefits in terms of mitigating the cost of the proposed future communications network.

New Investment Planning Tool

Reference

Exhibit B Tab1 Schedule 2, page 32, Lines 9-11 through to page 33, line 27

Hydro Ottawa is implementing a new asset investment planning tool, and other new technology

vi. Please confirm when the software will be fully implemented and when its impact will be reflected in the forecasts provided.

vii. Please provide an assessment of the O&M savings referenced on lines 26-27 of page 33.

Technology-based Opportunities

References

1. Exhibit B Tab 1 Schedule 2 page 202 - 203

2. Exhibit B Tab 1 Schedule 3 Page 16

Hydro Ottawa is implementing an IT roadmap over a multi-year horizon.

viii. Given that Hydro Ottawa will continue to implement smart grid technologies over a five year period as indicated in Reference 1, please provide the point at which efficiencies related to this implementation will start to materialize and to what extent will they be reflected in terms of actual financial impact?

ix. Please provide an assessment of the impact of the SCADA implementation stated in Reference 1, and in particular, the expected impact on the asset management plan from the increased information to be gained from the upgraded system.

x. Please provide the total capital expenditures, by year, of the 10 year IT roadmap mentioned in Reference 1.

xi. Please state the cost for the IT roadmap, and specifically, whether Hydro Ottawa is trying to fit the project into the budget, or defining the requirements and setting the budget around those requirements.

xii. Please state the approval process and prioritising of spending that does not fit within the IT roadmap, but are required on a short term basis.

xiii. Please state when the 'Expected Outcomes' identified in Reference 2 are expected to be realised, and whether the financial impacts have been factored into the forecast.

Capital Expenditure Forecast

References

1. Exhibit B Tab1 Schedule 2, Tables 3.4.1 and 3.4.2.

2. Exhibit B Tab1 Schedule 2, pages 219, and 220.

OEB staff is interested in Hydro Ottawa's forecast of capital expenditures.

xiv. What inflation rate was used when developing the forecast in Reference 1?

xv. Despite the expectation of continued growth, forecast system access investments are flat as indicated in Reference 1. Please explain Hydro Ottawa's rationale for maintaining costs at a flat level over the forecasted period. Please also provide the historical variance to budget related to system access costs, so that the reasonableness of relying on historical data can be assessed. Given the historical spending increase in Reference 2, is a long term flattening of costs reasonable?

xvi. Please confirm whether a sensitivity analysis process is undertaken with respect to projected costs.

xvii. Please explain the rationale for the decrease in system renewal costs, given comments throughout Hydro Ottawa's submission that numerous system renewal initiatives will have to occur on a continuous basis.

Substation Automation

Reference

Exhibit B-1(B) 2014 Reliability Plan, Section 4.4 Substation Automation page 27

Increased automation will bring increased monitoring to feed into Hydro Ottawa's asset management process. Reduction in investigation and response time are expected.

xviii. Please provide an assessment of whether increased monitoring will identify additional maintenance requirements and will increase O&M costs

xix. Please confirm what is meant by ""will eventually lead to a significant reduction…" when is the reduction expected, and has this reduction been quantified?

Long term Investment Strategy

References

1. Exhibit B-1(B) 2014 Annual Planning Report, pages 16 & 19

2. Exhibit B-1(B) 2014 System Capacity Plan, page 3

The Annual Planning Report contains many recommendations related to asset investments, but does not delineate these between periods. Reference 1 indicates that annual investment increases of 5% are required to 2033 and $72 million is required to manage failures and replace equipment. Reference 2 indicates a $230 million requirement over a 20 year period commencing in 2014.

xx. Please reconcile the (a) 5% to 2033, (b) $72 million between 2014 and 2024, and the (c) $230 million over 20 years. Please state the amount included in the 2015-2020 forecasts.

xxi. Please confirm the level of capital projects that Hydro Ottawa is capable of delivering, given current resource levels, and in particular, bearing in mind the labour resource constraints outlined throughout Hydro Ottawa's application.

xxii. Please provide the implications on asset health of deferring the recommended spend by 5 years.

Response:

Capital Expenditure Variances

i. The values in Exhibit B-1-2 Table 3.4.1 were updated in HOL's revised submission of June 29, 2015. The variance is calculated by (actual cost – budgeted cost) / Budgeted cost. The variance for System Service in 2012 should have been stated as -1% in the revised submission of June 29, 2015. Please refer to the revised submission for the confirmed variances.

Table of Alternate Section Headings

ii. Hydro Ottawa Limited filed its Material Investment format to be in line with the Chapter 5 filing requirements.

A cross reference table can be found below that maps HOL's Attachment B-1(A) – Material Investments to the headings listed in section 5.4.5.2 of the OEB Document *Chapter 5 - Consolidated Distribution System Plan Filing Requirements, Section 5.2 Distribution System Plans*. HOL has included Material Investments in System Renewal, System Service and General Plant categories. Additional details for HOL's Facilities Implementation Plan can be found in Exhibit B1-2-4 filed by Hydro Ottawa in 2012 in support of its cost of service rage case (EB-2011-0054).

Table OEB #15 – 1: Attachment B-1(A) - Material Investment Mapping to OEB 5.4.5.2

OEB 5.4.5.2 Material Investments	HOL Attachment B-1(A) Material Investments		
	System Renewal	System Service	General Plant
A General Information			
Total capital costs	x.8 Project Details & Justification	x.x.8 Project Details & Justification	x.6 Project Description & Justification
O&M costs	x.8 Project Details & Justification	x.x.8 Project Details & Justification	x.3.1 Alternatives Evaluation x.6 Project Description & Justification
Related customer attachments and load	x.8 Project Details &	x.x.8 Project Details &	n/a

		Justification	Justification	
	Start date, in-service date and expenditure timing	x.8 Project Details & Justification	x.x.3.2 Project/Program Timing & Expenditure x.x.8 Project Details & Justification	x.5.3 Timing Factors x.6 Project Details & Justification
	Risks to the completion and risk mitigation	x.5 Execution Path	x.x.5.2 Risks to Completion & Risk Mitigation Strategy	x.5.2 Risks to completion & Risk Mitigation Strategies
	Comparative expenditures for equivalent projects/activites	x.3 Project/Program Justification	n/a	n/a
	Costs associated with REG and desciption of benefit to REG	x.6 Renewable Energy Generation	x.x.6 Renewable Energy Generation	n/a
	Leave to Construct	x.7 Leave-To-Construct	x.x.7 Leave-To-Construct	n/a
B	**Evaluation Criteria and Information**			
1	**Efficiency, Customer Value, Reliability**			
a)	Main & secondary driver	x.2.4 Main & Secondary Drivers	x.x.2.3 Main & Secondary Drivers	x.2.3 Main & Secondary Drivers
b)	Priority of investment	x.4 Prioritization	x.x.4 Prioritization	x.4 Prioritization
c)	Effect to efficiency and cost-effectiveness	x.3.3 Benefits	x.x.3.3 Benefits	x.3.3 Benefits
	Net benefits of the investment	x.3.3 Benefits	x.x.3.3 Benefits	x.3.3 Benefits
	Impact on reliatility	x.3.3 Benefits	x.x.3.3 Benefits	x.3.3 Benfits
2	**Safety**	**x.3.3 Benefits**	**x.x.3.3 Benfits**	**x.3.3 Benfits**
3	**Cyber-security, Privacy**	**x.3.3 Benefits**	**x.x.3.3 Benefits**	**x.3.3 Benefits**
4	**Co-ordination, Interoperability**			
a)	Applies recoginzed standards	x.3.3 Benefits	x.x.3.3 Benefits	x.3.3 Benefits
b)	Enable future technological functionality or operation requirements	x.3.3 Benefits	x.x.3.3 Benefits	x.3.3 Benefits
5	**Economic Development**	**x.3.3 Benefits**	**x.x.3.3 Benefits**	**x.3.3 Benefits**
6	**Environmental Benefits**	**x.3.3 Benefits**	**x.x.3.3 Benefits**	**x.3.3 Benefits**

C	Catergory-specific requirements			
a)	**System Access**	**n/a**		
b)	**System Renewal**			
	Relationship between the characteristics of the asset and consequences of failure	x.2.2 Asset Life Cycle & Condition x.2.3 Consequence of Failure		
	Timing of project	x.3.1.3 Preferred Alternative x.3.2 Project/Program Timing & Expenditure		
	Concequences for system O&M costs	x.8 Project Details & Justification		
	Reliability & Safety Factors	x.3.1 Alternatives Evaluation		
	Project Alternatives	x.3.1 Alternatives Evaluation		
	Other benefits	x.3.3 Benefits		
c)	**System Service**			
	Benefits to customers		x.x.3.3 Benefits x.x.8 Project Details & Justification	
	Regional electricity infrastructure requirements		x.x.1 Project/Program Summary	
	Advanced technology incorporated		x.x.3.3 Benefits	
	Reliability, effifiency, safety and coordination benefits		x.x.3.3 Benefits	
	Implementation timing/priority		x.x.4 Prioritization	
	Alternatives comparison		x.x.3.1 Alternatives Evaluation	
d)	**General Plant**			
	Quantitative and qualitative analyses			x.1 Project/Program Summary

			x.2 Project/Program Description x.3 Main & Secondary Drivers
Business Case			x.3 Main & Secondary Drivers x.4 Performance Targets & Objectives x.5 Project/Program Justification x.6 Prioritization

Drivers for Specific Projects

iii. ASSUMPTION – the numbers for the references were mislabeled in the question received and therefore the appropriate numbering as referenced in the question should be as follows:

1. Exhibit B Attachment B-(1)A Material Investments
2. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 2.2.3 Main and Secondary Drivers
3. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 3.2.3 Main and Secondary Drivers
4. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.2.3 Main and Secondary Drivers
5. Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.2.3 Main and Secondary Drivers
6. Exhibit B Attachment B-(1)A Material Investments System Service, Section 5.1.2.3 Main and Secondary Drivers
7. *OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements Section 5.4.5.2* B1 a)

In line with the above assumption, it has also been assumed that Reference 1 was not intended to be entered and that before Reference 7 (OEB Chapter 5) that a Reference to Exhibit B-1-2 was intended. Therefore it has been assumed that the References should read as follows:

1. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 2.2.3 Main and Secondary Drivers
2. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 3.2.3 Main and Secondary Drivers
3. Exhibit B Attachment B-(1)A Material Investments General Plant, Section 6.2.3 Main and Secondary Drivers
4. Exhibit B Attachment B-(1)A Material Investments System Service, Section 4.1.2.3 Main and Secondary Drivers
5. Exhibit B Attachment B-(1)A Material Investments System Service, Section 5.1.2.3 Main and Secondary Drivers
6. Exhibit B, Tab1, Schedule 2
7. *OEB Chapter 5 Consolidated Distribution System Plan Filing Requirements Section 5.4.5.2* B1 a)

The following table maps the drivers described in the assumed References 1 through 6 to the Drivers identified in Exhibit B-1-2 as updated June 29, 2015, Table 2.1.1 – Driver Descriptions.

Table OEB #15 – 2: Project/Activity Drivers

Reference Number	Project/Activity Name	Driver
1. Attachment B-(1)A - Material Investments General Plant, Section 2.2.3 Main and Secondary Drivers	CC&B Enhancement	Business Operations Efficiency
2. Attachment B-(1)A - Material Investments General Plant, Section 3.2.3 Main and Secondary Drivers	Outage Communication System	Business Operations Efficiency
3. Attachment B-(1)A - Material Investments General Plant, Section 6.2.3 Main and Secondary Drivers	Enterprise Architecture Program	Business Operations Efficiency
4. Attachment B-(1)A - Material Investments System Service, Section 4.1.2.3 Main and Secondary Drivers	Telecom Master Plan	System Efficiency
5. Attachment B-(1)A - Material Investments System Service, Section 5.1.2.3 Main and Secondary Drivers	SCADA Upgrades	System Efficiency

<u>Risks and Mitigation of Risks for Specific Project/Programs</u>

iv. Attachment B-(1)A – Material Investments System Service, Section 4.1.5.2 Risks to Completion and Risk Mitigation Strategies:

Table OEB #15 – 3: Telecommunication Master Plan Risk Mitigation Strategies

Risk to Program	Mitigation Strategy
Issues arising from the transition from existing communications system to the new system.	• A detailed transition plan has been developed including pilot projects to assess additional devices that will be used to permit the existing system to operate in parallel with the new system.
Financial constraints preventing the deployment of new assets.	• A long term incremental plan has been developed to spread the investment over several years. This plan can be adjusted as needs and constraints dictate.
Issues with the deployment and operations of the new equipment.	• Hydro Ottawa Limited has chosen to restrict the equipment vendors to those that can provide local support (Ottawa has the benefit of having a significant number of telecommunications equipment manufacturers). Furthermore, where possible Hydro Ottawa Limited has chosen to restrict the list of proposed vendors to those manufacturers that are currently used in the IT infrastructure.
Poor design or structural issues with the design of the telecommunications system.	• Hydro Ottawa Limited has engaged a leading utility telecommunications consulting firm (Black & Veatch) to provide the detailed engineering and specifications documents. In addition, Hydro Ottawa Limited will be publishing both an RFI and an RFP in order to fully evaluate the available solutions.
Internal resources are not provided to support the telecom network.	• The telecommunications master plan study has identified the requirements for support personnel and the Hydro Ottawa Limited executive management team has been notified of these requirements.

Attachment B-(1)A – Material Investments General Plant, Section 6.5.2 Risks to Completion and Risk Mitigation Strategies:

During the period 2016 to 2020 the Enterprise Architecture Program will be focused on using Service Oriented Architecture (SOA) principles and the deployed and in-service Enterprise Service Bus (ESB) to integrate applications and automate processes/workflows. The following table provides a view of the risks and the approaches to risk mitigation.

Table OEB #15 – 4: Enterprise Architecture Program Risk Mitigation Strategies

Risk	Risk Mitigation
Existing staff have limited SOA and ESB knowledge	• Training program has been defined and established and initial training is ongoing. • Standing offer will be established with local Ottawa consultants skilled in SOA and ESB, for augmenting and scaling HOL staff skills
With increasing numbers of applications integrated via ESB and processes/workflows automated using SOA Business Process Execution Language (BPEL), these systems must be highly available, monitored and managed for changes	• SOA/ESB technology has been deployed in a highly available configuration • Existing network infrastructure has been upgraded to be highly available, consisting of two data centres, to support SOA/ESB • A formal HOL SOA/ESB Governance Framework is being implemented and will be followed in order to effectively manage and govern the Enterprise Service Bus (ESB) solution itself, as well as the co-dependency and interaction with the supporting IMIT infrastructure; servers; and any applications integrating to the ESB, and providing services • The Manager, Enterprise Architecture will oversee all SOA/ESB related changes as well as all other IT changes across HOL

Telecommunications Master Plan Project

v. Hydro Ottawa Limited's current communications infrastructure is primarily based on leased infrastructure and telecommunications services from the major telecommunication carriers. As a result, Hydro Ottawa Limited is currently in the position of paying monthly operating fees based on the connection types and/or the amount of data that is transferred over these connections. Furthermore, these communication links have been acquired over time from the carriers on a case by case basis. This has resulted in many disparate and overlapping services spanning across the Hydro Ottawa Limited territory. For example:

1) Leased dark fibre connectivity to substations and facilities across the service territory
2) Leased phone lines for dial-up connections to AMI Gatekeepers
3) Leased data lines for non-fibre connected substations
4) 3G/LTE cellular connections for remote devices and new substations
5) High-speed data services between Hydro Ottawa corporate offices

In the first example above, the fibre network is being driven by legacy serial communications equipment capable of carrying 153.6 kilo-bits per second (kbps), (i.e.16 channels at 9600 Baud) with no overall costs associated with the monthly data traffic. In examples 2 and 3, the data rates are equivalent to 56 kbps, again with no overall costs associated with the monthly data traffic. Finally, in examples 4 and 5 the data rate is much higher (100s of Mbps), however, there are additional costs associated with amount of data transmitted.

In the proposed telecommunications network, there will be a mix of technologies and services that will create a high speed communications links between the substations and corporate offices utilizing Hydro Ottawa Limited owned infrastructure, where possible. For example:

1) High speed fibre connectivity utilizing modern commercially available equipment by

- First, modernizing equipment connected to the existing fibre network
- Second, expanding the reach of the existing network with Hydro Ottawa owned fibre
- Finally, replacing (upon expiry of existing agreements) leased fibre with Hydro Ottawa owned fibre

2) Private licensed and unlicensed radio connections between field devices and the fibre connected substations
3) Where technically and/or financially necessary, communications services from major carriers

In this proposed network, all of the substations (85) that will be connected to the improved and expanded fibre optical system will each have over 1 Gbps of data connectivity. With this amount of bandwidth available, Hydro Ottawa Limited will be in a position to retrieve vast quantities of data that is already being collected (or capable of being collected) by the installed substation equipment. This data can be fed into any number of analysis tools such as the existing Power Quality software or the future Distribution Management System functionality that will be added to the SCADA system in order to provide customer value. With the improved data capacity, Hydro Ottawa Limited will be well positioned to expand the smart grid network for years to come. Examples include new devices such as radio equipment and security systems in substations, distributed automation and control systems for energy resource facilities

As an illustrative example, for a similar level of connectivity between corporate offices, Hydro Ottawa Limited currently pays over $500 per month, per site. Therefore, in order to deploy this level of connectivity to all of the sites in the proposed network, it would cost over $480,000 per year in service fees. Furthermore, by creating a private network, Hydro Ottawa Limited will be increasing communication network reliability and security.

The long term financial advantages for this new approach are based on two major assumptions. First, there will be a continuous and long term need for more data to be collected from field devices. This is true of any modern utility. As more sensors and automation devices are placed on the distribution system, there will be a growing need to retrieve the data collected by these devices for monitoring, analyzing and controlling.

Second the major telecommunications carriers will continue to organize their service fee structures based on both the amount of data and the speed at which that data is transmitted. This is based on the experience that Hydro Ottawa Limited has gathered over the past few years paying for ever increasing connectivity.

In conclusion, the cost mitigation benefits are based on a long term approach of extending the reach and capability of Hydro Ottawa Limited's owned communications infrastructure in order to forgo current external costs. This is a strategic decision that extends beyond a 20 year time horizon. In addition to controlling communication costs, Hydro Ottawa Limited anticipates benefits and efficiencies from this project and projects enabled by it to many other areas including: customer reliability, outage response, operations and asset management.

<u>New Investment Planning Tool</u>

vi. The 2016 Sustainment Project list was completed in 2014 using the existing prioritization process as Hydro Ottawa Limited produces detailed project lists a minimum of two years in advance to allow time for appropriate resource planning.

Hydro Ottawa Limited's installation of Copperleaf's C55 Asset Investment Planning Initiative program was completed December 2014. The tool will be used to manage the 2016 project portfolio from a budget perspective as well as a reprioritization perspective as required. This asset management tool will be used to optimize Hydro Ottawa's 2017 list of projects which will be completed Q4 2015. In 2015 Hydro Ottawa Limited is working on refining Health Index models.

vii. Lines 25-27 on page 33 of Exhibit B-1-2 of the April 29th version OR Lines 25-27 on page 34 of Exhibit B-1-2 of the June 29th updated version, read:

"Through the use of these technologies a reduction of manual efforts is achieved, thereby creating better efficiencies and overall better reliability. They also allow for greater O&M savings than their initial investments thus reducing overall lifecycle cost."

The referenced technologies are SCADA controlled switches, fault current indicators, cable rejuventation, the Copperleaf C55 program for Asset Investment Planning, and the recommended acquisition of a Mobile Workforce Management Tool.

Over time SCADA controlled switches will achieve O&M savings by reducing crew and truck time previously required for switching and power restoration.

Over time fault current indicators will achieve O&M savings by reducing the time crews must spend to locate a fault during an outage.

It is anticipated that cable rejuvenation achieves capital savings by being more cost effective than traditional cable replacement for backyard direct buried cables. It allows us to effectively manage more kilometres of cable within the same capital envelope, helping to close the gap between the needs identified and available expenditure levels. No significant O&M savings are expected with cable rejuvenation.

Given the demographics of our infrastructure the Copperleaf C55 program will aid in avoiding increased engineering resource requirements through productivity and efficiency gains. C55 will be the single repository for data, reducing time spent by planning engineers searching for information. When compared to managing the planning process in spreadsheets, planning engineers will be able to analyze, optimize, and develop more effective plans for capital programs working to reduce the gap between the forecasted need and actual expenditure levels.

The Mobile Workforce Management tool will achieve O&M Savings through productivity and efficiency gains. The system will improve overall visibility of workload and resource availability and ensure consistent application of scheduling policies to all types of work. With features such as schedule optimization and route planning, it improves field resource productivity, reduces mileage and overtime costs, and increases the ability to meet customer commitments.

Technology-based Opportunities

viii. Hydro Ottawa Limited plans to continue to implement smart grid technology deployment in strategic areas within its system. The implementation of these smart grid technologies will increase the reliability for our customers. This is accomplished by reducing duration of outages with remotely and/or automatically operated switching. Financial impact will be seen over time with reduced truck rolling and fault finding.

ix. Hydro Ottawa Limited's existing SCADA system is reaching end of life due to the age of the hardware and software which are becoming obsolete. As a result, failure to replace the SCADA system represents a significant and unacceptable risk to the safe, reliable operation of Hydro Ottawa Limited's distribution system.

With the increasing implementation of automation, the SCADA system is integral in order to leverage the data provided by monitoring equipment embedded throughout the distribution system. Not only will this data identifying areas of concern, but the increased use of automation will increase provide value to our customers by increasing their reliability.

Hydro Ottawa Limited anticipates that the SCADA implementation will have a significant impact on the asset management plan by providing key functionality in both the first and second phases of the project.

The first phase is the replacement of the existing legacy SCADA system with a modern platform that will include enhanced interfaces for staff outside of the control room. This interface will be in the form of a read-only web interface into the SCADA system giving the asset planning and maintenance engineering staff visibility into real-time operations of the system.

In the second phase of the project, there will be additional features installed including a Distribution Management System (DMS). The DMS will gather information from various

sensors, AMI metering, substation relays etc. and provide optimization algorithms, fault location/restoration (FLISR), contingency analysis, and many additional tools. With these tools, the SCADA system will make use of automation devices in the field which will have a significant impact on the overall system reliability and outage response metrics.

x. Hydro Ottawa Limited has made the assumption that the reference in question OEB #15 parts x, xi, and xii to "IT roadmap" are actually referring to the "Telecommunication Plan" due to the reference, Exhibit B-1-2 page 202 – 203, original submission April 29th, 2015.

The refined capital expenditures associated with the 10 year Telecommunication plan are:

Table OEB #15 – 5: Telecommunication Plan Capital Expenditures

Year	**2015**	**2016**	**2017**	**2018**	**2019**
Capital ($)	2,439,780	3,207,009	4,325,731	3,093,340	2,037,591

Year	**2020**	**2021**	**2022**	**2023**	**2024**
Capital ($)	3,080,982	0	0	0	0

xi. Hydro Ottawa Limited has made the assumption that the reference in question OEB #15 parts x, xi, and xii to "IT roadmap" are actually referring to the "Telecommunication Plan" due to the reference, Exhibit B-1-2 page 202 – 203, original submission April 29th, 2015.

Hydro Ottawa Limited created the Telecommunications plan to achieve the maximum amount of benefit while maintaining a feasible execution schedule. Therefore, the requirements were set first and the budget (please see Interrogatory Response to OEB Staff # 15 part x) was established accordingly.

xii. Hydro Ottawa Limited has made the assumption that the reference in question OEB #15 parts x, xi, and xii to "IT roadmap" are actually referring to the "Telecommunication Plan" due to the reference, Exhibit B-1-2 page 202 – 203, original submission April 29th, 2015.

Hydro Ottawa Limited consistently prioritizes projects in order to gain the most value for our customers. Any additional spending that is required in the short term in order to facilitate the telecommunications master plan project will be prioritized as per Exhibit B-1-2 Section 2.1.2 Asset Management Process Components.

xiii. Exhibit B-1-3 outlines IM&IT strategies and potential benefits as opposed to being IM&IT initiatives. Individual strategies may be a driver for one or more IM&IT or other business driven initiatives. These strategies are expected to improve the technology foundation to reliably meet ongoing business requirements and leveraged as components of other technology dependant projects initiated within the business. Details for major IM&IT initiatives are provided in Attachment B-1(A) – Material Investments, Section 4, General Plant. Related cost information is provided as part of General Plant within Exhibit B-1-2, Table 3.1.12.

Capital Expenditure Forecast

xiv. Hydro Ottawa Limited did not use a prescribed inflation rate when developing its capital expenditure forecast.

xv. As described in Exhibit B-1-2 Section 3.4.2.2 the economic growth is expected to remain at a constant level thus requiring consistent spending.

The historical variance to budget related to system access costs are shown in Exhibit B-1-2 Table 3.4.3. The forecasted levels of spending for the System Access Category are based on historical as well as known major projects.

xvi. A sensitivity analysis has not been done at this time.

xvii. Projects contained in Hydro Ottawa's System Renewal category are weighed along with projects in HOL's System Service category are determined through Hydro Ottawa's capital expenditure planning processes outlines in Exhibit B-1-2 section 3.2. Budgeted spending in the category is expected to remain at approximately 30% of HOL's capital budget from 2015 through 2020 with the exception of 2017. Spending in this year is budgeted to decrease to approximately 20%, where these expenditures would be focused in the System Service category to allow for costs associated to multiyear projects to allow them to proceed as efficiently as possible. While there may be fluctuation year to year on the spending levels in the System Renewal category, HOL continues to focus on asset replacement amongst other solutions to provide the best value for the customer. HOL ranks and scores potential projects using the criteria outlined in Exhibit B-1-2 section 2.1.2.2.

<u>Substation Automation</u>

xviii. As per Attachment B-1(B) – 2014 Reliability Plan, Section 4.4 Substation Automation page 27, Substation Automation monitoring upgrades include incorporating existing substation devices into the existing SCADA, addition of online oil monitoring, and additional Power Quality metering.

The intent of increased data / information on our assets, in particular our large ageing assets, is to improve decision making abilities on both maintenance and capital programs making more effective use of maintenance and capital dollars.

SCADA controlled and monitoring devices reduce crew and truck time previously required to investigate the status of equipment at a substation. Online oil monitoring provides real-time transformer condition information rather than sending a crew to do manual oil sampling in the field. Additional Power Quality metering in conjunction with

fault current indicator data can improve fault finding and reducing the time crews must spend to locate a fault during an outage.

xix. Attachment B-1(B) – 2014 Reliability Plan, Section 4.4 Substation Automation page 27, states, "…work is planned for continued deployment of Power Quality metering… Another significant benefit of the additional Power Quality metering will be the ability to capture waveform data from system faults. This data can be processed using power quality software (PQView) in order to determine approximate locations for faults (in conjunction with the FCI data). While there will be some additional effort involved in calibrating this system, it is expected that it will eventually lead to a significant reduction in the time spent investigating a fault and therefore reduce response time."

The reference "will eventually lead to a significant reduction…" is in relation to fault locating. Fault locating will eventually be instantaneous and accurate. The power quality software will use fault waveform data collected immediately following a fault, inputs from fault current indicators, and the distribution system model to calculate the most likely location of the fault.

This determination of fault location using waveform data is still in the testing stage. The eventual rollout is expected as more fault current indicator devices are incorporated into SCADA, more power quality monitors are installed, and more testing is done.
This reduction in time spent investigating a fault not been quantified as the process has not been operational. However, significant time savings can be achieved by eliminating the need for a crew to patrol long circuits for an outage cause.

<u>Long term Investment Strategy</u>

xx. As a precursor to the response, each of the dollar amounts discussed in Attachment B-1(B) – Annual Planning Report are to address the forecasted system needs to maintain current reliability of the distribution system. They are meant to be used as an input into setting the Capital Budget.

The 5% to 2033 is an option presented by Attachment B-1(B) – Annual Planning Report System Outlook page 16 to cumulatively accomplish the forecasted investment needs for both System Renewal and System Service.

The $72 million is presented as an alternate option to address the System Renewal needs whilst the $230 million is a cumulative need for System Service.

The 2015 to 2020 budget submitted as part of application EB-2015-0004 is shown below and aligns more closely with the 5% option cumulatively over the 5 years.

Figure OEB #15-1 below illustrates the forecasted need versus the planned expenditure.

Figure OEB #15 – 1: System Renewal & System Service Need Vs. Budget

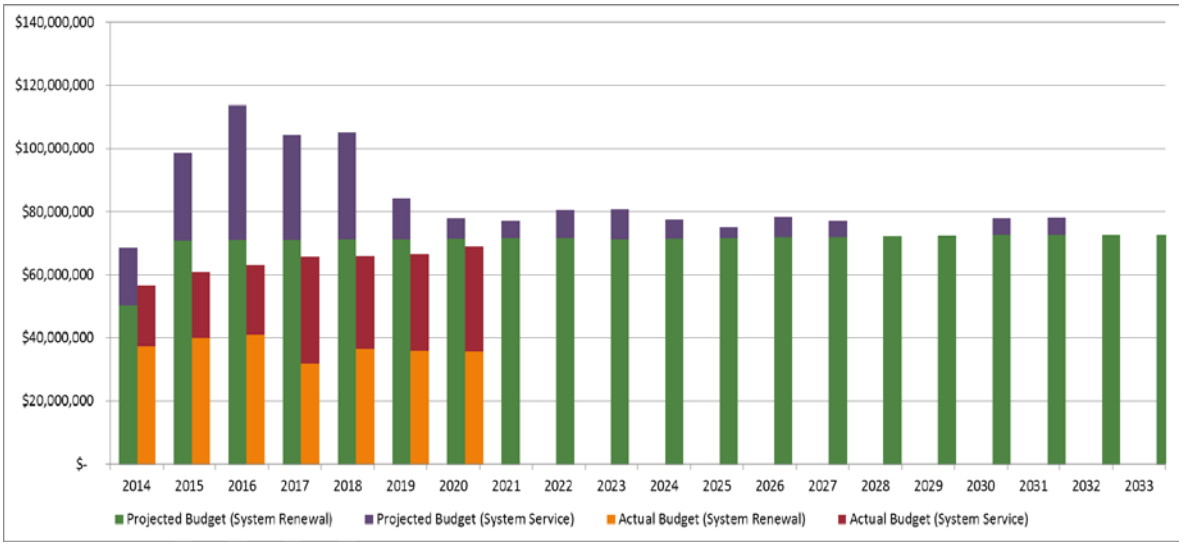
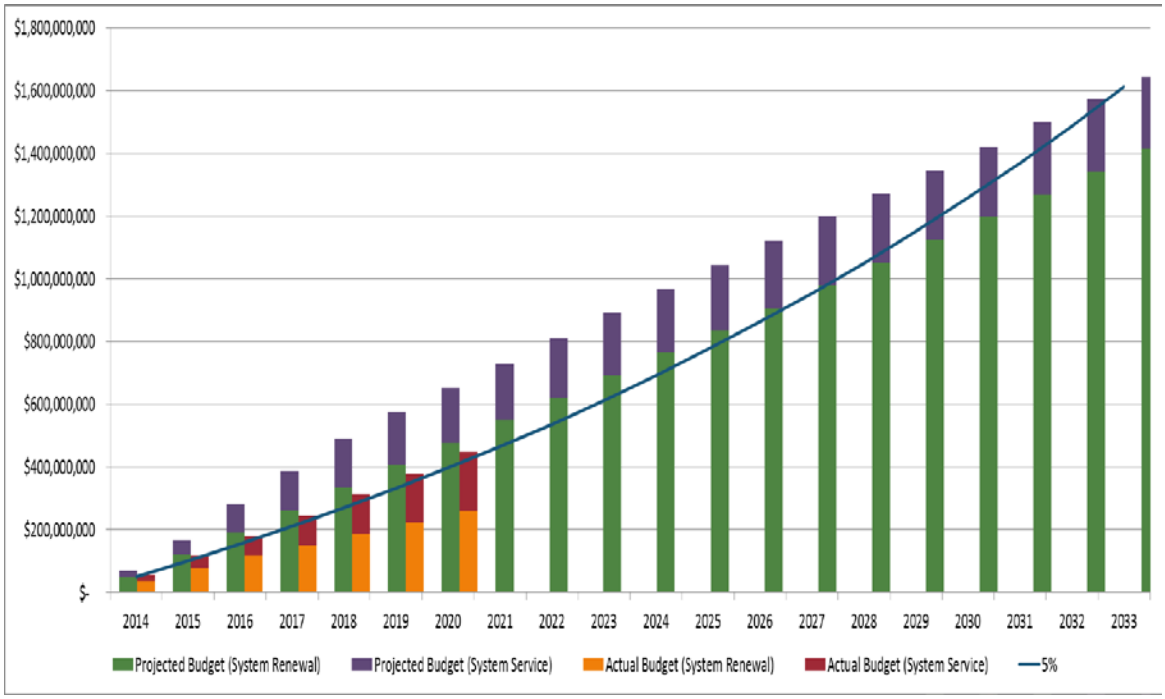


Figure OEB #15-2 below shows the cumulative need vs the cumulative budget in relationship to a 5% annual increase in System Service and System Renewal.

Figure OEB #15 – 2: Forecasted Cumulative System Need & Budget Vs. 5% Annual Increase



xxi. Hydro Ottawa is capable of delivering the level of capital projects outlined in the evidence filed during the period 2016 – 2020 using a combination of internal and external resources. Should capital levels increase from the forecast presented, and bearing in mind the labour resource constraints, ramping up would require the procurement of additional contract resources to complete the program.

xxii. Please refer to Interrogatory Response to OEB #15 part xx for clarity regarding Attachment B-1(B) – Annual Planning Report.

Hydro Ottawa is making the assumption that the "recommended spend" noted in the question refers to the amounts identified in Attachment B-1(B) – Annual Planning Report and not the budget amount submitted as part of Application EB-2015-0004.

Hydro Ottawa Limited recognizes the gap between the five year plan as submitted and the needs defined in Attachment B-1(B) – Annual Planning Report. The deferral of

recommended spend versus the five year plan creates a challenge for Hydro Ottawa to maintain reliability through improved optimization of our capital program, increased productivity relating to the execution of the capital program as well as opportunities to leverage technology.

Response to OEB Staff Interrogatory Question #16

Reference:

1. **Exhibit B Tab 1 Schedule 2 Distribution System Plan Figure 2.1.2 Asset Management Consequence Matrix**
2. **Exhibit B Tab 1 Schedule 2 Table 2.1.1 Driver Descriptions**
3. **Exhibit B Tab 1 Schedule 2 Table 2.2.5 Assets Demographics and Condition**
4. **Exhibit B Tab 1 Schedule 2 Table 2.2.6 Asset Management Strategy**
5. **Exhibit B Tab 1 Schedule 2 page 89**
6. **Exhibit B Tab 1 Schedule 2 page 63**
7. **Exhibit B Tab 1 Schedule 2 Page 71 line 3**
8. **Exhibit B Tab 1 Schedule 2 Page 78**
9. **Exhibit B-1(B) 2014 Testing, Inspection & Maintenance Plan Page 3**
10. **Exhibit B-1(B) 2014 Testing, Inspection & Maintenance Plan Annual Planning Report, page 6**
11. **Distribution System Code Appendix C, Minimum Inspection Requirements**
12. **Exhibit B-1(B) Letter from KINECTRICS INC. to Jim W. Pegg Hydro Ottawa dated February 26, 2015**

Question 16:

Asset Management Process Components

Reference

Exhibit B Tab 1 Schedule 2 Distribution System Plan Figure 2.1.2 Asset Management Consequence Matrix

Hydro Ottawa states: "HOL's Asset Management Process, as shown in Figure 2.1.2, is a function of 5 difference 2 phases:

1) Project Concept Definition (Section 2.1.2.1)
2) Project Evaluation (Section 2.1.2.2)
3) Project Prioritization (Section 2.1.2.3)

4) Project Execution (Section 2.1.2.4)
5) Risk Assessment & Review (Section 2.1.2.5)"

i. Please provide an asset management flow chart showing supporting asset management activities connected with the above five phases and indicate in this asset management flow chart the process which would be followed for assessment and prioritization of "backlogs" i.e. work not completed in the year, legacy work, emergency and unplanned work, etc.
ii. Please provide Hydro Ottawa's organization flow chart which supports the asset management process and clarify whether there is a separate asset management department within Hydro Ottawa with staff dedicated for asset management work. Include the positions and the responsibilities with respect to the asset management activities and interrelations within the Hydro Ottawa organization as a whole
iii. Hydro Ottawa and Hydro One Networks Inc. systems are interconnected. Please clarify whether there is a relationship between Hydro Ottawa's aging infrastructure management process and that of Hydro One. If there is such relationship, please explain the process of work prioritization
iv. Please clarify whether there should be a Step 6 "Return to Step 1" if the defined work is not started or not completed.

<u>Project Concept Definition</u>

References

1. Exhibit B Tab 1 Schedule 2 Table 2.1.1 Driver Descriptions
2. Exhibit B Tab 1 Schedule 2 Table 2.2.5 Assets Demographics and Condition
3. Exhibit B Tab 1 Schedule 2 Table 2.2.6 Asset Management Strategy
4. Exhibit B Tab 1 Schedule 2 page 89
5. Exhibit B Tab 1 Schedule 2 page 63

Hydro Ottawa states in Reference 5: "The Project Concept Definition phase gathers all internal and external drivers to describe the needs of our organizational environment.

Concept projects are created to meet requirements, mitigate or remove risk, and reach Corporate Strategic Objectives." Reference 1 outlines the 4 description of the drivers by Investment Category, which are detailed in following sections.

Hydro Ottawa states in Reference 4: "Table 2.2.5 summarizes the condition and population statistics for the asset classes that are detailed in the following sections"

Table 2.2.5 - Asset Demographics & Condition

Asset Type	Population	Average Age	% in Poor & Critical Condition
Poles	59,450	39	12%
Polemounted Transformers	15,663	30	11%
Kiosk & Padmounted Transformers	15,633	33	4%
Vault Transformers	3,474	34	7%
Distribution Cables (XLPE)	4,128 km	25	17%
Distribution Cables (PILC)	356 km	35	15%
Underground Switchgear	439	15	2%
Station Transformers	170	36	2%
Station Breakers	1,003	36	5%

Table 2.2.6 - Asset Management Strategy

Type	Asset	Strategy	Age / Condition Based Replacement
Substation	Transformers	Proactive	Condition
	Switchgear	Proactive	Condition
	Batteries	Proactive	Age
	Overhead Conductor	Proactively replaced with other projects	N/A
Distribution	Poles	Proactive	Condition
	Cable – PILC	Reactive	N/A
	Cable – XLPE	Proactive/Refurbish	Condition
	Cable – Butyl Rubber	Proactive	Condition
	Cable – EPR	Reactive	N/A
	Padmounted & Kiosk Transformers	Reactive	N/A
	Polemounted Transformers	Reactive	N/A
	Vault Transformers	Reactive	N/A
	Underground Switchgear	Proactive	Age
	Underground Civil Structures	Proactive	Condition
	Overhead Distribution Switches and Reclosers	Reactive	N/A

v. Please include a separate chart, or refer to an existing chart in this application if one exists, which would indicate the relationships among

Investment Categories "System Renewal" and "General Plant" (listed in Table 2.1.1 on page 63), corresponding asset groups (mentioned on page 65, line 24), Health Indices (listed on page 66, line 13), Capital Projects, OM&A and corresponding budgeted amounts. Also, please indicate where the corresponding budgeted amounts are shown in this document and confirm that the budgeted amounts represent optimized and prioritized expenditures.

vi. Please clarify whether the above asset lists in Tables 2.2.5 and 2.2.6 provide a complete list of Assets. The titles and order of asset classes in subsequent sub-sections do not appear to match up between the contents of Tables 2.2.5 and 2.2.6. For clarity, please rearrange the information so that the Asset Classes listed in the Tables align with the titles and sequence in the following sections in the text.

vii. Please provide a Table, or refer to an existing table in the application, which would indicate a complete list of Asset Groups, Asset Classes, Asset Types and the corresponding generic asset descriptions within each. For example, please indicate if assets such as cables are treated as a single Asset Class, or separately for PILC, XLPE EPR and Butyl Rubber. If Assets are grouped into a single class, please explain how this Asset Class information is used for replacement planning and provide (or point to) quantitative examples.

viii. If a reference in the main text exists, please identify which section in the application describes the content and the purpose of Table 2.2.6

<u>Project Evaluation</u>

Reference

Exhibit B Tab 1 Schedule 2 Page 71 line 3

Hydro Ottawa states: "Each consequence has an associated weighting, see Figure 2.1.3, each having a dual function to normalize and to rank. While it is intended that the scoring scales between measures are normalized, the use of the weighting factors to assist in this is acceptable. Further, weighting is used to rank both the priority of a measure and its impact; a measure which has a relatively low impact on its associated initiative will also have a lower weighting. The sum of the weights of all the measures for

a given Asset Management Objective must be equal to 1. The weighting of the measures is under the purview and approval of the Manager of Asset Planning."

ix. The values of weighting factors can have a major impact on the outcomes of the project ranking process. What determines that "the use of weighting factors are acceptable". Is there formal guidance or other reference mandating this approach? In particular, please explain (or point to) how the authority of the Manager of Asset Planning defined and overseen in application of this process? Please describe the process, especially for definition and review of weight factors and include examples of the derivation of the weights. In particular, please discuss the metrics applied and how they were obtained.

x. Figures 2.1.3 and 2.1.4 illustrate the "roll up" of weighting factors. To increase the clarity of the information contained in these figures, please provide a table containing the subcategory weights and the resultant product in each case of their multiplication.

xi. Please clarify whether the Manager of Asset Planning is:

a) A single person charged with a task to manage one asset group, or.
b) A single person charged with managing all the asset groups, or
c) A statement to represent the overall Asset Planning Department.

<u>Execution</u>

Reference

Exhibit B Tab 1 Schedule 2 Page 78

Hydro Ottawa states: "The Execution phase follows an Hydro Ottawa internal project management methodology called "Project Coach" which defines the core lifecycle for projects."

xii. Please clarify whether the Project Coach is applied in the Asset Management process and where the responsibility for applying lies.

xiii. Please describe the process to utilize the "lessons learned" from the projects execution for application of asset management process of prioritization of future work.

2014 Testing, Inspection & Maintenance Plan Annual Planning Report

Reference

Exhibit B-1(B) 2014 Testing, Inspection & Maintenance Plan Page 3

Hydro Ottawa states: "Hydro Ottawa's testing, inspection and maintenance (TIM) programs are crucial to ensuring a reliable and sustainable distribution system. Information from the testing, inspection and maintenance programs feed back into the Asset Management Plan to allow for effective life-cycle planning of assets."

xiv. Please clarify whether these inspections include all information identified as required for collecting asset information for asset condition assessment and for evaluation with respect to end of life criteria or are additional activities for the Asset Management conducted. If the latter, please specify which activities would be additional.

Distribution Testing, Inspection and Maintenance

Reference

1. Exhibit B-1(B) 2014 Testing, Inspection & Maintenance Plan Annual Planning Report, page 6

2. Distribution System Code Appendix C, Minimum Inspection Requirements

In Reference 2 it states:

"It is expected that distributors will file both annual summary reports of detailed patrol inspection activities that have taken place during the previous year as well as an outline of inspection plans ("compliance plans") for the forthcoming year."

xv. Please clarify whether the expected annual summary reports Reference 1 were filed.

xvi. If they were not filed, why not? If filed please direct OEB staff to where they are filed.

Kinectrics Letter

Reference

Exhibit B-1(B) Letter from KINECTRICS INC. to Jim W. Pegg Hydro Ottawa dated February 26, 2015

KINECTRICS INC. states: "The existing risk-based approach used by Hydro Ottawa could be further refined and extended to include more asset categories. Also, for some asset categories more data and information in addition to age could be incorporated to improve confidence in the existing Health Indexing results. This will allow Hydro Ottawa to further improve on their long-term "flagged for action" plan for all of their asset categories."

xvii. Please clarify whether Hydro Ottawa plans to further refine the risk approach as recommended by Kinectrics. If so, what actions would be taken and over what time frame.

Response:

Asset Management Process Components

Part i

Hydro Ottawa Limited has made the assumption that the question's reference is Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart rather than Exhibit B-1-2 Distribution System Plan Table 2.1.2 Asset Management Consequence Matrix**.**

The project management methodology utilized by Hydro Ottawa Limited for the Project Execution phase is called Project Coach and is based on the internationally accepted standard Project Management Body of Knowledge by the Project Management Institute. Further information on this project management can be found in Exhibit B-1-2 Distribution System Plan Section 2.1.2.4 Execution.

In the case that a project is not executed in the planned year due to uncontrollable situations, the project will be reprioritized to ensure the subsequent year's project list yields the greatest value.

Emergency work due to plant failure is immediately executed in order to mitigate safety concerns, environmental concerns and customer outages.

Unplanned projects that arise are evaluated and prioritized in the same way as a planned project which is described in Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart.

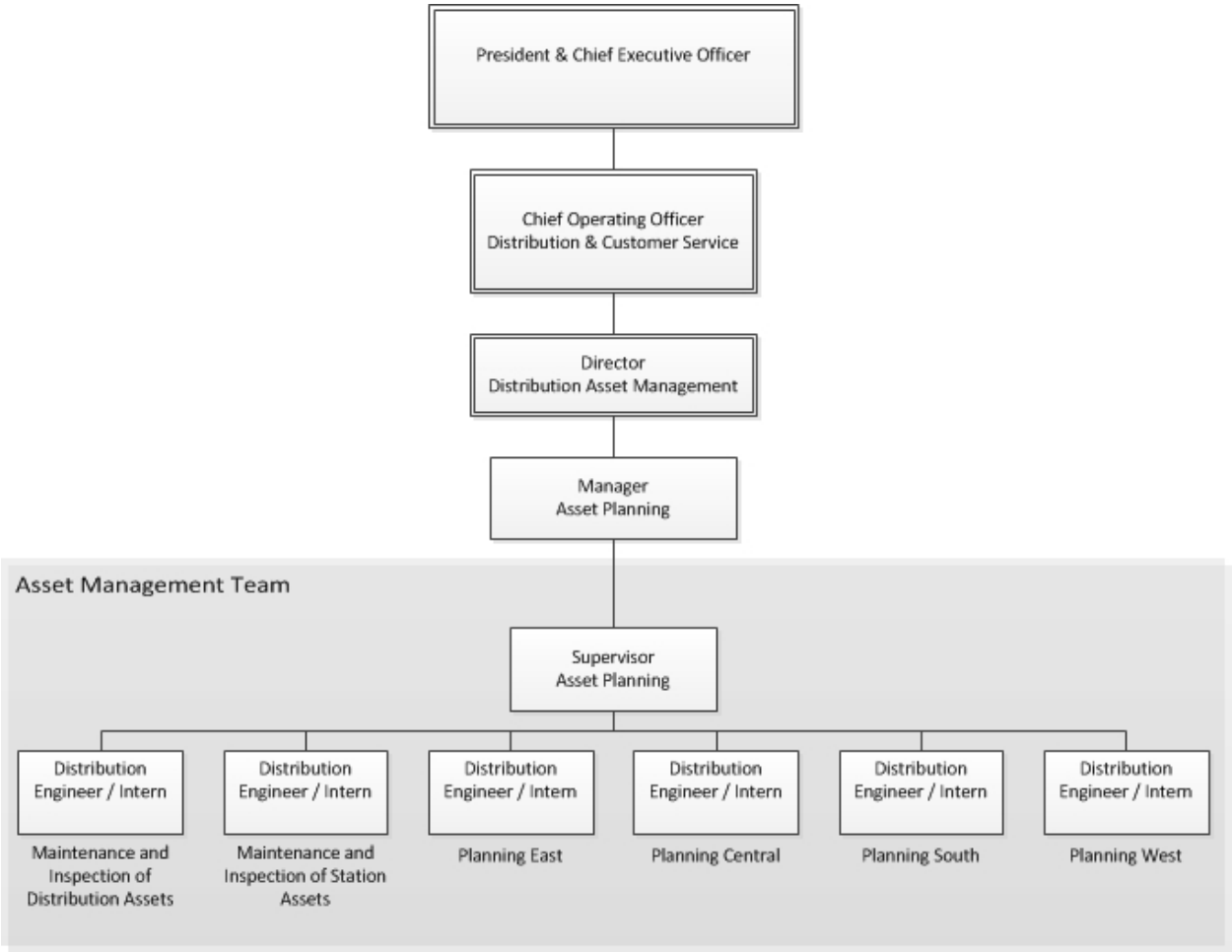
Please see Interrogatory Response to OEB # 16 part iv.

Part ii

The following flowchart depicts Hydro Ottawa's internal organization responsible for managing the Asset Management Process. This is a separate section reporting to the Manager, Asset Planning and consisting of six engineers and one supervisor responsible for asset management work. Note that the following positions also have other direct reports and, to simplify the flowchart, have not been included in the diagram below:

- President & Chief Executive Officer
- Chief Operating Officer, Distribution & Customer Service
- Director, Distribution Asset Management
- Manager, Asset Planning

Figure OEB #16 – 1: HOL Section Responsible for Asset Management Process

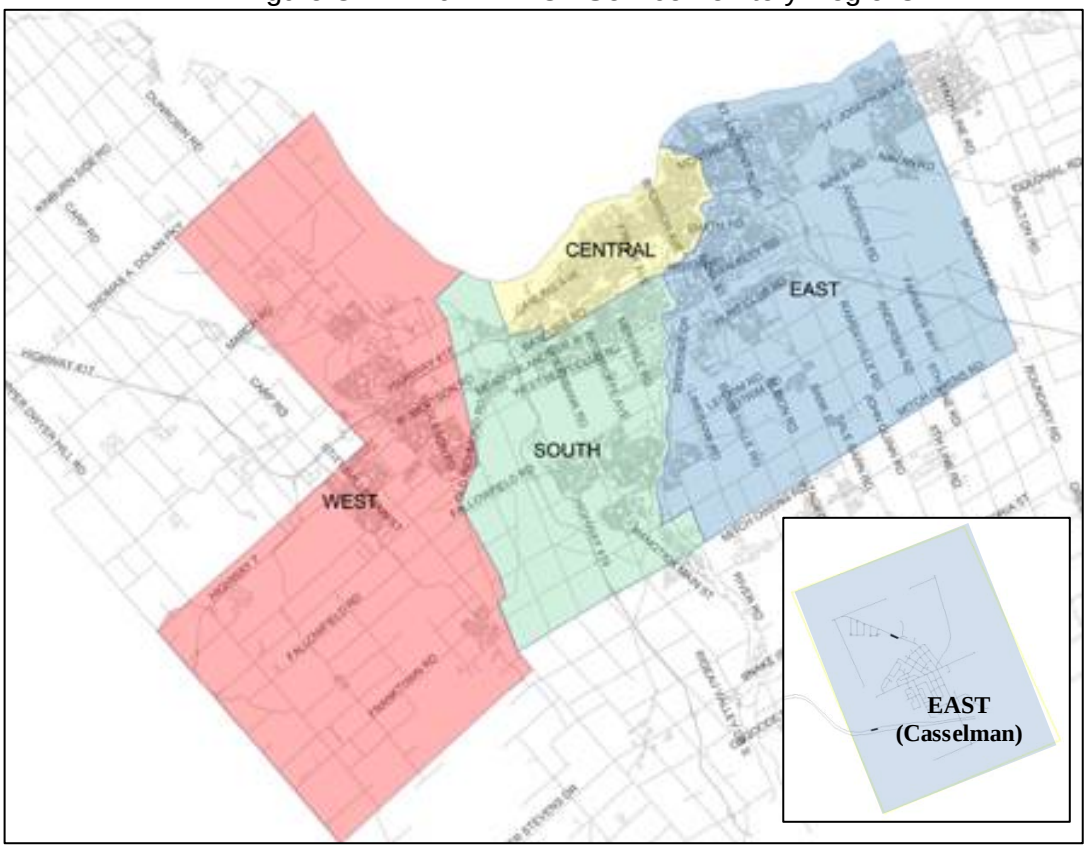


Maintenance & Inspection: There are two positions dedicated to Testing, Inspection & Maintenance programs; one responsible for distribution assets and one responsible for station assets. These positions are responsible for:

- Testing, Inspection & Maintenance Programs
    - Including activity definition, tracking, financial forecasting and estimating, reporting and data analysis

Planning: There are four positions dedicated to planning. As with staff in design and construction function, these positions are assigned to a specific region within Hydro Ottawa's service territory as shown in Figure OEB #16-2.

Figure OEB #16 – 2: HOL Service Territory Regions



The responsibilities of these positions can include, but are not limited to:

- Asset Management Process management & development
- Reliability reporting & outage investigations
    - Including outage tracking and metric calculation
    - Reporting and analysis
- Power Quality
    - Reporting and analysis
- Protection & Control
    - Setting coordination, review & analysis
- Short term & long term planning
    - Load forecasting
    - Coordination of activities with:
        - the City of Ottawa and developers
        - with design staff

- System operation staff
- Construction staff
- Stations staff
- Conservation & demand staff

Part iii

Hydro Ottawa Limited has made the assumption that the question's reference is Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart rather than Exhibit B-1-2 Distribution System Plan Table 2.1.2 Asset Management Consequence Matrix**.**

Hydro Ottawa Limited and Hydro One Networks Inc. (HONI) work closely with each other to discuss upcoming work that affects both parties. This work falls within the high voltage distribution stations with respect to HONI's transmission business, whereas Hydro Ottawa Limited communicates with HONI's distribution business regarding work within the distribution system.

Coordination between Hydro Ottawa Limited and HONI is also completed through the Integrated Regional Resource Planning Process described in Exhibit B-1-2 Distribution System Plan Section 1.2.1.1 Integrated Regional Resource Planning Process.

Projects that affect both Hydro Ottawa Limited and HONI are communicated ahead of time to ensure proper planning can be undertaken. These projects can span from HONI's transformers reaching end of life and Hydro Ottawa Limited requesting additional capacity in the replaced transformers due to increasing area demand, to coordinating load switching when HONI undertakes maintenance or replacement work affecting Hydro Ottawa Limited's distribution plant and customers.

This work has the potential to materialize into opportunities where synergies can be achieved to complete projects with cost savings, therefore adding value to Hydro Ottawa Limited and our customers. Projects such as these are evaluated and prioritized as per Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart.

Part iv

Hydro Ottawa Limited has made the assumption that the question's reference is Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart

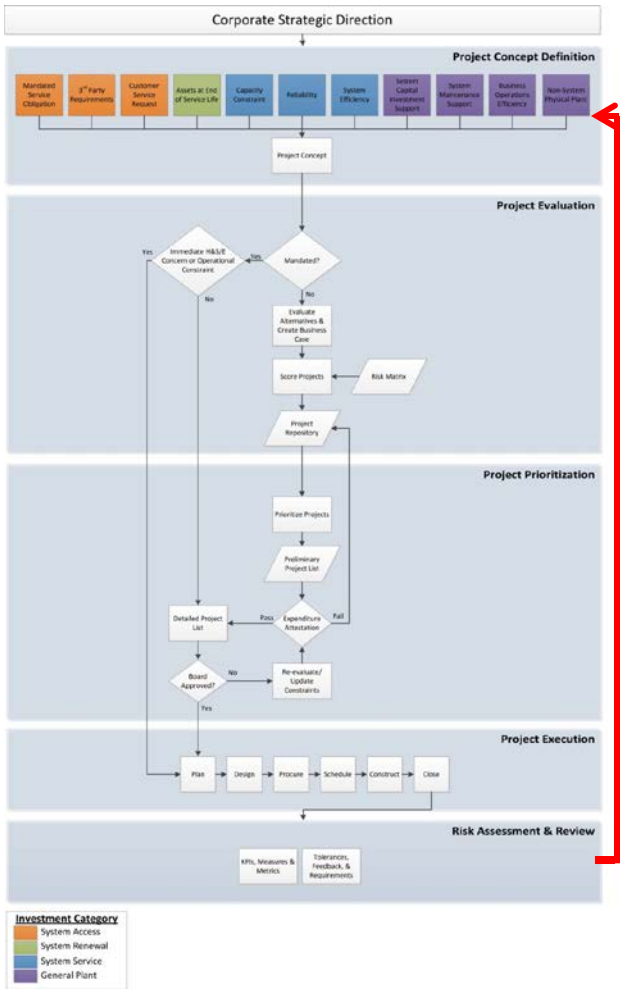
rather than Exhibit B-1-2 Distribution System Plan Table 2.1.2 Asset Management Consequence Matrix**.**

Exhibit B-1-2 Distribution System Plan Figure 2.1.2 Asset Management Process Flowchart does show an arrow returning to step 1 after step 5 as shown by the red arrow in the following figure.

If a project has not started in a given budget year, a Change Request Form is submitted to reprioritize the project within the projects in the next budget year.

If a project has not been completed in a given budget year, a Change Request Form is submitted to allocate dollars for the project in the next budget year.

Figure OEB #16 – 3: Asset Management Process Flowchart with Return Arrow Emphasized



Project Concept Definition

Part v

General Plant is treated outside of the Asset Management Process. The "asset groups" referred to on line 24, page 66 of the updated (June 29, 2015) Distribution System Plan (DSP) (Exhibit B-1-2) are outlined in Table 2.2.6 of the DSP and the health indices for the related asset groups are shown in section 2.3.3.1 through 2.3.3.13 of the DSP. HOL's process to gather the inputs of the testing, inspection and maintenance records are detailed in the Testing, Inspection & Maintenance Plan of the 2014 Annual Planning in Attachment B-1(B) – Annual Planning Report – Testing, Inspection & Maintenance Plan.

The capital and budget programs contained in the System Renewal and General Plant categories along with their primary drivers are shown in Table 3.1.1 and sections 3.1.2 and 3.1.4 of Exhibit B-1-2.

Details of the corresponding Capital budgets for can be found as follows:

- System Access Exhibit B-1-2 Table 3.4.4
- System Renewal Exhibit B-1-2 Table 3.4.6
- System Service Exhibit B-1-2 Table 3.4.8
- General Plant Exhibit B-1-2 Table 3.4.11

The 2016 capital program has been optimized at the project level for System Access and System Renewal (2017-2020 and beyond will be optimized using the new CopperLeaf C55 program). System Service is based on projected demand and known large customer projects.

Part vi

Table 2.2.6 provides a complete list of all the major Assets. Other assets such as Pole Fixtures, Elbows and Inserts, Station Ground Grids and Station Relays are not listed in that table. The tables below have been modified to better align with the subsequent sub-sections.

Table OEB #15 – 1: Exhibit B-1-2 – Table 2.2.5 – Asset Demographic & Conditions – Revised July 2015

Type	Asset Type		Population	Average Age	% in Poor & Critical Condition
Substation	Transformers		170	36	2%
	Station Switchgear (Breakers)		1,003	36	5%
	Batteries		53	8	N/A
Distribution	Poles		59,450	39	12%
	Cables (PILC)		356 km	35	15%
	Cables (Polymer)	XLPE	4,128 km	25	17%
		Butyl Rubber	14 km	35	100%
		EPR	1 km	4	0%
	Kiosk & Padmounted Transformers		15,633	33	4%
	Polemounted Transformers		15,663	30	11%
	Vault Transformers		3,474	34	7%
	Underground Switchgear		439	15	2%
	Underground Civil Structures		25,246	Varies by sub-type	N/A
	Overhead Distribution Switches and Reclosers		29,716	Varies by sub-type	N/A

Table OEB #15 – 2: Exhibit B-1-2 – Table 2.2.6 – Asset Management Strategy – Revised July 2015

Type	Asset		Strategy	Age / Condition Based Replacement
Substation	Transformer s		Proactive	Condition
	Switchgear		Proactive	Condition
	Batteries		Proactive	Age
Distribution	Overhead Conductor		Proactively replaced with other projects	N/A
	Poles		Proactive	Condition
	Cable – PILC		Reactive	N/A
	Cables (Polymer)	XLPE	Proactive/Refurbish	Condition
		Butyl Rubber	Proactive	Condition
		EPR	Reactive	N/A
	Padmounted & Kiosk Transformers		Reactive	N/A
	Polemounted Transformers		Reactive	N/A
	Vault Transformers		Reactive	N/A
	Underground Switchgear		Proactive	Age
	Underground Civil Structures		Proactive	Condition
	Overhead Distribution Switches and Reclosers		Reactive	N/A

Part vii

Please see Interrogatory Response to OEB #16 part vi for a revised Exhibit B-1-2 table 2.2.6 which shows a complete list of all major assets.

Asset class information to be used in replacement planning can be found within Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan**.**

Part viii

Information in Exhibit B-1-2 Table 2.2.6. is described within sections 2.2.3.1 through to section 2.3.1.1.3.

<u>Project Evaluation</u>

Part ix

Exhibit B-1-2 Page 71 line 3, 4, and 5 of the April 29 version states:

"Each consequence has an associated weighting, see Figure 2.1.3, each having a dual function to normalize and to rank. While it is intended that the scoring scales between measures are normalized, the use of the weighting factors to assist in this is acceptable."

Table 2.1.2 compares multiple reliability & customer impact categories. Since it is difficult to compare, for example, a minimal measure score for System Reliability (SAIFI) versus a minimal measure score for Asset Capacity, weighting factors are used. The Measure Weighting is shown in figures 2.1.3 and 2.1.4. This approach is acceptable since it factors the relative value of each measure into the value of a project. The weighting of the measures is under the purview and approval of the Manager of Asset Planning. The weightings were developed by the Manager of Asset Planning and presented to the Executive Management Team.

Part x

Table OEB #15 – 3: Example Project Scoring

	Health & Safety		Envir	Reliability and Customer Value					Asset Management				
	20%	20%	10%	7%	5%	4%	3%	1%	6%	12%	9%	3%	
	Pub	Emp	Oil Spills	SAIFI	SAIDI	FEMI	PQ Volt	PQ Harm	Fin	Asset Cap.	Asset Cond.	Asset Life	Total
Score	0	3	0	0	0	0	0	0	1	0	5	1	
Product	0	0.6	0	0	0	0	0	0	0.06	0	0.45	0.03	1.14

This table shows an example project being scored. The top row lists the subcategory weighting of each measure as described in Interrogatory Response to OEB #16 part ix. The row Score represents the actual score that the example project received for each subcategory. The scores are selected based on Exhibit B-1-2 Table 2.1.2 by Distribution Engineers/Interns in the planning role. The Product row is the multiplication of the subcategory weighting and the score. The Total Score column is a summation of all products.

Part xi

The Manager, Asset Planning is a single role within the Distribution Asset Management Group within Hydro Ottawa Limited who reports directly to the Director, Distribution Asset Management and is responsible for overseeing the Asset Planning unit as well as

the Engineering Programs and Major Projects unit, which consist of two supervisors and twelve engineering positions.

Execution

Part xii

Project Coach is Hydro Ottawa Limited's documented project management process used for all distribution related projects. Project Coach is the main process followed by all parties involved in the Execution Phase (Exhibit B-1-2 Figure 2.1.2) of the Asset Management Process. This process contains tools and templates to help efficient and consistent implementation of projects. Typically the process is driven by Project Managers in the Distribution Design Section with defined roles and responsibilities for all parties involved.

Part xiii

Hydro Ottawa Limited's Project Coach methodology states that all lessons learned on a project should be shared and documented in a database upon completion. These issues are tracked through the use of issue and action logs which are shared amongst the project team. All aspects of the project from the conceptual stage to completion are reviewed and discussed. The lessons learned are reviewed at the initiation of future similar projects to allow all to learn and improve from the past. This allows Hydro Ottawa Limited to be positioned to continuously improve and refine our project management processes. Planning and estimating are continuously being refined based post project analysis to improve productivity and effectiveness of the delivery of the Capital Program.

2014 Testing, Inspection & Maintenance Plan Annual Planning Report

Part xiv

Hydro Ottawa Limited performs detailed inspections on assets to collect asset condition information for health indexing (HI). Details on the current approach to asset condition assessment can be found within each assets Health Index section of Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan.

More details of the current testing, inspection and maintenance (TIM) program gaps can be found within each program Gap Analysis section of Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan. This section details improvements that can be made to the TIM program to increase its effectiveness to the Asset Management Plan. These gaps were documented prior to Hydro Ottawa Limited conducting an evaluation of the current health indices. More details of the Hydro Ottawa evaluation of the health indices can be found within Interrogatory Response to OEB Staff Question #17 part i. A detailed plan for improving Hydro Ottawa risk model can be found within Interrogatory Response to OEB Staff Question #16 part xvii.

As the health indices are finalized for Hydro Ottawa Limited assets the inspection data inputs will be adjusted to ensure required information is available for optimized asset conditioned assessment.

<u>Distribution Testing, Inspection and Maintenance</u>

Part xv

Please see attachment Att-OEB-Q16-A – Summary Report and Compliance Plans.

Part xvi

Hydro Ottawa Limited completed Appendix C Minimum Inspection Requirements as per the attachment ATT-OEB-Q16-A – Summary Report and Compliance Plans.

Hydro Ottawa Limits uses the Outage Management System (OMS) to track and manage deficiencies found during inspection patrols. The OMS manages outages, calls, jobs, and events associated with our electrical distribution system. It is also used as a workforce management system, allowing us to manage, organize, schedule, and assign work to groups and mobile devices, as well as manage the crews and vehicles receiving the work. The OMS system has additional components for planning, switching, and reporting that assist with day-to-day work in the electrical distribution industry.

Hydro Ottawa has taken advantage of the OMS workforce management and job management capabilities, and allowed a variety of sources/systems to interface with it. Work is passed to the OMS through these interfaces, from sources such as our customer care and billing (CC&B), interactive voice response (IVR), supervisory control

and data acquisition (SCADA), geographical information system (GIS), call centre, and inspection programs. Once this work is in the OMS, it is organized, prioritized, assigned to relevant groups, then dispatched, and most of that is done automatically. There are 3 main OMS applications for managing work and the workforce:

1. The main dispatching software uses fully-featured software with many tools available.
2. A lighter web interface for viewing and dispatching, with sufficient tools for managing work within specified groups.
3. A mobile software that field crews use to receive, updates, and close work.

Hydro Ottawa Limited is able to track the status of OMS jobs categorized by priority; 0 – highest priority to 9 – lowest priority. Table OEB #16-4, below shows all outages, jobs, calls, events that were generated in OMS. A total count of the columns demonstrates that a majority of the 2014 entries were resolved that year.

Table OEB #16 – 4: OMS Job Count

Priority	# Created in 2014	# Completed in 2014	# 2014 Jobs Completed in 2015	Current # Remaining 2014 Jobs
0	47	30	2	15
1	2	2		
2	398	398		
3	1,386	1,363	12	11
4	63	63		
5	255	255		
6	4,018	3,956	46	16
7	72,641	71,931	665	45
8	1,102	1,102		
9	18,009	17,446	504	59
Total	**97,921**	**96,546**	**1,229**	**146**

Table OEB #16-5, below, represents OMS entries that are deficiency driven and the table includes deficiencies reported during patrol inspections. The deficiency count in Table OEB #16-5 is included in Table OEB #16-4. A total count of the columns demonstrates that a majority of the 2014 entries were resolved that year.

Table OEB #16 – 5: OMS Deficiency Entries

Priority	# Created in 2014	# Completed in 2014	# 2014 Jobs Completed in 2015	Current # Remaining 2014 Jobs
0	3	2	1	0
1	0	0	0	0
2	2	2	0	0
3	13	13	0	0
4	1	1	0	0
5	9	9	0	0
6	157	121	23	13
7	5	5	0	0
8	8	8	0	0
9	4,204	3,672	475	57
Total	**4,402**	**3,833**	**499**	**70**

Refer to the following documents for more information on inspections:

Overhead Devices

- Overhead visual and infrared inspection for overhead transformers, switchgear and protective devices, regulators, conductors, and poles refer to Section 2.1.3 Overhead Equipment; 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.
- Vegetation management refer to Section 2.4 Vegetation Management; 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.

Underground Devices

- Underground padmount visual and infrared transformer inspection refer to Section 2.1.2 Padmount and Kiosk Transformers, 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.
- Underground air break padmount visual and infrared inspection refer to Section 2.1.1 Padmount Switchgear, 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report. Underground air break padmount visual and infrared inspection $C0_2$ wash refer to Section 2.2 Padmount

Switchgear CO_2 Wash, 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.

- Cable Inspection refer to Section 2.6 Cable Inspection; 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.
- Civil Structures refer to Section 2.3 Civil Structures Inspections; 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.

Distribution and Transmission Stations

- Station visual inspections refer to Section 3.6 Station Visual Inspections; 2014 Testing, Inspection and Maintenance Plan - Attachment B-1(B) – Annual Planning Report.
- For other station testing, inspection and maintenance details refer to Section 3 Station Testing, Inspection, and Maintenance - Attachment B-1(B) – Annual Planning Report.

Kinectrics Letter

Part xvii

Hydro Ottawa Limited is currently working on revising and validating the Health Index formulation and risk model. These actions will be completed by end of 2015.

Detailed Plan:

1. Develop an Interim Health Index based on existing data and systems.
2. Validate Probability Curves
3. Develop a Roadmap to the Best Practice Health Index.
4. Develop Road Map to full Risk Based Management.
5. Development of a Road Map for a Risk Based Financial Model.
6. Review and Revise Project Prioritization Scheme

Evaluation of Hydro Ottawa Limited's Vegetation Management Program

May 2014

Sculpture on corner of Kent and Slater Street, Ottawa, Ontario

This evaluation report was prepared by SRL Corp

INTRODUCTION

Hydro Ottawa conducted a three-day meeting to discuss its Vegetation Management Program, and to garner assistance with a tender bid document. The meeting was held on-site at the office of Hydro Ottawa (1970 Merivale Road), from April 29 – May 1, 2014. In attendance were John Vedder, Margaret DeFazio, and Kevin Ainsworth of Hydro Ottawa, and Stan Veraart of SRL Corp. Two field visits were also conducted at this time, one led by Louis Lauzon.

This report is based on evaluations of Hydro Ottawa's current Vegetation Management Program, and provides a review of the survey data, an analysis of what it shows, along with feedback on its operations and structure. The addends also offer recommendations for how to further develop a VM program. Hydro Ottawa Vegetation Management Program is a relatively young program, begun only in 2008, and is active in implementing continuous process improvements, one of which is improving their field (pruning) practices. A positive next step could be to develop strategic plans for future direction.

The following evaluation report is presented in three parts:

1. Subcontractor Management
2. Internal Management
3. Stakeholder Management – external clients

Each section identifies Best Management Practices in the field, enumerates observations of Hydro Ottawa's practices, and makes recommendations for continuous improvement and growth.

SRL Corp would like to take the opportunity to sincerely thank Hydro Ottawa for its active interest in balancing tree growth with utility needs, and the invitation to be involved; we trust this evaluation report and our findings are constructive to Hydro Ottawa's goals. SRL Corp feels confident that its feedback will benefit Hydro Ottawa's strong and successful Vegetation Management Team.

Sincerely,

Stan Veraart
President, SRL Corp

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1. SUBCONTRACTOR MANAGEMENT

As trees and other vegetation are integral to communities, their care is subject to high degrees of public exposure. Pruning can create noticeable changes in landscapes, so it is not uncommon for customers to express their concerns and preferences, or to critique utility companies' vegetation work. Of course, most utility companies rely on contractors to provide necessary trimming services that affect public areas. If a contractor were to suspend proper pruning techniques to address customers' concerns – or if it is not clear what the utility standards are – he may inadvertently produce a negative impact on the health of the vegetation and budgeted costs. The effect of both can shorten pruning cycle times and increase costs and safety hazards. The health and efficacy of any Vegetation Management Program depends on a strong partnership and agreement between the utility company and its vegetation management contractor(s). Hydro Ottawa's goal has been to develop positive relationships with contractors and customers, and when confronted with concerns, it is also beneficial for a utility company to have a clear vision and plan to communicate. This develops manageable expectations and positive relationships with both contractor and customers.

Since trees and vegetation will always grow, Hydro Ottawa's pruning shall continue to concentrate on defining trimming techniques to encourage desirable future growth (low-impact shapes), creating the least amount of tree damage and reducing potential risks and establishing cost-reductive growth. A way of establishing clear and manageable expectations between Utility Company and Contractor is to have highly specific, documented guidelines and best management pruning standards in place.

The International Society of Arboriculture's (ISA) Best Management Practices (BMP) are the recommended standard in regards to pruning, specifically the practices described in its publication BMP: Utility Pruning of Trees. Along with these practices, incorporate the pruning practices described by Dr. Alex Shigo in his publication Pruning Trees Near Electric Utility Lines. Below is an outline of select practices/standards that are in alignment with the above resources, their descriptions, and explanations of why these pruning practices are essential. It is extremely important to hold the vegetation management contractors to these standards of work.

For Example:

- A proper cut is placed in such a way that the branch bark ridge or branch collar is not damaged. This allows the tree to seal the pruning cut, eliminating future exposure to pathogens and thereby reducing tree failure risks.
- Prune back to main lateral or main stem, not damaging the branch bark ridge or branch collar, and do not prune mid-branch or leave pruning stubs. A tree is not able to seal a mid-branch cut, and the wound will be vulnerable to pathogens for the rest of the tree's life.
- It is never recommended to prune more than 25% of a tree's live tissue. Hydro Ottawa's exemption from pruning for 3.5 meters of clearance in cases where mutilation of a tree would occur is a good demonstration of this principle.
- Incorporate “directional pruning” in a pruning program. Directional pruning is the process of administering strategic cuts from an early age to “train” trees to grow into a certain direction or shape. The “V” or “L” tree shapes are examples of directional pruning.

- Do not “top” trees. “Topping” is the practice of removing the entire top of a tree. This technique is quickly vanishing because it stimulates fast-growing new growth (water sprouts, or shoots). The resulting new growth is poorly connected to the tree, increasing tree branch failure rates, and creates additional pruning needs.
- Have standards in place for a minimum branch distance from a primary line. In Hydro Ottawa's vegetation program, these clearance standards read: “to trim to 3 meters” (not requiring a continuous minimum clearance).

All pruning specifications are communicated to the vegetation contractor(s) in a signed contract. However, a frequent reminder of theses specifications through extensive audits of pruning work is recommended, particularly if pruning requirements are not being met. Pruning expectations should be clearly communicated prior to the contractor bidding on the work to be performed.

The majority (more than 50%) of Hydro Ottawa’s tree inventory exists of fast and medium-fast growing trees, such as Maples, Ash, Elm, and Poplar, making the VM work challenging.

Tree Species	**Total Amount of listed Trees**	**Percentage of Systems Vegetation**
Maples (all Maples)	17436	31.84 %
Spruce	6693	12.22 %
Ash	5137	9.38 %
Elm	4502	8.22 %
Cedar	3415	6.24 %
Pine	3318	6.06 %
Poplar	2457	4.49 %
Fruit Trees	2287	4.18 %
Basswood/Linden	1890	3.45 %
Locust	1520	2.78 %
14 other tree species	6313	11.14 %

Data Extracted from Hydro Ottawa’s Vegetation System Shape files

We recommend having expected growth rates per tree category available in writing for vegetation contractor(s) to review so they can prune back far enough to attain the specified clearance.

1. In the Ottawa Ontario area (as is the case in most regions), fast-growing species should be trimmed back further from the primary lines than slow growing species. It is not uncommon for fast growing species (Silver Maple, Manitoba Maple, Elm, Chinese Elm, Willow, Poplar, Ash, etc.) to grow 3 - 3.5 meters in a three-year period, and young fast-growing tree species can be expected to grow even more quickly.
2. In the Ottawa Ontario region, expect grow back of 1.5 - 2.5 meters in three years for medium-fast growing species (Oak, Red Maple, Norwegian Maple, Crimson Maple, Black Walnut, Birch, Beech, Butternut, most fruit trees, Locust, Gingko, Basswood, Linden, Ornamentals, etc.).

3. It would be good to prune back enough to hold a trimming cycle for slow growing tree species (Ironwood, Sugar Maple, Pine, Spruce, Cedar, Fir, Tamarack, hemlock, etc.) of at least 0.6 - 1 meter in a three-year period.

According to the power line vegetation inventory Hydro Ottawa Limited conducted and completed in 2012, certain pertinent data became available to guide and direct vegetation contractors. Among the data was the percentage of overhang above lines. "Overhang" is defined as a branch overhanging a primary power line. As is further described in chapter 3, overhang causes an increased risk factor as it relates to outages. A good practice is removal of overhang using the wire-to-sky (also known as L-shape) trimming technique. This technique prescribes the pruning of all branches hanging over the lines (overhang).

Overhang Class	**Total Number of Occurrences per spans**	**Percentage of Occurrences Larger than 1 %**
Very Light, Lower Risk	1450	3.2 %
Other Overhang categories	1048	2.3 %
None	24259	53.8 %
No Value	18395	40.7 %

Data Extracted from Hydro Ottawa's Vegetation System Shape files

As can be seen above, a total of 5.5 % of Hydro Ottawa's lines are overhanging. It is possible for this percentage to be a little higher, for 18,395 spans have a no value listed. Part of Hydro Ottawa's continuing improvement processes includes the expressed desire to start eliminating overhang from it system all together.

Most utilities work with the vegetation contractor(s) to establish "smart removal" criteria and guidelines. Smart removals are preferable to line clearance in certain situations. They are often fast-growing trees located directly underneath a power line and or conductor, which would require frequent pruning; such trees would never have a natural form due to clearance requirements. They may also be brush that would interfere with the power line. Others could be large, previously topped trees under the line, or trees with a high risk of failure (leaning, decline; sever die back, hollow, etc.).

In Hydro Ottawa's power line vegetation inventory database, a total of 468 smart removals are listed. This number can be expected to go up when some or most trees that were previously topped are also considered for removal.

In addition to the identification of smart removals, data was collected in regards to main boles growing within 3 meters/10 feet from the primary.

Main Bole	**Number of spans having one or more main boles within 3 meters of primary**	**%**
No	24385	54 %
Yes, can be maintained	1269	2.8 %
Yes, difficult to maintain	1082	2.2 %
No Value	18416	41 %

Data Extracted from Hydro Ottawa's Vegetation System Shape files

Main boles near the power line, when not suitable for removal, could require a higher level of care (see chapter 3 for information regarding Grandfather Trees.)

Based on field observations within Hydro Ottawa, as well as the data listed above in regards to:

- The amount of vast growing species on the system,
- The identified overhang classes and Hydro's expressed desire to remove overhang
- The listed smart removals and the likely possibility of an increase in the number of smart removals (see comments above)
- A possible new approach regarding main boles within 3 meters of primary,

An initial cost increase during the next vegetation pruning cycle can be expected. Do note that removals require an up-front cost investment, but will no longer require pruning maintenance once performed.

Some utilities implement separate pruning specifications for vegetation crews to follow for trees that provide an intrinsic value to a neighborhood and/or align with city canopy programs. These older, matured trees, referred to as Grandfather Trees, are pruned less aggressively and are thus scheduled for trims more frequently. Further recommendations regarding Grandfather Trees can be found in chapter three.

2. INTERNAL MANAGEMENT

Although Hydro Ottawa's Vegetation Management Program is a relatively young program, it already has an entire vegetation inventory system in place, which includes different data categories. This is significant, as the different data categories provide insights and perspectives for managerial purposes. This data allows for proper planning in regards to amount of work to be expected and the associated costs, as well as developing long term vegetation strategies and goals as it relates to trim cycles.

For example, one of the data categories is "trim class". The related data can be used to build detailed estimates of workloads for Hydro Ottawa required to complete any given area. An inventory was created, detailing which spans experience heavy, medium, light, or very light vegetation.

Trim Class	Number of spans per trim class	%
Very Light	3253	7.2 %
Light	19107	42.3 %
Medium	3895	8.6 %
Heavy	461	1.1 %
No Value	18436	40.8 %

Data Extracted from Hydro Ottawa's Vegetation System Shape files

Based on this data, it shows that 49.5% of the spans only experience "very light" or "light" vegetation growth; meaning that an area spanning 4 to 7 meters has associated trim work with it. Only a very minor 1.1% of the spans qualify as "heavy trim" areas (qualification is 50 meters or more per span). When the above data is plotted against a grid map, contractors can use this data for bidding purposes.

The vegetation management system provides yet another asset: detailed information regarding vegetation clearance distance from primary lines.

Clearance	Number of spans	%
Within 1'	638	1
Within 2'	811	2
Within 3'	3022	7
Within 5'	6276	14
Within 7'	4749	10.5
Within 10'	4331	9.5
10 or more	6913	15
No Value	18412	41

Data Extracted from Hydro Ottawa's Vegetation System Shape files

The measurements were taken at the closest point of vegetation to the primary power line on the entire span. This information provides good insight into the expected workload for a vegetation contractor.

Time was spent analyzing the trim cycle data. This category lists the projected trim cycle for a span in

order to maintain proper clearance from primary.

Trim Cycle	Number of Spans	%
1 year	125	
2 years	8928	20
3 years	16821	37
4 years	700	1.5
5 years	44	
No	18534	41

Data Extracted from Hydro Ottawa's Vegetation System Shape files

The data was plotted against a grid GIS map and compared to the current trim cycles in place. The comparison showed that, for the most part, the areas are trimmed at a proper frequency. Some small adjustments to certain areas are recommended:

- West portion of area VMC03 can be trimmed on a 3-year cycle
- West portion of area VMC05 can be trimmed on a 3-year cycle
- Southern part of VMC20 can be trimmed on a 3-year cycle
- Northern part of VMS33 can be trimmed on a 2-year cycle
- Northern part of VME23 can be trimmed on a 2-year cycle

For a visual of these areas, see the embedded map:

Minimum Trim Cycle and New Areas(2).pd

With the continued use of the vegetation data inventory system, combined with the proper pruning practices in place, expectations are that additional 2-year trim cycle areas can be transitioned to 3-year trim cycles, and some 3-year trim cycle areas have the potential be transitioned to 4-year trim cycles. Lengthening trim cycles reduces costs with proper management (so as to not increase exposed risks).

The data category listing information about access to span (roadside, off-road, backyard climb, backyard lift) was not analyzed, however provides a key factor in scheduling and planning brushing resources. The different access levels have an impact on budgeting and forecasting.

Along with the Vegetation Inventory Program, Hydro Ottawa excels in having a separate Vegetation Management Plan in place (with its own budget) that deals with certain tree diseases – mainly with the Emerald Ash Borer (EAB). In the past, it was the Dutch Elm disease that killed many trees in Ottawa, and it is quite possible that other existing tree diseases will impact current vegetation in the future, in the same way that the EAB is killing trees today.

The combined efforts of this program and the data inventory system can help to more closely predict future costs and budgetary needs. For example, the total number of identified Ash trees on Hydro's

system is just under 6,000, and when plotted against a GIS grid map, there was indication that some 2-year pruning areas could quickly transition to a 3-year trimming cycle once the Ash trees are removed. Since Hydro Ottawa has recognized the importance of proper cost tracking, its time and effort are well spent in documenting incurred cost; this provides a solid foundation for future cost calculation options.

Time was spent brainstorming for additional continuous improvement possibilities to enhance to Hydro Ottawa's vegetation program with. Ideas included: performing additional field audits, identifying Grandfather Trees, and creating customer training videos. For expanded reference, Appendix A lists additional results of the brainstorm session, as well as observations made. Appendix B provides information on future ideas to continue to further enhance, build, design, and develop Hydro’s current vegetation program.

3. EXTERNAL STAKEHOLDERS' COOPERATION

A steady dose of freezing rain can quickly cover a landscape with a solid layer of ice, as was the case this past winter (2013) in the city of Toronto and surrounding areas. The ice storm caused hundreds of thousands of people to lose power virtually overnight due to bent tree limbs and entire trees falling over. Overhang (a tree branch that hangs over the power line) is often the culprit in causing outages, as these branches bend or break under the weight of ice. This exposed risk factor is something Hydro indicated wanting to address (see chapter 1) and at the same time use as a leverage tool to create a higher level of awareness and understanding among customers and manage customers pruning expectation. The next few paragraphs will address additional possibilities to continue to build better relationships with the people it serves.

It is possible to develop favorable relationships with constituents, e.g., the City of Ottawa, by, among other things, improving pruning practices. As in the case of an ice storm, proper directional pruning would shift a tree's weight away from a power line, decreasing the chances of interference with it. Another smart management method is to plant the right tree in the right place, preventing mature trees from reaching a height that would interfere with the power line. When covered in ice, it would not impact the power line. Along with increased efficiency and budgetary benefits, continually improving pruning practices shows a good faith effort to respond to customer concerns.

Other possibilities for developing good relationships lie in creating joint tree strategies, public outreach programs, and increasing transparency – thus fostering trust, commitment, and understanding. Improved pruning strategies would provide material to educate the public on why certain practices are necessary, preparing customers for what to expect, and explaining Hydro Ottawa's concentrated efforts to ensure the best management methods possible. Hydro Ottawa's current brochures (e.g., Tree Planting Advice and Swimming Pools in the Vicinity of Electrical Wires) are good examples. Education can be highly effective, multi-purpose, and multi-dimensional. It may include initiative to communicate work intentions and efforts through blogs, web FAQ pages, pruning videos, and improved notification processes, or releasing strategic messages to encourage recognition for programs. If crafted properly, these steps have the added benefit of setting customer expectations.

Setting expectations is a significant foundation to any communication between utility and customer. It identifies a problem or common need, and addresses the necessary steps for resolution. If any dispute or amendment to procedure is to be made, these educational components provide the language and framework for discussion. These efforts must be backed up with a long-term vision for community trees, communicating it when appropriate.

In addition, Hydro Ottawa expressed an interest to invest in specific programs that will address popular items such as Grandfather Trees. Implement special pruning requirements for trees that provide intrinsic value to a neighborhood and/or align with city canopy programs. These older, matured trees, referred to as Grandfather Trees, are pruned less aggressively and are thus scheduled for trims more frequently. The first step in the Grandfather Tree Project is to locate and identify these trees. The city of Ottawa's computer-based tree inventory mapping system could be a tool in identifying the Grandfather Trees. Ottawa's Trees and Community Forest Project could be of help or

give guidance in the right direction. Once identified, the trees species, locations, and pruning specs should be communicated to the planner/notifier, VM contractor(s), and auditor(s). In addition, public awareness of the Grandfather Trees project could be provided to Hydro Ottawa's customers through media support, articles, and interviews.

Externally, identify cross-points with third-parties who share a common interest: they will have expense budgets as well, and their work efforts will directly align with Hydro Ottawa's to improve performance. Search out organizations with a common interest in certain vegetation, and apply the proper vegetation at the power lines. For example, if an organization wishes to increase pollinator shrubs and plants, encourage them to plant in right-of-way areas, as their plants will never need pruning. Specifically, Collaborate with City of Ottawa urban foresters to coordinate VM Program efforts with beautification efforts – planting decorative trees which will not require reshaping/pruning. Work together with Ottawa's "Trees in Trust" Program to streamline future outcomes. Study the appropriate ecological utility right-of-way practices (http://www.rights-of-way.org/), and approach the Nature Conservancy of Canada (NCC) to develop a VM Plan based on ecology. This foundation should expose ample common ground and mutual willingness to improve the ROW vegetation on NCC land. Along with this, plant the "right tree in the right place" and apply proper pruning standards.

As a result of these partnerships, shared constituents are satisfied, city lights stay on, the green canopy is maintained, and groundwork is laid to address future conflicts or issues. Focusing on these win-win efforts can enhance community relations and reduce cost over time. Pairing with local organizations such as Ecology Ottawa and their Tree Ottawa program – or perhaps working even with subdivision within Ottawa such as the Glebe Community Association – can be a lasting means of building relationships, and ease internal workloads, reduce cost, and have the potential to increase public trust by association. The combined work of these organization can make Ottawa tree canopy the greenest in Canada. What a great way to accomplish such a goal – with joint efforts and partnerships.

In doing so, some of the Eastern Native Trees worth considering for planting in yards with limited space in Urban Ottawa (in the order of appearance in Farrar's "Trees in Canada"). (Note: this list is rather arbitrary, and plants not mentioned explicitly may still be perfectly suitable!)

Eastern Red Juniper *(Juniperus virginiana)*: slow-growing small tree especially suited to dry, poor soils.
Eastern White Thuja *(Thuja occidentalis)*: slow-growing small tree.
Pitch Pine *(Pinus rigida)*: smallish tree grows well on poor or good soils.
Balsam Fir *(Abies balsamea)*: on moist well-drained but rich sites, narrow crown takes up little lateral space.
Black Spruce *(Picea mariana)*: similar habitat and rationale to Balsam Fir.
Black Maple *(Acer nigrum)*: More urban tolerant than the similar Sugar Maple, and native.
Striped Maple *(Acer pensylvanicum)* : small trees suited to cool shady sites.
Mountain Maple *(Acer spicatum)*: small trees suited to cool shady sites.
Ohio Buckeye *(Aesculus glabra):* a smaller and hardy alternative to the non-native Horse chestnut
Shagbark Hickory *(Carya ovata)*: a slow-growing hardy tree with strong wood and edible nuts
American Ash *(Sorbus americana)*: Small trees favoring cool sites.
Showy Mountain Ash *(Sorbus decora)*: Small trees favoring cool sites.
Swamp White Oak *(Querucs bicolor)*: smallish for a tree-sized oak.
Dwarf Chinquapin Oak *(Querucus prinoides)*: small and shrubby.
Bear Oak *(Quercus ilicifolia)*: a shrubby oak.
Hornbeam *(Carpinus caroliniana)*: tall shrub for shady locations.

Hop-hornbeam *(Ostrya virginiana)*: small tree can grow in almost any condition except wet.
Canada Plum *(Prunus nigra)*: small tree with edible plums.
Peach-leaf Willow *(Salix amygdaloides)*: for wet soils, often narrow crowned for a Willow.
Winterberry *(Ilex verticillata)*: tall shrub, female plants have attractive winter berries.
Bladdernut *(Staphylea trifolia)*: Attractive tall shrub, adaptable to growing conditions.
Alternate-leaved Dogwood *(Cornus alternifolia):* tall shrubs ideal for shady locations.
Round-leaved Dogwood *(Cornus rugosa)*: tall shrubs ideal for shady locations.
Buttonbush *(Cephalanthus occidentalis)*: tall shrub for wet locations.

APPENDIX A: SOME OBSERVATIONS AND RECOMMENDATION BASED ON SITE VISIT

- Continuation of the VM inventory is of utmost importance. The collection of the existing vegetation was an important step in the right direction. In order to manage a VM program effectively current information of existing vegetation on all lines is crucial.
- Explore options to enhance the planning and notification activities that come with an all-round VM program.
- Develop a ten year Vegetation Management Plan. in this plan, pay attention to the proper pruning standards, planning notification procedures, auditing procedures, process mapping, and cost reduction strategies
- Develop Measurements of Success for VM Program
- Promote Best Management Practices for Pruning (doing so will decrease the necessity for mid-cycle pruning)
- Further define/describe grandfathered tree requirements
- Work together with the city of Ottawa to map out the Grandfather Trees encroaching onto the Primary Lines; develop annual (or every other year) pruning cycle for Grandfather Trees
  [For additional information about grandfather trees, see the next chapter.]
- Take one step at a time, don't change everything at once
- Audit 100% of VM Contractor's work (not periodic or spot audits, but 100%). Audit not only on minimum clearance distance from primary wire (holding a trim cycle), but also on pruning techniques used. In addition have the auditor maintain the electronic VM database.
- Have system wide clarity of what it means to hold cycle.
- Continue to work with customer outreach, education, and cooperation.
- It would be good if the Request for Proposal (Tender Bid) to be created spring 2014 consist of a flexible contract type, designed to maximize the value per dollar invested. This is accomplished by assuming that VM contractors and Hydro Ottawa reach common goals and objectives. Contract value can be measured by price alone, or include safety standards, reliability of service, customer relations, productivity, work quality, as well as contract responsiveness in regards to work scope changes, storm response, record keeping. The lowest cost bidder is not guaranteed to provide the best value for the money spent. The RFP can exist of Time and Material, Lump Sum, Unit Price, Performance Based work, or any combination of the four. It is important to give the contract type enough consideration for the contract type, in combination with the specifications will set the undertone for the work to be performed.
- To implement additional Best Management Pruning Practices, in combination with an enhanced or new contract type can be overwhelming. Consider improving VM standards for 25% of the VM area at a time instead of upgrading the entire system all at once. Each year add 25% to the improved areas, this to make the quality improvements less daunting.

APPENDIX B: VEGETATION MANAGEMENT PRACTICES in regards to PROGRAM BUDGET

1. How to Get Better Value for The Money: A Look at Vegetation Management and Pruning Practices As They Relate To A Budget
    - 1A. Increase efficiency with a long-term plan; outline 10-year plan details
    - 1B. How Hydro Ottawa can come up to spec by Process Mapping and developing Standard Operating Procedures (SOP)
    - 1C. Next Steps: Exploring tactical plans to achieve strategic goals

Operating with uncertain, annual, and diminishing budgets can be challenging, especially while managing living organisms such as trees. Attempts are often made to reduce Vegetation Management expenses quickly, but may not always be effective in the long run. For example, at times, certain pruning techniques that appear to be effective can be counterproductive to budgetary goals. These techniques can cause trees to react in such a way that there is increased growth the next year, as they actually stimulate rapid re-growth. The resulting re-growth (i.e., water shoots) have poor branch connections that could ultimately result in breaking branches causing outages. Pruning in such a manner shortens the pruning cycle and increases potential risks, thereby increasing the vegetation management workload and costs.

Establishing a strong, cost-stable program requires a long-term vegetation program that includes best management pruning practices, enforcing their use, being prepared for natural threats to trees (diseases, infestations), initiating cooperative planting programs, and increasing program transparency with internal and external stakeholders. The final outcome will reduce cost and outage risks, improve client satisfaction levels, and develop strategic community relations – as well as enhance tree health. Demonstrable results can be witnessed at other utilities, large and small... so how do most utility companies accomplish this?

<u>Components of Successful VM Programs:</u>

- Clearly define and enforce a continuous "clearing distance" (in meters or feet) from primary line at all times.
- Observe proper pruning practices as describe in the ISA best management practices. These practices promote economic and efficiency goals. Some <u>pruning practices to incorporate</u>: directional pruning, ground-to-sky, wire-to-sky (eliminating overhang), pruning back to main lateral, tree-cut branch removal (to maintain branch collar, allowing the cut to seal)
- Identify counterproductive pruning practices. <u>Pruning practices to move away from</u>: pruning mid-branch, allowing stubs to remain, "topping" a tree (completely lopping off the top of the main bole)
- Lengthen pruning cycle – prune vegetation with techniques that maximize life cycle
- Increase internal awareness of necessity to meet pruning specification.
- Enforce pruning specifications to reduce costly mid-cycle trimming. Hold contractor accountable to trimming standards (as outlined in specifications).
- Prune to expect growth that will not create line disturbance (directional pruning)
- Establish, or continue to update a vegetation inventory system to be able to answer key

questions such as primary species on system, average growth rate per species, location of trees, accessibility for pruning activities, and the like.

- Clearly define and concentrate on "smart removals" – remove trees, root re-sprouts, and new trees that would become pruning factors when they reaches maturity
- Have auxiliary response plans in place for threatening tree diseases, such as the EAB (Emerald Ash Borer), Verticillium Wilt, et cetera
- Incorporate programs such as, "The right tree in the right place" – working with property owners or municipalities to plant the most suitable tree for any given place
- Established vegetation guidelines, in regards to lessening of adverse impacts from trees, for new construction projects.
- A well designed (cost) record keeping system to, for example, be able to determine the average hours required to perform an activity, the number of trim units or cost to trim by circuit/grid. With the aid of a strong record keeping system, a utility could establish an incentive-based contract with VM contractors.
- A strong customer care and well-designed customer communication program in order to manage customer's expectations, as well as customer's participation.
- The presence and implementation of a 10 year vegetation management plan with clear goals and objectives defined.

DEVELOPING A 10-YEAR PLAN

Vegetation Programs significantly benefit from developing long-term plans. Such plans detail measurable goals and outline a structural framework, showing a clear trajectory for the following ten years. This will be the foundation for all vegetation work.

Beginning with a strategic vision and knowledge of best practices, this plan establishes clear expectations and procedures for every constituent of the Vegetation Management Program. Where programs are typically weakened due to staff turnover or changing procedures, this will provide continuity and guidance – internally and externally – regardless of who implements the program. Additionally, developing a long term plan would prioritize immediate improvements and implement cost saving practices over time.

Below are the recommended procedures to initiate a Vegetation Management 10-year plan.

NECESSARY STEPS:

- Develop Strategic Goals
  - Establish measurable goals. Goals must be clear and concrete, i.e., "to reduce the outages to 3% in the next 5 years, improving to 1.5 % in the next 10 years"
  - Within the 10-year strategic program, have short-term (3-year) and mid-term (6-year) and long term (10 years) goals to track success and cumulatively build towards the long-term plan

- Create an Internal Process Map for Work Flow
  - Outline Job descriptions, responsibilities, and measurements of productivity if

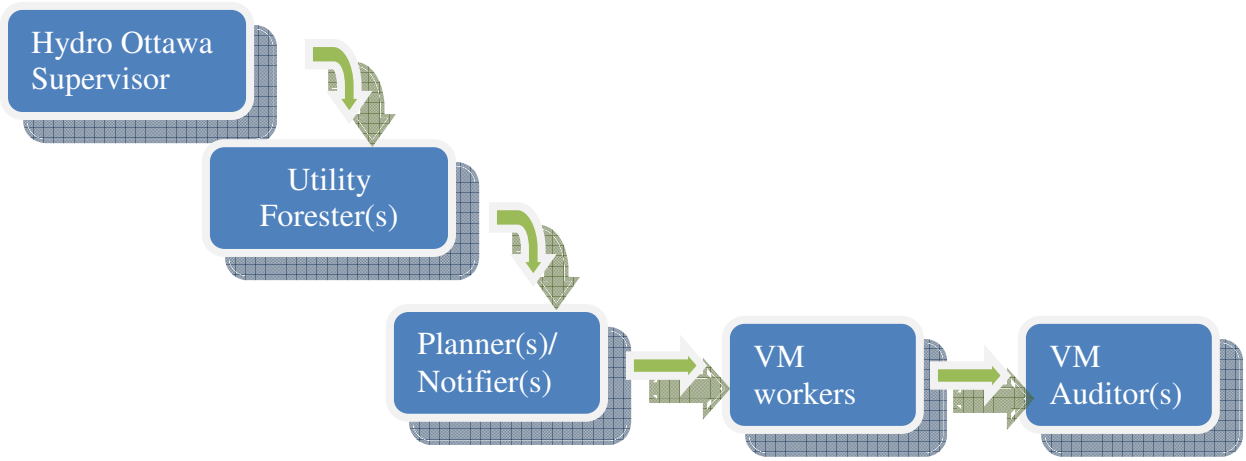
desired

- Define Standard Operating Procedures (SOP) for each position, focusing on Best Management Practices

PROCESS MAP

Process maps are an important reference point to discuss what work must be done within an organization, and how. It identifies who is responsible, the standards that inform each process, and how to achieve specific success. A key factor in creating a process map is to organize around a ***goal***, not tasks. Though people, technology, and techniques may change over time, the work flow remains the same. This is important because energy is not wasted on constantly regrouping – all energy can go into the work itself. Process maps have the added benefit of being able to clearly identify areas of complexity, generate ideas for improvement, and illustrate how those improvements can fit into an existing process.

In successful (efficient, highly functional) utility companies, a vegetation management process map/work flow similar as the following can be found:



This work flow includes the Planning & Notification Process, which creates a work plan for vegetation contractors, and informs utility customer of pruning activities (managing clients' expectations). Establishing expectations for vegetation pruning activities increases the ability to perform audits on contractors' work. This recommended work flow is outlined below.

ESSENTIAL POSITIONS, FUNCTIONS, AND PURPOSES

1. **Planner / Notifier** –
   1. creates a work plan for vegetation contractor according to tender specifications.
      Benefit/goal: creates consistency in work, and enhances proper directional vegetation growth.
   2. notifies customer of pruning activities which will have an impact on their property/trees; explains what activities will take place
      Benefit/goal: informs and educates customers; helps to manage

expectations

Means: a notification letter*, door hanger*, and/or call

* includes: illustrations, before/after pictures, description of work, contact number for additional questions etc. (Appendix B gives examples of notification door hangers.)

The link below provides access to a notification video created to educate customers and better manage their expectations. The embedded PDF documents are the door hanger examples shown in the video.
http://www.pge.com/en/myhome/servicerequests/treetrimming/index.page

Distribution Door Hanger Example.PDF

Transmission Door Hanger Example.PDF

Power Restoration Debris Notice.pdf

2. **Utility Forester** –
   Manager on staff (may be same as notifier/planner in small utility)
   a. delegates work to notifiers/planners
   b. intercedes in customer concerns, interruptions and outages
   c. checks status of notifier/planner, VM work, and auditor

3. **Contractor**
   a. implements work packages – the actual vegetation work (pruning) according to work plan and provided pruning specs.
   b. ensures minimal tree damages by following proper pruning practices
   c. ensures success of long term VM goal through implementation
   d. guarantees and follows through on customer's expectations

4. **Auditor** (internal or external to utility company) –
   a. ensures planning and execution were done correctly by comparing work plan with output, and comparing work plan with tender bid specs.
   b. After sign-off vegetation contractor receives invoiced amount for area audited.

5. **Supervisor** (within utility company) –
   a. Oversees entire program, managing Utility forester, Planner/Notifier, Vegetation Contractor, Auditor, invoices for contractor etc.
   b. ensures VM plan is implemented,
   c. direct contact within utility for customer decision process (makes executive decisions)

TACTICAL PLANNING FOR LONG-TERM GOALS

Begin tactical planning to support long-term goals. Tactical plans are short-term, immediate steps that support a broader goal, and are typically more detailed than the long-range plan. These plans may be included among the 3-year and 6-year plans. The following list provides directional recommendations

for how to focus efforts and effect immediate change.

- Provide continuous education and training in relevant knowledge areas for employees
- Sponsor directly relevant educational programs for staff, i.e., courses in pruning, internal team building and external sub-contractor management, as well as community development training programs
- Encourage and promote Best Management Practices in the field of Vegetation Management. Specifically, integrate key points into company/department ideology through training and exposure
- Actively measure the productivity of positions

Response to OEB Staff Interrogatory Question #17

Reference:

1. **Exhibit B Tab 1 Schedule 2 page 65**
2. **Exhibit B Tab 1 Schedule 2 page 69, line 27**
3. **Exhibit B Tab 1 Schedule 2 pages 84-87**
4. **Exhibit B Tab 1 Schedule 2 page 66 line 11**
5. **Exhibit B Tab 1 Schedule 2 page 88 line 5**
6. **Exhibit B Tab 1 Schedule 2, Figure 2.2.9**
7. **Exhibit B-1(B) Asset Management Plan Figure 3.1**
8. **Exhibit B-1(B) Asset Management Plan Figure 7.2**
9. **Exhibit B Tab 1 Schedule 2 Figure 2.2.9, page 92**
10. **Exhibit B-1(B) 2014 Asset Management Plan page 19**
11. **Exhibit B Tab 1 Schedule 2 pages 93-94**
12. **Exhibit B Tab 1 Schedule 2 page 122**
13. **Exhibit B-1(B) 2014 Asset Management Plan Figure 6.5 page19**
14. **Exhibit B Tab 1 Schedule 2 pages 95-97**
15. **Exhibit B-1(B) 2014 Asset Management Plan page 40**
16. **Exhibit B Tab 1 Schedule 2 pages 99-102**
17. **Exhibit B-1(B) 2014 Asset Management Plan page 35**
18. **Exhibit B-1(B) 2014 Asset Management Plan page 39**
19. **Exhibit B Tab 1 Schedule pages113**
20. **Exhibit B Tab 1 Schedule 2 page104**
21. **Exhibit B-1(B) 2014 Asset Management Plan page 49**
22. **Exhibit B Tab 1 Schedule 2 page112 – 113**
23. **Exhibit B Tab 1Schedule 2 page119-120 and 126**
24. **Exhibit B-1(B) 2014 Asset Management Plan page 54**

Question 17:

2 Staff 17. Asset Condition Study

System Renewal Assets at End of Service Life

Reference

Exhibit B Tab 1 Schedule 2 page 65

Hydro Ottawa states: "HOL describes its asset replacement strategy, or asset management plan, in the Asset Management Planning Report (AMPR),"

i. Please clarify whether Hydro Ottawa developed a complete set of end-of-life criteria which would be used along with the Asset Condition Assessment (ACA). If so, please describe what they are, or cite where the information can be found in the application, how they are applied in system renewal and how they relate to the asset management process health indices and prioritization of the work.

ii. Please state if the data obtained for ACA are collected according to surveys designed specifically for use in asset condition assessments and subsequently directly useable for prioritization using health indices as well as directly comparable against the end-of-life criteria for each group of assets. If so, please describe steps involved in designing asset inspection surveys, including that of the identification of survey deliverables and explain how they differ from those inspections which are part of the testing, inspection and maintenance programs

General Plant Life Cycles

Reference

Exhibit B Tab 1 Schedule 2 page 69, line 27

Hydro Ottawa states in line 27: Non-System Physical Plant captures the life cycle requirements for buildings.

iii. Please explain the interrelation between the buildings asset condition assessment and the overall asset management program for electrical distribution system equipment located within or connected with the buildings in terms of risk ranking and prioritization of work.

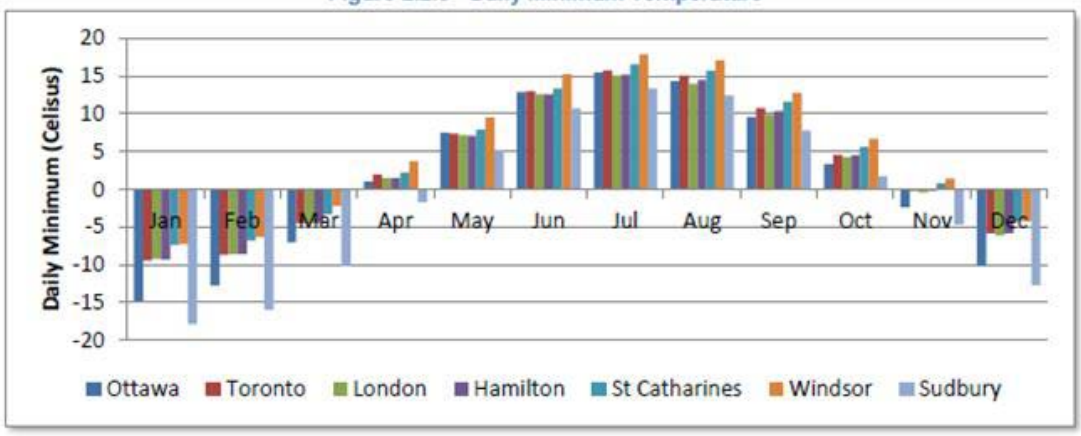
iv. Please include a reference in this document to the list of the "Non-System" buildings.

Temperature

Reference

Exhibit B Tab 1 Schedule 2 pages 84-87

Figure 2.2.3 - Daily Minimum Temperature



The Ottawa region temperature profile requires that equipment operate under a temperature range of -40 to +40 degrees centigrade. Various pieces of equipment that contain inert gasses may not operate reliably at the lower end of this range and thus require extra heaters to ensure reliable operation. Extra heaters on equipment causes design changes and non-standard equipment procurement. The requirement of additional heaters thus impacts capital investment and may require a larger initial investment than that of a similar equipment model in an area with a warmer temperature range.

v. Are the larger initial investments required to adapt to these temperature requirements quantified? If so please provide (or point to) a quantitative indication by Asset Category of this impact on cost

vi. As noted concerning figures 2.2.2 and 2.2.3, Sudbury experiences colder winter temperatures. Are specifications used in design requirement for procurement developed jointly with other utilities sharing similar environmental factors? If so, please describe the efforts taken and results achieved from such inter-utility co-operation.

vii. Similar local environmental challenges are described in subsequent paragraphs of the report, for Seismic Zone effects, Ice accumulation and Snow loading, and Soil conditions. Please provide investment impacts and any shared design-specification initiatives and results achieved as requested above for temperature requirements.

Health Index

Reference

1. Exhibit B Tab 1 Schedule 2 page 66 line 11

2. Exhibit B Tab 1 Schedule 2 page 88 line 5

3. Exhibit B Tab 1 Schedule 2, Figure 2.2.9

4. Exhibit B-1(B) Asset Management Plan Figure 3.1

5. Exhibit B-1(B) Asset Management Plan Figure 7.2

Reference 1 states:

"the following list describes the results of the asset management planning process.

- Recommended asset replacement rates, refurbishment and associated annual spend;
- Asset condition (health index); and
- Projected failure rates based on spending/replacement levels."

Reference 2 states;

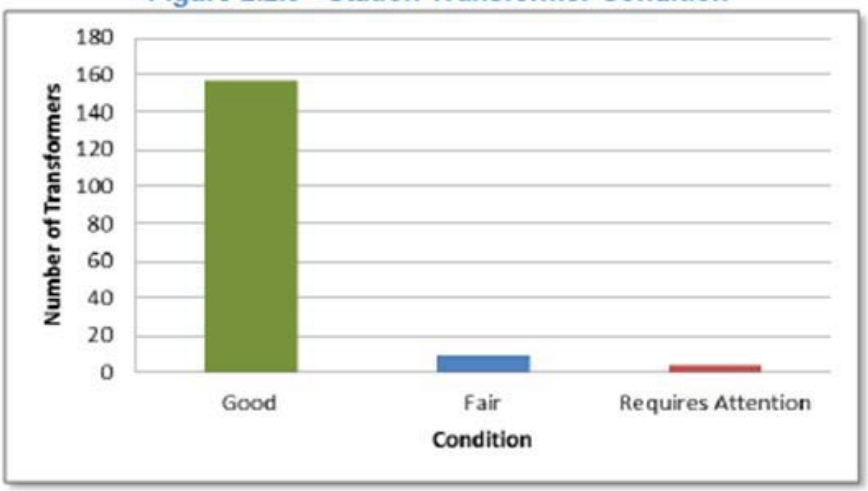
"2.2.3 Asset Demographics and Condition

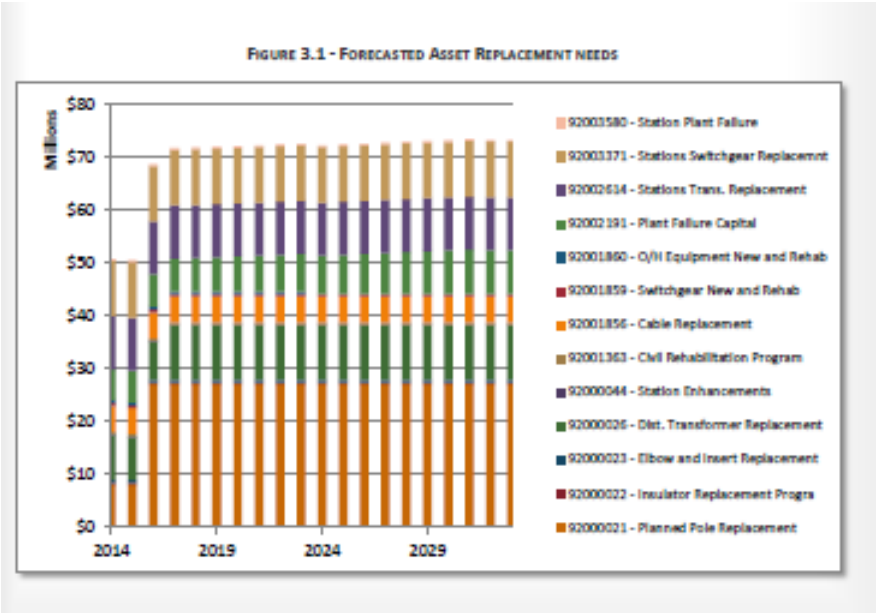
The following section summarizes the demographics and condition assessment for the major 6 asset classes within Hydro Ottawa's system. Asset condition is based upon health index calculations which are unique for each asset class. Where information is lacking, a correlation is implied between condition and age. Further details on the asset demographics can be found in the AMPR.

7.2.2.1 Health Index (of Station Switchgear)

The health index of station switchgear is assessed through the insulation condition, breaker timing, arc protection and structure support. *Currently, there is no reliable centralized information available to support the proposed health index,* therefore age and qualitative information about the structural support condition is used to prioritize replacement projects. The structural support condition is evaluated and rated on a scale from 0 to 1 during regular maintenance inspections using the criteria laid out in Table 7.1."

Figure 2.2.9 - Station Transformer Condition





Reference 5 states: "Figure 7.2 gives an indication of the condition of the station transformer population calculated using the above equation. Based on the Health index, transformers can be grouped into three categories: Good – Health Index =0, Fair – 0 >Health Index <= 1, and Requires Attention –Health Index > 1."

viii. Considering the text in italics above from Reference 2, the part played by Health Indices appears slightly different in each case. Please provide in general, (or point to), descriptions of the quantitative links between asset condition and system renewal requirements. Where Health Indices (HIs) were used to derive replacement plans, please explain how and provide a tabulation of the HI values and their supporting calculations for each Asset Class. In particular, please show the relationship in each case to demographic values and identify those Asset Classes where factors in addition to age were used. Where information beyond age is not yet available, please outline any plans and corresponding timetables to address this.

ix. ix. Are the categories "Good", "Fair" and "Requires Attention" associated with specific Health Index (HI) Values throughout, as illustrated in the text above which accompanies Fig 7.2 of the Asset Management Plan? If so please explain (or point to) the process used to relate these values to corresponding HIs and provide them wherever non-quantitative condition categories are used (e.g. poles – Fig 2.2.14). If numerical HIs are not used, please explain(or point to) the steps used in forecasting Asset Replacement needs as illustrated in Figure 3.1 above.

<u>Overhead Conductors</u>

References

1. Exhibit B Tab 1 Schedule 2 Figure 2.2.9, page 92

2. Exhibit B-1(B) 2014 Asset Management Plan page 19

Hydro Ottawa states in Reference 1 that it "owns and operates on over 2900km of overhead conductor. Due to the rarity of overhead conductor failures, Hydro Ottawa does not record or perform inspections."

x. Are ground-based visual inspections carried out as part of regular line "patrols", e.g. to identify excessive sagging, irregularities in pole-top equipment etc.? In the reply, please indicate the frequency of such inspections and the degree to which they are (or would be) useful in contributing to conductor HIs.

Wood Poles

References

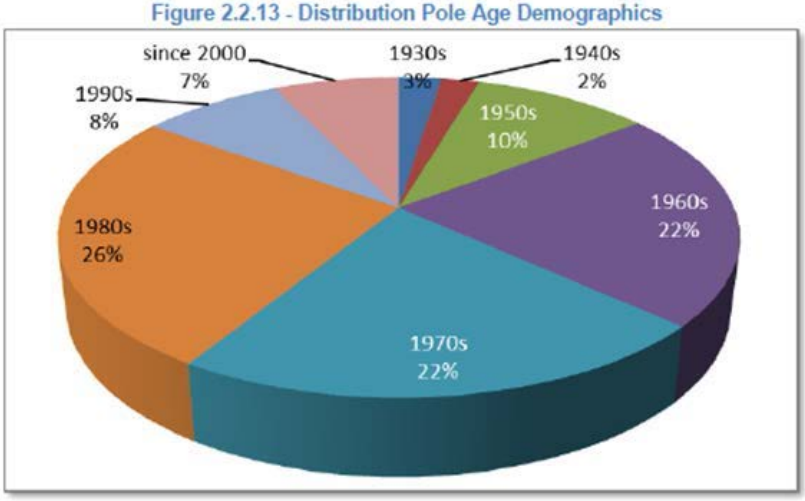
1. Exhibit B Tab 1 Schedule 2 pages 93-94

2. 2.Exhibit B Tab 1 Schedule 2 page 122

3. 3.Exhibit B-1(B) 2014 Asset Management Plan Figure 6.5 page19

In Reference 1, Hydro Ottawa provides the following:

Figure 2.2.13 - Distribution Pole Age Demographics



"The condition of poles is evaluated against a health index developed by HOL. The health index for poles is based on determining the percentage of remaining strength left in the pole."

"Health Index Inputs:

1. Maximum and minimum ground line circumference to determine the extent of surface rot and mechanical damage due to vehicles and snow plows;
2. Width and depth of pocket holes along the pole caused by rot or woodpeckers; and

3. Width of the external shell of a pole, measured from the center, which can be reduced due to internal rot.

Hydro Ottawa has inspected 14,370 poles since 2011, an average of 3,592 poles per year with a continued program inspection target of 4,500 poles per year over a ten year cycle. Inspections are initially done visually and if a pole appears to be in a degraded state a drill test is completed. As mentioned above, if the pole is determined to have a remaining strength below 60% it is replaced. When an area is identified as having numerous poles in a degraded state a pole replacement project is initiated."

xi. For ease of comparison with other asset classes and useful life information from other sources, please relate the percentages in Fig 2.2.13 to the pole-age data by referencing Fig 6.5 in the Aging Management Plan (Part3). Is more rapid degradation of wood poles experienced for some wood (tree) species? If so would it be useful to create an Asset subclass (or subclasses) for these, each with its own Asset HI based in part on the Useful Life of the subclass? If so, please indicate how the costs of pole replacement assumed might be affected by such Asset Class subdivision.

xii. What is meant by the statement "The condition of poles is evaluated against a Health Index developed by HOL"? Please provide the quantitative relationship between pole information and the corresponding Health Indices. If applicable, please explain how the "Health Index Inputs" listed above, any other visual characteristics, and the resistograph drill outputs are combined to create an Asset Class Health Index and the Health Index value for individual assets. In particular, how is the "remaining strength left in the pole" determined: for example is this done by calculation, or employing some form of experiential model incorporating the Health Index Inputs (or both)?

<u>Distribution Cables (PILC)</u>

References

1. Exhibit B Tab 1 Schedule 2 pages 95-97

2. Exhibit B-1(B) 2014 Asset Management Plan page 40

In Reference 1, Hydro Ottawa states:
"HOL owns and operates 356 km of triple conductor Paper Insulated Lead Cable (PILC). It… is some of the oldest cable in the service area. The vast majority of the underground polymer cable is XLPE. Butyl Rubber is in the process of being phased out of Hydro Ottawa's system due to the number of failures. Ethylene Propylene Rubber has been newly introduced into the Hydro Ottawa system and only makes up a small portion of underground cable. Therefore, the condition of underground polymer cable uses data collected from tests on XLPE cable. The condition of distribution XLPE cables are monitored through an underground cable testing program which collects information useful for developing an asset health index. The health index for XLPE is based on the remaining insulation strength of the cable. The tests done on XLPE provide a Quality (Q) Value which indicate the condition of the cable. Hydro Ottawa uses the criteria that once the Q Value reaches a value of 32 or greater, it is considered to in either Bad or Critical condition and should be scheduled for replacement."

xiii. What is the percentage of Distribution Cable of each type? If available, please provide a complete table of the cable lengths by type in the Hydro Ottawa's service area by breaking out the data in Table 6.5 of the Asset Management Plan. Have the "remaining useful life" values for each cable type been determined? I f so, please explain how this information is used in the Asset Management Plan, and in particular please link this to the costs and timing of replacement.

xiv. Is the Health Index calculation for XLPE cable based only on the insulation strength of the cable? How is it correlated with "remaining useful life". Please explain the HI calculation. In particular, please explain the significance of a "Q Value of 32 or greater". Has a correlation of "Q Value and age been performed? If so please provide or point to it. Please explain the HI equivalent of "Bad" and "Critical".

<u>Transformers and Switchgear</u>

Reference

3. Exhibit B Tab 1 Schedule 2 pages 99-102

4. Exhibit B-1(B) 2014 Asset Management Plan page 35

Reference 1 states: "Similar statements are provided for pole mounted (2.2.3.9), Vault (2.2.3.10) transformers, and underground switchgear (2.2.3.11)"

xv. In Reference 2, Section 6.5.2.3, and accompanying figures 6.21and 6.22 please indicate if a Health Index is developed for the overall Asset Class of pad mounted transformers, and if individual indices are computed for each transformer. Please explain how correlations are made between "Critical" and "Poor" categories and corresponding HIs

xvi. If available, please provide or point to equivalent information for pole mounted and vault transformers and underground switchgear. There is a substantial difference between Weibull Analysis and Historical Failure data ages in deriving critical and poor between pad mounted and pole mounted transformers. Please explain. Please provide a comparative table and explain similarities and differences in the Weibull vs Historical data for all 3 transformer Asset Classes. Please comment on the validity of Health Indices derived only from age data, and the potential implications for the replacement programs for these Asset Classes.

xvii. For Underground Switchgear, there appears to be a relatively short Useful Life. Given their risk of failure, please comment on the potential utility of conducting visual or other forms of field inspections to supplement the statistical analysis? If so, please indicate which kinds of inspections would be useful and the likely costs vs benefits of including these, such as improved HIs and more accurate determination of asset replacement schedules.

<u>Replacement and Rehabilitation</u>

References

1. Exhibit B-1(B) 2014 Asset Management Plan page 39

2. Exhibit B Tab 1 Schedule pages113

Hydro Ottawa states:

a) At Reference 2 regarding underground civil structures:

"The asset class has been divided into two primary groups; Duct Structures and Underground Chambers. While duct structures are run to the unlikely event that they fail, underground chambers are maintained through a replacement and rehabilitation program based on regular condition assessment. Based on the currently available inspection data it is recommended that the program target a minimum of 10 underground chambers per year."

b) At Reference 2 regarding life extension:

"Refurbishment of an asset is a life extension investment to offset the planned replacement. HOL determines the best course of action, refurbishment or retirement, by examining:

- Asset remaining useful operating life;
- Life extension forecasted from refurbishment activity;
- Cost of refurbishment as compared to cost of replacement;
- Availability of replacement parts;
- Obsolescence of asset;
- Impact to reliability, refurbishment outage vs. replacement outage;
- Refurbishment warranty; and
- Asset remaining financial life: cost of de-recognition if replaced"

xviii. Please clarify that the "program target" referred to above means either replacement or rehabilitation of a single chamber and comment on how the "recommended target" is determined. If the "program target" is not as stated, please state what it is. In particular, please provide (or point to) a summary of the "currently available inspections data", indicating if the data analysis involves creation of a HI for this Asset Class, as for other Asset Classes? If yes please explain how, if not please explain why not and what is used instead.

xix. Please comment on the differentiation between rehabilitation and replacement of underground chambers and outline (or point to) the factors leading to choice between the options, the relative costs associated with each for this Asset Class,

and the overall cost implications to the program (for example by pointing to Section 2.3.1.1. if this is relevant).

xx. Please discuss how each point in the "Policies and Practices" is quantified (e.g. metrics used). For example are precise numerical values determined or are general "value" scales used and values assigned based on judgement? Please identify any weighting factors applied in integrating the factors and explain the rationale for their choice of values.

Run to Failure

References

1. Exhibit B Tab 1 Schedule 2 page104

2. Exhibit B-1(B) 2014 Asset Management Plan page 49

In Reference 1, Hydro Ottawa states: "The overhead switch and recloser program is typically a run-to-failure asset class unless a technical or health and safety issue have been identified."

xxi. Please explain the criteria applied for designating an Asset Class "run to failure", and please provide a list of other significant "run to failure" asset classes. Please explain (or point to in the submission) how "run to failure" assets are managed vis a vis others in the overall AM program (e.g. absence of periodic Condition Assessment). Please discuss the costs and risks of this approach.

Proactive Replacement

Reference

Exhibit B Tab 1 Schedule 2 page112 - 113

Hydro Ottawa states in Reference 1:

"While it is preferred for all investments to be selected based on this prioritization, mandated investments will arise typically due to external drivers. When such investments occur they have reasoning clearly documented and are scored so that the impact to objectives is clearly understood and communicated. An example of this type of

replacement would be due to equipment recalls, environmental regulation or major safety concerns.

2.3.1.1.2 Reactive Replacement 1

Hydro Ottawa has developed capital programs that manage assets through reactive replacement. These assets have minimal failure consequence, have spares readily available, and require minimal resources for installation. Hydro Ottawa reactive replacement strategy has been developed based on historical failure rates and considers utility best practices."

xxii. Please quantify and state the extent to which investments driven by external drivers occur and their effects on the AM program. Please differentiate the approach described in the text under "Proactive Replacement" from "Reactive Replacement". Please explain how "HOL reactive replacement strategy has been developed based on historical failure rates" and how utility best practices are considered

Dissolved Gas Analysis

Reference

1. Exhibit B Tab 1Schedule 2 page119-120 and 126

2. Exhibit B-1(B) 2014 Asset Management Plan page 54

Hydro Ottawa in Reference 1 with respect to dissolved gas analysis (DGA) states: "DGA and oil quality tests identify abnormalities within the transformer and provide detailed information to allow for sound decision making for future operation and maintenance of the transformer."

xxiii. Reference 2 illustrates the calculation of transformer HIs. The HI calculation does not appear to include other inputs such as IR scanning. Please discuss any plans to include other factors in the HI and anticipated benefits in terms of improved asset replacement planning.

Response:

System Renewal Assets at End of Service Life

Part i

Hydro Ottawa Limited describes the current practices for evaluating the end-of-life criteria for the various asset classes within the Asset Management Planning Report (AMPR) section of the Annual Planning Report which can be found in Attachment B-1(B) – Annual Planning Report. The information is described within the Health Index subsection for each asset class. It should be noted that Hydro Ottawa Limited is currently working on revising and updating the Health Index formulation along with the data inputs required (data captured during inspection and maintenance activities) for use in determining end-of-life and risk consequence for all asset classes. To see a list of information currently collected during inspection and maintenance activities refer to the Testing, Inspection and Maintenance Plan section of the Annual Planning Report, also found in Attachment B-1(B) – Annual Planning Report which can be seen in the Data Governance subsections for each program described.

These Health Indices are used in the Asset Condition Assessment to develop asset replacements project concepts within the System Renewal Investment Category by identifying specific assets requiring replacement based on condition. See Exhibit B-1-2, Section 2.1.2.1.2 for further information.

Part ii

Hydro Ottawa Limited has created different surveys for each of the major asset classes and collects survey information for ACA during routine testing, inspection or maintenance activities. In field data collection with the use of tablets allows data to be automatically uploaded to the GIS system. Hydro Ottawa Limited describes the current process for gathering ACA related information within the Testing, Inspection, and Maintenance Planning Report which can be found in Attachment B-1(B) – Annual Planning Report.

See Interrogatory Response to OEB #17 part i for more detail on prioritization using health indices, comparing the health indices to end-of-life criteria of the asset group and Hydro Ottawa Limited's plans for developing health indices.

General Plant Life Cycles

Part iii

Building work prioritization is managed outside of the Asset Management Process at this time.

Part iv

"Non-System" buildings refers to the following properties:

- The property known as Head Quarters is located at 3025 Albion Rd North, also includes storage buildings;
- 1970 Merivale Road includes admin offices, garage and operations equipment storage;
- 4565 Bank Street includes training centre accommodations and fleet repair garage;
- 100 Maple Grove Rd includes admin offices, garage and operations equipment storage;
- 1275 Carling Avenue includes an admin office

Temperature

Part v

HOL does not have the quantitative values related to these increased requirements. All equipment and designs of HOL's distribution system are designed to the required levels for our unique environment. We have not evaluated the additional costs needed to meet these needs as the characteristics are guided by external industry standards and good engineering principles.

Part vi

Hydro Ottawa Limited participates in numerous working groups with third parties in the electrical utility industry. These working groups provide a forum for stakeholders to discuss common problems, improvement and best practices. One example of such a group is the Centre for Energy Advancement through Technological Innovation (CEATI) which has over 120 participating organizations including numerous local distributing

companies in Ontario. These working groups are further detailed in Exhibit B-1-2 page 35-42 of the updated Hydro Ottawa DSP submitted June 29, 2015.

Part vii

Hydro Ottawa Limited (HOL) does not have the quantitative values related to these increased requirements. All equipment and designs of HOL's distribution system are designed to the required levels for our unique environment.

Geotechnical studies are required as an investment due to the environmental challenges faced in the Ottawa region. Completion of this study ensures that the minimal investment is made due to the design being based on the exact location of the project – rather than assuming the soil bearing strength in one area of the city cascades through-out. Based on the outcome of the geotechnical study the civil footing and foundation requirements are calculated and used in the design. The design must incorporate the seismic, snow loading and ice accumulation for the Ottawa region in conjunction with the area specific soil conditions.

Please see Interrogatory Response to OEB# 17 part vi.

<u>Health Index</u>

Part viii

Please see Interrogatory Response to OEB #17 part i for explanations of the Health Indices (HI) values for each Asset Class. Hydro Ottawa Limited uses an asset's condition (whether based on HIs or solely on age) and the historical probability of failure to project future replacement rates within assets classes and across asset replacement categories listed in the System Renewal Capital program. Please see Attachment B-1(B) – Asset Management Plan Section 5.3 - Asset Replacement Projections.

As shown in Exhibit B-1-2 table 2.2.6, each of the major assets that have a proactive replacement strategy make use of asset condition with the exception of underground switchgear, which makes use of visual inspections not yet formulated into a HI and station batteries which also does not yet have a completed HI model but does rely on inspection.

It should be noted that Hydro Ottawa Limited is currently working on revising and updating the Health Index formulation along with the data inputs required (data captured during inspection and maintenance activities) for use in determining end-of-life and risk consequence for all asset classes.

As an example of how HIs drive asset replacement please see attachment Att-OEB-Q17-B – Civil Structure Health Index. The attached data represents underground civil structures and is based on visual inspections. A weighting factor is given to collar and roof rating in order to take into effect the increased risk to public safety and potential damage to electrical equipment. Please reference Attachment B-1(B) – Annual Planning Report – Asset Management Plan Section 6.6 – Underground Civil Structures and Attachment B-1(B) – Annual Planning Report – Testing, Inspection & Maintenance Plan Section 2.3 – Civil Structure Inspections. Please also see attachment Att-SEC-Q15-A – Numerical Data Asset Age and Condition for asset data relating to age and condition.

When creating HIs based on condition, Hydro Ottawa Limited does not include age in the calculation. However, age is used to extrapolate sample information amongst the asset base in order to create an overall picture of the whole asset class.

Part ix

Hydro Ottawa Limited calculates a HI for its stations transformers using concentrations of dissolved gas and fluids and a visual rated score as per Section 7.1.2.1 Health Index of Attachment B-1(B) – Asset Management Plan**.** For more details on the testing methods used refer to Section 7.1.2 Assessment of Attachment B-1(B) – Asset Management Plan and Section 2.2.3.1 Exhibit B-1-2. The ratings “Good”, “Fair” and “Requires Attention” categories as per Fig 7.2 of the Asset Management Plan refer to the ratings used for station transformer. Rating categories for different assets are specifically selected to optimize project prioritization. For more information asset health indices refer to the Health Index section of Attachment B-1(B) – Asset Management Plan.

The current C55 condition categories and relative asset condition score can be found within Table OEB #17-1. Hydro Ottawa Limited is currently reviewing and revising the asset health indices.

Table OEB #17-1: Current C55 Condition Categories

Asset Condition	Asset Condition Score
Critical	<35
Poor	<65
Fair	<80
Good	<100

Overhead Conductors

Part x

Hydro Ottawa Limited does not record or perform inspections specifically for overhead conductors. However, overhead conductors are inspected for excessive sagging and irregularities during other operational and maintenance programs. The Hydro Ottawa field staff as well as contractors that perform maintenance programs for Hydro Ottawa Limited have a duty to report overhead conductor and equipment hazards.

The IR Scanning program identifies overhead equipment that is over a temperature threshold, as is detailed in Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan Section 2.1.3.

Overhead conductor is patrolled between a 2 and 3 year cycle through the Vegetation Management program, as detailed in Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan Section 2.4.

Overhead conductors and equipment are also patrol inspected through the Insulator Washing program, the Critical Switch Inspection program, and the Pole Inspection program as described in Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan Sections 2.4, 2.7, and 2.8, respectively.

Hydro Ottawa Limited does not maintain a health index for overhead conductor. The conductors are replaced during work on pole top equipment or pole replacement projects. This allows for the greatest efficiency. During this time the area is studied to assess whether larger conductors need to be installed.

Wood Poles

Part xi

Figure 6.5 in the Asset Management Plan (Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan) was created by correlating remaining strength information obtained from inspections and the pole age information used in Fig 2.2.13. As more inspection data is collected every year, the remaining strength to pole age correlation will become more accurate.

Hydro Ottawa currently installs wood poles of type Western Red Cedar, other wood species that have been installed in the past such as Red Pines, Jack Pine, Lodgepole Pine, and others; however, they are only a small percentage of the total wood pole population. Analysis has been done based on pole age and health condition and not based on wood species since the majority of known pole wood species are Western Red Cedar.

Part xii

The statement "The condition of poles is evaluated against a Health Index developed by HOL" means that Health Index determines when a pole is at critical or poor condition and in need of replacement. As stated in Exhibit B-1-2 page 93, once a pole's ultimate strength has reach 60% or below as per Canadian Electrical Code- CSA 22.3, it will be considered to be at the end of life. When an area is identified as having several poles at the end of life a pole replacement project is scheduled.

Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan Figure 6.6 page 21 shows that 2% of poles are in critical condition, 7% in poor condition, 11% in fair condition and 80% in sound condition. This information is obtained by extrapolating the remaining strength and age correlation (Figure 6.5) to the entire pole asset class.

As explained in section 6.1.2.1 of Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan, an IML Resistograph Drill is used for the detection and measurement of internal decay and measurement of the remaining shell thickness with minimal damage to the pole. The results of the Resistograph drill are then used to estimate the pole remaining strength. Section 6 of the Overhead Line Inspection Method (Att-OEB-Q17-A – Overhead Line Inspection Method) shows the formulas and tables use for the calculation of the remaining strength.

Distribution Cables (PILC)

Part xiii

For percentage of Distribution Cable of each type and lengths, please see Interrogatory Response to OEB #16 part vi table 2.2.5. Rather than a "remaining useful life" value for cable, an estimated condition of polymer cable and Paper Insulated Lead Cable was determined. For estimated condition of in-service polymer cable, please see Figure 6.30 of Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan. For distribution cable PILC condition, please see Figure 2.2.16 of Exhibit B-1-2. This information on asset condition is used as an input to the project scoring and optimization process. High value is given to projects that refurbish or replace assets in poor or critical condition.

Part xiv

The Health Index calculation for XLPE cable is based only on the insulation strength of the cable. Determining the Health Index of XLPE cable is described in section 6.7.2.1 of the 2014 Asset Management Plan (Attachment B-1(B) – Annual Planning Report). The health index is determined from cable testing results performed by National Research Council Canada on in-service XLPE cable. Specific cable segments are tested using a polarization / depolarization technique and the results are compared to reference cables. Quality (Q) Value is a diagnostic indicator that National Research Council Canada uses to determine the insulation condition of a tested cable segment. The larger the Q Value is, the lower the remaining insulation strength of the cable. A Q Value of 32 or greater indicates low remaining levels of insulation and poor cable condition. There has been no published correlation between Q value and "remaining useful life", however, the worse the cable condition; the more likely it is to fail. A weak correlation has been established with Q value and age. Cable age is not the main factor in determining the insulation condition of in-service cable. Other factors such as soil condition, amount of moisture in the ground, presence of a cable jacket, and operating condition play an important role in determining the rate of decay. The table below shows the value of Q versus the Health Index.

Table OEB #17-2: Q Value versus Health Index

Q Value	Condition (Health Index)
Q < 4.99	Like New
4.99 < Q < 19.99	Good
20 < Q < 31.99	Fair
32 < Q < 49.99	Bad
Q > 50	Critical

Transformers and Switchgear

Part xv

Hydro Ottawa Limited has made the assumption that the first sentence of OEB #17 part xvi should be part of OEB #17 part xv. Thus it has been removed from OEB #17 part xvi and added to OEB #17 part xv.

In Reference 2, Section 6.5.2.3, and accompanying figures 6.21 and 6.22 please indicate if a Health Index is developed for the overall Asset Class of pad mounted transformers, and if individual indices are computed for each transformer. Please explain how correlations are made between "Critical" and "Poor" categories and corresponding HIs. If available, please provide or point to equivalent information for pole mounted and vault transformers and underground switchgear.

Hydro Ottawa Limited develops the health index for pad mounted transformers based on the age of the asset. Poor condition represents pad mounted transformers ranging from 50 to 60 years old and critical condition refers to pad mounted transformers that are equal to or older than 60 years.

Equivalent figures for pole mounted transformers can be found in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan page 31 Figure 6.14. Hydro Ottawa Limited develops the health index for pole mounted transformers based on the age of the asset. Poor condition represents pole mounted transformers ranging from 60 to 90 years old and critical condition refers to pole mounted transformers that are equal to or older than 90 years.

Equivalent figures for vault transformers can be found in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan pages 35-36 Figures 6.21 and 6.22. Hydro Ottawa Limited develops the health index for vault transformers based on the age of the asset. Poor condition represents vault transformers ranging from 55 (there is an error in Exhibit B-1-2, Page 102, Updated where this is listed as 65. It should be 55) to 70 years old and critical condition refers to vault transformers that are equal to or older than 70 years.

Hydro Ottawa Limited develops the health index for underground switchgears based on the age of the asset. Poor condition represents underground switchgears ranging from 30 to 35 years old and critical condition refers to underground switchgears that are equal to or older than 35 years. Please refer to Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan page 48 for more details on the management of underground switches.

Part xvi

Hydro Ottawa Limited has made the assumption that the first sentence of OEB #17 part xvi should be part of OEB #17 part xv. Thus it has been removed from OEB #17 part xvi and added to OEB #17 part xv.

> There is a substantial difference between Weibull Analysis and Historical Failure data ages in deriving critical and poor between pad mounted and pole mounted transformers. Please explain. Please provide a comparative table and explain similarities and differences in the Weibull vs Historical data for all 3 transformer Asset Classes. Please comment on the validity of Health Indices derived only from age data, and the potential implications for the replacement programs for these Asset Classes.

Hydro Ottawa Limited's current transformer failures are on the order of 0.5% annually. As a result there are limited observed failures from which to derive age based health indices. Utilizing the currently available failure information, Hydro Ottawa Limited has observed a low correlation between probability of failure for its distribution transformers and asset age. This combined with the low failure consequence, has resulted in the current Reactive replacement strategy for these assets.

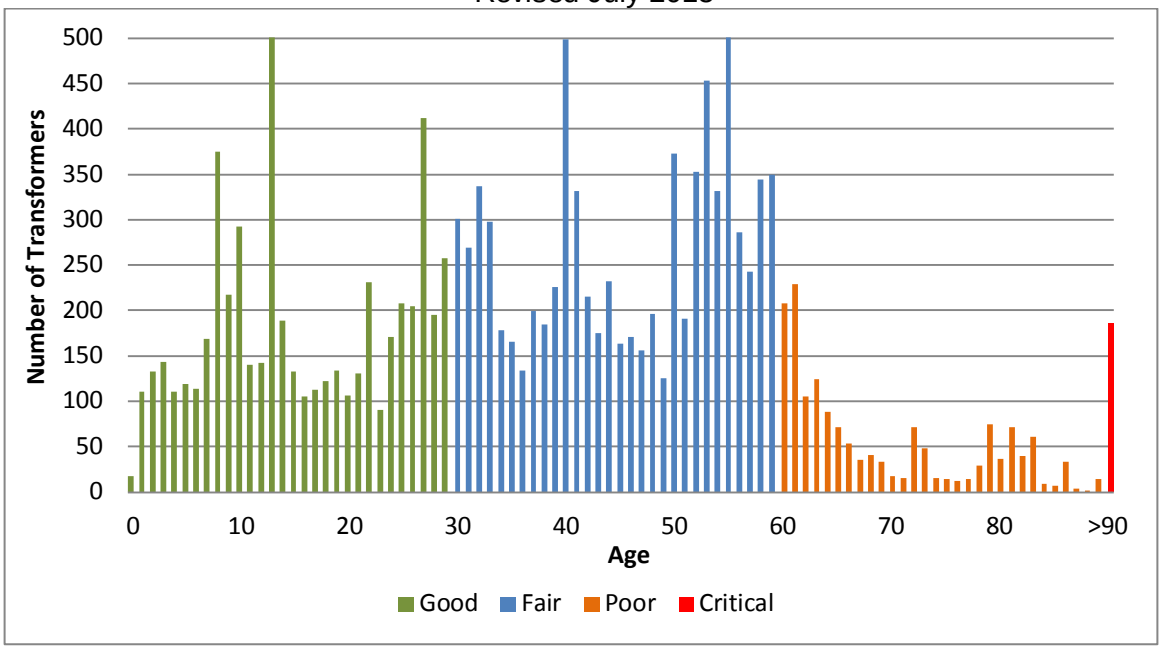
The current age based health indices have been implied to provide an estimated overview asset class condition, however are not utilized at this time to drive replacement decisions.

Hydro Ottawa Limited has employed the use of Weibull analysis to determine the expected end-of-life for pole mounted, pad and kiosk, and vault transformers. This estimation of the probability of failure is determined based on the annual asset failures and asset age demographics. The use of Weibull analysis is further acknowledged by The Centre for Energy Advancement through Technological Innovation's Distribution Assets Life Cycle Management working group who states in Section 14.4.6 – Equipment Failure Analytics of Attachment Att-OEB-Q17-C – CEATI Distribution Planner Manual, a subsection from their Distribution Planner's Manual, "Today, Weibull analysis is the leading method in the world for fitting and analyzing life data [217]. The Weibull distribution is one of the most widely used lifetime distributions in reliability engineering. The Weibull probability density function (PDF) can be used to model the probability of the time to failure of a component."

By contrast, the historical failure age has been determined on the basis of the recorded asset age at failure, but does not take into account the overall demographics. A threshold has been established based on the maximum age at which the majority of the failures have occurred. Assets aged beyond this point have been considered to be in poor condition.

There was an error in Exhibit B-1-2 Figure 2.2.22 Polemounted Transformer Condition. The corrected figure is below.

Figure OEB #17-1: Exhibit B-1-2 – Figure 2.2.22 – Polemounted Transformer Condition – Revised July 2015



There was an error in Exhibit B-1-2, Updated June 29th, 2015, Page 102 where lines 1 to 3 should read: The condition assessment for vault transformers is based on age alone. Critical and poor condition transformers are considered to be over the ages of 70 (Weibull Analysis) and 55 (Historical Failures), respectively. These assets are considered to be at a higher risk of failure.

Figure OEB #17-2: Transformer Asset Class Comparison

Asset	Years	
	Poor	Critical
Pad Mounted/Kiosk Transformer	50-59	>60
Vault Transformer	55-69	>70
Pole Mounted Transformer	60-89	>90

Part xvii

Hydro Ottawa Limited performs visual and IR inspections on padmount switchgear (refer to Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection &

Maintenance Plan page 7-8)**.** The inspection information is analyzed to prioritize switchgear replacement.

Hydro Ottawa Limited performs CO_2 wash on all air-break switchgear (refer to Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan page 12-13). Air-break switchgear have a higher risk of failure due to contamination. The CO_2 wash cleans the switchgear of contamination decreasing the probability of failure.

<u>Replacement and Rehabilitation</u>

Part xviii

Hydro Ottawa Limited's underground chamber replacement and rehabilitation program target is the total number of single underground chambers that are replaced or have rehabilitation work done to them. The recommended program target is determined by analyzing the calculated health condition from underground chamber inspections. Underground chambers are targeted that have a HI of critical or poor condition. The recommended program target is set based on the manhole inspection information available.

The underground chambers components are rated based on Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan page 40 – Table 6.4.

The health condition is calculated using the below weightings and formulation.

Table OEB #17-3: Underground Chamber Health condition Weighting

Component	Weighting
Floor	1
Wall	1
Roof	3
Collar	2

Manhole Rating= (Floor rating x 1) + (Wall rating x 1) + (Roof rating x 3) + (Collar rating x 2)

For more information on Inspection information being collected refer to Attachment B-1(B) – Annual Planning Report – 2014 Testing, Inspection & Maintenance Plan.

Part xix

Rehabilitation of an underground chamber refers to work performed on an existing civil structure such as rebuilding the collar or roof. Components of the underground structure can be replaced or rebuilt leaving the good condition components intact such as the base. Replacement of an underground chamber refers to the construction of a new chamber.

In addition to the refurbishment or retirement factors listed in Exhibit B-1-2 pages 114 Section 2.3.1.1.3 underground chamber project scope is dependent on the location of component(s) in the structure that require(s) corrective action. Underground chambers are constructed from the floor to the collar; therefore, the structure is repaired from the top to the bottom ensuring all components requiring attention are repaired or replaced based on their condition.

Cost of underground chamber replacement and rehabilitation projects varies greatly depending on the scope of the work and location. As a general guide and as noted in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan Section 6.6.3, typical cost of rehabilitation and replacement are $20,000 and $60,000 respectively.

Part xx

Hydro Ottawa Limited determines the best course of action for refurbishment or replacement based on the factors listed in Exhibit B-1-2 Section 2.3.1.1.3. The equipment being considered for refurbishment or replacement is evaluated using the applicable factors. This is performed for equipment on a case by case basis.

Run to Failure

Part xxi

An Asset Class is designated to "run to failure" after looking at the historical failure rates of that asset and assessing the impact of failure in the system as described in Exhibit B-1-2 page 114, Reactive Replacement of the June 29 version. Details on how each of the assets is evaluated can be found in the Assessment section for each Asset Class in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan. A list of the replacement strategy for the major asset classes within the system can be found in Exhibit B-1-2 Table 2.2.6. This table includes assets that are replaced in a Reactive or "run to failure" approach.

Distribution Assets that are "run to failure" are replaced under designated budget envelopes in the Plant Failure program of the Distribution Assets Capital Program. Assets that are "run to failure" show minimum failure consequences therefore have a low risk. In addition the cost to replace a "run to failure" asset reactively does not greatly differ from proactively providing failure rates remain at low levels. If one of these factors changes, the use of a proactive replacement program will be re-evaluated. It is also noted that certain "run to failure" assets are proactively replaced through other programs i.e. pole mount transformers may be replaced as part of a pole line replacement project, padmount transformers may be replaced as part of an underground cable replacement project.

Proactive Replacement

Part xxii

The first statement refers to the replacement of assets that are deemed for replacement due to external factor but can be done in a planned approach. Examples of this would be

the replacement of oil filled transformers containing PCB's and the replacement of known asset issues as identified by manufacturers such as SMD 20 switches. The proposed budget for these projects can be found in Exhibit B-1-2 Table 3.1.7.

Please see Interrogatory Response to OEB #17 part xxi for explanation of Reactive versus Proactive replacement.

Dissolved Gas Analysis

Part xxiii

Presently, Hydro Ottawa Limited uses IR scanning to inspect for immediate issues on transformers such as bushing issues. The overall condition assessment of a station power transformer is heavily based on the health of the oil and paper insulation on the windings which is evaluated through dissolved gas analysis. As older power transformers are considered for refurbishment, other factors such as tank wear, bushing health and tap changer health begin to play a larger role in the overall health of the unit.

Hydro Ottawa Limited is in the process of evaluating the HI formulations for all assets. IR scanning has been identified as an important factor in the HI calculation. Once Hydro Ottawa Limited finalizes the HI formulations, inspections will be updated to acquire the required information.

HydroOttawa		TITLE: **Working Procedure**	
RECOMMENDED:	**Mark Wojdan**	NO: **OIS0005**	REV: **1**
APPROVED:	**F. Kropp**		
REV. DATE:	**2012-08-01**		

Overhead Line Inspection Method

See Hydro Ottawa's Intranet site for the latest revisions

REVISION SHEET

Revision	Description of Change	Date	Initial
0	Original Document	2010-11-09	mm/bh
1	Addition Riser Pole Drill Test Requirements	2012-08-01	mw/fk

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1 Introduction

One of Hydro Ottawa's largest asset class is the distribution pole and the attached hardware which are used support distribution and sub-transmission conductors throughout the city. Maintaining these assets is essential in maintaining a reliable electric supply. This document describes the methods and information to be collected during inspection of overhead lines and poles.

2 References

CEATI T024700-5033	Wood Pole Inspection Training and Standards
Ethekwini Electricity Department	Testing of Standing Wood Poles
IML-RESI	Test and measuring instruments for trees and timber structures
FIST Volume 4-6	Wood Pole Maintenance

3 Scope

This document will be used for evaluating and testing the condition of in-service poles and hardware. Any staff or contractors involved must be familiar with the procedures and testing equipment before performing pole inspections.

4 Inspector Requirements

The inspector shall read and understand the latest version of working procedure OIS0005: Overhead Line Inspection Method. The inspector will also receive in-field training on pole inspection. The inspector must be deemed qualified by the program manager of pole inspection. Appropriate PPE for outdoor work in public must be worn by the inspector, as per HOL PPE Program.

5 Inspection Procedure

The described procedures herein can be utilized when inspecting a single suspect pole or to assess a pole line. In general pole testing and inspection consists of 4 parts: gathering general data, visual assessment, pole sounding, and below grade drill assessment. Figure 1 below depicts the pole inspection procedure in flow chart form.

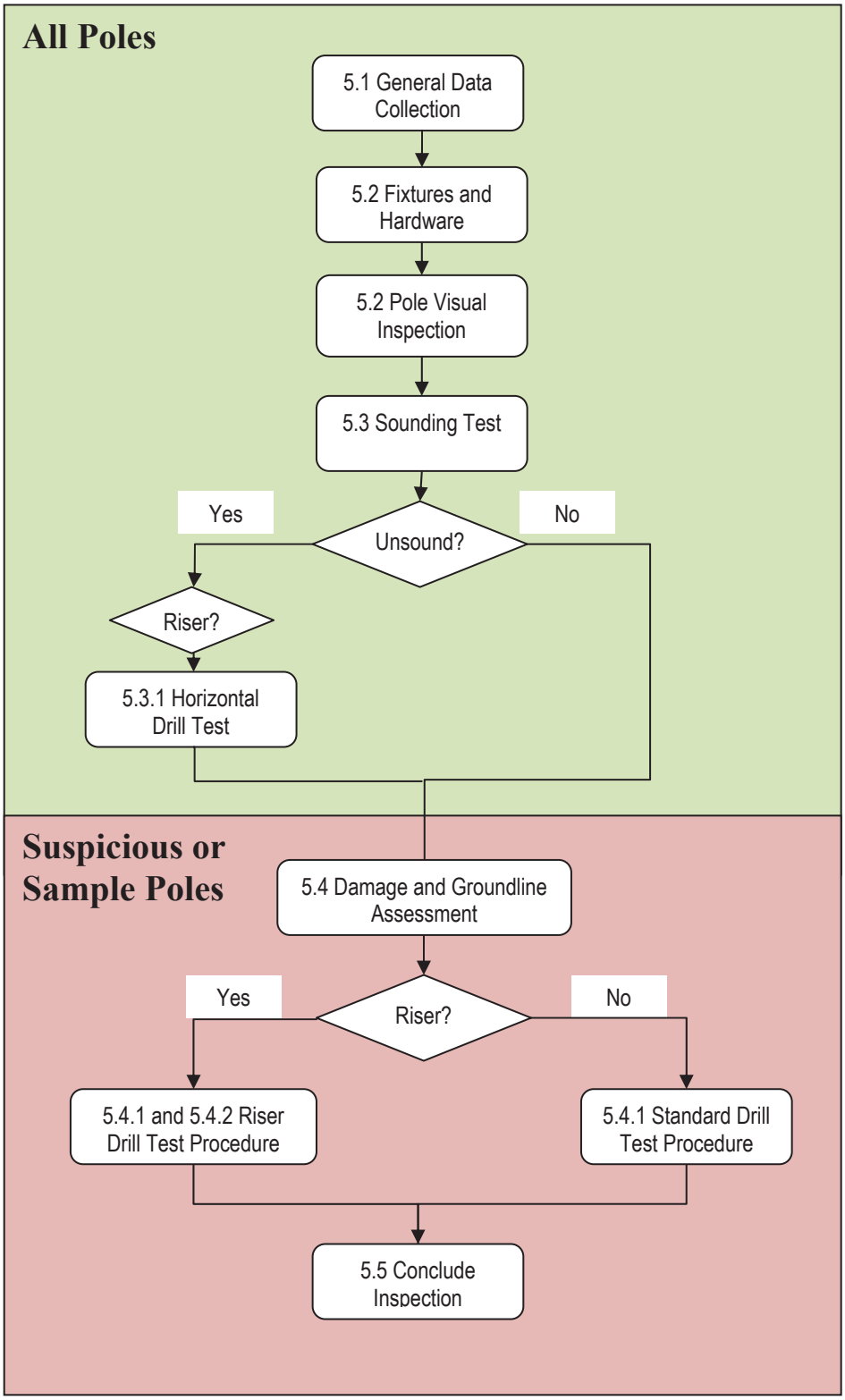


Figure 1 - Pole Inspection Flow Chart

5.1 General Data Collection

General data is collected and recorded to provide context to the remainder of the inspection results. This information is used to update and correct Hydro Ottawa's GIS system as well as identify global trends that could be related to problems with types of assets.

General data which should be collected is listed below. Where data cannot be captured it should be indicated as unavailable rather than estimating which could lead to incorrect entries.

General data to be recorded:

Date	The date on which the inspection is taking place
Inspector Name	Name of the inspector performing the inspection
Plot Boundary	The 6 digit boundary assigned to the part of the city (ex: 65A1A1).
Pole ID	The identification number associated with the pole (ex: X12345 or 65A1A-0000).
Preservative	Penta (P), CCA, Creosote (C), etc.
Class	Pole size classification
Pole Age	Manufacture year
Pole Height	Height of the pole measured from the butt to the top.

Information is to be collected using a Hydro Ottawa mobile tablet PC. In the absence of a tablet, collect information on paper using Schedule A.

NOTE: Record information only taken from the manufacturer nail or brand. If the nail or brand cannot be found, the information should be left blank or marked unknown.

5.2 Visual Inspection

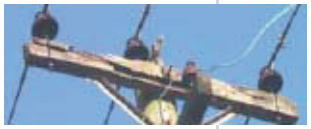
5.2.1 Fixtures and Hardware

Condition of the pole fixtures and hardware is assessed to provide a holistic view of the pole condition. Information collected during this stage of the inspection will be used to drive other programs, maintenance activities, as well as help better prioritize pole replacement activities. Where there is not a field on the inspection form to record relevant data, it should be included in the comment section.

Insulators: Insulator type should be noted, a summary of insulator types is given below. See Appendix B – Insulators.

Insulator Types	
Value	Description
WP	"Wart" Porcelain Insulators
PP	Porcelain Pin Insulators (Canadian Porcelain)
HP	Horizontal Installed Porcelain Pin
OB	Ohio Brass procelain Insulator on Stand-off Bracket
GL	Glass
PO	Polymer
UN	Unknown

Cross-Arm: Note condition of cross arm, as per rating scale below:

Crossarm Condition		
Value	Description	Example
G	Good, normal, No Problem	
F	Fair, Some deterioration	
B	Bad, Schedule for replacement	

Transformer: Where a transformer is located on the pole, the general condition of the transformer should be noted. Inspect the transformer for broken bushings, leaking oil, and advanced corrosion. The rating scale below should be applied.

Transformer Standard Comments	
Value	Description
G	No Visible Issues
F	Signs of rust/deterioration
B	Broken/Cracked Bushing or tank sweating or active leak.

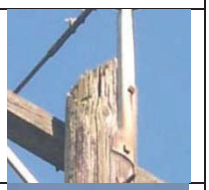
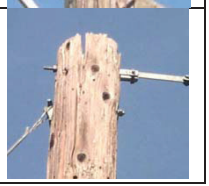
If a transformer is found to be leaking oil, appropriate action is required as per Hydro Ottawa Spill Response. This requires notifying dispatch or system office.

5.2.2 Pole Condition Assessment

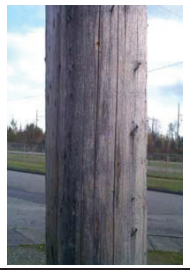
Wood Pole

The pole condition is visual assessment of the outer surface of the pole. The inspector is required to assess the extent of deterioration and weathering of the pole. If woodpecker damage is present, the extent of the damage will be noted.

Pole Top Feathering: Observe the condition of the top of the pole for deterioration. Large cracks and severe weathering should be a concern especially when pole top construction is present.

Pole Top Condition		
Value	Description	Example
G	Good, normal, No Problem	
F	Fair, Some deterioration	
B	Bad, Significant Deterioration	

Shell Condition: Condition of the pole shell should be noted. The inspector will observe for large deep cracks, signs of rot, and excessive weathering.

Shell Condition			
Code	G	F	B
Description	Good, normal, No Problem	Fair, Some deterioration	Bad, significant deterioration
Example			

Woodpecker Damage: Check for the extent of woodpecker damage. The rating scaling below should be applied:

Wood Pecker Damage	
Code	Description
G	Go, None Visible or Minor Surface Damage
F	Fair, Moderate Repairable Damage
B	Bad, Severe Damage

Other Observations

The inspector is required to take note of particular issues that may or may not be present. These observations will provide information for maintenance and aid in prioritizing replacement projects.

Broken or Loose Guying: Guy wires are intact and have no signs of damage.

Ground Wire Intact: Ensure that the ground wire is still running continuously down along the pole and that there are no breaks

Pole Lean or Twisting: Observe the pole for unnecessary leaning or deformation of the pole.

Signs of Fire/Lightning/Arcing: Observe the pole from top to bottom for signs of charring or smoke damage due to fires, lightning, or flashovers.

Insect Infestation: Observe for signs of tunnelling and sawdust created from burrowing insects. It is also important to note whether infestation is active. Immediate issues should be reported to assets for spot trimming.

Vegetation Growth: If vegetation management is required it should be noted.

Debris or Bird's Nesting: On pole top or overhead transformer.

Cut-out Switch: Where a cut-out switch is located on the pole if it is a problem type such as SMD-20 porcelain cut-outs should be noted.

Concrete Poles

The same items should be assessed while inspecting concrete poles. Rather than **External Decay**, concrete poles should be examined for cracking or flaking of the concrete. Also evidence of corrosion and/or exposed reinforced rods should also be noted.

Composite Poles

As composite materials age primary contributors to material aging are, UV light and they begin to degrade. Currently rigorous assessment methods required development for composite poles, at this time general condition of concern should be noted, during inspection and flagged to the asset management group who will initiate further investigation. General conditions which should be noted are:

1. Blistering
2. Exposed fibre ends.
3. Cracking or crazing (small, hair-like cracks beneath the material surface)
4. Sever discoloration of the material

5.3 Pole Sounding

Sounding is carried out on Wood poles to detect internal decay. If the pole has been positively identified unsound from the visual inspection, sounding need not be carried out. Sounding is done using a hammer to strike the pole from the groundline up to as high as can be reached.

To perform the sounding test, start at the groundline tapping every 10cm (Approx 4 inch) to as high as can be reached. Repeat for each quadrant of the pole. A sharp ringing indicates sound wood whereas a dull or hollow sound indicates unsound wood. Height and location of unsound wood should be noted for Horizontal Drilling.

5.3.1 Horizontal Drilling

When an unsound section of pole is found through pole sounding, a horizontal drill test should be performed. For instructions on how to drill a pole and assess the drill results, **See Appendix A – Pole Testing Using IML Resistograph**. If the pole has risers, see 5.4.1 – Using the IML on Riser Poles. The results of the horizontal drilling are to be recorded on the inspection form.

5.4 Damage and Groundline Assessment

Damage assessment is carried out to better quantify the extent of the damage in the locations most critical to the strength of a pole.

Where a full pole-line is being inspected in general only 20% of the poles in the line need to have a detailed groundline inspection, with a minimum of 2 measurements per line. Where poles in a poleline are not all of the same vintage or in similar condition, additional groundline measurements may be necessary.

5.4.1 Instructions for Damage and Groundline Assessment (ie. Drill Test)

For instructions on how to drill a pole and assess the drill results, **See Appendix A – Pole Testing Using IML Resistograph**. Full groundline testing involves a minimum of two 45° drill tests of the pole to assess the condition. If there is further doubt as to the degree of rot in a pole after two drill tests, perform additional drill tests. If the first drill test confirms that the pole is sound, additional measurements are not necessary. Additional precautions are required when drilling poles with cable risers on them. Please note the precautions noted below in section 5.4.2.

Information should be recorded after taking into account the result from all drill tests on a single pole. Below are the steps required for a proper below grade drill test:

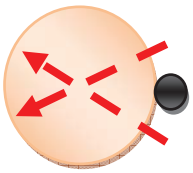
1. Measure the maximum pole circumference, up to 1m above ground, in inches
2. Measure the minimum pole circumference, at the damage point or warp point, up to 1m above ground.
3. For external damage within 1m of groundline, measure the hole *depth*, in inches. If there is no external damage, record 0.
4. For external damage within 1m of groundline, measure the hole *width*, in inches. If there is no external damage, record 0.
5. Perform a minimum of two drill tests using the 45° drill adaptor. Perform additional drill tests to develop a better understanding of the true condition of the pole.
6. Record the *average* Maximum External Decay Width from the recording paper (if none → 0). Maximum External is from the edge of the recording paper inwards, from one side only. Decay is flatline or very close to flatline. *Average the maximum recorded amounts by the number of drill tests taken*. Note 1” to 1.5” of uptake is normal at the beginning of test. This is not external decay.
7. Record the *average* Maximum Internal Decay Width from the recording paper (if none → 0). Maximum Internal is the decay contained on the inside part of the recording paper, with outer shell still intact. Also known as a hollow center. If there are multiple decay pockets, their widths should be added. Decay is flatline or very close to flatline. *Average the maximum recorded amounts by the number of drill tests taken*.
8. Record the *average* Minimum Remaining Shell from the recording on paper (if sound → max width). The minimum remaining shell width is the smaller of the measured thickness

of intact wood (at either the beginning or end of the drill test). *Average the minimum recorded amounts by the number of drill tests taken.*

5.4.2 Using the IML on Riser Poles

Drilling poles with Hydro Ottawa primary cable risers, secondary cable risers, or any third party attachment risers presents a safety hazard. When not required, avoid drilling riser poles. The following precautions are to be taken when encountering a riser pole that requires a drill test:

1. If the pole is overly congested with risers (one third or more), do not perform a drill test. Visually inspect and sound the pole.
2. Perform a 360 degree check of the pole to orient yourself with the location of the riser(s) and any other unavoidable obstructions.
3. Position the drill so it is on the same side as the riser, and perform two drill tests in the direction away from the riser. See the illustration below.



4. Do not drill entirely through the riser pole, but rather stop short one or two inches before exiting. The figure below shows the recommended distance in inches of wax paper to drill a riser pole in order to avoid exiting the pole, for both horizontal and 45 degree drilling.

Circumference of Riser Pole (inches)	Recommended Horizontal Distance on Paper (Inches)	Recommended 45 Degree Distance on Paper (Inches)
20	4	7
25	6	9
30	8	11
35	9	14
40	11	16
45	12	18
50	14	21
55	16	23
60	17	25

Figure 2 - Recommended Drill Distance to avoid exiting a riser pole

5.5 Concluding the Inspection

At the end of the inspection it should be verified that all the appropriate data has been recorded, and verify that appropriate pole ID is marked on all IML graphs.

The inspection information shall be forwarded to the asset management group for evaluation.

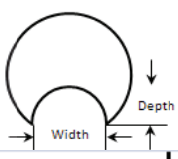
6 Overall Pole Condition Assessment

This section is primarily for Assets. Overall Pole Condition assessment will be derived by using the data collected by pole inspectors in-field. Overall Pole Condition Assessment shall drive planned pole replacement programs.

Remaining Strength

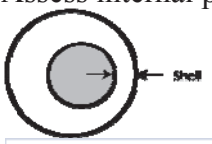
Where damage is identified the effective circumference should be calculated. Damage located in close proximity (~1 meter) should have its effect on the localized remaining strength should be calculated. In order to assess the remaining strength, we must first have a value for the original (C_o) and measured pole circumference (C_m). The impact of additional pole damage on remaining pole strength is used to decrease the measured circumference effective circumference (C_{eff}).
The remaining pole strength can then be assessed from the ratio of C_{eff} to C_0. The

1. Get values of original (C_o), and measured pole circumference (C_m).
2. Assess circumference reduction due to external decay, or mechanical damage (C_{Ext}) using the table below



Width of Pocket (in)	1					2					3					4					5					6				
Depth of pocket (in)	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
C_m Measured circum. (in)	C_{Ext} Reduction in circumference (in)																													
30 to 40	1	1	1	2	2	1	2	2	3	3	2	3	4	4	4	2	3	4	4	4	3	5	6	7	8	5	7	8	9	10
40 to 50	1	1	1	2	2	1	2	2	3	3	2	3	3	4	4	2	3	3	4	4	3	4	5	6	7	3	5	6	7	8
50 to 60	1	1	1	2	2	1	2	2	3	3	2	3	3	4	4	2	3	3	4	4	3	4	4	5	6	3	4	5	6	7

3. Assess internal pocket circumference reduction (C_{IP}), using the table below.



Diameter of Pocket (inches)	3			4			5		
Min. thickness of Shell (in)	1	2	3	1	2	3	1	2	3
C_m Meas. Circumference (in)	Reduction in Circumference (inches)								
30 to 40	2	1	1	3	1	1	4	2	1
40 to 50	2	1	1	3	2	1	4	3	1
50 to 60	2	2	1	3	3	1	4	3	1

For Diameter of Pocket, use the value of Maximum Internal Decay from the drill test. For Minimum thickness of shell, use the Minimum Remaining Shell Width from the drill test.

4. Assess below grade external rot C_{Rot}. Use the value of Maximum External Decay Width from the drill test. Multiply the value by 2π and divide by $\sqrt{2}$. This is the amount by which the below grade circumference has decreased, C_{Rot}.

5. Calculate

$$C_{eff} = C_m - C_{Ext} - C_{IP} - C_{Rot}$$

6. Calculate Ratio to original Circumference, and assess the remaining strength from the table below.

$$\%\text{Remaining Circumference} = \frac{C_{eff}}{C_o} \times 100\%$$

% Remaining Circumference	% Remaining Strength
100%	100%
98%	93%
95%	86%
93%	79%
90%	73%
88%	67%
85%	61%
83%	56%
80%	51%

Appendix A – Pole Testing Using IML Resistograph

The Resistograph drill is a non-destructive analysis device that uses a constant force drill to determine the fibre strength of the pole and which allows for identification of any cavities or areas of decay. It uses a 1.5mm to 3mm diameter drill bit to measure the amount of torque applied to the drill shaft. The resistance applied to the drill indicates the condition of the wood and also the presence of cavities not visible from an external visual inspection. The output of the resistograph comes in wax paper form. An etched trace of the values on a waxed paper strip is attached to the top of the drill. This waxed paper is replaced after each pole.

Operating the IML Resistograph

A.1 Preparing the Instrument

1. Carefully remove Resistograph from the carrying case.
2. Insert a fully charged battery pack into the butt of the drill.
3. Make sure a drill bit is inserted into the instrument and is fully retracted. If no drill bit is inserted, refer to section A.4 Exchanging Drill Bits.
4. Insert a new wax paper strip by slightly bending the end of the strip so that it can fit into the introduction slot at the back end of the instrument as seen in Figure 3. Slide the paper strip all the way to the front end making sure it stays within the rails and ensuring the recorder stylus is on top of the strip.
5. Ensure drill is set to a sensitivity stage setting of 1 (for softwood). To set sensitivity, adjust the wheel at the rear of the instrument by pressing it in and rotating until it falls into the slot, then rotate the wheel to the number 1 setting as seen in Figure 4.

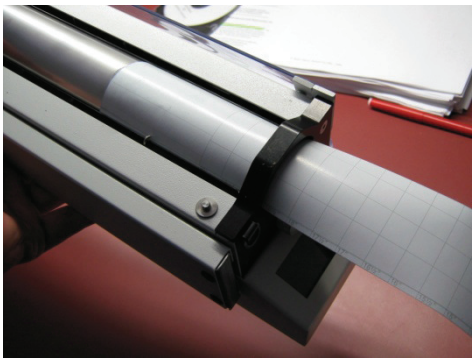


Figure 3 - Inserting Wax Strip

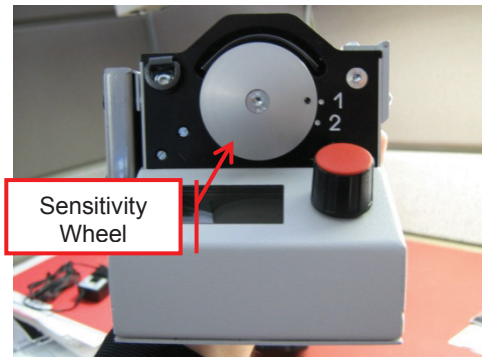


Figure 4 - Sensitivity Wheel

A.2 Operating the Instrument

1. Prepare the instrument as per section “Preparing the Instrument”
2. Prior to drilling, perform a 360° check of the pole to familiarize yourself with any hazards, including risers. If the pole has risers, see 5.4.2.

3. Place the front end of the instrument against the pole in the area of suspected decay. Adjust the drill so that it will drive the bit horizontally through the pole. If using the 45° adapter, place the face of the bit flat against the pole and keep the instrument in an upright position. Ensure that there are no obstructions, such as nails or wires, in the path of the measurement. Ensure your stability and apply enough pressure as to prevent the drill from backing out.

   NOTE: Avoid driving the bit directly into a crack in the pole or broken off section. Measure beside instead.
4. Ensure drill is in forward rotation and accelerate the drill to maximum speed.
5. Drive the drill until it either exits the opposite side of the pole or it reaches a maximum length of 508mm (20 inches), unless you are dealing with a riser pole, in which case stop short of exiting the pole, see 5.4.2.4.
6. Set the drill to reverse and retract the bit. As the bit gets close to being fully retracted, reduce the speed of the drill until the bit is fully retracted.
7. The wax paper strip can be used multiple times as a visual indication of the measurement being taken. To remove wax paper strip, open the plastic cover and bend the strip slightly so that it slides off the rails, then pull upwards.

A.3 Charging the Resistograph

1. Connect the batter charger to a standard 120 volt receptacle
2. There is also car charger available that connects to the 12 volt receptacle inside the vehicle.

A.4 Exchanging Drill Bits

1. Open plastic cover and remove wax paper strip if applicable.
2. Remove grey security sticker if applicable.
3. Set drill to forward rotation and advance the bit until the recorder stylus is lined up with the mark indicating “Exchange of drilling needle”.
4. Observe the opening that was uncovered by the sticker and advance/reverse the drill until a hex socket in revealed as seen in Figure 6.
5. Use the hex key supplied in the case to rotate the screw counter-clockwise (approx. 2 turns)
6. Pull the drill bit from the instrument and replace with a new bit.
7. Tighten the hex skew clockwise to secure the bit.
8. Replace security sticker and wax paper strip.

Figure 5 - 45 Degree Bit

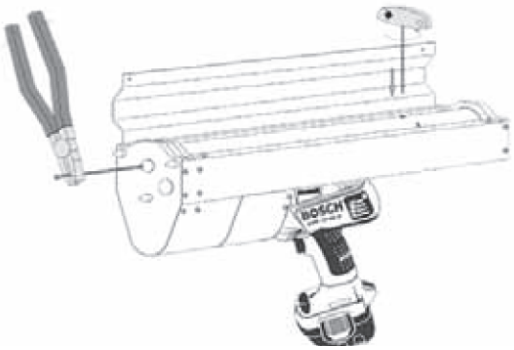


Figure 6 - Drill Bit Exchange

A.4 Wax Paper Results

Read results from the wax paper after doing a drill inspection. Record results as per section 4.4 – Damage and Groundline Assessment. Be sure to average the result of multiple drill tests on the same pole. Retain the wax paper and provide to Assets.

Interpreting Resistograph Results

The Resistograph produces quantitative record of the internal condition of wood poles. This data is subject to interpretation and takes experience to decipher. However, there are certain characteristics of the results which can create a basic understanding of the condition of the pole.

A summary of commonly encountered results can be found in the attached quick reference guide.

Sound Pole

The characteristics of a sound pole are the distinct rippling of the waveform, which indicate the growth rings of the pole, and its position on the graph. The waveform should be in approximately the middle of the vertical axis for the entire length of the pole with no sudden drops.

Dull Bit

As the drilling needle becomes dull the Resistograph drill becomes less sensitive to fine density changes.

Pole Quality

Lower pole quality that is density of wood and fibre strength are visible in measurement results. These differences can be the result of numerous factors, including age, preservative treatments, and origin and species of the wood.

45° Drilling

When drilling on a horizontal axis the output is at a 1:1 scale. Drilling on a 45° angle to determine the cross-sectional distance, multiplier 0.71 must be applied. One of the characteristics of data taken at a 45° angle is that the growth rings are less distinct and more elongated. The amplitude of the data should still be at approximately the middle of the vertical axis.

Crack

Cracks in the pole are evident by a sudden sharp drop off of the waveform. This sudden drop off is often very short in length and quickly returns back to the previous amplitude.

Internal Decay

Internal decay in a pole is evident by the gradual change in slope of the waveform due to the reduction in fibre strength. Advanced decay is shown by a resistance of 0 on the waveform which indicates a cavity in the pole.

Multiple Decay Pockets

Decay does not always mean a drop of 0 in resistance of the graph, as can be seen, but rather a drop in density relative to the rest of the pole.

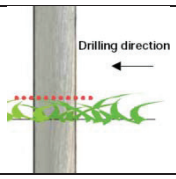
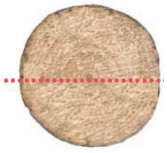
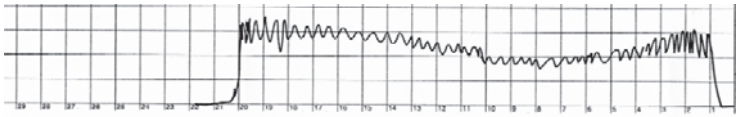
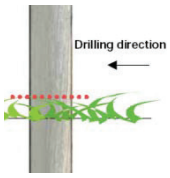
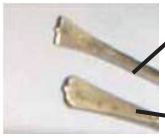
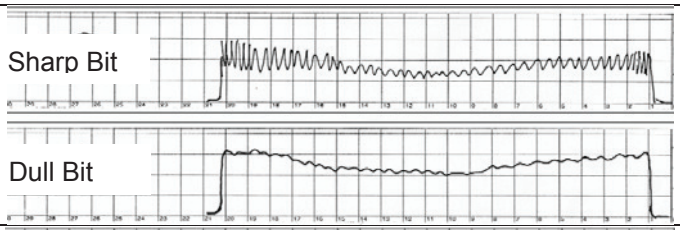
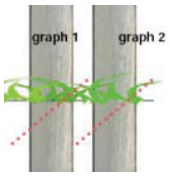
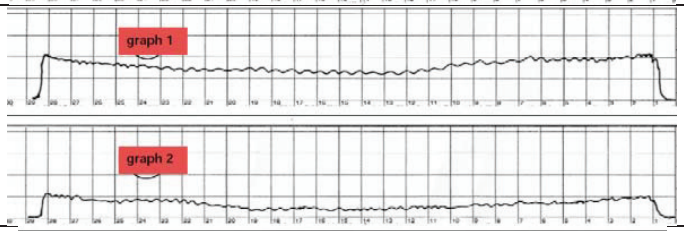
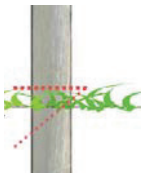
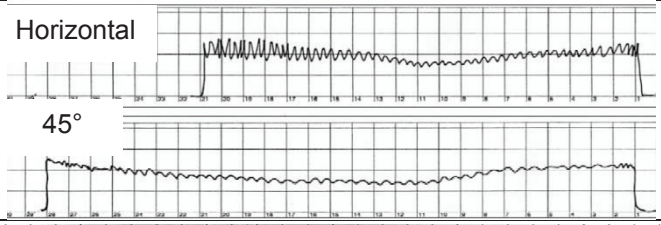
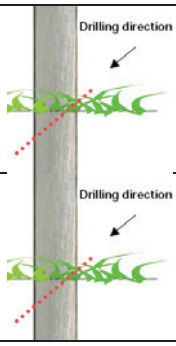
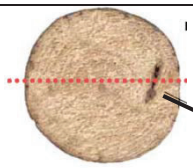
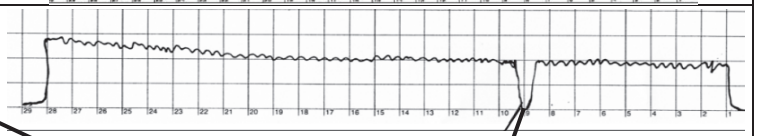
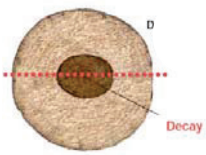
External Decay

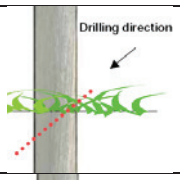
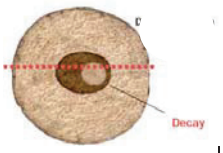
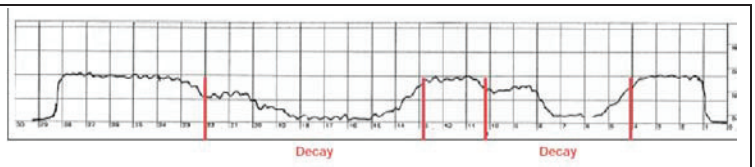
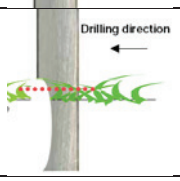
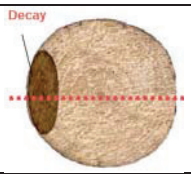
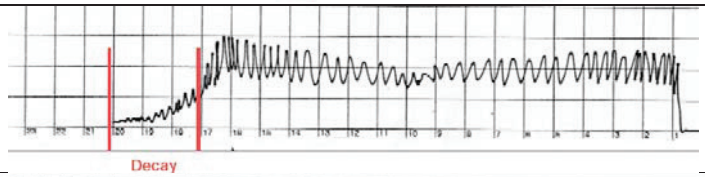
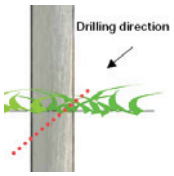
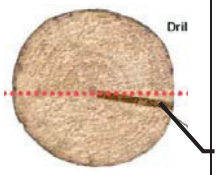
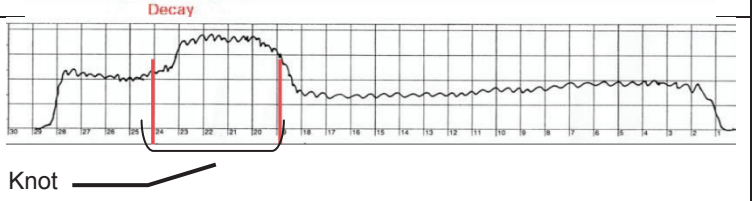
It's important to identify when there is decay on the side of the pole and not mistake it for the other side of the pole. Decay on the side of pole acts as it does when it occurs in the

centre. There will be a gradual decay of the resistance of the wood down to zero. Another clear indicator is that the length of the measurement is shorter than the actual diameter of the pole.

Knot

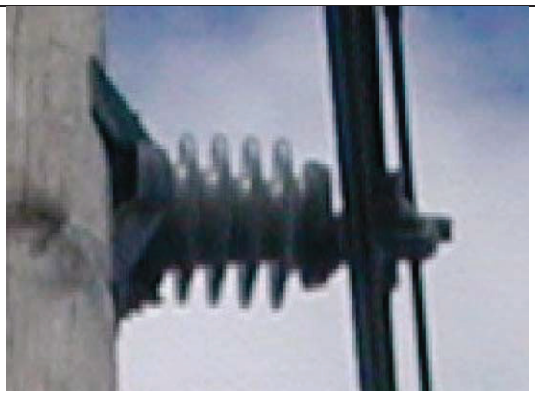
When the waveform suddenly increases from the average density in the middle of the pole it usually indicates a knot in the wood. Knots generally have a higher density than the surrounding wood.

Resistograph Interpretation Quick Reference			
Description	Direction	Cross Section/ Notes	IML Graph
Sound Pole			
Dull Bit			
Pole Quality		Quality differences can be due to: - Treatment - Growth and/or Origin - Age	
45° Drilling		Drilling with 45° adapter there is a 0.71 scale conversion factor.	
Crack			
Internal Decay			

Multiple Decay Pockets			
External Decay			
Knot			

Appendix B – Insulators

Several porcelain insulator types have been identified to have a history of issues, below is a pictorial summary to assist the inspector in the process of identification of these problem insulators.

<u>"Wart" Porcelain Insulators</u> These insulators are typically found on former Ottawa Hydro 15kV, as well as former Nepean Hydro 44kV and 8kV. These insulators have been found to be subjected to cracking, tracking as well as separating from the mounting bracket.	
<u>Porcelain Pin Insulators (Canadian Porcelain)</u> These insulators are found with variation in design on past Ontario Hydro Territory on the 8, 12.47, 28 and 44kV. These insulators have been found to be subject to random failure, in many cases the narrow tie lash at the top breaks free from the rest of the insulator.	
<u>Horizontal Installed Porcelain Pin</u> Very common across the service territory commonly on the 4kV and 8kV systems. To date they have only been found to cause problems when installed in a drop lead application. Problem locations have been primarily in former Nepean. They have been found to have cracking problems due to freeze-thaw cycle.	

<u>Ohio Brass Porcelain Insulator on Standoff Bracket</u> Is installed on all systems above 4kV. These insulators are prone to failure resulting in the conductor floating freely as well as partial fracture resulting in high leakage current.		

Schedule A

HydroOttawa

Only to be used in absence of Gmobile Inspector Tablet

Inspector: _____ Date: _____ Plot Boundary: ____ __ __ __ __

65 B 1 C 1

General Data								Attachements				Condition			Other								Testing					
Pole #	Species	Preservative	Treatment	Class	Age	Manufacturer	Height	Insulator Type	Inline Switch Type	Crossarm (G-F-B)	Transformer (G-F-B)	Pole Top (G-F-B)	Shell (G-F-B)	Woodpecker (G-F-B)	Loose/Broken Guying	Broken Ground	Lean/Twist/Broken	Fire/Lightning	Insects	Vegetation	Debris	SMD-20	Sound	Original Cir.	Measured Cir.	External Pocket	Internal Shell	Comments
															☐	☐	☐	☐	☐	☐	☐	☐						
															☐	☐	☐	☐	☐	☐	☐	☐						
															☐	☐	☐	☐	☐	☐	☐	☐						
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Report for

CEATI INTERNATIONAL Inc.
1010 Sherbrooke Street West, Suite 2500
Montreal, Quebec, Canada H3A 2R7
Website: www.ceati.com

DISTRIBUTION ASSETS LIFE CYCLE MANAGEMENT (DALCM) INTEREST GROUP

CEATI REPORT No. T104700-5095

DISTRIBUTION PLANNER'S MANUAL

Prepared by
Quanta Technology, LLC
Raleigh, North Carolina, USA

Principal Investigator
Julio Romero Aguero

Sponsored by

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Technical Advisors
David Laking
Frank Chan
Jerry Lepka

October 2013

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ABSTRACT

In 1982, the Canadian Electrical Association (CEA) published the Distribution Planner's Manual. This manual, which was primarily written by utility planners, contained 14 sections covering a variety of topics such as load forecasting, reliability evaluation and loss mitigation. While the information within the manual is still useful, plenty has changed since its original publication. The regulatory and business environments and customer expectations have evolved, new types of loads have emerged, and utilization of distributed generation, particularly of renewable technologies, is expanding rapidly. Similarly, there is growing utilization of distribution automation, and increasingly stringent reliability requirements, especially from customers with sensitive loads. Moreover, computers, communications, and control systems are pervasive, which provides distribution engineers access to abundant data and analysis capabilities via utility enterprise systems and planning software tools.

This manual has been updated to help address these numerous changes that continue to impact distribution planner's activities. The manual has been completely rewritten expanding the number of sections from 14 to 19. Some of the new topics in the manual include demand side management, impact of distributed energy resources, power quality, new types of load and smart distribution. The manual has also been expanded to elaborate on the theory of modern distribution planning and load forecasting, and consider a variety of aspects driven by the introduction of the Smart Grid concept. This manual is intended to be a reference source on utility practices that can be used by distribution planners at all experience levels.

Keywords:
Distribution System, Planning, Equipment, Substations, Forecasting, Voltage Control, Grounding, Maintenance, Data Management

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American Electric Power	OH	USA
ATCO Electric	AB	Canada
Ausgrid		Australia
BC Hydro Distribution	BC	Canada
Con Edison Inc.	NY	USA
Duke Energy Corporation		USA
Electricité de France	NC	France
ENERGEX		Australia
ENMAX Power Corporation		Canada
EPCOR	AB	Canada
Essential Energy		Australia
Exelon	IL	USA
FortisAlberta Inc.	AB	Canada
FortisBC Inc.	BC	Canada
FortisOntario Inc.	ON	Canada
Greater Sudbury Hydro Inc.	ON	Canada
Horizon Utilities	ON	Canada
Hydro One Networks Inc.	ON	Canada
Hydro Ottawa Limited	ON	Canada
Hydro-Quebec Distribution	QC	Canada
Manitoba Hydro	MH	Canada
National Grid	MA	USA
National Rural Electric Cooperative Association	VA	USA
New Brunswick Power	NB	Canada
Newfoundland Power Inc.	NL	Canada
Nova Scotia Power Inc.	NS	Canada
PowerStream	ON	Canada
Public Service Electric & Gas	NJ	USA
Puget Sound Energy	WA	USA
Saskatoon Light & Power	SK	Canada
SaskPower	SK	Canada
Seattle City Light	WA	USA
South Carolina Electric & Gas Company	SC	USA
Southern Company	AL	USA
Toronto Hydro-Electric System Ltd	ON	Canada
Wisconsin Public Service Corporation	WI	USA

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The maintenance approach selected by a company should be consistent with their overall objectives for budget, reliability, availability and utilization of distribution equipment. Regardless of the chosen maintenance program (time-based, RCM, CBM, RtF), there should be specific expectations in each of the operational metrics that will both drive the maintenance program and schedule, and be used as the measure of success. Also, as more regulatory requirements are placed on utilities to demonstrate the record of their maintenance efforts, a clear program definition and annual schedule should be maintained for review.

System capability to accurately track and maintain maintenance cost information on individual equipment, circuits or other categories, as defined by the user, is an obvious requirement for the measure of maintenance effectiveness. Benefits gained in system reliability, availability and utilization should be measured against the expenses incurred as part of the evaluation of the overall maintenance program. Also, proposed changes in maintenance programs, from time-based to reliability centered, for example, can only be evaluated and justified if data is available to measure the impacts, both financial and operational.

Because of the number of distribution facilities on any system, the maintenance program must be planned for maximum efficiency and effectiveness. As outlined earlier, preventive inspection and maintenance programs are often limited to poles and vegetation and some operating equipment (e.g., switches, sectionalizers) with all other equipment being managed as run-to-failure or until a problem is identified. The concept of reliability-centered maintenance is often used without being defined as such, for example, a worst performing feeder improvement program is a discrete example of reliability-centered maintenance activity. In an improvement program of this type, maintenance activity is focused on the equipment and components that can directly affect and improve the overall performance of the system. Considering the large number of widely dispersed facilities on a distribution system, this type of maintenance is both efficient and effective.

14.4.6 Equipment Failure Analytics

Effective maintenance management, regardless of the maintenance program used, is a data-driven process. Basic time based maintenance is dependent upon schedules and records of work performed on those schedules. RCM and CBM advance maintenance practices to more efficient and need-based actions, but these programs cannot be effective without well-managed data and data analytics. With the amount of information that can be collected and archived in a good maintenance program, there is the opportunity to perform more sophisticated analyses on the failure patterns of equipment.

Today, Weibull analysis is the leading method in the world for fitting and analyzing life data [217]. The Weibull distribution is one of the most widely used lifetime distributions in reliability engineering. The Weibull probability density function (PDF) can be used to model the probability of the time to failure of a component. Figure 14-5 shows the failure data of line insulators from a utility, and can be considered a discrete Weibull distribution.

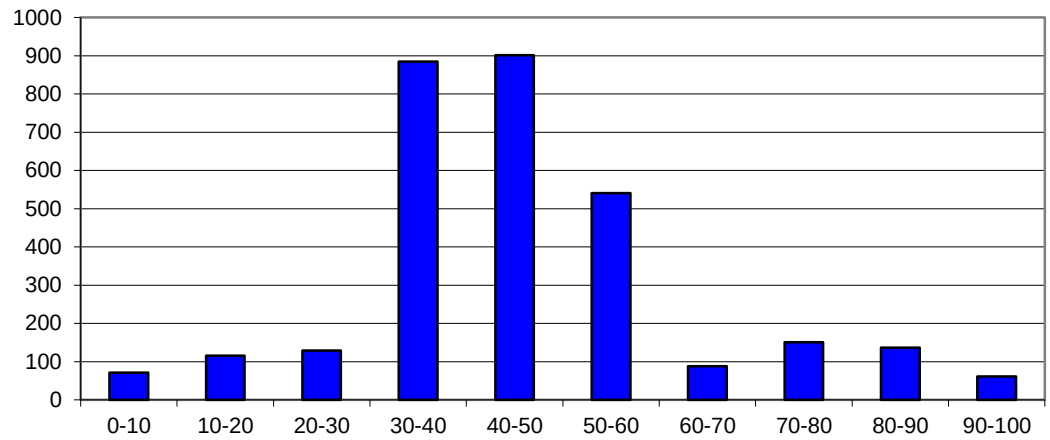


Figure 14-5 Number of Insulator Failures by Age at Time of Failure

This data set will be used as an example of Weibull analysis for determining the failure probabilities of a specific equipment population. Three basic functions are used in Weibull analysis:

- Cumulative distribution function (CDF): describes the probability that the random variable X takes on a value less than or equal to *x*.
- Reliability function (Survival Function): gives the probability of an item operating for a certain amount of time *t* without failure. Reliability is defined as the probability that a device will perform its intended function during a specified period of time under stated conditions.
- Failure rate: often denoted by λ, it is the frequency at which equipment fails. The failure rate of equipment usually depends on time, with the rate varying over the life cycle of the system. By calculating the failure rate for smaller and smaller intervals of time Δt, the hazard function, which is the instantaneous failure rate at any point in time, can be computed.

For the equipment failure distribution represented in Figure 14-5, the Weibull parameters are estimated as follows:

$\alpha = 2.76,\ \beta = 51.31$

$$f(x) = \begin{cases} \dfrac{\alpha}{\beta}\left(\dfrac{x}{\beta}\right)^{\alpha-1} e^{-\left(\frac{x}{\beta}\right)^{\alpha}}, & x \geq 0 \\ 0, & x < 0 \end{cases} = \begin{cases} \dfrac{2.76}{51.31}\left(\dfrac{x}{51.31}\right)^{1.76} e^{-\left(\frac{x}{51.31}\right)^{2.76}}, & x \geq 0 \\ 0, & x < 0 \end{cases}$$

Based on these parameters, the fitted Weibull probability density function and its corresponding survival curve (reliability curve) are shown in Figure 14-6.

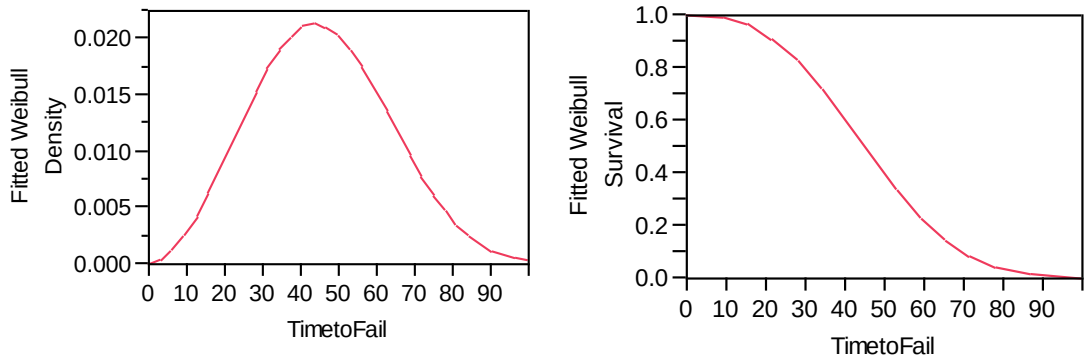


Figure 14-6 Fitted Weibull Probability Density and Survival Curve

The associated hazard function of this equipment population is shown in Figure 14-7.

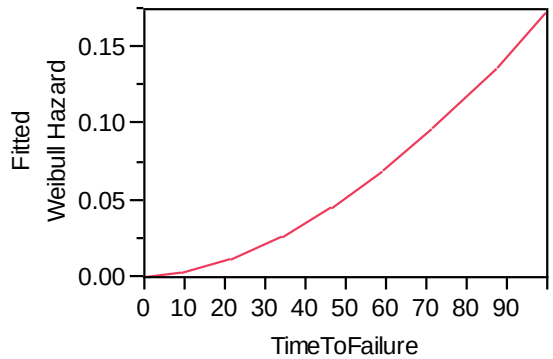


Figure 14-7 Fitted Weibull Hazard Function for Insulator Population

From this analysis, the fitted Weibull distribution indicates the typical failure rate of an insulator at age 70 is around 0.10 failures per year.

Weibull analysis or other statistical processes can be applied to maintenance data (inspection, failure, etc.) to provide a basis for management decisions on the need to replace components or equipment in a proactive manner. The development of a definition of "failure" is critical to the process, however. Obviously a component that is no longer functional is considered to be "failed". The end of life of a functional component, however, can be more problematic to define. The risk tolerance of the operations management is a key factor in making this determination. As with any maintenance program, the criteria established for the field personnel to make judgments on the condition of a component or piece of equipment must be clear and well-supported through analysis of life history of the class of equipment.

14.4.7 Maintenance of "Smart" Distribution Systems

Implementation of smart grid strategies for distribution systems introduces more dynamic operational capability to the system. Self-healing systems with automatic switching capabilities are an example of the dynamic reconfigurations that may occur through smart grid technology. The purpose of smart technology is of course to improve overall system utilization and reliability. In

Response to OEB Staff Interrogatory Question #18

Total References:

1. **Exhibit B Tab 1 Schedule 2 page 77 starting at line 10**
2. **Exhibit B Tab 1 Schedule 2 Figure 2.1.4.**
3. **Exhibit B1(A)**
4. ***OEB Chapter 5 Filing Requirements for Electricity Transmission and Distribution Applications*, Section 5.4.5.2 B**
5. **Exhibit B Part 1 Section 2.1.2.3 Project Prioritization**
6. **Exhibit B Part 2 Material Investments, System Service**
7. **Exhibit B Part 2 Material Investments, General Plant**
8. **Exhibit B Part 2 Material Investments General Plant Section 1.8 Prioritization**
9. **Exhibit B Part 2 Material Investments General Plant Section 5.6 Prioritization**
10. **Exhibit B Part 2 Material Investments General Plant Section 6.4 Prioritization**

Question 18:

2 Staff 18. Priority Setting

Prioritization Setting

References

1. Exhibit B Tab 1 Schedule 2 page 77 starting at line 10

2. Exhibit B Tab 1 Schedule 2 Figure 2.1.4.

3. Exhibit B1(A)

4. *OEB Chapter 5 Filing Requirements for Electricity Transmission and Distribution Applications*, Section 5.4.5.2 B

OEB staff is interested in details on setting priorities.

i. How are the criteria listed in Reference 4 and in the individual project summaries for material investments in Reference 3 factored into the priority setting described in section 2.1.2.3. in Reference 1?

ii. Please outline the process for developing the measure weightings in Reference 2.

<u>System Service and General Plant</u>

References

1. Exhibit B Part 1 Section 2.1.2.3 Project Prioritization

2. Exhibit B Part 2 Material Investments, System Service

3. Exhibit B Part 2 Material Investments, General Plant

4. Exhibit B Part 2 Material Investments General Plant Section 1.8 Prioritization

5. Exhibit B Part 2 Material Investments General Plant Section 5.6 Prioritization

6. Exhibit B Part 2 Material Investments General Plant Section 6.4 Prioritization

In Reference 1 Hydro Ottawa has described its method for project prioritization. In the material investment projects described in Reference 2 this method is used for System Renewal projects and some System Service projects; however it does not appear to be used for other System Service projects and is not used for any General Plant projects in Reference 3.

For material investment projects in References 4, 5 and 6 no priority has been assigned. Other projects in the General Plant category all have a priority of “high”.

i. Please explain how prioritization has been done for General Plant projects and for System Service projects such as Distribution Automation and SCADA Upgrade projects described in Reference 2 and 3 with respect to the method described in Reference 1.

ii. Please explain how System Service prioritizations for Distribution Automation and SCADA Upgrade projects described in Reference 2 relate to the prioritizations of other projects in the System Service category

iii. How were decisions made about which material investment projects were included in the General Plant category, and were any other material investment projects not included in this category?

Response:

Prioritization Setting

Part i

Hydro Ottawa Limited uses the applicable criteria set forth by the Ontario Energy Board in the *OEB Chapter 5 Filing Requirements for Electricity Transmission and Distribution Applications*, Section 5.4.5.2 B when determining project value in order to create a prioritized list. This criteria includes impact on customer reliability, concerns regarding health and safety, environmental concerns, OM&A cost savings and efficiencies, enabling distributed generation and ability to service customer demand. These benefits and risks are then compared to the project's cost in order to prioritize projects with the most value. For more detail regarding Hydro Ottawa Limited's Asset Management Process please see Exhibit B-1-2 Section 2.1.2 Asset Management Process Components.

Part ii

Please see Interrogatory Response to OEB #16 part ix.

System Service & General Plant

Part i

General Plant

The General Plant investments have a different nature than System Renewal and System Service; therefore, did not run though the Prioritization process as described in Reference 1. They are prioritized based on the corporate guidelines reference Exhibit A-2-1 p.9 and Attachment D-1(A) – Budget Memo. The guiding principles mainly focus on safe and reliable service to the customers. They are also prioritized based on the

corporate priorities including Customer Value, Financial Strength, Organizational Effectiveness, and Corporate Citizenship.

System Service

The System Service projects for Distribution Automation and the SCADA Upgrade investments did not run through the Prioritization process as described in Reference 1. These two investments were considered to be critical infrastructure investments that provide the backbone systems required to support many future investments and data requirements to drive improved decision making processes. As such, it was determined there was a need to make an investment and the plans for options were evaluated and timing considered in line with other system needs.

Please also see:

Interrogatory Response to OEB # 15 part ix and Interrogatory Response to OEB # 15 part v

Part ii

Please see Interrogatory Response to OEB #18 part i.

Part iii

The material investment projects were included in the four investment categories per the OEB guidelines and descriptions Table 2.1.1 of the updated DSP Exhibit B-1-2. All of the material investment projects that exceeded the threshold have been included.

Response to OEB Staff Interrogatory Question #19

Total References:

1. Appendix 2-BA-FA Fixed Asset Continuity 2014

2. Exhibit B Tab 2 Schedule 1 page 1

3. Exhibit A – Tab 4 – Schedule 7 – page 1

Question 19:

2 Staff 19. IFRS Transition

References

1. Appendix 2-BA-FA Fixed Asset Continuity 2014

2. Exhibit B Tab 2 Schedule 1 page 1

3. Exhibit A – Tab 4 – Schedule 7 – page 1

On the fixed asset continuity schedule for 2015, Hydro Ottawa booked an adjustment related to IFRS.

Cost Adjustment	$113,527,137
Accumulated depreciation Adjustment	($114,029,619)
Net Adjustment	$502,481

The net adjustment is discussed Reference 2

For purposes of the prior rate order (EB-2011-0054), Hydro Ottawa's rate base was calculated under MIFRS. Therefore, our expectation is that no further adjustments between GAAP under Parts V (CGAAP) and Part I (IFRS) of the CPA Handbook would be required.

i. Please explain why this adjustment was made. Please provide justification for making this adjustment.

ii. Please calculate a rate rider to return this amount plus the weighted average cost of capital back to the customers.

Response:

i. In the 2012 rate application (EB-2011-0054), Hydro Ottawa converted to MIFRS and the rate base was calculated under MIFRS. At the time of filing, it was anticipated that external financial reporting would align with regulatory reporting, however a late deferral was issued by the Canadian Accounting Standards Board ("AcSB") following the International Accounting Standards Board ("IASB") announcement in December 2012 and Hydro Ottawa decided to defer the IFRS adoption for its external financial reporting to fiscal year 2015.

As a result, the opening balance sheet date used in the 2012 rate application was January 1, 2011, however the actual opening balance sheet date for external financial reporting is January 1, 2014. Although many of the same changes under IFRS were incorporated in the Canadian Generally Accepted Accounting Principles ("CGAAP") books and records, these changes were only done as of January 1, 2012. This created a one year adoption differential in many of the changes (useful lives and burden rates).

Upon transition to IFRS, Hydro Ottawa's opening rate base at January 1, 2014 was reduced by the opening accumulated depreciation amount of $114M, this is the same adjustment (different amounts) that was approved in the 2012 application whereby the accumulated depreciation balance is cleared to zero upon the opening balance sheet date. The $114M represents the three additional years of depreciation accumulated between the two opening balance sheet dates.

The $502k represents the unamortized portion of the differences between MIFRS and CGAAP between 2011-2013, stemming from the different burdens and useful lives during 2011.

This adjustment is necessary to reduce the administrative burden of maintaining two sets of fixed assets ledgers and associated audit costs – one for regulatory reporting and one for external financial reporting.

ii. The $502k is not an amount to be returned to customers but an amount to be collected from customers. Hydro Ottawa is proposing to adjust its rate base, as at January 1, 2014, by $502k. The $502k represents capital assets not previously added to rate base during the transition to MIFRS, as outlined in part i above. Therefore Hydro Ottawa is proposing to add the amount to rate base on January 1, 2014 and depreciate the assets over their useful lives. As such Hydro Ottawa has not calculated a rate rider to calculate the recovery from our customers, recovering the $502K from customers over the remaining lives of the assets will have less of an immediate impact on rates. Hydro Ottawa has not asked to recover the “lost” depreciation in years 2011-2015.

Response to OEB Staff Interrogatory Question #20

Total References:

1. **Exhibit C Tab 1 Schedule 2 Attachment C-1(A)**

Question 20:

3 Staff 20. Load Forecast Model

Reference

Exhibit C Tab 1 Schedule 2 Attachment C-1(A)

In the Reference, Figure 5 compares monthly system sales, against an economic index (weighted GDP and Population), an efficiency index (weighted residential and commercial energy intensity), and a combination of the economic and efficiency index (Base Use). It is difficult to discern any trend in monthly system sales due to the seasonal oscillations.

i. Please add a plot of the rolling 12 month average monthly system sales.

In Section 3 Forecast Methodology a series of plots for each rate class is provided which shows the fit between the plot of actual class sales and predicted sales.

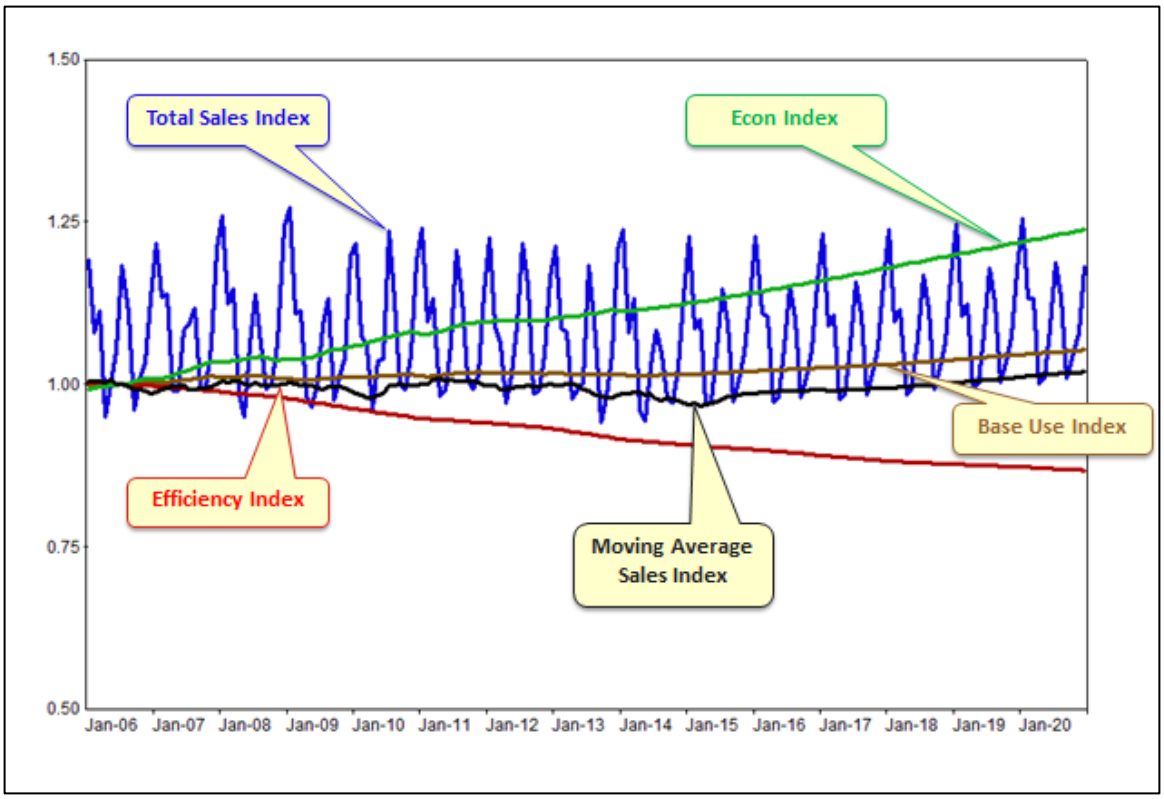
ii. Please provide tables showing actual sales, predicted sales, the kWh difference by year, and the percent difference by year. Please proved totals for each.

Response:

Itron assisted Hydro Ottawa Limited in the preparation of this response.

i) Figure 1 to this response is an updated Figure 5 from Itron's report, attachment C-1(A) of Exhibit C-1-1, to include an additional line indicating the rolling 12 month average monthly system sales.

Figure 1 - Indexed System Energy and Model Drivers



ii) Actual and predicted rate class annual sales are included as attachment Att-OEB-Q20-A.

Response to OEB Staff Interrogatory Question #21

Total References:

1. **Exhibit H, Tab 7, Schedule 1, Page 4**
2. **Attachment H-7(A)**
3. **2006 Electricity Distribution Rate Handbook**
4. **Exhibit H, Tab 7, Schedule 1, Page 5**
5. **Attachment H-7(A)**
6. ***2006 Electricity Distribution Rate Handbook***
7. **Exhibit H, Tab 7, Schedule 1, Page 5,**
8. **Attachment H-7(A)**
9. **Exhibit H, Tab 7, Schedule 1, Page 7,**
10. **Attachment H-7(A)**
11. **Exhibit H, Tab 7, Schedule 1, Page 6**
12. **Exhibit H, Tab 7, Schedule 1, Page 6**

Question 21:

3 Staff 21. Specific Service Charges

Special Billing Service (formerly Request for other Billing Information)

References

1. **Exhibit H, Tab 7, Schedule 1, Page 4**
2. **Attachment H-7(A)**
3. **2006 Electricity Distribution Rate Handbook**

The proposed charge is based on Hydro Ottawa's work for others hourly rate of $95.00. In the establishment of the default Specific Service Charges in Chapter 11 in Reference 3, the following hourly rates were used:

Direct Labour inside staff	$23.00
Direct Labour field staff	$27.00
Direct Labour field staff overtime	$27.00 with a 2 hour minimum

Payroll Burden	30%

The calculation of the rate was based on 0.4 hours.

i. Please provide Hydro Ottawa's current equivalent hourly rates to the ones used in Reference 3.

ii. Please provide the basis and calculations for the work for others hourly rate of $95.00.

iii. Please provide the rationale and explicit data to support the use of a one hour minimum for this charge.

iv. The description of the proposed charge implies that the work done in providing the requested information is done by inside staff. In Reference 2 the establishment of the charge shows the rate for labour component does not vary for inside or outside labour. Please explain the determination $95.00 for Direct Labour, regardless of inside or field staff.

<u>Temporary Service</u>

References

1. Exhibit H, Tab 7, Schedule 1, Page 5

2. Attachment H-7(A)

3. *2006 Electricity Distribution Rate Handbook*

In the establishment of the default Specific Service Charges in Chapter 11 in Reference 3, the following hourly rates were used:

Direct Labour inside staff	$23.00
Direct Labour field staff	$27.00
Direct Labour field staff overtime	$27.00 with a 2 hour minimum
Payroll Burden	30%
Small Vehicle Time	$10.00
Large Vehicle Time	$42.00

Hydro Ottawa has used different hour estimates in Reference 2 for the three temporary services Hydro Ottawa has proposed to change; overhead & no transformer, underground & no transformer, and overhead and transformer.

v. Given the differences between the hours used in the Rate Handbook and the hours used in Hydro Ottawa`s calculations for all three charges, please confirm that the proposed charges cover both the installation and removal of the temporary service (i.e. the charge is only applied once).

vi. Given the differences between the material costs used in Reference 3 and the costs used in Hydro Ottawa`s calculations for all three charges, please provide a detailed breakdown of the material costs.

<u>Access to Power Poles</u>

References

1. Exhibit H, Tab 7, Schedule 1, Page 5,

2. Attachment H-7(A)

3. in Reference 3

Hydro Ottawa is proposing to increase the rate for attachments to utility poles from $22.35 to $57.00.

vii. In Reference 2, it indicates that there are 35,663 poles with attachments. Please provide the calculations to show that the number of third party attachers is 2.

viii. In Reference 2, no use of the number of third party attachers (2) is made in the Direct Costs section, as used in Reference 3 that established the original pole attachment charge. Please explain.

ix. Please provide supporting calculations and any necessary explanations for each of the components of the Indirect Costs section.

x. Given the magnitude of the proposed increase in this charge, please discuss whether or not Hydro Ottawa has considered phasing in the proposed increase over the period of the application. Please explain why Hydro Ottawa decided not to adopt this approach.

xi. If Hydro Ottawa has not considered phasing in the proposed increase, please provide Hydro Ottawa's views on such an approach, including potential options for implementing a phase in period that would be appropriate for the custom IR application that Hydro Ottawa has filed, while maintaining revenue offset benefits to load customers.

<u>High Bill Investigation Charge</u>

Reference

1. Exhibit H, Tab 7, Schedule 1, Page 7,

2. Attachment H-7(A)

The level of the proposed charge shown in Reference 1, Table 2 for 2016 is $213, whereas, the table outlining the determination in Reference 2 of the charge shows $212.

xii. Please explain the difference.

<u>Revised Retail Service Charges</u>

Reference

Exhibit H, Tab 7, Schedule 1, Page 6

Hydro Ottawa states: "A detailed review and analysis of costs associated with serving this market has resulted in modest adjustments for each of the years 2016 through 2020.

xiii. Please provide the referenced "detailed review and analysis of costs associated with serving this market".

xiv. Please provide the rationale for the proposed level of rates for 2016 to 2020.

<u>Revised Generator Charges</u>

Reference

Exhibit H, Tab 7, Schedule 1, Page 6

The description of the existing microFIT Classification is standard across all distributors. No reference is made to "Micro-Net Metering".

xv. Please explain what this Micro-Net Metering terminology refers to and why Hydro Ottawa proposes to add this service to the microFIT classification.

xvi. Please explain why this should not be on the Tariff Sheet as a rate.

The usual practice among distributors with regard to dealing with FIT and other Energy Resource Facilities is to classify them into the equivalent load classifications and apply the applicable distribution charges as appropriate.

xvii. Please explain why Hydro Ottawa proposes to establish two new classifications rather than following the general practice.

Response:

Special Billing Service (formerly Request for other Billing Information)

i. Please see Table 1 below; however, note that the rates are not comparable as one is a 2006 rate and the other is a 2016 rate:

Table 1: Comparison of Hydro Ottawa's 2016 Direct Labour Rates to the 2006 Electricity Distribution Rate Handbook

	2006 Electricity Rate Handbook	2016 Hydro Ottawa Rate
Direct Labour (inside staff) Straight Time	$23.00	$52.00
Direct Labour (field staff) Straight Time	$27.00	$61.00
Direct Labour (field staff) Overtime	$27.00	(Note 1)
Payroll Burden %	30%	20% (Note 2)

Note 1: Hydro Ottawa's overtime rate is twice the hourly wage of the employee.

Note 2: Payroll burden includes the statutory benefit (CPP, EI, Ontario Health Tax, WSIB) and the employment benefit, per the collective agreement (OMERS, Health, Dental, Life Insurance, and LTD).

ii. The work for others hourly rate of $95.00 is comprised of the following:

- Direct labour costs including salary and payroll burden.
- Direct OM&A and Corporate Allocation include safety clothing and equipment, small tools, radio/mobile phone, training, direct supervision, and corporate support such as HR services, IT infrastructure, and facilities.

Table 2 below summarizes these components:

Table 2: Labour Rate Calculation

Direct Labour	$72
Direct OM&A & Corporate Allocations	$23
Labour Rate	$95

iii. The one-hour minimum charge is intended to recover the upfront costs associated with processing, assessing and, often, engaging various functions in sourcing the requested billing information. Regardless of the timeframe required to complete the request, the proposed one-hour minimum was established to recover the costs inherent with triaging billing information service requests. Hydro Ottawa provides other means for the customer to receive this data. Examples include MyHydroLink and a web portal option for interval-metered customers.

For billing and meter data information requests which cannot be managed through the aforementioned service offerings, or, if the customer prefers not to use those services, the proposed special billing service charge would be applied to recover the associated costs from those parties who benefit. Often the

requests associated with this proposed service charge are received from third-parties who are providing billing analysis services to Hydro Ottawa's customers.

iv. Hydro Ottawa is applying the same hourly rate of $95.00 for both inside and outside staff. The components to calculate the rate varies. For example, the direct labour portion for inside staff is lower than outside staff; however the direct OM&A and Corporate Allocations are higher. The amount allocated for facilities is higher for inside staff as they occupy more square footage, as well as, the amount allocated for IT infrastructure is higher due to the nature of the inside versus outside work. The administration costs are minimized by maintaining one single rate for billing.

Temporary Service

v. It is confirmed that the three proposed charges for basic temporary service covers both the installation and removal of the basic temporary service.

vi. The 2016 material costs are part of the total Basic Temporary Service Charges shown in table EB-2015-0004, Exhibit H, Tab 7, Schedule 1, page 3 of 10. The breakdown of the material costs for each Temporary Service Charge scenario are provided in Table 3, below:

Table 3 – Temporary Service Material Costs

Temporary Service Install and Remove – Overhead, No Transformer	$
Materials:	
AL OH 1/0 triplex 300V (on average 30 metres)	197
1 PH 200A Meter	93
Miscellaneous hardware	34
Total Materials	324
Temporary Service Install and Remove – Underground, No Transformer	
Materials:	
AL UH 3/0 triplex 300V (on average 30 metres)	261
1 PH 200A Meter	93
Press on Lugs	54
Miscellaneous hardware	39

Total Materials	447
Temporary Service Install and Remove – Underground, No Transformer	
Materials:	
AL UH 3/0 triplex 300V (on average 30 metres)	197
1 PH 200A Meter	93
50KVA OH 1PH 120/240V transformer	1,152
Miscellaneous hardware	453
Total Materials	1,895

Access to Power Poles

vii. Please see Interrogatory Response to Carriers Question #4.

viii. Please see Interrogatory Response to Allstream Question #1.

ix. Indirect Costs represent Hydro Ottawa's fixed costs associated with pole ownership and maintenance. Hydro Ottawa incurs these costs whether or not third party attachments are present on its poles. The Indirect Cost components include Average Net Embedded Cost per Pole; Depreciation Expense; Pole Maintenance Expense and Capital Carrying Costs. For detailed calculations of each of the above Indirect Cost components, please see Interrogatory Response to Carriers, Questions #6, #8, #11 and #10, respectively.

x. The proposed specific charge best represent the costs that should be attributed to 3rd party pole attachments and its users. Under the current OEB approved rate of $22.35, any revenue shortfall is recovered through the rate base. Hydro Ottawa has not proposed a phased-in rate so that cross subsidization of 3rd party attachers does not persist in the rate base.

xi. Please see Interrogatory response to OEB Staff Question #21 part x.

High Bill Investigation Charge

xii. The difference is due to a typing error in Reference 1, Table 2. The correct rate is $212, as calculated in Reference 2.

Revised Retail Service Charges

xiii. During Hydro Ottawa's detailed review and analysis of retail service charges it became evident that the rates could not support the full cost of the service. As a result, Hydro Ottawa did not compile the review and analysis data in a presentable format.

xiv. As noted in part xiii. Hydro Ottawa determined the retail service rates could not support the full cost of the service. Hydro Ottawa chose to increase the rates based on an inflationary rate so that the rates would increase as cost drivers increased, up to this point the rates had remained the same since 2002.

Revised Generator Charges

xv. Micro-Net Metering refers to an Energy Resource Facility (ERF) that is less than 10KW and does not have a provincial energy purchase contract. Hydro Ottawa proposes to add this service to the MicroFIT classification, as it meets the technical requirements of a Micro-FIT generator. Further, as stated in Hydro Ottawa's Conditions of Service, Version 5, there is an implied agreement between the distributor and the ERF customer that does not have a provincial energy purchase contract.

xvi. Please refer to Exhibit H-10-1, Attachment 2-Z Proposed Tariff of Rates and Charges for each year on page 10.

xvii. These generators are not a typical customer in terms of the services required and provided. The proposed additional classifications are consistent with the rationale applied in creating the existing MicroFIT classification.

Response to OEB Staff Interrogatory Question #22

Total References:

1. **Exhibit D Tab 1 Schedule 3**

Question 22:

4 Staff 22. Cost Drivers

Reference

Exhibit D Tab 1 Schedule 3

Hydro Ottawa's OM&A has increased $14.0 million in or 19.2% in four years. That is a cumulative average growth rate (CAGR) of 4.8% per year. Hydro Ottawa is also proposing to index its OM&A for 2015 – 2020 using the I-X proposal of 3.24%. OEB staff notes that both historical and proposed increases are above average inflation.

i. Table 2 indicates that salary and wages have a CGAR of 4.0% representing a $8.4 million increase, and Benefits have a CGAR of 5.3% representing a $2.7 million increase since the last Board approved budget. What steps is Hydro Ottawa taking to significantly reduce these increases for 2016 – 2020?

ii. Underground locates costs are increasing significantly since 2012. While the number of locates is also increase, the $/locate continues to increase. What is Hydro Ottawa doing to build in more efficiencies and productivity?

iii. Bad debt is increasing at a CGAR of 8.4% over the past four years. What programmes or actions is Hydro One planning for the 2016 – 2020 period to better control bad debt.

Response:

i. As indicated in Exhibit D-1-3, Page 3, Hydro Ottawa has taken several proactive measures to reduce CGAR increases relating to salary and wages and benefits for 2016-2020. These proactive measures are further detailed as follows:

- In Exhibit D-1-7, which includes hiring principles (Page 10) leading to the adoption of a flat headcount by constraining workforce hiring and replacement from 2014-2020, in addition to strategic talent deployment initiatives (Page 14) that will rationalize work.

- In Exhibit D-1-8, which details Hydro Ottawa's approach to contain compensation costs by increasing its usage of temporary workers to address seasonal and other fluctuations in labour demand, in addition to offsets expected from reduced benefits premiums as noted in Exhibit D-1-3, Page 3.

- In Exhibit D-1-4, which outlines the historical and forward looking productivity initiatives that will enable a flat headcount and the constraint of associated costs.

ii. Hydro Ottawa is currently taking a number of measures to ensure efficient and productive provision of locates. These activities are summarized in the three key items below.

1. Member of Locate Alliance Consortium ("LAC")
   Hydro Ottawa is an active member of LAC "a group of infrastructure owners working towards a cost efficient locate process with standardized terms and conditions and consistent quality and outcomes" [1]. LAC infrastructure owners use a consortium approach to purchase locates, which results in cost control through the following means.

a. Rather than each infrastructure owner sending a representative to an excavation site to provide locates, one locate service provider provides locates for multiple infrastructure owners during one trip to an excavation site, resulting in efficiencies in dispatching and performing locates.

b. Standardized locate processes and forms amongst infrastructure owners result in more efficient delivery of service. Standardized locate forms for excavators reduce the likelihood if misinterpretation of the locate, thus reducing damage to infrastructure during excavation.

c. The consortium purchase approach for contract negotiations with one locate provider for multiple infrastructure owners works similar to bulk-buying, resulting in lower prices.

2. Evaluating Implementation of Alternate Locate Agreement ("ALA")

Hydro Ottawa is in the process of evaluating the ALA model as an alternative to traditional locates in select situations. Under an ALA, an excavator is given permission by an infrastructure owner to excavate using specified methods, in specified situations, without obtaining a physical locate or records check. Hydro Ottawa is in the process of gathering information from other infrastructure owners on their experiences with ALAs, and determining which, if any situations/excavators could be entered into an ALA without detrimentally impacting public and worker safety, and risk to the condition of Hydro Ottawa's infrastructure.

The application of the ALA model is accepted by Ontario One Call and used by infrastructure owners and excavators in the province. Any ALAs that are entered into would still incur the Ontario One Call fee, but eliminate the cost of providing the physical locate for each request.

3. Evaluation of use of Look Ups

When an excavator contacts Ontario One Call an electronic request is forwarded to Hydro Ottawa's Locate Service Provider ("LSP"). The LSP office staff review maps of the location to determine if there is Hydro Ottawa underground infrastructure in the locate area (referred to as an "look-up").

a. If there is underground infrastructure in the locate area, the request is dispatched to a locator who physically performs the locate and delivers paper or electronic records to the excavator. Each locate request may result in one or more locate billing units, depending on the scope of the excavation.

b. If there is no underground infrastructure in the location, office staff forward paperwork to the excavator indicating the locate area is clear of Hydro Ottawa underground infrastructure (referred to as an "office clear").

The benefit of the look-up process is reduced locator workload, which results in cost savings to Hydro Ottawa by way of a smaller charge for a look-up that results in an office-clear than the charge per locate billing unit.

To assist with managing locates, the LSP has divided the City of Ottawa into many geographic areas. In the past seven areas were identified where the look-up process described above is skipped, due to the congestion of underground infrastructure which would lead to very few, if any, office clears. In these cases the requests are dispatched directly to the locator.

The LSP has proposed that additional areas be added to the list of areas that skip the look-up process and are dispatched directly to a locator. These areas were identified by reviewing the percentage of office clears identified in the first 5 1/2 months of 2015. Those areas with office clears totaling less than 5% of total requests would provide cost savings to Hydro Ottawa by

eliminating the look-up charges, reduce administrative work performed by the LSP, and would result in an insignificant workload increase for the locators.

On June 25, 2015 Hydro Ottawa requested the LSP include additional areas to be directly dispatched and therefore eliminating the look up fee for locates provided in those locations. The LSP and Ontario One Call are working to implement the changes. Total cost savings are challenging to predict, based on the demand nature of locate requests, but are estimated to be in the range of $100k.

iii. Since the spike in 2013, Hydro Ottawa has put in place a number of measures and process changes to manage the Bad debt cost. The residential and small commercial rate classes account for a large percentage of our bad debt cost. In 2014, we have transitioned these customer rate classes from bi-monthly to monthly billing. Combined they make up 99% of our total customers. Additionally, we have also reduced the number of days for referrals of unpaid final bills to collection agencies from 90 to 38 days. Our account set-up process has been reviewed and strengthened to ensure that we collect the appropriate information from our customers enabling us to track moves within our service territory. Some additional functional enhancements have been implemented such as landlord agreements and special rules for arrears payment management. There are also considerations underway regarding potentially reinstating our residential deposit requirement which we had put on moratorium in 2011. The implementation of the Ontario Electricity Support Program should contribute positively to manage the bad debt risk for low income customers.

[1] http://locatealliance.com/

Response to OEB Staff Interrogatory Question #23

Total References:

1. **Appendix 2-K (Exhibit D-1-8)**

Question 23:

4 Staff 23. Staffing, Wages and Benefits

References

Appendix 2-K

Hydro Ottawa has not provided detail of employee costs for 2017 – 2020.

i. Please complete Appendix 2-K Employee Costs for the years 2017 – 2020.

Response:

i. Appendix 2-K, Employee Costs to 2020 has been updated to include only forecasts of total FTEs and total compensation for 2017 to 2020. Please refer to Attachment Att-OEB-Q23-A_Chapter_2_Appendicies_2-K_Employee Costs. These forecasts reflect Hydro Ottawa's plan to continue stabilizing its workforce throughout the 2017 to 2020 period as outlined in Exhibit D, Tab 1, Schedule 8, Page 10. The total FTE and total compensation forecasts will be achieved through the measures outlined in response to OEB Staff Interrogatory Question #22.

Response to OEB Staff Interrogatory Question #24

Total References:

1. **Appendix 2-M (Exhibit D-2-4)**

Question 24:

4 Staff 24. Regulatory Costs

Reference

Appendix 2-M

Hydro Ottawa is proposing a custom IR that will have a regulatory burden due to annual updates. No forecast of regulatory costs is provided.

i. Please complete Appendix 2-M Regulatory Costs for the years 2017 – 2020.

Response:

As stated in Exhibit D-2-4, all of Hydro Ottawa's Regulatory Costs are considered on-going costs. Since Hydro Ottawa applies an escalation factor to OM&A expenditures for the 2017-2020 rate period (see Exhibit D-1-1), the Regulatory Costs will be managed within this envelope.

Response to OEB Staff Interrogatory Question #25

Total References:

1. **2016 PILs Workform (Exhibit D-4-1)**

Question 24:

4 Staff 25. PILS Model

Reference

2016 PILs Workform

Hydro Ottawa is forecasting tax losses for 2014 and 2015. The total losses are $8 million. ($497,799 and $7,517,675). The benefit of the $8 million of losses does not seem to be reflected in the PILs calculation.

i. In what year will Hydro Ottawa use these non-capital losses to reduce taxable income?

Response:

For the 2014 tax year, the actual taxable income was $1,027,371, so the forecasted loss for tax purposes did not occur. See Attachment 'ATT-OEB-Q25-A_HOL 2014 tax return final REDACTED' for Hydro Ottawa Limited's 2014 tax return and see Attachment 'ATT-OEB-Q25-B_HOL 2014 tax return final AMENDED' for Hydro Ottawa Limited's 2014 AMENDED tax return.

The taxable loss for 2015 is forecasted to be ~$7.5 million. The tax legislation allows taxable losses to be a carry back against taxable income of the three preceding tax years and carry forward for twenty years. Prudent tax management prescribes that taxable losses should be carried back against preceding taxable income before carry

forwarding any taxable losses for future tax years. As such, Hydro Ottawa Limited intends to carry back the 2015 taxable loss against the taxable income of the 2012 tax year.

Canada Revenue Agency / Agence du revenu du Canada

PIL FILING

T2 Corporation Income Tax Return

200

This form serves as a federal, provincial, and territorial corporation income tax return, unless the corporation is located in Quebec or Alberta. If the corporation is located in one of these provinces, you have to file a separate provincial corporation return.

All legislative references on this return are to the federal *Income Tax Act* and *Income Tax Regulations*. This return may contain changes that had not yet become law at the time of publication.

Send one completed copy of this return, including schedules and the *General Index of Financial Information* (GIFI), to your tax centre or tax services office. You have to file the return within six months after the end of the corporation's tax year.

For more information see **www.cra.gc.ca** or Guide T4012, *T2 Corporation – Income Tax Guide*.

055 **Do not use this area**

Identification

Business number (BN) 001 86339 1363 RC0001

Corporation's name
002 Hydro Ottawa Limited

Address of head office
Has this address changed since the last time we were notified? . . . . . 010 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 011 to 018.)
011 3025 Albion Road North
012 P.O. Box 8700
City: 015 Ottawa
Province, territory, or state: 016 ON
Country (other than Canada): 017
Postal code/Zip code: 018 K1G 3S4

Mailing address (if different from head office address)
Has this address changed since the last time we were notified? . . . . . 020 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 021 to 028.)
021 c/o
022
023
City: 025
Province, territory, or state: 026
Country (other than Canada): 027
Postal code/Zip code: 028

Location of books and records (if different from head office address)
Has the location of books and records changed since the last time we were notified? . . . . . 030 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 031 to 038.)
031
032
City: 035
Province,territory, or state: 036
Country (other than Canada): 037
Postal code/Zip code: 038

040 **Type of corporation at the end of the tax year**

1 ☒ Canadian-controlled private corporation (CCPC)
2 ☐ Other private corporation
3 ☐ Public corporation
4 ☐ Corporation controlled by a public corporation
5 ☐ Other corporation (specify, below)

If the type of corporation changed during the tax year, provide the effective date of the change . . . . . 043 _____ YYYY MM DD

To which tax year does this return apply?
Tax year start: 060 2014-01-01 YYYY MM DD
Tax year-end: 061 2014-12-31 YYYY MM DD

Has there been an acquisition of control to which subsection 249(4) applies since the tax year start on line 060? . . . . . 063 1 Yes ☐ 2 No ☒
If **yes**, provide the date control was acquired . . . . . 065 _____ YYYY MM DD

Is the date on line 061 a deemed tax year-end according to subsection 249(3.1)? . . . . . 066 1 Yes ☐ 2 No ☒

Is the corporation a professional corporation that is a member of a partnership? . . . . . 067 1 Yes ☐ 2 No ☒

Is this the first year of filing after:
Incorporation? . . . . . 070 1 Yes ☐ 2 No ☒
Amalgamation? . . . . . 071 1 Yes ☐ 2 No ☒
If **yes**, complete lines 030 to 038 and attach Schedule 24.

Has there been a wind-up of a subsidiary under section 88 during the current tax year? . . . . . 072 1 Yes ☐ 2 No ☒
If **yes**, complete and attach Schedule 24.

Is this the final tax year before amalgamation? . . . . . 076 1 Yes ☐ 2 No ☒

Is this the final return up to dissolution? . . . . . 078 1 Yes ☐ 2 No ☒

If an election was made under section 261, state the functional currency used 079

Is the corporation a resident of Canada?
080 1 Yes ☒ 2 No ☐ If **no**, give the country of residence on line 081 and complete and attach Schedule 97.
081

Is the non-resident corporation claiming an exemption under an income tax treaty? . . . . . 082 1 Yes ☐ 2 No ☒
If **yes**, complete and attach Schedule 91.

If the corporation is exempt from tax under section 149, tick one of the following boxes:
085
1 ☐ Exempt under paragraph 149(1)(e) or (l)
2 ☐ Exempt under paragraph 149(1)(j)
3 ☐ Exempt under paragraph 149(1)(t)
4 ☐ Exempt under other paragraphs of section 149

Do not use this area
095 096

Attachments

Financial statement information: Use GIFI schedules 100, 125, and 141.
Schedules – Answer the following questions. For each **yes** response, **attach** the schedule to the T2 return, unless otherwise instructed.

		Yes	Schedule
Is the corporation related to any other corporations?	150	X	9
Is the corporation an associated CCPC?	160	X	23
Is the corporation an associated CCPC that is claiming the expenditure limit?	161		49
Does the corporation have any non-resident shareholders who own voting shares?	151		19
Has the corporation had any transactions, including section 85 transfers, with its shareholders, officers, or employees, other than transactions in the ordinary course of business? Exclude non-arm's length transactions with non-residents	162		11
If you answered **yes** to the above question, and the transaction was between corporations not dealing at arm's length, were all or substantially all of the assets of the transferor disposed of to the transferee?	163		44
Has the corporation paid any royalties, management fees, or other similar payments to residents of Canada?	164		14
Is the corporation claiming a deduction for payments to a type of employee benefit plan?	165	X	15
Is the corporation claiming a loss or deduction from a tax shelter?	166		T5004
Is the corporation a member of a partnership for which a partnership account number has been assigned?	167		T5013
Did the corporation, a foreign affiliate controlled by the corporation, or any other corporation or trust that did not deal at arm's length with the corporation have a beneficial interest in a non-resident discretionary trust (without reference to section 94)?	168		22
Did the corporation own any shares in one or more foreign affiliates in the tax year?	169		25
Has the corporation made any payments to non-residents of Canada under subsections 202(1) and/or 105(1) of the federal *Income Tax Regulations*?	170		29
Did the corporation have a total amount over $1 million of reportable transactions with non-arm's length non-residents?	171		T106
For private corporations: Does the corporation have any shareholders who own 10% or more of the corporation's common and/or preferred shares?	173	X	50
Has the corporation made payments to, or received amounts from, a retirement compensation plan arrangement during the year?	172		———
Does the corporation earn income from one or more Internet webpages or websites?	180		88
Is the net income/loss shown on the financial statements different from the net income/loss for income tax purposes?	201	X	1
Has the corporation made any charitable donations; gifts to Canada, a province, or a territory; gifts of cultural or ecological property; or gifts of medicine?	202	X	2
Has the corporation received any dividends or paid any taxable dividends for purposes of the dividend refund?	203	X	3
Is the corporation claiming any type of losses?	204		4
Is the corporation claiming a provincial or territorial tax credit or does it have a permanent establishment in more than one jurisdiction?	205	X	5
Has the corporation realized any capital gains or incurred any capital losses during the tax year?	206		6
i) Is the corporation claiming the small business deduction and reporting income from: a) property (other than dividends deductible on line 320 of the T2 return), b) a partnership, c) a foreign business, or d) a personal services business; or ii) does the corporation have aggregate investment income at line 440?	207		7
Does the corporation have any property that is eligible for capital cost allowance?	208	X	8
Does the corporation have any property that is eligible capital property?	210	X	10
Does the corporation have any resource-related deductions?	212		12
Is the corporation claiming deductible reserves (other than transitional reserves under section 34.2)?	213	X	13
Is the corporation claiming a patronage dividend deduction?	216		16
Is the corporation a credit union claiming a deduction for allocations in proportion to borrowing or an additional deduction?	217		17
Is the corporation an investment corporation or a mutual fund corporation?	218		18
Is the corporation carrying on business in Canada as a non-resident corporation?	220		20
Is the corporation claiming any federal or provincial foreign tax credits, or any federal or provincial logging tax credits?	221		21
Does the corporation have any Canadian manufacturing and processing profits?	227		27
Is the corporation claiming an investment tax credit?	231	X	31
Is the corporation claiming any scientific research and experimental development (SR&ED) expenditures?	232		T661
Is the total taxable capital employed in Canada of the corporation and its related corporations over $10,000,000?	233	X	33/34/35
Is the total taxable capital employed in Canada of the corporation and its associated corporations over $10,000,000?	234	X	———
Is the corporation claiming a surtax credit?	237		37
Is the corporation subject to gross Part VI tax on capital of financial institutions?	238		38
Is the corporation claiming a Part I tax credit?	242		42
Is the corporation subject to Part IV.1 tax on dividends received on taxable preferred shares or Part VI.1 tax on dividends paid?	243		43
Is the corporation agreeing to a transfer of the liability for Part VI.1 tax?	244		45
Is the corporation subject to Part II - Tobacco Manufacturers' surtax?	249		46
For financial institutions: Is the corporation a member of a related group of financial institutions with one or more members subject to gross Part VI tax?	250		39
Is the corporation claiming a Canadian film or video production tax credit refund?	253		T1131
Is the corporation claiming a film or video production services tax credit refund?	254		T1177
Is the corporation subject to Part XIII.1 tax? (Show your calculations on a sheet that you identify as Schedule 92.)	255		92

Attachments – continued from page 2

		Yes	Schedule
Did the corporation have any foreign affiliates in the tax year?	271		T1134
Did the corporation own specified foreign property in the year with a cost amount over $100,000?	259		T1135
Did the corporation transfer or loan property to a non-resident trust?	260		T1141
Did the corporation receive a distribution from or was it indebted to a non-resident trust in the year?	261		T1142
Has the corporation entered into an agreement to allocate assistance for SR&ED carried out in Canada?	262		T1145
Has the corporation entered into an agreement to transfer qualified expenditures incurred in respect of SR&ED contracts?	263		T1146
Has the corporation entered into an agreement with other associated corporations for salary or wages of specified employees for SR&ED?	264		T1174
Did the corporation pay taxable dividends (other than capital gains dividends) in the tax year?	265	X	55
Has the corporation made an election under subsection 89(11) not to be a CCPC?	266		T2002
Has the corporation revoked any previous election made under subsection 89(11)?	267		T2002
Did the corporation (CCPC or deposit insurance corporation (DIC)) pay eligible dividends, or did its general rate income pool (GRIP) change in the tax year?	268	X	53
Did the corporation (other than a CCPC or DIC) pay eligible dividends, or did its low rate income pool (LRIP) change in the tax year?	269		54

Additional information

Did the corporation use the International Financial Reporting Standards (IFRS) when it prepared its financial statements?	270	1 Yes		2 No	X
Is the corporation inactive?	280	1 Yes		2 No	X

What is the corporation's main revenue-generating business activity? 221122 Electric Power Distribution

Specify the principal product(s) mined, manufactured, sold, constructed, or services provided, giving the approximate percentage of the total revenue that each product or service represents.

284	DIST. OF ELECTRICITY	285	100.000 %
286		287	%
288		289	%

Did the corporation immigrate to Canada during the tax year?	291	1 Yes		2 No	X
Did the corporation emigrate from Canada during the tax year?	292	1 Yes		2 No	X
Do you want to be considered as a quarterly instalment remitter if you are eligible?	293	1 Yes		2 No	
If the corporation was eligible to remit instalments on a quarterly basis for part of the tax year, provide the date the corporation ceased to be eligible	294	YYYY MM DD			
If the corporation's major business activity is construction, did you have any subcontractors during the tax year?	295	1 Yes		2 No	

Taxable income

Net income or (loss) for income tax purposes from Schedule 1, financial statements, or GIFI.	300		1,069,731	A
Deduct: Charitable donations from Schedule 2	311	212,515		
Gifts to Canada, a province, or a territory from Schedule 2	312			
Cultural gifts from Schedule 2	313			
Ecological gifts from Schedule 2	314			
Gifts of medicine from Schedule 2	315			
Taxable dividends deductible under section 112 or 113, or subsection 138(6) from Schedule 3	320			
Part VI.1 tax deduction*	325			
Non-capital losses of previous tax years from Schedule 4	331			
Net capital losses of previous tax years from Schedule 4	332			
Restricted farm losses of previous tax years from Schedule 4	333			
Farm losses of previous tax years from Schedule 4	334			
Limited partnership losses of previous tax years from Schedule 4	335			
Taxable capital gains or taxable dividends allocated from a central credit union	340			
Prospector's and grubstaker's shares	350			
Subtotal		212,515 ▶	212,515	B
Subtotal (amount A **minus** amount B) (if negative, enter "0")			857,216	C
Add: Section 110.5 additions or subparagraph 115(1)(a)(vii) additions	355			D
Taxable income (amount C **plus** amount D)	360		857,216	
Income exempt under paragraph 149(1)(t)	370			
Taxable income for a corporation with exempt income under paragraph 149(1)(t) (line 360 **minus** line 370)			857,216	Z

* This amount is equal to 3.5 times the Part VI.1 tax payable at line 724 on page 8.

Small business deduction

Canadian-controlled private corporations (CCPCs) throughout the tax year

Income from active business carried on in Canada from Schedule 7 . . . . . **400** 1,069,731 A

Taxable income from line 360 on page 3, **minus** 100/28 3.57143 of the amount on line 632* on page 7, **minus** 4 times the amount on line 636** on page 7, and **minus** any amount that, because of federal law, is exempt from Part I tax . . . . . **405** 857,216 B

Business limit (see notes 1 and 2 below) . . . . . **410** 500,000 C

Notes:

1. For CCPCs that are not associated, enter $ 500,000 on line 410. However, if the corporation's tax year is less than 51 weeks, prorate this amount by the number of days in the tax year divided by 365, and enter the result on line 410.

2. For associated CCPCs, use Schedule 23 to calculate the amount to be entered on line 410.

Business limit reduction:

Amount C 500,000 x **415** *** 1,232,630 / 11,250 D = ... 54,783,556 E

Reduced business limit (amount C **minus** amount E) (if negative, enter "0") . . . . . **425** F

Small business deduction

Amount A, B, C, or F, whichever is the least x 17 % = ... **430** G

Enter amount G on line I on page 7.

* Calculate the amount of foreign non-business income tax credit deductible on line 632 without reference to the refundable tax on the CCPC's investment income (line 604) and without reference to the corporate tax reductions under section 123.4.

** Calculate the amount of foreign business income tax credit deductible on line 636 without reference to the corporation tax reductions under section 123.4.

*** **Large corporations**

- If the corporation is not associated with any corporations in both the current and previous tax years, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **prior year** minus $10,000,000) x 0.225%.
- If the corporation is not associated with any corporations in the current tax year, but was associated in the previous tax year, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **current year** minus $10,000,000) x 0.225%.
- For corporations associated in the current tax year, see Schedule 23 for the special rules that apply.

General tax reduction for Canadian-controlled private corporations

Canadian-controlled private corporations throughout the tax year

Taxable income from page 3 (line 360 or amount Z, whichever applies)			857,216	A
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27				B
Amount QQ from Part 13 of Schedule 27				C
Personal service business income	432			D
Amount used to calculate the credit union deduction (amount F from Schedule 17)				E
Amount from line 400, 405, 410, or 425 on page 4, whichever is the least				F
Aggregate investment income from line 440 on page 6*				G
Subtotal (**add** amounts B to G)		▶		H
Amount A **minus** amount H (if negative, enter "0")			857,216	I
General tax reduction for Canadian-controlled private corporations – Amount I **multiplied** by 13 %			111,438	J

Enter amount J on line 638 on page 7.

* Except for a corporation that is, throughout the year, a cooperative corporation (within the meaning assigned by subsection 136(2)) or a credit union.

General tax reduction

Do not complete this area if you are a Canadian-controlled private corporation, an investment corporation, a mortgage investment corporation, a mutual fund corporation, or any corporation with taxable income that is not subject to the corporation tax rate of 38%.

Taxable income from page 3 (line 360 or amount Z, whichever applies)				K
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27				L
Amount QQ from Part 13 of Schedule 27				M
Personal service business income	434			N
Amount used to calculate the credit union deduction (amount F from Schedule 17)				O
Subtotal (**add** amounts L to O)		▶		P
Amount K **minus** amount P (if negative, enter "0")				Q
General tax reduction – Amount Q **multiplied** by 13 %				R

Enter amount R on line 639 on page 7.

Refundable portion of Part I tax

Canadian-controlled private corporations throughout the tax year

Aggregate investment income from Schedule 7 . . . . . **440** _____ x 26 2 / 3 % = ... _____ A

Foreign non-business income tax credit from line 632 on page 7 . . . . . _____ B

Deduct:

Foreign investment income from Schedule 7 . . . . . **445** _____ x 9 1 / 3 % = _____ C

(if negative, enter "0") _____ ▶ _____ D

Amount A **minus** amount D (if negative, enter "0") . . . . . _____ E

Taxable income from line 360 on page 3 . . . . . 857,216 F

Deduct:

Amount from line 400, 405, 410, or 425 on page 4, whichever is the least . . . . . _____ G

Foreign non-business income tax credit from line 632 on page 7 . . . _____ x 100 / 35 = _____ H

Foreign business income tax credit from line 636 on page 7 . . . . . _____ x 4 = _____ I

Subtotal _____ ▶ _____ J

857,216 K

x 26 2 / 3 % = 228,591 L

Part I tax payable minus investment tax credit refund (line 700 **minus** line 780 from page 8) . . . . . 104,582 M

Refundable portion of Part I tax – Amount E, L, or M, whichever is the least . . . . . **450** _____ N

Refundable dividend tax on hand

Refundable dividend tax on hand at the end of the previous tax year . . . . . **460** _____

Deduct: Dividend refund for the previous tax year . . . . . **465** _____

_____ ▶ _____ O

Add the total of:

Refundable portion of Part I tax from line 450 above . . . . . _____ P

Total Part IV tax payable from Schedule 3 . . . . . _____ Q

Net refundable dividend tax on hand transferred from a predecessor corporation on amalgamation, or from a wound-up subsidiary corporation . . . . . **480** _____

_____ ▶ _____ R

Refundable dividend tax on hand at the end of the tax year – Amount O **plus** amount R . . . . . **485** _____

Dividend refund

Private and subject corporations at the time taxable dividends were paid in the tax year

Taxable dividends paid in the tax year from line 460 on page 2 of Schedule 3 . . . . . 15,000,000 x 1 / 3 = 5,000,000 S

Refundable dividend tax on hand at the end of the tax year from line 485 above . . . . . _____ T

Dividend refund – Amount S or T, whichever is less . . . . . _____ U

Enter amount U on line 784 on page 8.

Part I tax

Base amount Part I tax – Taxable income from page 3 (line 360 or amount Z, whichever applies) **multiplied** by 38 % . . . 550 325,742 A

Recapture of investment tax credit from Schedule 31 . . . 602 B

Calculation for the refundable tax on the Canadian-controlled private corporation's (CCPC) investment income
(if it was a CCPC throughout the tax year)

Aggregate investment income from line 440 on page 6			C
Taxable income from line 360 on page 3	857,216 D		
Deduct:			
Amount from line 400, 405, 410, or 425 on page 4, whichever is the least	E		
Net amount (amount D **minus** amount E)	857,216 ▶	857,216	F

Refundable tax on CCPC's investment income – 6 2 / 3 % of whichever is less: amount C or amount F . . . 604 G

Subtotal (**add** amounts A, B, and G) 325,742 H

Deduct:

Small business deduction from line 430 on page 4			I
Federal tax abatement	608	85,722	
Manufacturing and processing profits deduction from Schedule 27	616		
Investment corporation deduction	620		
Taxed capital gains 624			
Additional deduction – credit unions from Schedule 17	628		
Federal foreign non-business income tax credit from Schedule 21	632		
Federal foreign business income tax credit from Schedule 21	636		
General tax reduction for CCPCs from amount J on page 5	638	111,438	
General tax reduction from amount R on page 5	639		
Federal logging tax credit from Schedule 21	640		
Eligible Canadian bank deduction under section 125.21	641		
Federal qualifying environmental trust tax credit	648		
Investment tax credit from Schedule 31	652	24,000	
Subtotal		221,160 ▶	221,160 J

Part I tax payable – Amount H **minus** amount J . . . 104,582 K

Enter amount K on line 700 on page 8.

Summary of tax and credits

Federal tax

Part I tax payable from amount K on page 7	700	104,582
Part II surtax payable from Schedule 46	708	
Part III.1 tax payable from Schedule 55	710	
Part IV tax payable from Schedule 3	712	
Part IV.1 tax payable from Schedule 43	716	
Part VI tax payable from Schedule 38	720	
Part VI.1 tax payable from Schedule 43	724	
Part XIII.1 tax payable from Schedule 92	727	
Part XIV tax payable from Schedule 20	728	
Total federal tax		104,582

Add provincial or territorial tax:

Provincial or territorial jurisdiction . . . 750 ON
(if more than one jurisdiction, enter "multiple" and complete Schedule 5)

Net provincial or territorial tax payable (except Quebec and Alberta)	760	574,818	
Provincial tax on large corporations (Nova Scotia Schedule 342)	765		
(The Nova Scotia tax on large corporations is eliminated effective July 1, 2012.)			
Total provincial or territorial tax		574,818 ▶	574,818
Total tax payable	770		679,400 A

Deduct other credits:

Investment tax credit refund from Schedule 31	780		
Dividend refund from amount U on page 6	784		
Federal capital gains refund from Schedule 18	788		
Federal qualifying environmental trust tax credit refund	792		
Canadian film or video production tax credit refund (Form T1131)	796		
Film or video production services tax credit refund (Form T1177)	797		
Tax withheld at source	800		
Total payments on which tax has been withheld	801		
Provincial and territorial capital gains refund from Schedule 18	808		
Provincial and territorial refundable tax credits from Schedule 5	812		
Tax instalments paid	840	4,000,000	
Total credits	890	4,000,000 ▶	4,000,000 B

Refund code 894 1 Overpayment 3,320,600

Balance (amount A **minus** amount B) -3,320,600

If the result is positive, you have a **balance unpaid**. If the result is negative, you have an **overpayment**. Enter the amount on whichever line applies. Generally, we do not charge or refund a difference of $2 or less.

Balance unpaid . . . . . .

For information on how to make your payment, go to **www.cra-arc.gc.ca/payments**.

Enclosed payment 898

Direct deposit request

To have the corporation's refund deposited directly into the corporation's bank account at a financial institution in Canada, or to change banking information you already gave us, complete the information below:

☐ Start ☐ Change information 910 Branch number

914 Institution number 918 Account number

If the corporation is a Canadian-controlled private corporation throughout the tax year, does it qualify for the one-month extension of the date the balance of tax is due? . . . . . 896 1 Yes ☐ 2 No ☒

If this return was prepared by a tax preparer for a fee, provide their EFILE number 920

Certification

I, 950 Simpson (Last name (print)) 951 Geoff (First name (print)) 954 CFO (Position, office, or rank),

am an authorized signing officer of the corporation. I certify that I have examined this return, including accompanying schedules and statements, and that the information given on this return is, to the best of my knowledge, correct and complete. I also certify that the method of calculating income for this tax year is consistent with that of the previous tax year except as specifically disclosed in a statement attached to this return.

955 2015-06-12 (Date (yyyy/mm/dd)) Signature of the authorized signing officer of the corporation 956 (613) 738-5499 (Telephone number)

Is the contact person the same as the authorized signing officer? If **no**, complete the information below . . . . . 957 1 Yes ☐ 2 No ☒

958 Mike Grue (Name (print)) 959 (613) 738-5499 (Telephone number)

Language of correspondence – Langue de correspondance

Indicate your language of correspondence by entering **1** for English or **2** for French.
Indiquez votre langue de correspondance en inscrivant **1** pour anglais ou **2** pour français. 990 1

Privacy Act, personal information bank number CRA PPU 047

Schedule of Instalment Remittances

Name of corporation contact: Mike Grue
Telephone number: (613) 738-5499

Effective interest date	Description (instalment remittance, split payment, assessed credit)	Amount of credit
	2014 INSTALLMENTS	4,000,000

Total amount of instalments claimed (carry the result to line 840 of the T2 Return)	4,000,000	**A**
Total instalments credited to the taxation year per T9	4,000,000	**B**

Transfer

	Account number	Taxation year end	Amount	Effective interest date	Description
From:					
To:					
From:					
To:					
From:					
To:					
From:					
To:					
From:					
To:					

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SCHEDULE 100

Form identifier 100

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Name of corporation	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Balance sheet information

Account	Description	GIFI		Current year	Prior year
Assets					
	Total current assets	1599	+	172,231,000	181,668,000
	Total tangible capital assets	2008	+	1,136,055,000	1,090,072,000
	Total accumulated amortization of tangible capital assets	2009	–	438,899,000	438,495,000
	Total intangible capital assets	2178	+	99,421,000	100,496,000
	Total accumulated amortization of intangible capital assets	2179	–	32,144,000	55,763,000
	Total long-term assets	2589	+	31,647,000	32,334,000
	* Assets held in trust	2590	+		
	Total assets (mandatory field)	2599	=	968,311,000	910,312,000
Liabilities					
	Total current liabilities	3139	+	212,964,000	198,807,000
	Total long-term liabilities	3450	+	472,882,000	441,911,000
	* Subordinated debt	3460	+		
	* Amounts held in trust	3470	+		
	Total liabilities (mandatory field)	3499	=	685,846,000	640,718,000
Shareholder equity					
	Total shareholder equity (mandatory field)	3620	+	282,465,000	269,594,000
	Total liabilities and shareholder equity	3640	=	968,311,000	910,312,000
Retained earnings					
	Retained earnings/deficit – end (mandatory field)	3849	=	115,384,000	102,513,000

* Generic item

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SCHEDULE 125

Form identifier 125

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Name of corporation	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Income statement information

Description	GIFI

Operating name	0001	
Description of the operation	0002	
Sequence number	0003	01

Account	Description	GIFI		Current year	Prior year
Income statement information					
	Total sales of goods and services	8089	+	988,442,000	952,790,000
	Cost of sales	8518	–	905,746,000	768,079,000
	Gross profit/loss	8519	=	82,696,000	184,711,000
	Cost of sales	8518	+	905,746,000	768,079,000
	Total operating expenses	9367	+	53,913,000	152,522,000
	Total expenses (mandatory field)	9368	=	959,659,000	920,601,000
	Total revenue (mandatory field)	8299	+	988,442,000	952,790,000
	Total expenses (mandatory field)	9368	–	959,659,000	920,601,000
	Net non-farming income	9369	=	28,783,000	32,189,000
Farming income statement information					
	Total farm revenue (mandatory field)	9659	+		
	Total farm expenses (mandatory field)	9898	–		
	Net farm income	9899	=		
	Net income/loss before taxes and extraordinary items	9970	=	28,783,000	32,189,000
	Total other comprehensive income	9998	=		
Extraordinary items and income (linked to Schedule 140)					
	Extraordinary item(s)	9975	–		
	Legal settlements	9976	–		
	Unrealized gains/losses	9980	+		
	Unusual items	9985	–		
	Current income taxes	9990	–	912,000	6,750,000
	Future (deferred) income tax provision	9995	–		
	Total – Other comprehensive income	9998	+		
	Net income/loss after taxes and extraordinary items (mandatory field)	9999	=	27,871,000	25,439,000

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Schedule 141

Notes checklist

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Parts 1, 2, and 3 of this schedule must be completed from the perspective of the person (referred to in these parts as the **accountant**) who prepared or reported on the financial statements. If the person preparing the tax return is not the accountant referred to above, they must still complete Parts 1, 2, 3, and 4, as applicable.
- For more information, see Guide RC4088, *General Index of Financial Information (GIFI)* and Guide T4012, *T2 Corporation – Income Tax Guide*.
- Complete this schedule and include it with your T2 return along with the other GIFI schedules.

Part 1 – Information on the accountant who prepared or reported on the financial statements

Does the accountant have a professional designation? . . . . . **095** 1 Yes [X] 2 No [ ]

Is the accountant connected* with the corporation? . . . . . **097** 1 Yes [ ] 2 No [X]

* A person connected with a corporation can be: (i) a shareholder of the corporation who owns more than 10% of the common shares; (ii) a director, an officer, or an employee of the corporation; or (iii) a person not dealing at arm's length with the corporation.

Note
If the accountant does not have a professional designation **or** is connected to the corporation, you do not have to complete Parts 2 and 3 of this schedule. However, you **do have** to complete Part 4, as applicable.

Part 2 – Type of involvement with the financial statements

Choose the option that represents the highest level of involvement of the accountant: **198**

Completed an auditor's report . . . . . 1 [X]

Completed a review engagement report . . . . . 2 [ ]

Conducted a compilation engagement . . . . . 3 [ ]

Part 3 – Reservations

If you selected option **1** or **2** under **Type of involvement with the financial statements** above, answer the following question:

Has the accountant expressed a reservation? . . . . . **099** 1 Yes [ ] 2 No [X]

Part 4 – Other information

If you have a professional designation and are not the accountant associated with the financial statements in Part 1 above, choose one of the following options: **110**

Prepared the tax return (financial statements prepared by client) . . . . . 1 [ ]

Prepared the tax return and the financial information contained therein (financial statements have not been prepared) . . . . . 2 [ ]

Were notes to the financial statements prepared? . . . . . **101** 1 Yes [X] 2 No [ ]

If **yes**, complete lines 104 to 107 below:

Are subsequent events mentioned in the notes? . . . . . **104** 1 Yes [X] 2 No [ ]

Is re-evaluation of asset information mentioned in the notes? . . . . . **105** 1 Yes [ ] 2 No [X]

Is contingent liability information mentioned in the notes? . . . . . **106** 1 Yes [X] 2 No [ ]

Is information regarding commitments mentioned in the notes? . . . . . **107** 1 Yes [X] 2 No [ ]

Does the corporation have investments in joint venture(s) or partnership(s)? . . . . . **108** 1 Yes [ ] 2 No [X]

Part 4 – Other information (continued)

Impairment and fair value changes

In any of the following assets, was an amount recognized in net income or other comprehensive income (OCI) as a result of an impairment loss in the tax year, a reversal of an impairment loss recognized in a previous tax year, or a change in fair value during the tax year? . . . . . **200** 1 Yes [X] 2 No [ ]

If **yes**, enter the amount recognized:

		In net income Increase (decrease)		**In OCI** Increase (decrease)
Property, plant, and equipment	**210**	1,250,168	**211**	
Intangible assets	**215**		**216**	
Investment property	**220**			
Biological assets	**225**			
Financial instruments	**230**		**231**	
Other	**235**		**236**	

Financial instruments

Did the corporation derecognize any financial instrument(s) during the tax year (other than trade receivables)? . . . . . **250** 1 Yes [ ] 2 No [X]

Did the corporation apply hedge accounting during the tax year? . . . . . **255** 1 Yes [ ] 2 No [X]

Did the corporation discontinue hedge accounting during the tax year? . . . . . **260** 1 Yes [ ] 2 No [X]

Adjustments to opening equity

Was an amount included in the opening balance of retained earnings or equity, in order to correct an error, to recognize a change in accounting policy, or to adopt a new accounting standard in the current tax year? . . . . . **265** 1 Yes [ ] 2 No [X]

If **yes**, you have to maintain a separate reconciliation.

SCHEDULE 100

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Form identifier 100

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Assets – lines 1000 to 2599

1000	19,421,000	1060	65,290,000	1062	81,806,000
1480	31,000	1481	1,015,000	1483	3,728,000
1484	940,000	1599	172,231,000	1600	24,995,000
1680	81,634,000	1681	-24,095,000	1740	12,970,000
1741	-6,803,000	1900	1,016,456,000	1901	-408,001,000
2008	1,136,055,000	2009	-438,899,000	2010	99,421,000
2011	-32,144,000	2178	99,421,000	2179	-32,144,000
2420	20,592,000	2421	11,055,000	2589	31,647,000
2599	968,311,000				

Liabilities – lines 2600 to 3499

2620	211,949,000	2963	1,015,000	3139	212,964,000
3140	417,185,000	3240	11,055,000	3270	9,836,000
3320	34,806,000	3450	472,882,000	3499	685,846,000

Shareholder equity – lines 3500 to 3640

3500	167,081,000	3600	115,384,000	3620	282,465,000
3640	968,311,000				

Retained earnings – lines 3660 to 3849

3660	102,513,000	3680	27,871,000	3700	-15,000,000
3849	115,384,000				

SCHEDULE 125

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Form identifier 125

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Description

Sequence number 0003 01

Revenue – lines 8000 to 8299

8000	988,442,000	8089	988,442,000	8299	988,442,000

Cost of sales – lines 8300 to 8519

8320	905,746,000	8518	905,746,000	8519	82,696,000

Operating expenses – lines 8520 to 9369

8570	5,791,000	8670	30,249,000	8740	17,873,000
9367	53,913,000	9368	959,659,000	9369	28,783,000

Extraordinary items and taxes – lines 9970 to 9999

9970	28,783,000	9990	912,000	9999	27,871,000

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Net Income (Loss) for Income Tax Purposes

SCHEDULE 1

Corporation's name	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- The purpose of this schedule is to provide a reconciliation between the corporation's net income (loss) as reported on the financial statements and its net income (loss) for tax purposes. For more information, see the T2 *Corporation Income Tax Guide*.
- All legislative references are to the *Income Tax Act*.

Amount calculated on line 9999 from Schedule 125				27,871,000 A
Add:				
Provision for income taxes – current	101	912,000		
Interest and penalties on taxes	103	6,439		
Amortization of tangible assets	104	30,249,000		
Amortization of intangible assets	106	5,791,000		
Loss on disposal of assets	111	1,509,282		
Charitable donations and gifts from Schedule 2	112	212,515		
Non-deductible meals and entertainment expenses	121	70,010		
Other reserves on lines 270 and 275 from Schedule 13	125	1,110,910		
Reserves from financial statements – balance at the end of the year	126	5,371,304		
Subtotal of additions		45,232,460	▶	45,232,460

Other additions:

Miscellaneous other additions:

604	Apprentice tax credit - Federal 2013 & 2014	35,878			
	Employee Future Benefits expensed in F/S	597,824			
	ARO expenses accrued in 2014	10,438			
	Impairment charge	1,250,168			
	Apprentice tax credit - Ontario 2014	163,864			
	Coop education tax credit - Ontario 2014	38,459			
	Total	2,096,631	294	2,096,631	
	Subtotal of other additions		199	2,096,631 ▶	2,096,631
	Total additions		500	47,329,091 ▶	47,329,091 B
Amount A **plus** amount B					75,200,091

Deduct:

Capital cost allowance from Schedule 8	403	65,022,460	
Cumulative eligible capital deduction from Schedule 10	405	58,341	
Other reserves on line 280 from Schedule 13	413	3,227,504	
Reserves from financial statements – balance at the beginning of the year	414	3,063,750	
Subtotal of deductions		71,372,055 ▶	71,372,055

Other deductions:

Miscellaneous other deductions:

700	ARO costs incurred in 2014		390	103,721	
701	AFUDC		391	1,857,000	
702	Employee Future Benefits paid during the year		392	570,527	
703	App & Coop Tax Credits	227,057			
	Total	227,057	393	227,057	
704					
	Total		394		
	Subtotal of other deductions		499	2,758,305 ▶	2,758,305
	Total deductions		510	74,130,360 ▶	74,130,360

Net income (loss) for income tax purposes – enter on line 300 of the T2 return 1,069,731

T2 SCH 1 E (12)

Canada

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Schedule 2

Charitable Donations and Gifts

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- For use by corporations to claim any of the following:
  - the eligible amount of charitable donations to qualified donees;
  - the Ontario community food program donation tax credit for farmers;
  - the eligible amount of gifts to Canada, a province, or a territory;
  - the eligible amount of gifts of certified cultural property;
  - the eligible amount of gifts of certified ecologically sensitive land; or
  - the deduction for gifts of medicine.
- The eligible amount of a gift is the amount by which the fair market value of the gifted property exceeds the amount of an advantage, if any, for the gift.
- The donations and gifts are eligible for a 5-year carryforward except for gifts of certified ecologically sensitive land made after February 10, 2014, which are eligible for a 10-year carryforward.
- Use this schedule to show a transfer of unused amounts from previous years following an amalgamation or the wind-up of a subsidiary as described under subsections 87(1) and 88(1) of the federal *Income Tax Act*.
- Subsection 110.1(1.2) of the federal Act provides as follows:
  - Where a particular corporation has undergone an acquisition of control, for tax years that end on or after the acquisition of control, no corporation can claim a deduction for a gift made by the particular corporation to a qualified donee before the acquisition of control.
  - If a particular corporation makes a gift to a qualified donee pursuant to an arrangement under which both the gift and the acquisition of control is expected, no corporation can claim a deduction for the gift unless the person acquiring control of the particular corporation is the qualified donee.
- An eligible medical gift to a qualifying organization for activities outside of Canada may be eligible for a deduction. Calculate the deduction in Part 6.
- File one completed copy of this schedule with your *T2 Corporation Income Tax Return*.
- For more information, see the *T2 Corporation - Income Tax Guide*.

Part 1 – Charitable donations

Charity/Recipient	Amount ($100 or more only)
United Way	72,990
United Way	62,832
United Way	34,675
United Way	100
United Way	100
United Way	100
Christie Lake Kids	39,103
St John Ambulance	315
CHEO Foundation	100
Heart & Stroke Foundation	100
Heart & Stroke Foundation	100
Heart & Stroke Foundation	100
Heart & Stroke Foundation	100
University of Ottawa Heart Institute	100
University of Ottawa Heart Institute	100
Canadian Cancer Society	100
Canadian Cancer Society	100
Alzheimer Society of Canada	100
Alzheimer Society of Canada	100
Quebec Lung Association	100
CHEO Foundation	100
Canadian Breast Cancer Foundation	100
The Ottawa Hospital Foundation	100
Canadian Diabetes Association	100
University Hospitals Kingston Foundation	100
Saints Peter and Paul Melkite Catholic Church	100
Perley and Rideau Veteran Health Centre Found	100
Lanark Animal Welfare Society	100
Southgate Community Church	100
The Masonic Foundation of Ontario	100

Part 1 – Charitable donations

Charity/Recipient	Amount ($100 or more only)
P.R.O Kids	100
Subtotal	212,515
Add: Total donations of less than $100 each	
Total donations in current tax year	212,515

Part 1 – Charitable donations

		Federal		Québec	Alberta
Charitable donations at the end of the previous tax year			A		
Deduct: Charitable donations expired after five tax years*	239				
Charitable donations at the beginning of the current tax year	240		B		
Add:					
Charitable donations transferred on an amalgamation or the wind-up of a subsidiary	250				
Total charitable donations made in the current year (enter this amount on line 112 of Schedule 1)	210	212,515		212,515	212,515
Subtotal (line 250 **plus** line 210)		212,515	C	212,515	212,515
Subtotal (amount B **plus** amount C)		212,515	D	212,515	212,515
Deduct: Adjustment for an acquisition of control	255				
Total charitable donations available (amount D **minus** amount on line 255)		212,515	E	212,515	212,515
Deduct: Amount applied in the current year against taxable income (cannot be more than amount O in Part 2) (enter this amount on line 311 of the T2 return)	260	212,515		212,515	212,515
Charitable donations closing balance (amount E **minus** amount on line 260)	280				
Ontario community food program donation for farmers included in the amount on line 260 (for donations made after December 31, 2013)	262				
Ontario community food program donation tax credit for farmers (amount on line 262 multiplied by 25 %)			1		

Enter the amount from line 1 on line 420 of Schedule 5, *Tax Calculation Supplementary – Corporations*. The maximum amount you can claim in the current year is whichever is less; the Ontario income tax otherwise payable or the amount on line 1. For more information, see section 103.1.2 of the *Taxation Act, 2007* (Ontario).

* For the federal and Alberta, the gifts expire after five tax years. For Québec, gifts made in a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Amounts carried forward – Charitable donations

Year of origin:		Federal	Québec	Alberta
1st prior year	2013-12-31			
2nd prior year	2012-12-31			
3rd prior year	2011-12-31			
4th prior year	2010-12-31			
5th prior year	2009-12-31			
6th prior year*	2008-12-31			
7th prior year	2007-12-31			
8th prior year	2006-12-31			
9th prior year	2005-12-31			
10th prior year	2004-12-31			
11th prior year	2003-12-31			
12th prior year	2002-12-31			
13th prior year	2001-12-31			
14th prior year	2001-09-30			
15th prior year	2000-09-30			
16th prior year	1999-09-30			
17th prior year	1998-09-30			
18th prior year	1997-09-30			
19th prior year	1996-09-30			
20th prior year	1995-09-30			
21st prior year*	1994-09-30			
Total (to line A)				

* For the federal and Alberta, the 6th prior year gifts expire in the current year. For Québec, the 6th prior year gifts made in a tax year that ended before March 24, 2006, expire in the current year and the 21st prior year gifts made in a tax year that ended after March 23, 2006, expire in the current year.

Part 2 – Calculation of the maximum allowable deduction for charitable donations

Net income for tax purposes* **multiplied** by 75 % . . . . . 802,298 F

Taxable capital gains arising in respect of gifts of capital property included in Part 1 ** . . . . . 225 _____ G

Taxable capital gain in respect of deemed gifts of non-qualifying securities per subsection 40(1.01), from the disposition of a property in the preceding tax year . . . . . 227 _____ H

The amount of the recapture of capital cost allowance in respect of charitable donations . . . . . 230 _____

Proceeds of disposition, less outlays and expenses** . . . . . _____ I

Capital cost** . . . . . _____ J

Amount I or J, whichever is less . . . . . 235 _____

Amount on line 230 or 235, whichever is less . . . . . _____ K

Subtotal (**add** amounts G, H, and K) _____ L

Amount L **multiplied** by 25 % _____ M

Subtotal (amount F **plus** amount M) 802,298 N

Maximum allowable deduction for charitable donations (enter amount E from Part 1, amount N, or net income for tax purposes, whichever is less) . . . . . 212,515 O

* For credit unions, subsection 137(2) states that this amount is before the deduction of payments pursuant to allocations in proportion to borrowing and bonus interest.

** This amount must be prorated by the following calculation: eligible amount of the gift **divided by** the proceeds of disposition of the gift.

Part 3 – Gifts to Canada, a province, or a territory

Gifts to Canada, a province, or a territory at the end of the previous tax year				A
Deduct: Gifts to Canada, a province, or a territory expired after five tax years	339			
Gifts to Canada, a province, or a territory at the beginning of the current tax year	340			B
Add:				
Gifts to Canada, a province, or a territory transferred on an amalgamation or the windup of a subsidiary	350			
Total gifts made to Canada, a province, or a territory in the current year*	310			
Subtotal (line 350 **plus** line 310)		▶		C
Subtotal (amount B **plus** amount C)				D
Deduct:				
Adjustment for an acquisition of control	355			
Amount applied in the current year against taxable income (enter this amount on line 312 of the T2 return)	360			
Subtotal (line 355 **plus** line 360)		▶		E
Gifts to Canada, a province, or a territory closing balance (amount D **minus** amount E)	380			

* Not applicable for gifts made after February 18, 1997, unless a written agreement was made before this date. If no written agreement exists, enter the amount on line 210 and complete Part 2.

Part 4 – Gifts of certified cultural property

		Federal		Québec	Alberta
Gifts of certified cultural property at the end of the previous tax year			F		
Deduct: Gifts of certified cultural property expired after five tax years*	439				
Gifts of certified cultural property at the beginning of the current tax year	440		G		
Add:					
Gifts of certified cultural property transferred on an amalgamation or the windup of a subsidiary	450				
Total gifts of certified cultural property in the current year	410				
Subtotal (line 450 **plus** line 410)			H		
Subtotal (amount G **plus** amount H)			I		
Deduct:					
Adjustment for an acquisition of control	455				
Amount applied in the current year against taxable income (enter this amount on line 313 of the T2 return)	460				
Subtotal (line 455 **plus** line 460)			J		
Gifts of certified cultural property closing balance (amount I **minus** amount J)	480				

* For the federal and Alberta, the gifts expire after five tax years. For Québec, gifts made in a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Amount carried forward – Gifts of certified cultural property

Year of origin:		Federal	Québec	Alberta
1st prior year	2013-12-31			
2nd prior year	2012-12-31			
3rd prior year	2011-12-31			
4th prior year	2010-12-31			
5th prior year	2009-12-31			
6th prior year*	2008-12-31			
7th prior year	2007-12-31			
8th prior year	2006-12-31			
9th prior year	2005-12-31			
10th prior year	2004-12-31			
11th prior year	2003-12-31			
12th prior year	2002-12-31			
13th prior year	2001-12-31			
14th prior year	2001-09-30			
15th prior year	2000-09-30			
16th prior year	1999-09-30			
17th prior year	1998-09-30			
18th prior year	1997-09-30			
19th prior year	1996-09-30			
20th prior year	1995-09-30			
21st prior year*	1994-09-30			
Total				

* For the federal and Alberta, the 6th prior year gifts expire in the current year. For Québec, the 6th prior year gifts made in a tax year that ended before March 24, 2006, expire in the current year and the 21st prior year gifts made in a tax year that ended after March 23, 2006, expire in the current year.

Part 5 – Gifts of certified ecologically sensitive land

		Federal		Québec	Alberta
Gifts of certified ecologically sensitive land at the end of the previous tax year			K		
Deduct: Gifts of certified ecologically sensitive land expired after 5 tax years, or after 10 tax years for gifts made after February 10, 2014*	539				
Gifts of certified ecologically sensitive land at the beginning of the current tax year	540		L		
Add:					
Gifts of certified ecologically sensitive land transferred on an amalgamation or the windup of a subsidiary	550				
Total current-year gifts of certified ecologically sensitive land made before February 11, 2014	510				
Total current-year gifts of certified ecologically sensitive land made after February 10, 2014	520				
Subtotal (**add** lines 550, 510, and 520)			M		
Subtotal (amount L **plus** amount M)			N		
Deduct:					
Adjustment for an acquisition of control	555				
Amount applied in the current year against taxable income (enter this amount on line 314 of the T2 return)	560				
Subtotal (line 555 **plus** line 560)			O		
Gifts of certified ecologically sensitive land closing balance (amount N **minus** amount O)	580				

* For the federal and Alberta, gifts made before February 11, 2014 , expire after five tax years and gifts made after February 10, 2014, expire after ten tax years. For Québec, gifts made during a tax year that ended before March 24, 2006, expire after five tax years and gifts made during a tax year that ended after March 23, 2006 expire after twenty tax years.

Amounts carried forward – Gifts of certified ecologically sensitive land

Amount of carried forward gifts made on or after February 11, 2014, in the tax year including this date . . . . . .

Year of origin:		Federal	Québec	Alberta
1st prior year	2013-12-31			
2nd prior year	2012-12-31			
3rd prior year	2011-12-31			
4th prior year	2010-12-31			
5th prior year	2009-12-31			
6th prior year*	2008-12-31			
7th prior year	2007-12-31			
8th prior year	2006-12-31			
9th prior year	2005-12-31			
10th prior year	2004-12-31			
11th prior year*	2003-12-31			
12th prior year	2002-12-31			
13th prior year	2001-12-31			
14th prior year	2001-09-30			
15th prior year	2000-09-30			
16th prior year	1999-09-30			
17th prior year	1998-09-30			
18th prior year	1997-09-30			
19th prior year	1996-09-30			
20th prior year	1995-09-30			
21st prior year*	1994-09-30			
Total				

* For the federal and Alberta, gifts made before February 11, 2014, expire after five tax years and gifts made after February 10, 2014, expire after ten tax years. The field "Amount of carried forward gifts made on or after February 11, 2014, in the tax year including this date" is used to determine the portion of the gifts made in the tax year straddling February 11, 2014, that expires after ten tax years.
For Québec, gifts made during a tax year that ended before March 24, 2006, expire after five tax years and gifts made in a tax year that ended after March 23, 2006, expire after twenty tax years.

Part 6 – Deduction for gifts of medicine

		Federal		Québec		Alberta	
Deduction for gifts of medicine at the end of the previous tax year			P				
Deduct: Deduction for gifts of medicine expired after five tax years	639						
Deduction for gifts of medicine at the beginning of the current tax year	640		Q				
Add:							
Deduction for gifts of medicine transferred on an amalgamation or the wind-up of a subsidiary	650						
Deduction for gifts of medicine for the current year:							
Proceeds of disposition	602		1		1		1
Cost of gifts of medicine	601		2		2		2
Subtotal (line 1 **minus** line 2)			3		3		3
Line 3 **multiplied** by 50 %			4		4		4
Eligible amount of gifts	600		5		5		5

Federal

a _____ x (b _____ / c) = Deduction for gifts of medicine for the current year . . . . . 610 _____

Québec

a _____ x (b _____ / c) = Deduction for gifts of medicine for the current year . . . . . _____

Alberta

a _____ x (b _____ / c) = Deduction for gifts of medicine for the current year . . . . . _____

where:

a is the **lesser** of line 2 and line 4

b is the eligible amount of gifts (line 600)

c is the proceeds of disposition (line 602)

Subtotal (line 650 **plus** line 610)			R			
Subtotal (amount Q **plus** amount R)			S			
Deduct:						
Adjustment for an acquisition of control	655					
Amount applied in the current year against taxable income (enter this amount on line 315 of the T2 return)	660					
Subtotal (line 655 **plus** line 660)			T			
Deduction for gifts of medicine closing balance (amount S **minus** amount T)	680					

Amounts carried forward – Deduction for gifts of medicine

Year of origin:		Federal	Québec	Alberta
1st prior year	2013-12-31			
2nd prior year	2012-12-31			
3rd prior year	2011-12-31			
4th prior year	2010-12-31			
5th prior year	2009-12-31			
6th prior year*	2008-12-31			
Total				

***** These donations expired in the current year.

Québec – Gifts of musical instruments

Gifts of musical instruments at the end of the previous tax year		A
Deduct: Gifts of musical instruments expired after twenty tax years		B
Gifts of musical instruments at the beginning of the tax year		C
Add:		
Gifts of musical instruments transferred on an amalgamation or the wind-up of a subsidiary		D
Total current-year gifts of musical instruments		E
Subtotal (line D **plus** line E)		F
Deduct: Adjustment for an acquisition of control		G
Total gifts of musical instruments available		H
Deduct: Amount applied against taxable income		I
Gifts of musical instruments closing balance		J

Amounts carried forward – Gifts of musical instruments

Year of origin:		Québec
1st prior year	2013-12-31	
2nd prior year	2012-12-31	
3rd prior year	2011-12-31	
4th prior year	2010-12-31	
5th prior year	2009-12-31	
6th prior year*	2008-12-31	
7th prior year	2007-12-31	
8th prior year	2006-12-31	
9th prior year	2005-12-31	
10th prior year	2004-12-31	
11th prior year	2003-12-31	
12th prior year	2002-12-31	
13th prior year	2001-12-31	
14th prior year	2001-09-30	
15th prior year	2000-09-30	
16th prior year	1999-09-30	
17th prior year	1998-09-30	
18th prior year	1997-09-30	
19th prior year	1996-09-30	
20th prior year	1995-09-30	
21st prior year*	1994-09-30	
Total		

* These gifts expired in the current year.

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Canada

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DIVIDENDS RECEIVED, TAXABLE DIVIDENDS PAID, AND PART IV TAX CALCULATION

SCHEDULE 3

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- This schedule is for the use of any corporation to report:
  - non-taxable dividends under section 83;
  - deductible dividends under subsection 138(6);
  - taxable dividends deductible from income under section 112, subsection 113(2) and paragraphs 113(1)(a), (b) or (d); or
  - taxable dividends paid in the tax year that qualify for a dividend refund.
- The calculations in this schedule apply only to private or subject corporations.
- Parts, sections, subsections, and paragraphs referred to on this schedule are from the federal *Income Tax Act.*
- A recipient corporation is connected with a payer corporation at any time in a tax year, if at that time the recipient corporation:
  - controls the payer corporation, other than because of a right referred to in paragraph 251(5)(b); or
  - owns more than 10% of the issued share capital (with full voting rights), and shares that have a fair market value of more than 10% of the fair market value of all shares of the payer corporation.
- File one completed copy of this schedule with your *T2 Corporation Income Tax Return*.
- Column A – Enter "X" if dividends received from a foreign source (connected corporation only).
- Column F1 – Enter the amount of dividends received reported in column 240 that are eligible.
- Column F2 – Enter the code that applies to the deductible taxable dividend.
- Column F3 – Enter if dividends have been received or not after December 20, 2012. This information is required for corporations that must complete Schedules 71 and 72. For more details with regards to this column, consult the Help.

Part 1 – Dividends received in the tax year

Do not include dividends received from foreign non-affiliates.

		Complete if payer corporation is connected			
Name of payer corporation (from which the corporation received the dividend) 200	A	B Enter 1 if payer corporation is connected 205	C Business Number of connected corporation 210	D Tax year-end of the payer corporation in which the sections 112/113 and subsection 138(6) dividends in column F were paid YYYY/MM/DD (See note) 220	E Non-taxable dividend under section 83 230
				Total (enter on line 402 of Schedule 1)	

Note: If your corporation's tax year-end is different than that of the connected payer corporation, your corporation could have received dividends from more than one tax year of the payer corporation. If so, use a separate line to provide the information for each tax year of the payer corporation.
For more details, consult the Help.

				Complete if payer corporation is connected		
F Taxable dividends deductible from taxable income under section 112, subsections 113(2) and 138(6), and paragraphs 113(1)(a), (b), or (d)* 240	F1 Eligible dividends (included in column F)	F2	F3	G Total taxable dividends paid by connected payer corporation (for tax year in column D) 250	H Dividend refund of the connected payer corporation (for tax year in column D)** 260	I Part IV tax before deductions F x 1 / 3 *** 270
						J

Total (enter the amount from column F on line 320 of the T2 return and amount J in Part 2)

* If taxable dividends are received, enter the amount in column 240, but if the corporation is not subject to Part IV tax (such as a public corporation other than a subject corporation as defined in subsection 186(3)), enter "0" in column 270. Life insurers are not subject to Part IV tax on subsection 138(6) dividends.

** If the connected payer corporation's tax year ends after the corporation's balance-due day for the tax year (two or three months, as applicable), you have to estimate the payer's dividend refund when you calculate the corporation's Part IV tax payable.

*** For dividends received from connected corporations: Part IV tax = $\frac{\text{Column F x Column H}}{\text{Column G}}$

Part 2 – Calculation of Part IV tax payable

Part IV tax before deductions (amount J in Part 1) . . . . . .

Deduct:

Part IV.I tax payable on dividends subject to Part IV tax 320

Subtotal

Deduct:

Current-year non-capital loss claimed to reduce Part IV tax 330

Non-capital losses from previous years claimed to reduce Part IV tax 335

Current-year farm loss claimed to reduce Part IV tax 340

Farm losses from previous years claimed to reduce Part IV tax 345

Total losses applied against Part IV tax x 1 / 3 =

Part IV tax payable (enter amount on line 712 of the T2 return) 360

Part 3 – Taxable dividends paid in the tax year that qualify for a dividend refund

	A	B	C	D	D1
	Name of connected recipient corporation 400	Business Number 410	Tax year end of connected recipient corporation in which the dividends in column D were received YYYY/MM/DD (See note) 420	Taxable dividends paid to connected corporations 430	Eligible dividends (included in column D)
1	Hydro Ottawa Holding Inc.	89411 0816 RC0001	2014-12-31	15,000,000	

Note

If your corporation's tax year-end is different than that of the connected recipient corporation, your corporation could have paid dividends in more than one tax year of the recipient corporation. If so, use a separate line to provide the information for each tax year of the recipient corporation. For more details, consult the Help.

Total 15,000,000

Total taxable dividends paid in the tax year to other than connected corporations 450

Eligible dividends (included in line 450) 450a

Total taxable dividends paid in the tax year that qualify for a dividend refund (total of column D above **plus** line 450) 460 15,000,000

Part 4 – Total dividends paid in the tax year

Complete this part if the total taxable dividends paid in the tax year that qualify for a dividend refund (line 460 above) is different from the total dividends paid in the tax year.

Total taxable dividends paid in the tax year for the purposes of a dividend refund (from above) 15,000,000

Other dividends paid in the tax year (total of 510 to 540) . . . . . .

Total dividends paid in the tax year 500 15,000,000

Deduct:

Dividends paid out of capital dividend account 510

Capital gains dividends 520

Dividends paid on shares described in subsection 129(1.2) 530

Taxable dividends paid to a controlling corporation that was bankrupt at any time in the year 540

Subtotal ▶

Total taxable dividends paid in the tax year that qualify for a dividend refund 15,000,000

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Schedule 5

Tax Calculation Supplementary – Corporations

Corporation's name	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule if, during the tax year, the corporation:
  - had a permanent establishment in more than one jurisdiction (corporations that have no taxable income should only complete columns A, B and D in Part 1);
  - is claiming provincial or territorial tax credits or rebates (see Part 2); or
  - has to pay taxes, other than income tax, for Newfoundland and Labrador, or Ontario (see Part 2).
- Regulations mentioned in this schedule are from the *Income Tax Regulations.*
- For more information, see the *T2 Corporation – Income Tax Guide.*
- Enter the regulation number in field 100 of Part 1.

Part 1 – Allocation of taxable income

100 _____ Enter the Regulation that applies (402 to 413).

A Jurisdiction Tick yes if the corporation had a permanent establishment in the jurisdiction during the tax year. *		B Total salaries and wages paid in jurisdiction	C (B x taxable income**) / G	D Gross revenue	E (D x taxable income**) / H	F Allocation of taxable income (C + E) x 1/2*** (where either G or H is nil, do not multiply by 1/2)
Newfoundland and Labrador	003 1 Yes ☐	103		143		
Newfoundland and Labrador Offshore	004 1 Yes ☐	104		144		
Prince Edward Island	005 1 Yes ☐	105		145		
Nova Scotia	007 1 Yes ☐	107		147		
Nova Scotia Offshore	008 1 Yes ☐	108		148		
New Brunswick	009 1 Yes ☐	109		149		
Quebec	011 1 Yes ☐	111		151		
Ontario	013 1 Yes ☐	113		153		
Manitoba	015 1 Yes ☐	115		155		
Saskatchewan	017 1 Yes ☐	117		157		
Alberta	019 1 Yes ☐	119		159		
British Columbia	021 1 Yes ☐	121		161		
Yukon	023 1 Yes ☐	123		163		
Northwest Territories	025 1 Yes ☐	125		165		
Nunavut	026 1 Yes ☐	126		166		
Outside Canada	027 1 Yes ☐	127		167		
Total		129 G		169 H		

* "Permanent establishment" is defined in Regulation 400(2).

** If the corporation has income or loss from an international banking centre: the taxable income is the amount on line 360 or line Z of the T2 return **plus** the total amount not required to be included, or **minus** the total amount not allowed to be deducted, in calculating the corporation's income under section 33.1 of the federal *Income Tax Act*. This does not apply to tax years starting after March 20, 2013.

*** For corporations other than those described under Regulation 402, use the appropriate calculation described in the Regulations to allocate taxable income.

Notes:

1. After determining the allocation of taxable income, you have to calculate the corporation's provincial or territorial tax payable. For more information on how to calculate the tax for each province or territory, see the instructions for Schedule 5 in the *T2 Corporation – Income Tax Guide*.
2. If the corporation has provincial or territorial tax payable, complete Part 2.

Part 2 – Ontario tax payable, tax credits, and rebates

Total taxable income	Income eligible for small business deduction	Provincial or territorial allocation of taxable income	Provincial or territorial tax payable before credits
857,216		857,216	98,580

Ontario basic income tax (from Schedule 500) 270 98,580

Deduct: Ontario small business deduction (from Schedule 500) 402

Subtotal 98,580 ▶ 98,580 A6

Add:

Ontario additional tax re Crown royalties (from Schedule 504) 274

Ontario transitional tax debits (from Schedule 506) 276

Recapture of Ontario research and development tax credit (from Schedule 508) 277

Subtotal ▶ B6

Subtotal (amount A6 **plus** amount B6) 98,580 C6

Deduct:

Ontario resource tax credit (from Schedule 504) 404

Ontario tax credit for manufacturing and processing (from Schedule 502) 406

Ontario foreign tax credit (from Schedule 21) 408

Ontario credit union tax reduction (from Schedule 500) 410

Ontario transitional tax credits (from Schedule 506) 414

Ontario political contributions tax credit (from Schedule 525) 415

Subtotal ▶ D6

Subtotal (amount C6 **minus** amount D6) (if negative, enter "0") 98,580 E6

Deduct: Ontario research and development tax credit (from Schedule 508) 416

Ontario corporate income tax payable before Ontario corporate minimum tax credit and Ontario community food program donation tax credit for farmers (amount E6 **minus** amount on line 416) (if negative, enter "0") 98,580 F6

Deduct:

Ontario corporate minimum tax credit (from Schedule 510) 418

Ontario community food program donation tax credit for farmers (from Schedule 2) 420

Ontario corporate income tax payable (amount F6 **minus** amounts on line 418 and line 420) (if negative, enter "0") 98,580 G6

Add:

Ontario corporate minimum tax (from Schedule 510) 278 678,561

Ontario special additional tax on life insurance corporations (from Schedule 512) 280

Subtotal 678,561 ▶ 678,561 H6

Total Ontario tax payable before refundable credits (amount G6 **plus** amount H6) 777,141 I6

Deduct:

Ontario qualifying environmental trust tax credit 450

Ontario co-operative education tax credit (from Schedule 550) 452 38,459

Ontario apprenticeship training tax credit (from Schedule 552) 454 163,864

Ontario computer animation and special effects tax credit (from Schedule 554) 456

Ontario film and television tax credit (from Schedule 556) 458

Ontario production services tax credit (from Schedule 558) 460

Ontario interactive digital media tax credit (from Schedule 560) 462

Ontario sound recording tax credit (from Schedule 562) 464

Ontario book publishing tax credit (from Schedule 564) 466

Ontario innovation tax credit (from Schedule 566) 468

Ontario business-research institute tax credit (from Schedule 568) 470

Subtotal 202,323 ▶ 202,323 J6

Net Ontario tax payable or refundable credit (amount I6 **minus** amount J6) 290 574,818 K6

(if a credit, enter a negative amount) Include this amount on line 255.

Summary

Enter the total net tax payable or refundable credits for all provinces and territories on line 255.

Net provincial and territorial tax payable or refundable credits **255** 574,818

If the amount on line 255 is positive, enter the net provincial and territorial tax payable on line 760 of the T2 return.
If the amount on line 255 is negative, enter the net provincial and territorial refundable tax credits on line 812 of the T2 return.

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Schedule 8

Capital Cost Allowance (CCA)

Corporation's name	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

For more information, see the section called "Capital Cost Allowance" in the *T2 Corporation Income Tax Guide*.

Is the corporation electing under *Regulation* 1101(5q)? **101** 1 Yes ☐ 2 No ☒

	1 Class number (See Note) **200**	Description	2 Undepreciated capital cost at the beginning of the year (amount from column 12 of last year's schedule 8) **201**	3 Cost of acquisitions during the year (new property must be available for use)* **203**	4 Adjustments and transfers** **205**	5 Proceeds of dispositions during the year (amount not to exceed the capital cost) **207**	6 50% rule (1/2 of the amount, if any, by which the net cost of acquisitions exceeds column 5)*** **211**	7 Reduced undepreciated capital cost	8 CCA rate % **** **212**	9 Recapture of capital cost allowance***** (line 107 of Schedule 1) **213**	10 Terminal loss (line 404 of Schedule 1) **215**	11 Capital cost allowance (for declining balance method, column 7 **multiplied** by column 8, or a lower amount) (line 403 of Schedule 1) ****** **217**	12 Undepreciated capital cost at the end of the year (column 6 **plus** column 7 **minus** column 11) **220**
1.	1		202,217,253			0		202,217,253	4	0	0	8,088,690	194,128,563
2.	1b		23,817,714	1,549,117		0	774,559	24,592,272	6	0	0	1,475,536	23,891,295
3.	2	Dist equip pre 88	67,553,834			0		67,553,834	6	0	0	4,053,230	63,500,604
4.	3	buildings pre 88	10,182,929			0		10,182,929	5	0	0	509,146	9,673,783
5.	8		8,371,653	1,629,838		324	814,757	9,186,410	20	0	0	1,837,282	8,163,885
6.	10		5,328,903	2,197,399		97,865	1,049,767	6,378,670	30	0	0	1,913,601	5,514,836
7.	12		652,931	32,978,571		0	16,489,286	17,142,216	100	0	0	17,142,216	16,489,286
8.	42		422,370			0		422,370	12	0	0	50,684	371,686
9.	43.2	SOLAR ASSETS		114,096		0	57,048	57,048	50	0	0	28,524	85,572
10.	45		47,524			0		47,524	45	0	0	21,386	26,138
11.	47		318,548,295	72,717,280		29,918	36,343,681	354,891,976	8	0	0	28,391,358	362,844,299
12.	50		1,996,893	1,500,057		0	750,029	2,746,921	55	0	0	1,510,807	1,986,143
		Totals	639,140,299	112,686,358		128,107	56,279,127	695,419,423				65,022,460	686,676,090

Note: Class numbers followed by a letter indicate the basic rate of the class taking into account the additional deduction allowed. Class 1a: 4% + 6% = 10% (class 1 to 10%), class 1b: 4% + 2% = 6% (class 1 to 6%).

* Include any property acquired in previous years that has now become available for use. This property would have been previously excluded from column 3. List separately any acquisitions that are not subject to the 50% rule, see *Regulation* 1100(2) and (2.2).

** Enter in column 4, "Adjustments and transfers", amounts that increase or reduce the undepreciated capital cost. Items that **increase** the undepreciated capital cost include amounts transferred under section 85, or transferred on amalgamation or winding-up of a subsidiary. Items that **reduce** the undepreciated capital cost include government assistance received or entitled to be received in the year, or a reduction of capital cost after the application of section 80. See the *T2 Corporation Income Tax Guide* for other examples of adjustments and transfers to include in column 4.

*** The net cost of acquisitions is the cost of acquisitions (column 3) **plus** or **minus** certain adjustments and transfers from column 4. For exceptions to the 50% rule, see Interpretation Bulletin IT-285, *Capital Cost Allowance – General Comments*.

**** Enter a rate only if you are using the declining balance method. For any other method (for example the straight-line method, where calculations are always based on the cost of acquisitions), enter N/A. Then enter the amount you are claiming in column 11.

***** For every entry in column 9, the "Recapture of capital cost allowance" there must be a corresponding entry in column 5, "Proceeds of dispositions during the year". The recapture and terminal loss rules do not apply to passenger vehicles in Class 10.1.

****** If the tax year is shorter than 365 days, prorate the CCA claim. Some classes of property do not have to be prorated. See the *T2 Corporation Income Tax Guide* for more information.

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SCHEDULE 9

RELATED AND ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Complete this schedule if the corporation is related to or associated with at least one other corporation.
- For more information, see the *T2 Corporation Income Tax Guide*.

	Name 100	Country of residence (other than Canada) 200	Business number (see note 1) 300	Relationship code (see note 2) 400	Number of common shares you own 500	% of common shares you own 550	Number of preferred shares you own 600	% of preferred shares you own 650	Book value of capital stock 700
1.	Hydro Ottawa Holding Inc.		89411 0816 RC0001	1					
2.	Energy Ottawa Inc.		86338 9961 RC0001	3					
3.	Telecom Ottawa Holding Inc. / Soci		86202 9337 RC0001	3					
4.	PowerTrail Inc.		82829 3944 RC0001	3					
5.	Moose Creek Energy Inc.		82851 1311 RC0001	3					
6.	Chaudiere Hydro Inc. Hydro Chaudi		81281 3103 RC0001	3					
7.	Chaudiere Water Power Inc/Energie		10093 1955 RC0001	3					
8.	2425932 ONTARIO INC.		80053 3846 RC0001	3					

Note 1: Enter "NR" if the corporation is not registered or does not have a business number.
Note 2: Enter the code number of the relationship that applies from the following order: 1 - Parent 2 - Subsidiary 3 - Associated 4 - Related but not associated

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SCHEDULE 10

CUMULATIVE ELIGIBLE CAPITAL DEDUCTION

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- For use by a corporation that has eligible capital property. For more information, see the *T2 Corporation Income Tax Guide*.
- A separate cumulative eligible capital account must be kept for each business.

Part 1 – Calculation of current year deduction and carry-forward

Cumulative eligible capital - Balance at the end of the preceding taxation year (if negative, enter "0") . . . . . **200** 824,938 A

Add: Cost of eligible capital property acquired during the taxation year **222** 11,336

Other adjustments **226**

Subtotal (line 222 plus line 226) 11,336 x 3 / 4 = 8,502 B

Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an eligible capital property to the corporation after December 20, 2002 . . . . . **228** x 1 / 2 = C

amount B minus amount C (if negative, enter "0") 8,502 ▶ 8,502 D

Amount transferred on amalgamation or wind-up of subsidiary . . . . . **224** E

Subtotal (add amounts A, D, and E) **230** 833,440 F

Deduct: Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all eligible capital property during the taxation year . . . . **242** G

The gross amount of a reduction in respect of a forgiven debt obligation as provided for in subsection 80(7) . . . . . **244** H

Other adjustments . . . . . **246** I

(add amounts G,H, and I) x 3 / 4 = **248** J

Cumulative eligible capital balance (amount F minus amount J) . . . . . 833,440 K

(if amount K is negative, enter "0" at line M and proceed to Part 2)

Cumulative eligible capital for a property no longer owned after ceasing to carry on that business **249**

amount K 833,440

less amount from line 249

Current year deduction . . . . . 833,440 x 7.00 % = **250** 58,341 *

(line 249 plus line 250) (enter this amount at line 405 of Schedule 1) 58,341 ▶ 58,341 L

Cumulative eligible capital – Closing balance (amount K minus amount L) (if negative, enter "0") . . . . . **300** 775,099 M

* You can claim any amount up to the maximum deduction of 7%. The deduction may not exceed the maximum amount prorated by the number of days in the taxation year divided by 365.

Part 2 – Amount to be included in income arising from disposition

(complete this part only if the amount at line K is negative)

Amount from line K (show as positive amount)				N
Total of cumulative eligible capital (CEC) deductions from income for taxation years beginning after June 30, 1988	400		1	
Total of all amounts which reduced CEC in the current or prior years under subsection 80(7)	401		2	
Total of CEC deductions claimed for taxation years beginning before July 1, 1988	402	3		
Negative balances in the CEC account that were included in income for taxation years beginning before July 1, 1988	408	4		
Line 3 minus line 4 (if negative, enter "0")		▶	5	
Total of lines 1, 2 and 5			6	
Amounts included in income under paragraph 14(1)(b), as that paragraph applied to taxation years ending after June 30, 1988 and before February 28, 2000, to the extent that it is for an amount described at line 400		7		
Amounts at line T from Schedule 10 of previous taxation years ending after February 27, 2000		8		
Subtotal (line 7 plus line 8)	409	▶	9	
Line 6 minus line 9 (if negative, enter "0")			▶	O
Line N minus line O (if negative, enter "0")				P
Line 5 _____ x 1 / 2 =				Q
Line P minus line Q (if negative, enter "0")				R
Amount R _____ x 2 / 3 =				S
Amount N or amount O, whichever is less				T
Amount to be included in income (amount S plus amount T) (enter this amount on line 108 of Schedule 1)	410			

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SCHEDULE 13

CONTINUITY OF RESERVES

Name of corporation	Business number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- For use by corporations to provide a continuity of all reserves claimed which are allowed for tax purposes.
- File one completed copy of this schedule with the corporation's *T2 Corporation Income Tax Return*.
- For more information, see the *T2 Corporation Income Tax Guide*.

Part 1 – Capital gains reserves

	Description of property 001	Balance at the beginning of the year $ 002	Transfer on an amalgamation or the wind-up of a subsidiary $ 003	Add $	Deduct $	Balance at the end of the year $ 004
1						
	Totals	008	009			010

The amount from line 008 **plus** the amount from line 009 should be entered on line 880 of Schedule 6, *Summary of Dispositions of Capital Property*. The amount from line 010 should be entered on line 885 of Schedule 6.

Part 2 – Other reserves

Description	Balance at the beginning of the year $	Transfer on an amalgamation or the wind-up of a subsidiary $	Add $	Deduct $	Balance at the end of the year $
Reserve for doubtful debts . . . . . [X]	110 1,110,910	115	2,116,594		120 3,227,504
Reserve for undelivered goods and services not rendered . . . . . [ ]	130	135			140
Reserve for prepaid rent . . . . . [ ]	150	155			160
Reserve for refundable containers . . [ ]	190	195			200
Reserve for unpaid amounts . . . . . [ ]	210	215			220
Other tax reserves . . . . . [ ]	230	235			240
Totals	270 1,110,910	275	2,116,594		280 3,227,504

Enter "X" in the column above if the tax reserve has also been reported on the corporation's financial statements. This allows offsetting entries on Schedule 1, resulting in a zero effect on net income for tax purposes.

The amount from line 270 **plus** the amount from line 275 should be entered on line 125 of Schedule 1, *Net Income (Loss) for Income Tax Purposes*, as an addition. The amount from line 280 should be entered on line 413 of Schedule 1 as a deduction.

Continuity of financial statement reserves (not deductible)

Financial statement reserves (not deductible)

	Description	Balance at the beginning of the year	Transfer on an amalgamation or the wind-up of a subsidiary	Add	Deduct	Balance at the end of the year
1	Allowance for Doubtful Debts	531,598		68,960		600,558
2	Contingent Liability	1,421,242		122,000		1,543,242
3						
	Reserves from Part 2 of Schedule 13	1,110,910		2,116,594		3,227,504
	Totals	3,063,750		2,307,554		5,371,304

The total opening balance plus the total transfers should be entered on line 414 of Schedule 1 as a deduction.
The total closing balance should be entered on line 126 of Schedule 1 as an addition.

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Schedule 15

Deferred Income Plans

Corporation's name	Business number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Complete the information below if the corporation deducted payments from its income made to a registered pension plan (RPP), a registered supplementary unemployment benefit plan (RSUBP), a deferred profit sharing plan (DPSP), a pooled registered pension plan (PRPP), or an employee profit sharing plan (EPSP).
- If the trust that governs an employee profit sharing plan is **not resident** in Canada, please indicate if the T4PS, *Statement of Employees Profit Sharing Plan Allocations and Payments*, Supplementary slip(s) were filed for the last calendar year, and whether they were filed by the trustee or the employer.

	Type of plan (see note 1) 100	Amount of contribution $ (see note 2) 200	Registration number (RPP, RSUBP, PRPP, and DPSP only) 300	Name of EPSP trust 400	Address of EPSP trust 500	T4PS slip(s) (see note 3) 600
1	1	5,491,051	345983			

Note 1

Enter the applicable code number:

1 – RPP
2 – RSUBP
3 – DPSP
4 – EPSP
5 – PRPP

Note 2

You do not need to add to Schedule 1 any payments you made to deferred income plans.
To reconcile such payments, calculate the following amount:

Total of all amounts indicated in column 200 of this schedule . . . . . 5,491,051 A

Less:

Total of all amounts for deferred income plans deducted in your financial statements . . . . . 5,491,051 B

Deductible amount for contributions to deferred income plans
(amount A **minus** amount B) (if negative, enter "0") C

Enter amount C on line 417 of Schedule 1

Note 3

T4PS slip(s) filed by: 1 – Trustee
2 – Employer
(EPSP only)

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SCHEDULE 23

AGREEMENT AMONG ASSOCIATED CANADIAN-CONTROLLED PRIVATE CORPORATIONS TO ALLOCATE THE BUSINESS LIMIT

- For use by a Canadian-controlled private corporation (CCPC) to identify all associated corporations and to assign a percentage for each associated corporation. This percentage will be used to allocate the business limit for purposes of the small business deduction. Information from this schedule will also be used to determine the date the balance of tax is due and to calculate the reduction to the business limit.
- An associated CCPC that has more than one tax year ending in a calendar year, is required to file an agreement for each tax year ending in that calendar year.

Column 1: Enter the legal name of each of the corporations in the associated group. Include non-CCPCs and CCPCs that have filed an election under subsection 256(2) of the *Income Tax Act* (ITA) not to be associated for purposes of the small business deduction.

Column 2: Provide the Business Number for each corporation (if a corporation is not registered, enter "NR").

Column 3: Enter the association code that applies to each corporation:

1 – Associated for purposes of allocating the business limit (unless code 5 applies)

2 – CCPC that is a "third corporation" that has elected under subsection 256(2) not to be associated for purposes of the small business deduction

3 – Non-CCPC that is a "third corporation" as defined in subsection 256(2)

4 – Associated non-CCPC

5 – Associated CCPC to which code 1 does not apply because of a subsection 256(2) election made by a "third corporation"

Column 4: Enter the business limit for the year of each corporation in the associated group. The business limit is computed at line 4 on page 4 of each respective corporation's T2 return.

Column 5: Assign a percentage to allocate the business limit to each corporation that has an association code 1 in column 3. The total of all percentages in column 5 cannot exceed 100%.

Column 6: Enter the business limit allocated to each corporation by multiplying the amount in column 4 by the percentage in column 5. Add all business limits allocated in column 6 and enter the total at line A. Ensure that the total at line A falls within the range for the calendar year to which the agreement applies:

Calendar year	Acceptable range
2006	maximum $300,000
2007	$300,001 to $400,000

Calendar year	Acceptable range
2008	maximum $400,000
2009	$400,001 to $500,000

If the calendar year to which this agreement applies is after 2009, ensure that the total at line A does not exceed $500,000.

Allocating the business limit

Date filed (do not use this area) . . . . . **025** Year Month Day

Enter the calendar year to which the agreement applies . . . . . **050** Year 2014

Is this an amended agreement for the above-noted calendar year that is intended to replace an agreement previously filed by any of the associated corporations listed below? . . . . . **075** 1 Yes ☐ 2 No ☒

	1 Names of associated corporations **100**	2 Business Number of associated corporations **200**	3 Association code **300**	4 Business limit for the year (before the allocation) $	5 Percentage of the business limit % **350**	6 Business limit allocated* $ **400**
1	Hydro Ottawa Limited	86339 1363 RC0001	1	500,000	100.0000	500,000
2	Hydro Ottawa Holding Inc.	89411 0816 RC0001	1	500,000		
3	Energy Ottawa Inc.	86338 9961 RC0001	1	500,000		
4	Telecom Ottawa Holding Inc. / Societe De Port	86202 9337 RC0001	1	500,000		
5	PowerTrail Inc.	82829 3944 RC0001	1	500,000		
6	Moose Creek Energy Inc.	82851 1311 RC0001	1	500,000		
7	Chaudiere Hydro Inc. Hydro Chaudiere Inc.	81281 3103 RC0001	1	500,000		
8	Chaudiere Water Power Inc/Energie Hydrauliqu	10093 1955 RC0001	1	500,000		
9	2425932 ONTARIO INC.	80053 3846 RC0001	1	500,000		
				Total	100.0000	500,000 **A**

Business limit reduction under subsection 125(5.1) of the ITA

The business limit reduction is calculated in the small business deduction area of the T2 return. One of the factors used in this calculation is the "Large corporation amount" at line 415 of the T2 return. If the corporation is a member of an associated group** of corporations in the current tax year, the amount at line 415 of the T2 return is equal to 0.225% x (A - $10,000,000) where, "A" is the total of taxable capital employed in Canada*** of each corporation in the associated group for its last tax year ending in the preceding calendar year.

* Each corporation will enter on line 410 of the T2 return, the amount allocated to it in column 6. However, if the corporation's tax year is less than 51 weeks, prorate the amount in column 6 by the number of days in the tax year divided by 365, and enter the result on line 410 of the T2 return.

Special rules apply if a CCPC has more than one tax year ending in a calendar year and is associated in more than one of those years with another CCPC that has a tax year ending in the same calendar year. If the tax year straddles January 1, 2009, the business limit for the second (or subsequent) tax year(s) will be equal to the lesser of the business limit that would have been determined for the first tax year ending in the calendar year, if $500,000 was used in allocating the amounts among associated corporations and the business limit determined for the second (or subsequent) tax year(s) ending in the same calendar year. Otherwise, the business limit for the second (or subsequent) tax year(s) will be equal to the lesser of the business limit determined for the first tax year ending in the calendar year and the business limit determined for the second (or subsequent) tax year(s) ending in the same calendar year.

** The associated group includes the corporation filing this schedule and each corporation that has an "association code" of 1 or 4 in column 3.

*** "Taxable capital employed in Canada" has the meaning assigned by subsection 181.2(1) or 181.3(1) or section 181.4 of the ITA.

T2 SCH 23 (09)

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Schedule 31

Investment Tax Credit – Corporations

General information

- Use this schedule:
  - to calculate an investment tax credit (ITC) earned during the tax year;
  - to claim a deduction against Part I tax payable;
  - to claim a refund of credit earned during the current tax year;
  - to claim a carryforward of credit from previous tax years;
  - to transfer a credit following an amalgamation or wind-up of a subsidiary, as described under subsections 87(1) and 88(1) of the federal *Income Tax Act*;
  - to request a credit carryback to one or more previous years; or
  - if you are subject to a recapture of ITC.
- The ITC is eligible for a three-year carryback (if not deductible in the year earned). It is also eligible for a twenty-year carryforward.
- All legislative references are to the federal *Income Tax Act* and *Income Tax Regulations*.
- Investments or expenditures, described in subsection 127(9) of the Act and Part XLVI of the Regulations, that earn an ITC are:
  - qualified property and qualified resource property (Parts 4 to 7 of this schedule);
  - expenditures that are part of the SR&ED qualified expenditure pool (Parts 8 to 17). File Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim;*
  - pre-production mining expenditures (Parts 18 to 20);
  - apprenticeship job creation expenditures (Parts 21 to 23); and
  - child care spaces expenditures (Parts 24 to 28).
- Include a completed copy of this schedule with the *T2 Corporation Income Tax Return*. If you need more space, attach additional schedules.
- For more information on ITCs, see "Investment Tax Credit" in Guide T4012, *T2 Corporation – Income Tax Guide*, Information Circular IC 78-4, *Investment Tax Credit Rates*, and its related Special Release.
- For more information on SR&ED, see Brochure RC4472, *Overview of the Scientific Research and Experimental Development Program (SR&ED) Tax Incentive Program*; Brochure RC4467, *Support for your R&D in Canada*, and T4088, *Guide to Form T661 – Scientific Research and Experimental Development (SR&ED) Expenditures Claim*. Also see the *Eligibility of Work for SR&ED Investment Tax Credits Policy* at **www.cra.gc.ca/txcrdt/sred-rsde/clmng/lgbltywrkfrsrdnvstmnttxcrdts-eng.html**.

Detailed information

- For the purpose of this schedule, **investment** means the capital cost of the property (excluding amounts added by an election under section 21 of the Act), determined without reference to subsections 13(7.1) and 13(7.4), minus the amount of any government or non-government assistance that the corporation has received, is entitled to receive, or can reasonably be expected to receive for that property when it files the income tax return for the year in which the property was acquired.
- An ITC deducted or refunded in a tax year for a depreciable property, other than a depreciable property deductible under paragraph 37(1)(b), reduces the capital cost of that property in the next tax year. It also reduces the undepreciated capital cost of that class in the next tax year. An ITC for SR&ED deducted or refunded in a tax year will reduce the balance in the pool of deductible SR&ED expenditures and the adjusted cost base (ACB) of an interest in a partnership in the next tax year. An ITC from pre-production mining expenditures deducted in a tax year reduces the balance in the pool of deductible cumulative Canadian exploration expenses in the next tax year.
- Property acquired has to be **available for use** before a claim for an ITC can be made. See subsections 127(11.2) and 248(19) for more information.
- Expenditures for SR&ED and capital costs for a property qualifying for an ITC must be identified by the claimant on Form T661 and Schedule 31 no later than 12 months after the claimant's income tax return is due for the tax year in which it incurred the expenditures or capital costs.
- Partnership allocations – Subsection 127(8) provides for the allocation of the amount that may reasonably be considered to be a partner's share of the ITCs of the partnership at the end of the fiscal period of the partnership. An allocation of ITCs is generally considered to be the partner's reasonable share of the ITCs if it is made in the same proportion in which the partners have agreed to share any income or loss and if section 103 is not applicable for the agreement to share any income or loss. Special rules apply to specified and limited partners. For more information, see Guide T4068, *Guide for the Partnership Information Return*.
- For SR&ED expenditures, the expression **in Canada** includes the "exclusive economic zone" (as defined in the *Oceans Act* to generally consist of an area that is within 200 nautical miles from the Canadian coastline), including the airspace, seabed and subsoil for that zone.
- For the purpose of this schedule, the expression **Atlantic Canada** includes the Gaspé Peninsula and the provinces of Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick, as well as their respective offshore regions (prescribed in Regulation 4609).
- For the purpose of this schedule, **qualified property** means property in Atlantic Canada that is used primarily for manufacturing and processing, farming or fishing, logging, storing grain, or harvesting peat. Property in Atlantic Canada that is used primarily for oil and gas, and mining activities is considered qualified property only if acquired by the taxpayer **before** March 29, 2012. Qualified property includes new buildings and new machinery and equipment (prescribed in Regulation 4600), and if acquired by the taxpayer **after** March 28, 2012, new energy generation and conservation property (prescribed in Regulation 4600). Qualified property can also be used primarily to produce or process electrical energy or steam in a prescribed area (as described in Regulation 4610). See the definition of **qualified property** in subsection 127(9) of the Act for more information.
- For the purpose of this schedule, **qualified resource property** means property in Atlantic Canada that is used primarily for oil and gas, and mining activities, if acquired by the taxpayer **after** March 28, 2012, and **before** January 1, 2016. Qualified resource property includes new buildings and new machinery and equipment (prescribed in Regulation 4600). See the definition of **qualified resource property** in subsection 127(9) of the Act for more information.

Detailed information (continued)

- For the purpose of this schedule, **pre-production mining exploration expenditures** are pre-production mining expenditures incurred **after** March 28, 2012, by the taxpayer to determine the existence, location, extent, or quality of certain mineral resources in Canada, excluding expenses incurred in the exploration of an oil or gas well. See subparagraph (a)(i) of the definition of **pre-production mining expenditure** in subsection 127(9) for more information.
- For the purpose of this schedule, **pre-production mining development expenditures** are pre-production mining expenditures incurred **after** March 28, 2012, by the taxpayer to bring a new mineral resource mine in Canada into production, excluding expenses in the development of a bituminous sands deposit or an oil shale deposit. See subparagraph (a)(ii) of the definition of **pre-production mining expenditure** in subsection 127(9) for more information.

Part 1 – Investments, expenditures, and percentages

Investments	**Specified percentage**
Qualified property acquired primarily for use in Atlantic Canada	10 %
Qualified resource property acquired primarily for use in Atlantic Canada and acquired:	
– after March 28, 2012, and before 2014	10 %
– after 2013 and before 2016	5 %
– after 2015*	0 %
Expenditures	
If you are a Canadian-controlled private corporation (CCPC), this percentage may apply to the portion that you claim of the SR&ED qualified expenditure pool that does not exceed your expenditure limit (see Part 10)	35 %
Note: If your current year's qualified expenditures are more than the corporation's expenditure limit (see Part 10), the excess is eligible for an ITC calculated at the 20 % rate**.	
If you are a corporation that is not a CCPC and have incurred qualified expenditures for SR&ED in any area in Canada:	
– before 2014**	20 %
– after 2013**	15 %
If you are a taxable Canadian corporation that incurred pre-production mining expenditures before March 29, 2012	10 %
If you are a taxable Canadian corporation that incurred pre-production mining exploration expenditures***:	
– after March 28, 2012, and before 2013	10 %
– in 2013	5 %
– after 2013***	0 %
If you are a taxable Canadian corporation that incurred pre-production mining development expenditures****:	
– after March 28, 2012, and before 2014****	10 %
– in 2014	7 %
– in 2015	4 %
– after 2015****	0 %
If you paid salary and wages to apprentices in the first 24 months of their apprenticeship contract for employment	10 %
If you incurred eligible expenditures after March 18, 2007, for the creation of licensed child care spaces for the children of your employees and, potentially, for other children	25 %

* A transitional relief rate of 10% may apply to property acquired after 2013 and before 2017, if the property is acquired under a written agreement entered into before March 29, 2012, or the property is acquired as part of a **phase** of a project where the construction or the engineering and design work for the construction started before March 29, 2012. See paragraph (a.1) of the definition of **specified percentage** in subsection 127(9) for more information.

** The reduction of the rate from 20% to 15% applies to 2014 and later tax years, except that, for 2014 tax years that start before 2014, the reduction is pro-rated based on the number of days in the tax year that are after 2013.

*** Pre-production mining exploration expenditures are described in subparagraph (a)(i) of the definition of **pre-production mining expenditure** in subsection 127(9).

**** A transitional relief rate of 10% may apply to expenditures incurred after 2013 and before 2016, if the expenditure is incurred under a written agreement entered into before March 29, 2012, or the expenditure is incurred as part of the development of a new mine where the construction or the engineering and design work for the construction of the new mine started before March 29, 2012. See subparagraph (k)(ii) of the definition of **specified percentage** in subsection 127(9) for more information. Pre-production mining development expenditures are described in subparagraph (a)(ii) of the definition of **pre-production mining expenditure** in subsection 127(9).

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Part 2 – Determination of a qualifying corporation

Is the corporation a qualifying corporation? . . . . . **101** 1 Yes ☐ 2 No ☒

For the purpose of a refundable ITC, a **qualifying corporation** is defined under subsection 127.1(2). The corporation has to be a CCPC and its taxable income (before any loss carrybacks) for its previous tax year cannot be more than its **qualifying income limit** for the particular tax year. If the corporation is associated with any other corporations during the tax year, the total of the taxable incomes of the corporation and the associated corporations (before any loss carrybacks), for their last tax year ending in the previous calendar year, cannot be more than their qualifying income limit for the particular tax year.

Note: A CCPC calculating a refundable ITC is considered to be associated with another corporation if it meets any of the conditions in subsection 256(1), except where:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of both corporations; and
- one of the corporations has at least one shareholder who is not common to both corporations.

If you are a **qualifying** corporation, you will earn a **100%** refund on your share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund*.

Some CCPCs that are **not qualifying** corporations may also earn a **100%** refund on their share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The expenditure limit can be determined in Part 10. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund*.

The 100% refund will not be available to a corporation that is an **excluded corporation** as defined under subsection 127.1(2). A corporation is an excluded corporation if, at any time during the year, it is a corporation that is either controlled by (directly or indirectly, in any manner whatever) or is related to:

a) one or more persons exempt from Part I tax under section 149;

b) Her Majesty in right of a province, a Canadian municipality, or any other public authority; or

c) any combination of persons referred to in a) or b) above.

* Capital expenditures incurred after December 31, 2013, including lease payments for property that would have been a capital expenditure if purchased directly, are **not** qualified SR&ED expenditures and are **not** eligible for an ITC on SR&ED expenditures.

Part 3 – Corporations in the farming industry

Complete this area if the corporation is making SR&ED contributions.

Is the corporation claiming a contribution in the current year to an agricultural organization whose goal is to finance SR&ED work (for example, check-off dues)? . . . . . **102** 1 Yes ☐ 2 No ☒

Contributions to agricultural organizations for SR&ED* . . . . . **103** _____

If **yes**, complete Schedule 125, *Income Statement Information*, to identify the type of farming industry the corporation is involved in. For more information on Schedule 125, see Guide RC4088, *General Index of Financial Information (GIFI)*. Enter contributions on line 350 of Part 8.

* Enter only contributions not already included on Form T661. Include all of the contributions made before 2013 and 80% of the contributions made after 2012.

Qualified Property and Qualified Resource Property

Part 4 – Eligible investments for qualified property and qualified resource property from the current tax year

CCA* class number **105**	Description of investment **110**	Date available for use **115**	Location used (province or territory) **120**	Amount of investment **125**

Total of investments for qualified property and qualified resource property _____ A

* CCA: capital cost allowance

Part 5 – Current-year credit and account balances – ITC from investments in qualified property and qualified resource property

ITC at the end of the previous tax year . . . . . _____ B

Deduct:

Credit deemed as a remittance of co-op corporations . . . . . 210 _____

Credit expired . . . . . 215 _____

Subtotal (line 210 **plus** line 215) _____ ▶ _____ C

ITC at the beginning of the tax year (amount B **minus** amount C) . . . . . 220 _____

Add:

Credit transferred on amalgamation or wind-up of subsidiary . . . . . 230 _____

ITC from repayment of assistance . . . . . 235 _____

Qualified property; and qualified resource property acquired after March 28, 2012, and before January 1, 2014* (applicable part of amount A from Part 4) . . . . . _____ x 10 % = 240 _____

Qualified resource property acquired after December 31, 2013, and before January 1, 2016 (applicable part of amount A from Part 4) . . . . . _____ x 5 % = 242 _____

Credit allocated from a partnership . . . . . 250 _____

Subtotal (total of lines 230 to 250) _____ ▶ _____ D

Total credit available (line 220 **plus** amount D) . . . . . _____ E

Deduct:

Credit deducted from Part I tax (enter at amount D in Part 30) . . . . . 260 _____

Credit carried back to the previous year(s) (amount H from Part 6) . . . . . _____ a

Credit transferred to offset Part VII tax liability . . . . . 280 _____

Subtotal (total of line 260, amount a, and line 280) _____ ▶ _____ F

Credit balance before refund (amount E **minus** amount F) . . . . . _____ G

Deduct:

Refund of credit claimed on investments from qualified property and qualified resource property (from Part 7) . . . . . 310 _____

ITC closing balance of investments from qualified property and qualified resource property (amount G **minus** line 310) 320 _____

* Include investments acquired after 2013 and before 2017 that are eligible for transitional relief.

Part 6 – Request for carryback of credit from investments in qualified property and qualified resource property

	Year	Month	Day			
1st previous tax year				. . . . . Credit to be applied	901	_____
2nd previous tax year				. . . . . Credit to be applied	902	_____
3rd previous tax year				. . . . . Credit to be applied	903	_____

Total (enter at amount a in Part 5) _____ H

Part 7 – Refund of ITC for qualifying corporations on investments from qualified property and qualified resource property

Current-year ITCs (total of lines 240, 242, and 250 from Part 5) . . . . . _____ I

Credit balance before refund (amount G from Part 5) . . . . . _____ J

Refund (40 % of amount I or J, whichever is less) . . . . . _____ K

Enter amount K or a lesser amount on line 310 in Part 5 (also enter it on line 780 of the T2 return if the corporation does not claim an SR&ED ITC refund).

SR&ED

Part 8 – Qualified SR&ED expenditures

Current expenditures

Current expenditures (from line 557 on Form T661) . . . . . .

Contributions to agricultural organizations for SR&ED . . . . . .

Deduct:

Government assistance, non-government assistance, or contract payment . . . . . .

Contributions to agricultural organizations for SR&ED for the federal ITC (this amount is updated to line 103 of Part 3. For more details, consult the Help.)* . . . . . + ▶

Current expenditures (line 557 on Form T661 **plus** line 103 from Part 3)* . . . . . ▶ **350**

Capital expenditures incurred **before** 2014 (from line 558 on Form T661)** **360**

Repayments made in the year (from line 560 on Form T661) **370**

Qualified SR&ED expenditures (total of lines 350 to 370) **380**

* If you are claiming only contributions made to agricultural organizations for SR&ED, line 350 should equal line 103 in Part 3. Do not file Form T661.

** Capital expenditures incurred after December 31, 2013, are not qualified SR&ED expenditures.

Part 9 – Components of the SR&ED expenditure limit calculation

Part 9 only applies if the corporation is a CCPC.

Note: A CCPC that calculates an SR&ED expenditure limit is considered to be associated with another corporation if it meets any of the conditions in subsection 256(1), except where:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of the corporation; and
- one of the corporations has at least one shareholder who is not common to both corporations.

Is the corporation associated with another CCPC for the purpose of calculating the SR&ED expenditure limit? . . . . . **385** 1 Yes ☐ 2 No ☒

Complete lines 390 and 398 if you answered **no** to the question at line 385 above or if the corporation is not associated with any other corporations (the amounts for associated corporations will be determined on Schedule 49).

Enter your taxable income for the previous tax year* (prior to any loss carry-backs applied) **390** 26,428,300

Enter your taxable capital employed in Canada for the previous tax year minus $10 million. If this amount is nil or negative, enter "0". If this amount is over $40 million, enter $40 million 269,594,000 . . . . . **398** 40,000,000

* If either of the tax years referred to at line 390 is less than 51 weeks, **multiply** the taxable income by the following result: 365 **divided** by the number of days in these tax years.

Part 10 – SR&ED expenditure limit for a CCPC

For a stand-alone corporation: $ 8,000,000

Deduct:

Taxable income for the previous tax year (line 390 from Part 9) or $500,000, whichever is more 26,428,300 x 10 = 264,283,000 A

Excess ($8,000,000 **minus** amount A; if negative, enter "0") . . . . . B

$ 40,000,000 **minus** line 398 from Part 9 . . . . . a

Amount a **divided** by $ 40,000,000 C

Expenditure limit for the stand-alone corporation (amount B **multiplied** by amount C) . . . . . D*

For an associated corporation:

If associated, the allocation of the SR&ED expenditure limit as provided on Schedule 49 . . . . . **400** E*

Where the tax year of the corporation is less than 51 weeks, calculate the amount of the expenditure limit as follows:

Amount D or E x Number of days in the tax year / 365 365 = ... F

Your SR&ED expenditure limit for the year (enter the amount from line D, E, or F, whichever applies) **410**

* Amount D or E cannot be more than $3,000,000.

Part 11 – Investment tax credits on SR&ED expenditures

Current expenditures (line 350 from Part 8) or the expenditure limit (line 410 from Part 10), whichever is less*	420		x	35 %	=	G
Line 350 **minus** line 410 (if negative, enter "0")**	430		x	15 %	=	H
Line 410 **minus** line 350 (if negative, enter "0")			b			
Capital expenditures (line 360 from Part 8) or amount b above, whichever is less*	440		x	35 %	=	I
Line 360 **minus** amount b above (if negative, enter "0")**	450		x	15 %	=	J

Repayments (amount from line 370 in Part 8)

If a corporation makes a repayment of any government or non-government assistance, or contract payments that reduced the amount of qualified expenditures for ITC purposes, the amount of the repayment is eligible for a credit at the rate that would have applied to the repaid amount. Enter the amount of the repayment on the line that corresponds to the appropriate rate.**

460		x	35 %	=	c
480		x	15 %	=	d

Subtotal (amount c **plus** amount d) ▶ K

Current-year SR&ED ITC (total of amounts G to K; enter on line 540 in Part 12) L

* For corporations that are not CCPCs, enter "0" for amounts G and I.

** For tax years that end after 2013, the general SR&ED rate is reduced from 20% to 15%, except that, for 2014 tax years that start before 2014, the reduction is pro-rated based on the number of days in the tax year that are after 2013.

Part 12 – Current-year credit and account balances – ITC from SR&ED expenditures

ITC at the end of the previous tax year M

Deduct:

Credit deemed as a remittance of co-op corporations 510

Credit expired 515

Subtotal (line 510 **plus** line 515) ▶ N

ITC at the beginning of the tax year (amount M **minus** amount N) 520

Add:

Credit transferred on amalgamation or wind-up of subsidiary 530

Total current-year credit (from amount L in Part 11) 540

Credit allocated from a partnership 550

Subtotal (total of lines 530 to 550) ▶ O

Total credit available (line 520 **plus** amount O) P

Deduct:

Credit deducted from Part I tax (enter at amount E in Part 30) 560

Credit carried back to the previous year(s) (amount S from Part 13) e

Credit transferred to offset Part VII tax liability 580

Subtotal (total of line 560, amount e, and line 580) ▶ Q

Credit balance before refund (amount P **minus** amount Q) R

Deduct:

Refund of credit claimed on SR&ED expenditures (from Part 14 or 15, whichever applies) 610

ITC closing balance on SR&ED (amount R **minus** line 610) 620

Part 13 – Request for carryback of credit from SR&ED expenditures

	Year	Month	Day
1st previous tax year			
2nd previous tax year			
3rd previous tax year			

Credit to be applied **911** _____

Credit to be applied **912** _____

Credit to be applied **913** _____

Total (enter at amount e in Part 12) _____ S

Part 14 – Refund of ITC for qualifying corporations – SR&ED

Complete this part only if you are a qualifying corporation as determined at line 101 in Part 2.

Is the corporation an excluded corporation as defined under subsection 127.1(2)? **650** 1 Yes ☐ 2 No ☒

Current-year ITC (lines 540 **plus** 550 from Part 12 **minus** amount K from Part 11) _____ f

Refundable credits (amount f above or amount R from Part 12, whichever is less)* _____ T

Deduct:

Amount T or amount G from Part 11, whichever is less _____ U

Net amount (amount T **minus** amount U; if negative, enter "0") _____ V

Amount V **multiplied** by 40 % _____ W

Add:

Amount U _____ X

Refund of ITC (amount W **plus** amount X – enter this, or a lesser amount, on line 610 in Part 12) _____ Y

Enter the total of lines 310 from Part 5 and 610 from Part 12 on line 780 of the T2 return.

* If you are also an excluded corporation [as defined in subsection 127.1(2)], this amount must be multiplied by 40%. Claim this, or a lesser amount, as your refund of ITC for amount Y.

Part 15 – Refund of ITC for CCPCs that are not qualifying or excluded corporations – SR&ED

Complete this box only if you are a CCPC that is not a qualifying or excluded corporation as determined at line 101 in Part 2.

Credit balance before refund (amount R from Part 12) _____ Z

Deduct:

Amount Z or amount G from Part 11, whichever is less _____ AA

Net amount (amount Z **minus** amount AA; if negative, enter "0") _____ BB

Amount BB or amount I from Part 11, whichever is less _____ CC

Amount CC **multiplied** by 40 % _____ DD

Add :

Amount AA _____ EE

Refund of ITC (amount DD **plus** amount EE) _____ FF

Enter FF, or a lesser amount, on line 610 in Part 12 and also on line 780 of the T2 return.

Recapture – SR&ED

Part 16 – Recapture of ITC for corporations and corporate partnerships – SR&ED

You will have a recapture of ITC in a year when **all** of the following conditions are met:

- you acquired a particular property in the current year or in any of the 20 previous tax years, if the credit was earned in a tax year ending after 1997 and did not expire before 2008;
- you claimed the cost of the property as a qualified expenditure for SR&ED on Form T661;
- the cost of the property was included in calculating your ITC or was the subject of an agreement made under subsection 127(13) to transfer qualified expenditures; and
- you disposed of the property or converted it to commercial use after February 23, 1998. This condition is also met if you disposed of or converted to commercial use a property that incorporates the particular property previously referred to.

Note:

The recapture **does not apply** if you disposed of the property to a non-arm's-length purchaser who intended to use it all or substantially all for SR&ED. When the non-arm's-length purchaser later sells or converts the property to commercial use, the recapture rules will apply to the purchaser based on the historical ITC rate of the original user.

You will report a recapture on the T2 return for the year in which you disposed of the property or converted it to commercial use. In the following tax year, add the amount of the ITC recapture to the SR&ED expenditure pool.

If you have more than one disposition for calculations 1 and 2, complete the columns for each disposition for which a recapture applies, using the calculation formats below.

Calculation 1 – If you meet all of the above conditions

Amount of ITC you originally calculated for the property you acquired, or the original user's ITC where you acquired the property from a non-arm's length party, as described in the note above **700**	Amount calculated using ITC rate at the date of acquisition (or the original user's date of acquisition) on either the proceeds of disposition (if sold in an arm's length transaction) or the fair market value of the property (in any other case) **710**	Amount from column 700 or 710, whichever is less

Subtotal (enter this amount at amount C in Part 17) _____ A

Calculation 2 – Only if you transferred all or a part of the qualified expenditure to another person under an agreement described in subsection 127(13); otherwise, enter nil in amount B in Part 16 on page 9.

A Rate that the transferee used in determining its ITC for qualified expenditures under a subsection 127(13) agreement **720**	B Proceeds of disposition of the property if you dispose of it to an arm's length person; or, in any other case, enter the fair market value of the property at conversion or disposition **730**	C Amount, if any, already provided for in Calculation 1 (This allows for the situation where only part of the cost of a property is transferred under a subsection 127(13) agreement.) **740**

Calculation 2 (continued) – Only if you transferred all or a part of the qualified expenditure to another person under an agreement described in subsection 127(13); otherwise, enter nil in amount B below.

D Amount determined by the formula (A x B) – C	E ITC earned by the transferee for the qualified expenditures that were transferred **750**	F Amount from column D or E, whichever is less

Subtotal (enter this amount at amount D in Part 17) _____ B

Calculation 3

As a member of the partnership, you will report your share of the SR&ED ITC of the partnership after the SR&ED ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 550 in Part 12. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line 760 below.

Corporate partner's share of the excess of SR&ED ITC (amount to be reported at amount E in Part 17) **760** _____

Part 17 – Total recapture of SR&ED investment tax credit

Recaptured ITC for calculation 1 from amount A in Part 16	_____	C
Recaptured ITC for calculation 2 from amount B in Part 16	_____	D
Recaptured ITC for calculation 3 from line 760 in Part 16	_____	E
Total recapture of SR&ED investment tax credit – total of amounts C to E	_____	F

Enter amount F at amount A in Part 29.

Pre-Production Mining

Part 18 – Pre-production mining expenditures

Exploration information

A mineral resource that qualifies for the credit means a mineral deposit from which the principal mineral to be extracted is diamond, a base or precious metal deposit, or a mineral deposit from which the principal mineral to be extracted is an industrial mineral that, when refined, results in a base or precious metal.

In column 800, list all minerals for which pre-production mining expenditures have taken place in the tax year.

For each of the minerals reported in column 800, identify each project (in column 805), mineral title (in column 806), and mining division (in column 807) where title is registered. If there is no mineral title, identify only the project and mining division.

List of minerals 800	Project name 805

Mineral title 806	Mining division 807

Pre-production mining expenditures*

Exploration:

Pre-production mining expenditures that the corporation incurred in the tax year for the purpose of determining the existence, location, extent, or quality of a mineral resource in Canada:

Prospecting . . . . . 810 _____

Geological, geophysical, or geochemical surveys . . . . . 811 _____

Drilling by rotary, diamond, percussion, or other methods . . . . . 812 _____

Trenching, digging test pits, and preliminary sampling . . . . . 813 _____

Development:

Pre-production mining expenditures incurred in the tax year for bringing a new mine in a mineral resource in Canada into production in reasonable commercial quantities and incurred before the new mine comes into production in such quantities:

Clearing, removing overburden, and stripping . . . . . 820 _____

Sinking a mine shaft, constructing an adit, or other underground entry . . . . . 821 _____

Other pre-production mining expenditures incurred in the tax year:

Description 825	Amount 826

Add amounts in column 826 _____ ▶ _____ A

Total pre-production mining expenditures (total of lines 810 to 821 and amount A) . . . . . 830 _____

Deduct:

Total of all assistance (grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to at line 830 above . . . . . 832 _____

Excess (line 830 **minus** line 832) (if negative, enter "0") . . . . . _____ B

Add:

Repayments of government and non-government assistance . . . . . 835 _____

Pre-production mining expenditures (amount B **plus** line 835) . . . . . _____ C

* A pre-production mining expenditure is defined under subsection 127(9).

Part 19 – Current-year credit and account balances – ITC from pre-production mining expenditures

ITC at the end of the previous tax year . . . . . _____ D

Deduct:

Credit deemed as a remittance of co-op corporations . . . . . 841 _____

Credit expired . . . . . 845 _____

Subtotal (line 841 **plus** line 845) _____ ▶ _____ E

ITC at the beginning of the tax year (amount D **minus** amount E) . . . . . 850 _____

Add:

Credit transferred on amalgamation or wind-up of subsidiary . . . . . 860 _____

Pre-production mining expenditures* incurred before January 1, 2013 (applicable part of amount C from Part 18) . . 870 _____ x 10 % = _____ a

Pre-production mining exploration expenditures incurred in 2013 (applicable part of amount C from Part 18) . . 872 _____ x 5 % = _____ b

Pre-production mining development expenditures incurred in 2014 (applicable part of amount C from Part 18) . . 874 _____ x 7 % = _____ c

Pre-production mining development expenditures incurred in 2015 (applicable part of amount C from Part 18) . . 876 _____ x 4 % = _____ d

Current year credit (total of amounts a to d) 880 _____ ▶ _____ F

Total credit available (total of lines 850, 860, and amount F) . . . . . _____ G

Deduct:

Credit deducted from Part I tax (enter at amount F in Part 30) . . . . . 885 _____

Credit carried back to the previous year(s) (amount I from Part 20) . . . . . _____ e

Subtotal (line 885 **plus** amount e) _____ ▶ _____ H

ITC closing balance from pre-production mining expenditures (amount G **minus** amount H) . . . . . 890 _____

* Also include pre-production mining development expenditures incurred before 2014 and pre-production mining development expenditures incurred after 2013 and before 2016 that are eligible for transitional relief.

Part 20 – Request for carryback of credit from pre-production mining expenditures

	Year	Month	Day			
1st previous tax year				. . . . . Credit to be applied	921	
2nd previous tax year				. . . . . Credit to be applied	922	
3rd previous tax year				. . . . . Credit to be applied	923	

Total (enter at amount e in Part 19) _____ I

Apprenticeship Job Creation

Part 21 – Total current-year credit – ITC from apprenticeship job creation expenditures

If you are a related person as defined under subsection 251(2), has it been agreed in writing that you are the only employer who will be claiming the apprenticeship job creation tax credit for this tax year for each apprentice whose contract number (or social insurance number or name) appears below? (If not, you cannot claim the tax credit.) . . . . . 611 1 Yes ☐ 2 No ☐

For each apprentice in their first 24 months of the apprenticeship, enter the apprenticeship contract number registered with Canada, or a province or territory, under an apprenticeship program designed to certify or license individuals in the trade. For the province, the trade must be a Red Seal trade. If there is no contract number, enter the social insurance number (SIN) or the name of the eligible apprentice.

	A Contract number (SIN or name of apprentice) 601	B Name of eligible trade 602	C Eligible salary and wages* 603	D Column C x 10 % 604	E Lesser of column D or $ 2,000 605
1.	[redacted]	LINEWORKER	35,471	3,547	2,000
2.	[redacted]	LINEWORKER	36,180	3,618	2,000

	A Contract number (SIN or name of apprentice) 601	B Name of eligible trade 602	C Eligible salary and wages* 603	D Column C x 10 % 604	E Lesser of column D or $ 2,000 605
3.	[redacted]	LINEWORKER	34,536	3,454	2,000
4.	[redacted]	LINEWORKER	34,611	3,461	2,000
5.	[redacted]	LINEWORKER	33,604	3,360	2,000
6.	[redacted]	LINEWORKER	36,090	3,609	2,000
7.	[redacted]	LINEWORKER	27,704	2,770	2,000
8.	[redacted]	LINEWORKER	27,640	2,764	2,000
9.	[redacted]	LINEWORKER	28,453	2,845	2,000
10.	[redacted]	LINEWORKER	27,907	2,791	2,000
11.	[redacted]	LINEWORKER	27,791	2,779	2,000
12.	[redacted]	LINEWORKER	27,641	2,764	2,000

Total current-year credit (enter at line 640 in Part 22) 24,000 A

* Net of any other government or non-government assistance received or to be received.

Part 22 – Current-year credit and account balances – ITC from apprenticeship job creation expenditures

ITC at the end of the previous tax year . . . . . B

Deduct:

Credit deemed as a remittance of co-op corporations 612

Credit expired after 20 tax years 615

Subtotal (line 612 **plus** line 615) ▶ C

ITC at the beginning of the tax year (amount B **minus** amount C) 625

Add:

Credit transferred on amalgamation or wind-up of subsidiary 630

ITC from repayment of assistance 635

Total current-year credit (amount A from Part 21) 640 24,000

Credit allocated from a partnership 655

Subtotal (total of lines 630 to 655) 24,000 ▶ 24,000 D

Total credit available (line 625 **plus** amount D) . . . . . 24,000 E

Deduct:

Credit deducted from Part I tax (enter at amount G in Part 30) 660 24,000

Credit carried back to the previous year(s) (amount G from Part 23) . . . . . a

Subtotal (line 660 **plus** amount a) 24,000 ▶ 24,000 F

ITC closing balance from apprenticeship job creation expenditures (amount E **minus** amount F) 690

Part 23 – Request for carryback of credit from apprenticeship job creation expenditures

	Year	Month	Day
1st previous tax year			
2nd previous tax year			
3rd previous tax year			

. . . . . Credit to be applied 931

. . . . . Credit to be applied 932

. . . . . Credit to be applied 933

Total (enter at amount a in Part 22) G

Child Care Spaces

Part 24 – Eligible child care spaces expenditures

Enter the eligible expenditures that the corporation incurred to create licensed child care spaces for the children of the employees and, potentially, for other children. The corporation cannot be carrying on a child care services business. The eligible expenditures include:

- the cost of depreciable property (other than specified property); and
- the specified child care start-up expenditures;

acquired or incurred only to create new child care spaces at a licensed child care facility.

Cost of depreciable property from the current tax year

	CCA* class number 665	Description of investment 675	Date available for use 685	Amount of investment 695
1.				

Total cost of depreciable property from the current tax year 715 _____

Add:

Specified child care start-up expenditures from the current tax year . . . . . 705 _____

Total gross eligible expenditures for child care spaces (line 715 **plus** line 705) . . . . . _____ A

Deduct:

Total of all assistance (including grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to at line A . . . . . 725 _____

Excess (amount A **minus** line 725) (if negative, enter "0") . . . . . _____ B

Add:

Repayments by the corporation of government and non-government assistance . . . . . 735 _____

Total eligible expenditures for child care spaces (amount B **plus** line 735) . . . . . 745 _____

* CCA: capital cost allowance

Part 25 – Current-year credit – ITC from child care spaces expenditures

The credit is equal to 25% of eligible child care spaces expenditures incurred to a maximum of $10,000 per child care space created in a licensed child care facility.

Eligible expenditures (from line 745) . . . . . _____ x 25 % = _____ C

Number of child care spaces . . . . . 755 _____ x $ 10,000 = _____ D

ITC from child care spaces expenditures (amount C or D, whichever is less) . . . . . _____ E

Part 26 – Current-year credit and account balances – ITC from child care spaces expenditures

ITC at the end of the previous tax year . . . . . F

Deduct:

Credit deemed as a remittance of co-op corporations 765

Credit expired after 20 tax years 770

Subtotal (line 765 **plus** line 770) ▶ G

ITC at the beginning of the tax year (amount F **minus** amount G) 775

Add:

Credit transferred on amalgamation or wind-up of subsidiary 777

Total current-year credit (amount E from Part 25) 780

Credit allocated from a partnership 782

Subtotal (total of lines 777 to 782) ▶ H

Total credit available (line 775 **plus** amount H) I

Deduct:

Credit deducted from Part I tax (enter at amount H in Part 30) 785

Credit carried back to the previous year(s) (amount K from Part 27) . . . . . a

Subtotal (line 785 **plus** amount a) ▶ J

ITC closing balance from child care spaces expenditures (amount I **minus** amount J) 790

Part 27 – Request for carryback of credit from child care space expenditures

	Year	Month	Day			
1st previous tax year	2013-12-31			Credit to be applied	941	
2nd previous tax year	2012-12-31			Credit to be applied	942	
3rd previous tax year	2011-12-31			Credit to be applied	943	

Total (enter at amount a in Part 26) K

Recapture – Child Care Spaces

Part 28 – Recapture of ITC for corporations and corporate partnerships – Child care spaces

The ITC will be recovered against the taxpayer's tax otherwise payable under Part I of the Act if, at any time within 60 months of the day on which the taxpayer acquired the property:

- the new child care space is no longer available; or
- property that was an eligible expenditure for the child care space is:
  - disposed of or leased to a lessee; or
  - converted to another use.

If the property disposed of is a child care space, the amount that can reasonably be considered to have been included in the original ITC (paragraph 127(27.12)(a)) . . . . . 792 _____

In the case of eligible expenditures (paragraph 127(27.12)(b)), the lesser of:

The amount that can reasonably be considered to have been included in the original ITC . . . . 795 _____

25% of either the proceeds of disposition (if sold in an arm's length transaction) or the fair market value (in any other case) of the property . . . . . 797 _____

Amount from line 795 or line 797, whichever is less . . . . . _____ A

Corporate partnerships

As a member of the partnership, you will report your share of the child care spaces ITC of the partnership after the child care spaces ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 782 in Part 26. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line 799 below.

Corporate partner's share of the excess of ITC 799 _____

Total recapture of child care spaces investment tax credit (total of line 792, amount A, and line 799) . . . . . _____ B

Enter amount B at amount B in Part 29.

Summary of Investment Tax Credits

Part 29 – Total recapture of investment tax credit

Recaptured SR&ED ITC (from amount F in Part 17) . . . . . _____ A

Recaptured child care spaces ITC (from amount B in Part 28) . . . . . _____ B

Total recapture of investment tax credit (amount A **plus** amount B) . . . . . _____ C

Enter amount C on line 602 of the T2 return.

Part 30 – Total ITC deducted from Part I tax

ITC from investments in qualified property deducted from Part I tax (from line 260 in Part 5) . . . . . _____ D

ITC from SR&ED expenditures deducted from Part I tax (from line 560 in Part 12) . . . . . _____ E

ITC from pre-production mining expenditures deducted from Part I tax (from line 885 in Part 19) . . . . . _____ F

ITC from apprenticeship job creation expenditures deducted from Part I tax (from line 660 in Part 22) . . . . . 24,000 G

ITC from child care space expenditures deducted from Part I tax (from line 785 in Part 26) . . . . . _____ H

Total ITC deducted from Part I tax (total of amounts D to H) . . . . . 24,000 I

Enter amount I at line 652 of the T2 return.

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Summary of Investment Tax Credit Carryovers

Continuity of investment tax credit carryovers

CCA class number 97 Apprenticeship job creation ITC

Current year

Addition current year (A)	Applied current year (B)	Claimed as a refund (C)	Carried back (D)	ITC end of year (A-B-C-D)
24,000	24,000			

Prior years

Taxation year	ITC beginning of year (E)	Adjustments (F)	Applied current year (G)	ITC end of year (E-F-G)
2013-12-31				
2012-12-31				
2011-12-31				
2010-12-31				
2009-12-31				
2008-12-31				
2007-12-31				
2006-12-31				
2005-12-31				
2004-12-31				*
2003-12-31				
2002-12-31				
2001-12-31				
2001-09-30				
2000-09-30				
1999-09-30				
1998-09-30				
1997-09-30				
1996-09-30				
1995-09-30				*
Total				

B+C+D+G **Total ITC utilized** 24,000

* The **ITC end of year** includes the amount of ITC expired from the 10th preceding year if it is before January 1, 1998, or the amount of ITC expired from the 20th preceding year if it is after December 31, 1997. Note that this credit expires at the end of the tax year and any expired credit will be posted to line 215, 515, 615, 770 or 845, as applicable, in Schedule 31 the following year.

Canada Revenue Agency / Agence du revenu du Canada

Schedule 33

Taxable Capital Employed in Canada – Large Corporations

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule in determining if the total taxable capital employed in Canada of the corporation (other than a financial institution or an insurance corporation) and its related corporations is greater than $10,000,000.
- If the total taxable capital employed in Canada of the corporation and its related corporations is greater than $10,000,000, file a completed Schedule 33 with your T2 Corporation Income Tax Return no later than six months from the end of the tax year.
- Unless otherwise noted, all legislative references are to the *Income Tax Act* and the *Income Tax Regulations*.
- Subsection 181(1) defines the terms **financial institution**, **long-term debt**, and **reserves**.
- Subsection 181(3) provides the basis to determine the carrying value of a corporation's assets or any other amount under Part I.3 for its capital, investment allowance, taxable capital, or taxable capital employed in Canada, or for a partnership in which it has an interest.
- If the corporation was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada, go to Part 4, **Taxable capital employed in Canada**.

Part 1 – Capital

Add the following amounts at the end of the year:

Reserves that have not been deducted in computing income for the year under Part I	101	5,573,525		
Capital stock (or members' contributions if incorporated without share capital)	103	167,081,000		
Retained earnings	104	115,384,000		
Contributed surplus	105			
Any other surpluses	106			
Deferred unrealized foreign exchange gains	107			
All loans and advances to the corporation	108	489,913,855		
All indebtedness of the corporation represented by bonds, debentures, notes, mortgages, hypothecary claims, bankers' acceptances, or similar obligations	109			
Any dividends declared but not paid by the corporation before the end of the year	110			
All other indebtedness of the corporation (other than any indebtedness for a lease) that has been outstanding for more than 365 days before the end of the year	111			
The total of all amounts, each of which is an amount (see note below) for a partnership in which the corporation held a membership interest at the end of the year, either directly or indirectly through another partnership	112			
Subtotal		777,952,380	▶	777,952,380 A

Deduct the following amounts:

Deferred tax debit balance at the end of the year	121			
Any deficit deducted in computing its shareholders' equity (including, for this purpose, the amount of any provision for the redemption of preferred shares) at the end of the year	122			
Any amount deducted under subsection 135(1) in computing income under Part I for the year, as long as the amount may reasonably be regarded as being included in any of lines 101 to 112 above	123			
The amount of deferred unrealized foreign exchange losses at the end of the year	124			
Subtotal			▶	B
Capital for the year (amount A **minus** amount B) (if negative, enter "0")	190			777,952,380

Note: Line 112 is determined as follows:

– An amount for the partnership is the amount, if any, by which the total of those amounts—for the partnership's last fiscal period that ends at or before the tax year-end of the corporation—that would be determined for lines 101, 107, 108, 109, and 111 as if they apply to the partnership in the same way that they apply to corporations exceed the partnership's deferred unrealized foreign exchange losses at the end of the fiscal period.

– Do not include amounts owing to any corporation that held a membership interest in the partnership either directly or indirectly through another partnership.

– Do not include amounts owning to any partnership in which a corporation described above held a membership interest either directly or indirectly through another partnership.

– The proportion of the amount is determined by the amount that the corporation's share of the partnership's income or loss for the fiscal period—to which the corporation is entitled either directly or indirectly through another partnership—is of the partnership's income or loss for the period.

Part 2 – Investment allowance

Add the carrying value at the end of the year of the following assets of the corporation:

A share of another corporation	401	
A loan or advance to another corporation (other than a financial institution)	402	2,984,252
A bond, debenture, note, mortgage, hypothecary claim, or similar obligation of another corporation (other than a financial institution)	403	
Long-term debt of a financial institution	404	
A dividend receivable on a share of the capital stock of another corporation	405	
A loan or advance to, or a bond, debenture, note, mortgage, hypothecary claim, or similar obligation of, a partnership all of the members of which, throughout the year, were other partnership or other corporations (other than financial institutions) that were not exempt from tax under Part I.3 [other than by reason of paragraph 181.1(3)(d)]	406	
An interest in a partnership (see note 1 below)	407	
Investment allowance for the year (add lines 401 to 407)	490	2,984,252

Notes:

1. Where the corporation has an interest in a partnership or in tiered partnerships, consider the following:
   - the investment allowance of a partnership is deemed to be the amount calculated at line 490 above, at the end of its fiscal period, as if it was a corporation;
   - the total of the carrying value of each asset of the partnership described in the above lines is for its last fiscal period ending at or before the end of the corporation's tax year; and
   - the carrying value of a partnership member's interest at the end of the year is its specified proportion [as defined in subsection 248(1)] of the partnership's investment allowance.
2. Lines 401 to 405 should not include the carrying value of a share of the capital stock of, a dividend payable by, or indebtedness of a corporation that is exempt from tax under Part I.3 [other than by reason of paragraph 181.1(3)(d)].
3. Where a trust is used as a conduit for loaning money from a corporation to another related corporation (other than a financial institution), the loan will be considered to have been made directly from the lending corporation to the borrowing corporation, according to subsection 181.2(6).

Part 3 – Taxable capital

Capital for the year (line 190)		777,952,380	C
Deduct: Investment allowance for the year (line 490)		2,984,252	D
Taxable capital for the year (amount C **minus** amount D) (if negative, enter "0")	500	774,968,128	

Part 4 – Taxable capital employed in Canada

To be completed by a corporation that was resident in Canada at any time in the year

Taxable capital for the year (line 500) 774,968,128 x $\frac{\text{Taxable income earned in Canada}}{\text{Taxable income}}$ **610** $\frac{857,216}{857,216}$ = **Taxable capital employed in Canada** **690** 774,968,128

Notes:

1. Regulation 8601 gives details on calculating the amount of taxable income earned in Canada.
2. Where a corporation's taxable income for a tax year is "0," it shall, for the purposes of the above calculation, be deemed to have a taxable income for that year of $1,000.
3. In the case of an airline corporation, Regulation 8601 should be considered when completing the above calculation.

To be completed by a corporation that was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada

Total of all amounts each of which is the carrying value at the end of the year of an asset of the corporation used in the year or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada	701		
Deduct the following amounts:			
Corporation's indebtedness at the end of the year [other than indebtedness described in any of paragraphs 181.2(3)(c) to (f)] that may reasonably be regarded as relating to a business it carried on during the year through a permanent establishment in Canada	711		
Total of all amounts each of which is the carrying value at the end of year of an asset described in subsection 181.2(4) of the corporation that it used in the year, or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada	712		
Total of all amounts each of which is the carrying value at the end of year of an asset of the corporation that is a ship or aircraft the corporation operated in international traffic, or personal or movable property used or held by the corporation in carrying on any business during the year through a permanent establishment in Canada (see note below)	713		
Total deductions (**add** lines 711, 712, and 713)		▶	E
Taxable capital employed in Canada (line 701 **minus** amount E) (if negative, enter "0")	790		

Note: Complete line 713 only if the country in which the corporation is resident did not impose a capital tax for the year on similar assets, or a tax for the year on the income from the operation of a ship or aircraft in international traffic, of any corporation resident in Canada during the year.

Part 5 – Calculation for purposes of the small business deduction

This part is applicable to corporations that are not associated in the current year, but were associated in the prior year.

Taxable capital employed in Canada (line 690 or 790, whichever applies)		F
Deduct:	10,000,000	G
Excess (amount F **minus** amount G) (if negative, enter "0")		H
Calculation for purposes of the small business deduction (amount H x 0.00225)		I

Enter this amount at line 415 of the T2 return.

Attached Schedule with Total

Part 1 – All loans and advances to the corporation

Title Part 1 – All loans and advances to the corporation

Description	Amount	
Notes Payable	417,185,000	00
Tender Deposits	307,601	00
Key Deposits	39,945	00
Retailer Prudentials	176,615	00
Due to Related Parties	51,089,363	00
Customer Deposits - CIS	2,506,743	00
Customer Deposits - Construction	12,175,184	00
Customer Deposits - Long Term CIS	6,433,404	00
Total	489,913,855	00

Attached Schedule with Total

Part 1 – Reserves that have not been deducted in computing income for the year under Part I

Title Part 1 – Reserves that have not been deducted in computing income for th

Description	Amount	
Non deductible reserve per Schedule 13S	5,371,304	00
Assets Retirement Obligations	202,221	00
Total	5,573,525	00

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SCHEDULE 50

SHAREHOLDER INFORMATION

Name of corporation	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

All private corporations must complete this schedule for any shareholder who holds 10% or more of the corporation's common and/or preferred shares.

		Provide only one number per shareholder				
	Name of shareholder (after name, indicate in brackets if the shareholder is a corporation, partnership, individual, or trust) 100	Business Number (If a corporation is not registered, enter "NR") 200	Social insurance number 300	Trust number 350	Percentage common shares 400	Percentage preferred shares 500
1	Hydro Ottawa Holding Inc.	89411 0816 RC0001			100.000	
2						
3						
4						
5						
6						
7						
8						
9						
10						

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SCHEDULE 53

GENERAL RATE INCOME POOL (GRIP) CALCULATION

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

On: 2014-12-31

- If you are a Canadian-controlled private corporation (CCPC) or a deposit insurance corporation (DIC), use this schedule to determine the general rate income pool (GRIP).
- When an eligible dividend was paid in the tax year, file a completed copy of this schedule with your *T2 Corporation Income Tax Return*. Do not send your worksheets with your return, but keep them in your records in case we ask to see them later.
- Subsections referred to in this schedule are from the I*ncome Tax Act*.
- Subsection 89(1) defines the terms eligible dividend, excessive eligible dividend designation, general rate income pool, and low rate income pool.

Eligibility for the various additions

Answer the following questions to determine the corporation's eligibility for the various additions:

2006 addition

1. Is this the corporation's first taxation year that includes January 1, 2006? . . . . . ☐ Yes ☒ No
2. If not, what is the date of the taxation year end of the corporation's first year that includes January 1, 2006? Enter the date and go directly to question 4 2006-12-31
3. During that first year, was the corporation a CCPC or would it have been a CCPC if not for the election of subsection 89(11) ITA? . . . . . ☒ Yes ☐ No
   If the answer to question 3 is yes, complete Part "GRIP addition for 2006".

Change in the type of corporation

4. Was the corporation a CCPC during its preceding taxation year? . . . . . ☒ Yes ☐ No
5. Corporations that become a CCPC or a DIC . . . . . ☐ Yes ☒ No
   If the answer to question 5 is yes, complete Part 4.

Amalgamation (first year of filing after amalgamation)

6. Corporations that were formed as a result of an amalgamation . . . . . ☐ Yes ☒ No
   If the answer to question 6 is yes, answer questions 7 and 8. If the answer is no, go to question 9.
7. Was one or more of the predecessor corporations neither a CCPC nor a DIC? . . . . . ☐ Yes ☐ No
   If the answer to question 7 is yes, complete Part 4.
8. Was one or more of the predecessor corporation a CCPC or a DIC during the taxation year that ended immediately before amalgamation? . . . . . ☐ Yes ☐ No
   If the answer to question 8 is yes, complete Part 3.

Winding-up

9. Has the corporation wound-up a subsidiary in the preceding taxation year? . . . . . ☐ Yes ☒ No
   If the answer to question 9 is yes, answer questions 10 and 11. If the answer is no, go to Part 1.
10. Was the subsidiary neither a CCPC nor a DIC during its last taxation year? . . . . . ☐ Yes ☐ No
    If the answer to question 10 is yes, complete Part 4.
11. Was the subsidiary a CCPC or a DIC during its last taxation year? . . . . . ☐ Yes ☐ No
    If the answer to question 11 is yes, complete Part 3.

Part 1 – Calculation of general rate income pool (GRIP)

GRIP at the end of the previous tax year			100	191,409,773 A
Taxable income for the year (DICs enter "0") *	110	857,216 B		
Income for the credit union deduction * (amount E in Part 3 of Schedule 17)	120			
Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less *	130			
For a CCPC, the lesser of aggregate investment income (line 440 of the T2 return) and taxable income *	140			
Subtotal (**add** lines 120, 130, and 140)		▶ C		
Income taxable at the general corporate rate (line B **minus** line C) (if negative enter "0")	150	857,216		
After-tax income (line 150 x general rate factor for the tax year ** 0.72)			190	617,196 D
Eligible dividends received in the tax year	200			
Dividends deductible under section 113 received in the tax year	210			
Subtotal (**add** lines 200 and 210)		▶ E		
GRIP addition:				
Becoming a CCPC (line PP from Part 4)	220			
Post-amalgamation (total of lines EE from Part 3 and lines PP from Part 4)	230			
Post-wind-up (total of lines EE from Part 3 and lines PP from Part 4)	240			
Subtotal (**add** lines 220, 230, and 240)		▶	290	F
Subtotal (**add** lines A, D, E, and F)				192,026,969 G
Eligible dividends paid in the previous tax year	300			
Excessive eligible dividend designations made in the previous tax year	310			
Note: If becoming a CCPC (subsection 89(4) applies), enter "0" on lines 300 and 310.				
Subtotal (line 300 **minus** line 310)		▶ H		
GRIP before adjustment for specified future tax consequences (line G **minus** line H) (amount can be negative)			490	192,026,969
Total GRIP adjustment for specified future tax consequences to previous tax years (amount W from Part 2)			560	
GRIP at the end of the tax year (line 490 **minus** line 560)			590	192,026,969

Enter this amount on line 160 of Schedule 55.

* For lines 110, 120, 130, and 140, the income amount is the amount before considering specified future tax consequences. This phrase is defined in subsection 248(1). It includes the deduction of a loss carryback from subsequent tax years, a reduction of Canadian exploration expenses and Canadian development expenses that were renounced in subsequent tax years (e.g., flow-through share renunciations), reversals of income inclusions where an option is exercised in subsequent tax years, and the effect of certain foreign tax credit adjustments.

** The **general rate factor** for a tax year is 0.68 for any portion of the tax year that falls before 2010, 0.69 for any portion of the tax year that falls in 2010, 0.70 for any portion of the tax year that falls in 2011, and 0.72 for any portion of the tax year that falls after 2011. Calculate the general rate factor in Part 5 for tax years that straddle these dates.

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years

Complete this part if the corporation's taxable income of any of the previous three tax years took into account the specified future tax consequences defined in subsection 248(1) from the current tax year. Otherwise, enter "0" on line 560.

First previous tax year 2013-12-31

Taxable income before specified future tax consequences from the current tax year	26,428,300 J1	
Enter the following amounts before specified future tax consequences from the current tax year:		
Income for the credit union deduction (amount E in Part 3 of Schedule 17)	K1	
Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less	L1	
Aggregate investment income (line 440 of the T2 return)	M1	
Subtotal (**add** lines K1, L1, and M1)	▶ N1	
Subtotal (line J1 **minus** line N1) (if negative, enter "0")	26,428,300 ▶	26,428,300 O1

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)

Future tax consequences that occur for the current year Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	**Capital loss carry-back**	**Restricted farm loss carry-back**	**Farm loss carry-back**	**Other**	**Total carrybacks**

Taxable income after specified future tax consequences . . . . . _____ P1

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) . . . _____ Q1

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less . . . . _____ R1

Aggregate investment income (line 440 of the T2 return) . . . . . _____ S1

Subtotal (**add** lines Q1, R1, and S1) _____ ▶ _____ T1

Subtotal (line P1 **minus** line T1) (if negative, enter "0") _____ ▶ _____ U1

Subtotal (line O1 **minus** line U1) (if negative, enter "0") _____ V1

GRIP adjustment for specified future tax consequences to the first previous tax year

(line V1 **multiplied by** the general rate factor for the tax year 0.72) . . . . . **500** _____

Second previous tax year 2012-12-31

Taxable income before specified future tax consequences from the current tax year 26,900,819 J2

Enter the following amounts before specified future tax consequences from the current tax year:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) . . . _____ K2

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less . . . . _____ L2

Aggregate investment income (line 440 of the T2 return) . . . . . _____ M2

Subtotal (**add** lines K2, L2, and M2) _____ ▶ _____ N2

Subtotal (line J2 **minus** line N2) (if negative, enter "0") 26,900,819 ▶ 26,900,819 O2

Future tax consequences that occur for the current year Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	**Capital loss carry-back**	**Restricted farm loss carry-back**	**Farm loss carry-back**	**Other**	**Total carrybacks**

Taxable income after specified future tax consequences . . . . . _____ P2

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) . . . _____ Q2

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less . . . . _____ R2

Aggregate investment income (line 440 of the T2 return) . . . . . _____ S2

Subtotal (**add** lines Q2, R2, and S2) _____ ▶ _____ T2

Subtotal (line P2 **minus** line T2) (if negative, enter "0") _____ ▶ _____ U2

Subtotal (line O2 **minus** line U2) (if negative, enter "0") _____ V2

GRIP adjustment for specified future tax consequences to the second previous tax year

(line V2 **multiplied by** the general rate factor for the tax year 0.72) . . . . . **520** _____

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)

Third previous tax year 2011-12-31

Taxable income before specified future tax consequences from the current tax year 32,674,141 J3

Enter the following amounts before specified future tax consequences from the current tax year:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) . . . _____ K3

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less . . . . _____ L3

Aggregate investment income (line 440 of the T2 return) . . . . . _____ M3

Subtotal (**add** lines K3, L3, and M3) _____ ▶ _____ N3

Subtotal (line J3 **minus** line N3) (if negative, enter "0") 32,674,141 ▶ 32,674,141 O3

Future tax consequences that occur for the current year Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	**Capital loss carry-back**	**Restricted farm loss carry-back**	**Farm loss carry-back**	**Other**	**Total carrybacks**

Taxable income after specified future tax consequences . . . . . _____ P3

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) . . . _____ Q3

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less . . . . _____ R3

Aggregate investment income (line 440 of the T2 return) . . . . . _____ S3

Subtotal (**add** lines Q3, R3, and S3) _____ ▶ _____ T3

Subtotal (line P3 **minus** line T3) (if negative, enter "0") _____ ▶ _____ U3

Subtotal (line O3 **minus** line U3) (if negative, enter "0") _____ V3

GRIP adjustment for specified future tax consequences to the third previous tax year

(line V3 **multiplied by** the general rate factor for the tax year 0.72) . . . . . **540** _____

Total GRIP adjustment for specified future tax consequences to previous tax years:

(**add** lines 500, 520, and 540) (if negative, enter "0") . . . . . _____ W

Enter amount W on line 560.

Part 3 – Worksheet to calculate the GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was a CCPC or a DIC in its last tax year)

nb. 1 Post amalgamation . . . ☐ Post wind-up . . . . . ☐

Complete this part when there has been an amalgamation (within the meaning assigned by subsection 87(1)) or a wind-up (to which subsection 88(1) applies) and the predecessor or subsidiary corporation was a CCPC or a DIC in its last tax year. In the calculation below, **corporation** means a predecessor or a subsidiary. The last tax year for a predecessor corporation was its tax year that ended immediately before the amalgamation and for a subsidiary corporation was its tax year during which its assets were distributed to the parent on the wind-up.

For a post-wind-up, include the GRIP addition in calculating the parent's GRIP at the end of its tax year that immediately follows the tax year during which it receives the assets of the subsidiary.

Complete a separate worksheet for **each** predecessor and **each** subsidiary that was a CCPC or a DIC in its last tax year. Keep a copy of this calculation for your records, in case we ask to see it later.

Corporation's GRIP at the end of its last tax year . . . . . _____ AA

Eligible dividends paid by the corporation in its last tax year . . . . . _____ BB

Excessive eligible dividend designations made by the corporation in its last tax year . . . . . _____ CC

Subtotal (line BB **minus** line CC) _____ ▶ _____ DD

GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was a CCPC or a DIC in its last tax year)

(line AA **minus** line DD) . . . . . _____ EE

After you complete this calculation for each predecessor and each subsidiary, calculate the total of all the EE lines. Enter this total amount on:

- line 230 for post-amalgamation; or
- line 240 for post-wind-up.

Part 4 – Worksheet to calculate the GRIP addition post-amalgamation, post-wind-up (predecessor or subsidiary was not a CCPC or a DIC in its last tax year), or the corporation is becoming a CCPC

nb. 1 Corporation becoming a CCPC . . . . . ☐ Post amalgamation . . . . . ☐ Post wind-up . . . . . ☐

Complete this part when there has been an amalgamation (within the meaning assigned by subsection 87(1)) or a wind-up (to which subsection 88(1) applies) and the predecessor or subsidiary was not a CCPC or a DIC in its last tax year. Also, use this part for a corporation becoming a CCPC. In the calculation below, **corporation** means a corporation becoming a CCPC, a predecessor, or a subsidiary.

For a post-wind-up, include the GRIP addition in calculating the parent's GRIP at the end of its tax year that immediately follows the tax year during which it receives the assets of the subsidiary.

Complete a separate worksheet for **each** predecessor and **each** subsidiary that was not a CCPC or a DIC in its last tax year. Keep a copy of this calculation for your records, in case we ask to see it later.

Cost amount to the corporation of all property immediately before the end of its previous/last tax year . . . . . _____ FF

The corporation's money on hand immediately before the end of its previous/last tax year . . . . . _____ GG

Unused and unexpired losses at the end of the corporation's previous/last tax year:

Non-capital losses . . . . . _____
Net capital losses . . . . . _____
Farm losses . . . . . _____
Restricted farm losses . . . . . _____
Limited partnership losses . . . . . _____

Subtotal _____ ▶ _____ HH

Subtotal (**add** lines FF, GG, and HH) _____ II

All the corporation's debts and other obligations to pay that were outstanding immediately before the end of its previous/last tax year . . . . . _____ JJ

Paid-up capital of all the corporation's issued and outstanding shares of capital stock immediately before the end of its previous/last tax year . . . . . _____ KK

All the corporation's reserves deducted in its previous/last tax year . . . . . _____ LL

The corporation's capital dividend account immediately before the end of its previous/last tax year . . . . . _____ MM

The corporation's low rate income pool immediately before the end of its previous/last tax year . . . . . _____ NN

Subtotal (**add** lines JJ, KK, LL, MM, and NN) _____ ▶ _____ OO

GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was not a CCPC or a DIC in its last tax year), or the corporation is becoming a CCPC (line II **minus** line OO) (if negative, enter "0") . . . . . _____ PP

After you complete this worksheet for each predecessor and each subsidiary, calculate the total of all the PP lines. Enter this total amount on:

- line 220 for a corporation becoming a CCPC;
- line 230 for post-amalgamation; or
- line 240 for post-wind-up.

Part 5 – General rate factor for the tax year

Complete this part to calculate the general rate factor for the tax year.

0.68	x	number of days in the tax year before January 1, 2010 / number of days in the tax year	365	. . . . .	=		QQ
0.69	x	number of days in the tax year in 2010 / number of days in the tax year	365	. . . . .	=		RR
0.7	x	number of days in the tax year in 2011 / number of days in the tax year	365	. . . . .	=		SS
0.72	x	number of days in the tax year after December 31, 2011 / number of days in the tax year	365 / 365	. . . . .	=	0.720000000	TT

General rate factor for the tax year (total of lines QQ to TT) . . . . . 0.72000 UU

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SCHEDULE 55

PART III.1 TAX ON EXCESSIVE ELIGIBLE DIVIDEND DESIGNATIONS

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

Do not use this area

- Every corporation resident in Canada that pays a taxable dividend (other than a capital gains dividend within the meaning assigned by subsection 130.1(4) or 131(1)) in the tax year must file this schedule.
- Canadian-controlled private corporations (CCPC) and deposit insurance corporations (DIC) must complete Part 1 of this schedule. All other corporations must complete Part 2.
- Every corporation that has paid an eligible dividend must also file Schedule 53, *General Rate Income Pool (GRIP) Calculation*, or Schedule 54, *Low Rate Income Pool (LRIP) Calculation*, whichever is applicable.
- File the completed schedules with your *T2 Corporation Income Tax Return* no later than six months from the end of the tax year.
- All legislative references on this schedule are to the federal *Income Tax Act*.
- Subsection 89(1) defines the terms eligible dividend, excessive eligible dividend designation, general rate income pool (GRIP), and low rate income pool (LRIP).
- The calculations in Part 1 and Part 2 do not apply if the excessive eligible dividend designation arises from the application of paragraph (c) of the definition of excessive eligible dividend designation in subsection 89(1). This paragraph applies when an eligible dividend is paid to artificially maintain or increase the GRIP or to artificially maintain or decrease the LRIP.

Part 1 – Canadian-controlled private corporations and deposit insurance corporations

Taxable dividends paid in the tax year **not included** in Schedule 3			
Taxable dividends paid in the tax year **included** in Schedule 3		15,000,000	
Total taxable dividends paid in the tax year	100	15,000,000	
Total eligible dividends paid in the tax year	150		A
GRIP at the end of the tax year (line 590 on Schedule 53) (if negative, enter "0")	160	192,026,969	B
Excessive eligible dividend designation (line 150 **minus** line 160)			C
Deduct:			
Excessive eligible dividend designations elected under subsection 185.1(2) to be treated as ordinary dividends*	180		D
Subtotal (amount C **minus** amount D)			E
Part III.1 tax on excessive eligible dividend designations – CCPC or DIC (amount E **multiplied** by 20 %)	190		F

Enter the amount from line 190 on line 710 of the T2 return.

Part 2 – Other corporations

Taxable dividends paid in the tax year **not included** in Schedule 3			
Taxable dividends paid in the tax year **included** in Schedule 3			
Total taxable dividends paid in the tax year	200		
Total excessive eligible dividend designations in the tax year (amount from line A of Schedule 54)			G
Deduct:			
Excessive eligible dividend designations elected under subsection 185.1(2) to be treated as ordinary dividends*	280		H
Subtotal (amount G **minus** amount H)			I
Part III.1 tax on excessive eligible dividend designations – Other corporations (amount I **multiplied** by 20 %)	290		J

Enter the amount from line 290 on line 710 of the T2 return.

* You can elect to treat all or part of your excessive eligible dividend designation as a separate taxable dividend in order to eliminate or reduce the Part III.1 tax otherwise payable. You must file the election on or before the day that is 90 days **after** the day the notice of assessment for Part III.1 tax was sent. We will accept an election before the assessment of the tax. For more information on how to make this election, go to **www.cra.gc.ca/eligibledividends**.

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Schedule 500

Ontario Corporation Tax Calculation

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule if the corporation had a permanent establishment (as defined in section 400 of the federal *Income Tax Regulations*) in Ontario at any time in the tax year and had Ontario taxable income in the year.
- All legislative references are to the federal *Income Tax Act* and *Income Tax Regulations*.
- This schedule is a worksheet only. You do not have to file it with your *T2 Corporation Income Tax Return*.

Part 1 – Calculation of Ontario basic rate of tax for the year

Number of days in the tax year before July 1, 2011 / Number of days in the tax year		x	12.00 %	=	%	A1
	365					
Number of days in the tax year after June 30, 2011 / Number of days in the tax year	365	x	11.50 %	=	11.50000 %	A2
	365					

Ontario basic rate of tax for the year (rate A1 **plus** A2) 11.50000 ▶ 11.50000 % A3

Part 2 – Calculation of Ontario basic income tax

Ontario taxable income * . . . . . 857,216 B

Ontario basic income tax: amount B **multiplied** by Ontario basic rate of tax for the year (rate A3 from Part 1) . . . . . 98,580 C

If the corporation has a permanent establishment in more than one jurisdiction, or is claiming an Ontario tax credit in addition to Ontario basic income tax, or has Ontario corporate minimum tax or Ontario special additional tax on life insurance corporations payable, enter amount C on line 270 of Schedule 5, *Tax Calculation Supplementary – Corporations*. Otherwise, enter it on line 760 of the T2 return.

* If the corporation has a permanent establishment only in Ontario, enter the amount from line 360 or line Z, whichever applies, of the T2 return. Otherwise, enter the taxable income allocated to Ontario from column F in Part 1 of Schedule 5.

Part 3 – Ontario small business deduction (OSBD)

Complete this part if the corporation claimed the federal small business deduction under subsection 125(1) or would have claimed it if subsection 125(5.1) had not been applicable in the tax year.

Income from active business carried on in Canada (amount from line 400 of the T2 return)	1,069,731	1
Federal taxable income, less adjustment for foreign tax credit (amount from line 405 of the T2 return)	857,216	2
Federal business limit before the application of subsection 125(5.1) (amount from line 410 of the T2 return)	500,000	3

Business limit reduction (amount from line E of the T2 return) 54,783,556 x (Number of days in the tax year after May 1, 2014 / Number of days in the tax year) 244 / 365 = 36,622,432 4

Amount from line 3 **minus** amount from line 4 (if negative, enter "0") = 5

Enter the least of amounts 1, 2, 3 and 5 D

Ontario domestic factor: (Ontario taxable income * / Taxable income earned in all provinces and territories **) 857,216.00 / 857,216 = 1.00000 E

Amount D x factor E a

Ontario taxable income (amount B from Part 2) 857,216 b

Ontario small business income (lesser of amount a and amount b) F

(Number of days in the tax year before July 1, 2011 / Number of days in the tax year) / 365 x 7.50 % = % G1

(Number of days in the tax year after June 30, 2011 / Number of days in the tax year) 365 / 365 x 7.00 % = 7.00000 % G2

OSBD rate for the year (rate G1 **plus** G2) 7.00000 % G3

Ontario small business deduction: amount F **multiplied** by OSBD rate for the year (rate G3) H

Enter amount H on line 402 of Schedule 5.

* Enter amount B from Part 2.

** Includes the offshore jurisdictions for Nova Scotia and Newfoundland and Labrador.

Part 4 – Ontario adjusted small business income

Complete this part if the corporation was a Canadian-controlled private corporation throughout the tax year and is claiming the Ontario tax credit for manufacturing and processing or the Ontario credit union tax reduction.

Ontario adjusted small business income (lesser of amount D and amount b from Part 3) I

Enter amount I on line K in Part 5 of this schedule or on line B in Part 2 of Schedule 502, *Ontario Tax Credit for Manufacturing and Processing*, whichever applies.

Part 5 – Calculation of credit union tax reduction

Complete this part and Schedule 17, *Credit Union Deductions*, if the corporation was a credit union throughout the tax year.

Amount D from Part 3 of Schedule 17 . . . . . _____ J

Deduct:

Ontario adjusted small business income (amount I from Part 4) . . . . . _____ K

Subtotal (amount J **minus** amount K) (if negative, enter "0") . . . . . _____ L

OSBD rate for the year (rate G3 from Part 3) . . . . . 7.00000 %

Amount L **multiplied** by the OSBD rate for the year . . . . . _____ M

Ontario domestic factor (factor E from Part 3) . . . . . 1.00000 N

Ontario credit union tax reduction (amount M **multiplied** by factor N) . . . . . _____ O

Enter amount O on line 410 of Schedule 5.

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Schedule 510

Ontario Corporate Minimum Tax

Corporation's name	Business number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- File this schedule if the corporation is subject to Ontario corporate minimum tax (CMT). CMT is levied under section 55 of the *Taxation Act, 2007* (Ontario), referred to as the "Ontario Act".
- Complete Part 1 to determine if the corporation is subject to CMT for the tax year.
- A corporation not subject to CMT in the tax year is still required to file this schedule if it is deducting a CMT credit, has a CMT credit carryforward, or has a CMT loss carryforward or a current year CMT loss.
- A corporation that has Ontario special additional tax on life insurance corporations (SAT) payable in the tax year must complete Part 4 of this schedule even if it is not subject to CMT for the tax year.
- A corporation is exempt from CMT if, throughout the tax year, it was one of the following:
  1) a corporation exempt from income tax under section 149 of the federal *Income Tax Act*;
  2) a mortgage investment corporation under subsection 130.1(6) of the federal Act;
  3) a deposit insurance corporation under subsection 137.1(5) of the federal Act;
  4) a congregation or business agency to which section 143 of the federal Act applies;
  5) an investment corporation as referred to in subsection 130(3) of the federal Act; or
  6) a mutual fund corporation under subsection 131(8) of the federal Act.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Determination of CMT applicability

Total assets of the corporation at the end of the tax year *	112	968,311,000
Share of total assets from partnership(s) and joint venture(s) *	114	
Total assets of associated corporations (amount from line 450 on Schedule 511)	116	910,099,559
Total assets (total of lines 112 to 116)		1,878,410,559
Total revenue of the corporation for the tax year **	142	988,442,000
Share of total revenue from partnership(s) and joint venture(s) **	144	900,000,000
Total revenue of associated corporations (amount from line 550 on Schedule 511)	146	163,850,014
Total revenue (total of lines 142 to 146)		2,052,292,014

The corporation is subject to CMT if:
- for tax years ending before July 1, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are more than $5,000,000, or the total revenue for the year of the corporation or the associated group of corporations is more than $10,000,000.
- for tax years ending after June 30, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are equal to or more than $50,000,000, and the total revenue for the year of the corporation or the associated group of corporations is equal to or more than $100,000,000.

If the corporation is not subject to CMT, do not complete the remaining parts unless the corporation is deducting a CMT credit, or has a CMT credit carryforward, a CMT loss carryforward, a current year CMT loss, or SAT payable in the year.

* **Rules for total assets**
- Report total assets according to generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Do not include unrealized gains and losses on assets and foreign currency gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.
- The amount on line 114 is determined at the end of the last fiscal period of the partnership or joint venture that ends in the tax year of the corporation. Add the proportionate share of the assets of the partnership(s) and joint venture(s), and deduct the recorded asset(s) for the investment in partnerships and joint ventures.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the Ontario Act and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were $1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the Ontario Act.

** **Rules for total revenue**
- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the tax year is less than 51 weeks, **multiply** the total revenue of the corporation or the partnership, whichever applies, by 365 and **divide** by the number of days in the tax year.
- The amount on line 144 is determined for the partnership or joint venture fiscal period that ends in the tax year of the corporation. If the partnership or joint venture has 2 or more fiscal periods ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the Ontario Act and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were $1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the Ontario Act.

Part 2 – Adjusted net income/loss for CMT purposes

Net income/loss per financial statements *			210	27,871,000	
Add (to the extent reflected in income/loss):					
Provision for current income taxes/cost of current income taxes	220	912,000			
Provision for deferred income taxes (debits)/cost of future income taxes	222				
Equity losses from corporations	224				
Financial statement loss from partnerships and joint ventures	226				
Dividends deducted on financial statements (subsection 57(2) of the Ontario Act), excluding dividends paid by credit unions under subsection 137(4.1) of the federal Act	230				
Other additions (see note below):					
Share of adjusted net income of partnerships and joint ventures **	228				
Total patronage dividends received, not already included in net income/loss	232				
281	282				
283	284				
Subtotal		912,000	▶	912,000	A
Deduct (to the extent reflected in income/loss):					
Provision for recovery of current income taxes/benefit of current income taxes	320				
Provision for deferred income taxes (credits)/benefit of future income taxes	322				
Equity income from corporations	324				
Financial statement income from partnerships and joint ventures	326				
Dividends deductible under section 112, section 113, or subsection 138(6) of the federal Act	330				
Dividends not taxable under section 83 of the federal Act (from Schedule 3)	332				
Gain on donation of listed security or ecological gift	340				
Accounting gain on transfer of property to a corporation under section 85 or 85.1 of the federal Act ***	342				
Accounting gain on transfer of property to/from a partnership under section 85 or 97 of the federal Act ****	344				
Accounting gain on disposition of property under subsection 13(4), subsection 14(6), or section 44 of the federal Act *****	346				
Accounting gain on a windup under subsection 88(1) of the federal Act or an amalgamation under section 87 of the federal Act	348				
Other deductions (see note below):					
Share of adjusted net loss of partnerships and joint ventures **	328				
Tax payable on dividends under subsection 191.1(1) of the federal Act **multiplied** by 3	334				
Interest deducted/deductible under paragraph 20(1)(c) or (d) of the federal Act, not already included in net income/loss	336				
Patronage dividends paid (from Schedule 16) not already included in net income/loss	338				
381	382				
383	384				
385	386				
387	388				
389	390				
Subtotal			▶		B
Adjusted net income/loss for CMT purposes (line 210 **plus** amount A **minus** amount B)			490	28,783,000	

If the amount on line 490 is positive and the corporation is subject to CMT as determined in Part 1, enter the amount on line 515 in Part 3.

If the amount on line 490 is negative, enter the amount on line 760 in Part 7 (enter as a positive amount).

Note

In accordance with *Ontario Regulation 37/09*, when calculating net income for CMT purposes, accounting income should be adjusted to:

- exclude unrealized gains and losses due to mark-to-market changes or foreign currency changes on specified mark-to-market property (assets only);
- include realized gains and losses on the disposition of specified mark-to-market property not already included in the accounting income, if the property is not a capital property or is a capital property disposed in the year or in a previous tax year ended after March 22, 2007.

"Specified mark-to-market property" is defined in subsection 54(1) of the Ontario Act.

These rules also apply to partnerships. A corporate partner's share of a partnership's adjusted income flows through on a proportionate basis to the corporate partner.

* **Rules for net income/loss**

- Banks must report net income/loss as per the report accepted by the Superintendent of Financial Institutions under the federal *Bank Act*, adjusted so consolidation and equity methods are not used.

Part 2 – Calculation of adjusted net income/loss for CMT purposes (continued)

– Life insurance corporations must report net income/loss as per the report accepted by the federal Superintendent of Financial Institutions or equivalent provincial insurance regulator, before SAT and adjusted so consolidation and equity methods are not used. If the life insurance corporation is resident in Canada and carries on business in and outside of Canada, **multiply** the net income/loss by the ratio of the Canadian reserve liabilities **divided** by the total reserve liability. The reserve liabilities are calculated in accordance with Regulation 2405(3) of the federal Act.

– Other corporations must report net income/loss in accordance with generally accepted accounting principles, except that consolidation and equity methods must not be used. When the equity method has been used for accounting purposes, equity losses and equity income are removed from book income/loss on lines 224 and 324 respectively.

– Corporations, other than insurance corporations, should report net income from line 9999 of the GIFI (Schedule 125) on line 210.

** The share of the adjusted net income of a partnership or joint venture is calculated as if the partnership or joint venture were a corporation and the tax year of the partnership or joint venture were its fiscal period. For a corporation with an indirect interest in a partnership through one or more partnerships, determine the corporation's share according to clause 54(5)(c) of the Ontario Act.

*** A joint election will be considered made under subsection 60(1) of the Ontario Act if there is an entry on line 342, and an election has been made for transfer of property to a corporation under subsection 85(1) of the federal Act.

**** A joint election will be considered made under subsection 60(2) of the Ontario Act if there is an entry on line 344, and an election has been made under subsection 85(2) or 97(2) of the federal Act.

***** A joint election will be considered made under subsection 61(1) of the Ontario Act if there is an entry on line 346, and an election has been made under subsection 13(4) or 14(6) and/or section 44 of the federal Act.

For more information on how to complete this part, see the *T2 Corporation – Income Tax Guide*.

Part 3 – CMT payable

Adjusted net income for CMT purposes (line 490 in Part 2, if positive) **515** 28,783,000

Deduct:

CMT loss available (amount R from Part 7) . . . . . _____

Minus: Adjustment for an acquisition of control * . . . . . **518** _____

Adjusted CMT loss available . . . . . _____ ▶ _____ C

Net income subject to CMT calculation (if negative, enter "0") **520** 28,783,000

Amount from line 520 28,783,000 x Number of days in the tax year before July 1, 2010 / Number of days in the tax year _____ / 365 x 4 % = _____ 1

Amount from line 520 28,783,000 x Number of days in the tax year after June 30, 2010 / Number of days in the tax year 365 / 365 x 2.7 % = 777,141 2

Subtotal (amount 1 **plus** amount 2) 777,141 3

Gross CMT: amount on line 3 above x OAF ** **540** 777,141

Deduct:

Foreign tax credit for CMT purposes *** . . . . . **550** _____

CMT after foreign tax credit deduction (line 540 **minus** line 550) (if negative, enter "0") . . . . . 777,141 D

Deduct:

Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5) 98,580

Net CMT payable (if negative, enter "0") . . . . . 678,561 E

Enter amount E on line 278 of Schedule 5, *Tax Calculation Supplementary – Corporations*, and complete Part 4.

* Enter the portion of CMT loss available that exceeds the adjusted net income for the tax year from carrying on a business before the acquisition of control. See subsection 58(3) of the Ontario Act.

*** Enter "0" on line 550 for life insurance corporations as they are not eligible for this deduction. For all other corporations, enter the cumulative total of amount J for the province of Ontario from Part 9 of Schedule 21 on line 550.

** **Calculation of the Ontario allocation factor (OAF):**

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "Ontario," enter "1" on line F.

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "multiple," complete the following calculation, and enter the result on line F:

Ontario taxable income **** / Taxable income ***** _____ = _____

Ontario allocation factor . . . . . 1.00000 F

**** Enter the amount allocated to Ontario from column F in Part 1 of Schedule 5. If the taxable income is nil, calculate the amount in column F as if the taxable income were $1,000.

***** Enter the taxable income amount from line 360 or amount Z of the T2 return, whichever applies. If the taxable income is nil, enter "1,000".

Part 4 – Calculation of CMT credit carryforward

CMT credit carryforward at the end of the previous tax year * . . . . . G

Deduct:

CMT credit expired * 600

CMT credit carryforward at the beginning of the current tax year * (see note below) . . . . . ▶ 620

Add:

CMT credit carryforward balances transferred on an amalgamation or the windup of a subsidiary (see note below) 650

CMT credit available for the tax year (amount on line 620 **plus** amount on line 650) . . . . . H

Deduct:

CMT credit deducted in the current tax year (amount P from Part 5) I

Subtotal (amount H **minus** amount I) J

Add:

Net CMT payable (amount E from Part 3) 678,561

SAT payable (amount O from Part 6 of Schedule 512) . . . . . .

Subtotal 678,561 ▶ 678,561 K

CMT credit carryforward at the end of the tax year (amount J **plus** amount K) . . . . . 670 678,561 L

* For the first harmonized T2 return filed with a tax year that includes days in 2009:
- do not enter an amount on line G or line 600;
- for line 620, enter the amount from line 2336 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line G the amount from line 670 of Schedule 510 from the previous tax year.

Note: If you entered an amount on line 620 or line 650, complete Part 6.

Part 5 – Calculation of CMT credit deducted from Ontario corporate income tax payable

CMT credit available for the tax year (amount H from Part 4) . . . . . M

Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5) 98,580 1

For a corporation that is not a life insurance corporation:

CMT after foreign tax credit deduction (amount D from Part 3) . . 777,141 2

For a life insurance corporation:

Gross CMT (line 540 from Part 3) 3

Gross SAT (line 460 from Part 6 of Schedule 512) 4

The **greater** of amounts 3 and 4 5

Deduct: line 2 or line 5, whichever applies: 777,141 6

Subtotal (if negative, enter "0") ▶ N

Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5) 98,580

Deduct:

Total refundable tax credits excluding Ontario qualifying environmental trust tax credit (amount J6 **minus** line 450 from Schedule 5) 202,323

Subtotal (if negative, enter "0") ▶ O

CMT credit deducted in the current tax year (least of amounts M, N, and O) . . . . . P

Enter amount P on line 418 of Schedule 5 and on line I in Part 4 of this schedule.

Is the corporation claiming a CMT credit earned before an acquisition of control? . . . . . 675 1 Yes ☐ 2 No ☒

If you answered **yes** to the question at line 675, the CMT credit deducted in the current tax year may be restricted. For information on how the deduction may be restricted, see subsections 53(6) and (7) of the Ontario Act.

Part 6 – Analysis of CMT credit available for carryforward by year of origin

Complete this part if:
- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	CMT credit balance *
10th previous tax year	680
9th previous tax year	681
8th previous tax year	682
7th previous tax year	683
6th previous tax year	684
5th previous tax year	685
4th previous tax year	686
3rd previous tax year	687
2nd previous tax year	688
1st previous tax year	689
Total **	

* CMT credit that was earned (by the corporation, predecessors of the corporation, and subsidiaries wound up into the corporation) in each of the previous 10 tax years and has not been deducted.

** Must equal the total of the amounts entered on lines 620 and 650 in Part 4.

Part 7 – Calculation of CMT loss carryforward

CMT loss carryforward at the end of the previous tax year * . . . . . Q

Deduct:

CMT loss expired * 700

CMT loss carryforward at the beginning of the tax year * (see note below) . . . . . ▶ 720

Add:

CMT loss transferred on an amalgamation under section 87 of the federal Act ** (see note below) 750

CMT loss available (line 720 **plus** line 750) . . . . . R

Deduct:

CMT loss deducted against adjusted net income for the tax year (lesser of line 490 (if positive) and line C in Part 3) . . . . . .

Subtotal (if negative, enter "0") S

Add:

Adjusted net loss for CMT purposes (amount from line 490 in Part 2, if **negative**) (enter as a positive amount) 760

CMT loss carryforward balance at the end of the tax year (amount S **plus** line 760) . . . . . 770 T

* For the first harmonized T2 return filed with a tax year that includes days in 2009:
- do not enter an amount on line Q or line 700;
- for line 720, enter the amount from line 2214 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line Q the amount from line 770 of Schedule 510 from the previous tax year.

** Do not include an amount from a predecessor corporation if it was controlled at any time before the amalgamation by any of the other predecessor corporations.

Note: If you entered an amount on line 720 or line 750, complete Part 8.

Part 8 – Analysis of CMT loss available for carryforward by year of origin

Complete this part if:

- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	Balance earned in a tax year ending before March 23, 2007 *	Balance earned in a tax year ending after March 22, 2007 **
10th previous tax year	810	820
9th previous tax year	811	821
8th previous tax year	812	822
7th previous tax year	813	823
6th previous tax year	814	824
5th previous tax year	815	825
4th previous tax year	816	826
3rd previous tax year	817	827
2nd previous tax year	818	828
1st previous tax year		829
Total ***		

* Adjusted net loss for CMT purposes that was earned (by the corporation, by subsidiaries wound up into or amalgamated with the corporation before March 22, 2007, and by other predecessors of the corporation) in each of the previous 10 tax years that ended before March 23, 2007, and has not been deducted.

** Adjusted net loss for CMT purposes that was earned (by the corporation and its predecessors, but not by a subsidiary predecessor) in each of the previous 20 tax years that ended after March 22, 2007, and has not been deducted.

*** The total of these two columns must equal the total of the amounts entered on lines 720 and 750.

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SCHEDULE 511

ONTARIO CORPORATE MINIMUM TAX – TOTAL ASSETS AND REVENUE FOR ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- For use by corporations to report the total assets and total revenue of all the Canadian or foreign corporations with which the filing corporation was associated at any time during the tax year. These amounts are required to determine if the filing corporation is subject to corporate minimum tax.
- Total assets and total revenue include the associated corporation's share of any partnership(s)/joint venture(s) total assets and total revenue.
- Attach additional schedules if more space is required.
- File this schedule with the *T2 Corporation Income Tax Return.*

	Names of associated corporations 200	Business number (Canadian corporation only) (see Note 1) 300	Total assets* (see Note 2) 400	Total revenue** (see Note 2) 500
1	Hydro Ottawa Holding Inc.	89411 0816 RC0001	716,268,000	42,330,000
2	Energy Ottawa Inc.	86338 9961 RC0001	163,709,750	116,048,000
3	Telecom Ottawa Holding Inc. / Societe De Portefeuill	86202 9337 RC0001	17,054,967	18,580
4	PowerTrail Inc.	82829 3944 RC0001	12,085,000	3,458,000
5	Moose Creek Energy Inc.	82851 1311 RC0001	200	0
6	Chaudiere Hydro Inc. Hydro Chaudiere Inc.	81281 3103 RC0001	100	0
7	Chaudiere Water Power Inc/Energie Hydraulique De L	10093 1955 RC0001	981,442	1,995,434
8	2425932 ONTARIO INC.	80053 3846 RC0001	100	0
		Total	450 910,099,559	550 163,850,014

Enter the total assets from line 450 on line 116 in Part 1 of Schedule 510, *Ontario Corporate Minimum Tax*.
Enter the total revenue from line 550 on line 146 in Part 1 of Schedule 510.

Note 1: Enter ¨NR¨ if a corporation is not registered.

Note 2: If the associated corporation does not have a tax year that ends in the filing corporation's current tax year but was associated with the filing corporation in the previous tax year of the filing corporation, enter the total revenue and total assets from the tax year of the associated corporation that ends in the previous tax year of the filing corporation.

*** Rules for total assets**

- Report total assets in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Include the associated corporation's share of the total assets of partnership(s) and joint venture(s) but exclude the recorded asset(s) for the investment in partnerships and joint ventures.
- Exclude unrealized gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.

**** Rules for total revenue**

- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the associated corporation has 2 or more tax years ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of those tax years by 365 and **divide** by the total number of days in all of those tax years.
- If the associated corporation's tax year is less than 51 weeks and is the only tax year of the associated corporation that ends in the filing corporation's tax year, **multiply** the associated corporation's total revenue by 365 and **divide** by the number of days in the associated corporation's tax year.
- Include the associated corporation's share of the total revenue of partnerships and joint ventures.
- If the partnership or joint venture has 2 or more fiscal periods ending in the associated corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.

T2 SCH 511

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SCHEDULE 546

CORPORATIONS INFORMATION ACT ANNUAL RETURN FOR ONTARIO CORPORATIONS

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- This schedule should be completed by a corporation that is incorporated, continued, or amalgamated in Ontario and subject to the Ontario *Business Corporations Act* (BCA) or Ontario *Corporations Act* (CA), except for registered charities under the federal *Income Tax Act*. This completed schedule serves as a *Corporations Information Act* Annual Return under the *Ontario Corporations Information Act*.
- Complete parts 1 to 4. Complete parts 5 to 7 only to report change(s) in the information recorded on the Ontario Ministry of Government Services (MGS) public record.
- This schedule must set out the required information for the corporation as of the date of delivery of this schedule.
- A completed Ontario *Corporations Information Act* Annual Return must be delivered within six months after the end of the corporation's tax year-end. The MGS considers this return to be delivered on the date that it is filed with the Canada Revenue Agency (CRA) together with the corporation's income tax return.
- It is the corporation's responsibility to ensure that the information shown on the MGS public record is accurate and up-to-date. To review the information shown for the corporation on the public record maintained by the MGS, obtain a Corporation Profile Report. Visit **www.ServiceOntario.ca** for more information.
- This schedule contains non-tax information collected under the authority of the Ontario *Corporations Information Act*. This information will be sent to the MGS for the purposes of recording the information on the public record maintained by the MGS.

Part 1 – Identification

100 Corporation's name (exactly as shown on the MGS public record)
Hydro Ottawa Limited

Jurisdiction incorporated, continued, or amalgamated, whichever is the most recent	**110** Date of incorporation or amalgamation, whichever is the most recent	Year Month Day	**120** Ontario Corporation No.
Ontario		2000-10-03	1427586

Part 2 – Head or registered office address (P.O. box not acceptable as stand-alone address)

200 Care of (if applicable)

210 Street number: 3025
220 Street name/Rural route/Lot and Concession number: Albion Road North
230 Suite number:

240 Additional address information if applicable (line 220 must be completed first)
PO Box 8700

250 Municipality (e.g., city, town)	**260** Province/state	**270** Country	**280** Postal/zip code
Ottawa	ON	CA	K1G 3S4

Part 3 – Change identifier

Have there been any changes in any of the information most recently filed for the public record maintained by the MGS for the corporation with respect to names, addresses for service, and the date elected/appointed and, if applicable, the date the election/appointment ceased of the directors and five most senior officers, or with respect to the corporation's mailing address or language of preference? To review the information shown for the corporation on the public record maintained by the MGS, obtain a Corporation Profile Report. For more information, visit **www.ServiceOntario.ca**.

300 [1] If there have been no changes, enter **1** in this box and then go to "Part 4 – Certification."
If there are changes, enter **2** in this box and complete the applicable parts on the next page, and then go to "Part 4 – Certification."

Part 4 – Certification

I certify that all information given in this *Corporations Information Act* Annual Return is true, correct, and complete.

450 Simpson
Last name

451 Geoff
First name

454 _____ ,
Middle name(s)

460 [2] Please enter one of the following numbers in this box for the above-named person: **1** for director, **2** for officer, or **3** for other individual having knowledge of the affairs of the corporation. If you are a director and officer, enter **1** or **2**.

Note: Sections 13 and 14 of the Ontario *Corporations Information Act* provide penalties for making false or misleading statements or omissions.

Complete the applicable parts to report changes in the information recorded on the MGS public record.

Part 5 – Mailing address

500 ☐ Please enter one of the following numbers in this box:
1 - Show no mailing address on the MGS public record.
2 - The corporation's mailing address is the same as the head or registered office address in Part 2 of this schedule.
3 - The corporation's complete mailing address is as follows:

510 Care of (if applicable)

520 Street number | **530** Street name/Rural route/Lot and Concession number | **540** Suite number

550 Additional address information if applicable (line 530 must be completed first)

560 Municipality (e.g., city, town) | **570** Province/state | **580** Country | **590** Postal/zip code

Part 6 – Language of preference

600 ☐ Indicate your language of preference by entering **1** for English or **2** for French. This is the language of preference recorded on the MGS public record for communications with the corporation. It may be different from line 990 on the T2 return.

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SCHEDULE 550

ONTARIO CO-OPERATIVE EDUCATION TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule to claim an Ontario co-operative education tax credit (CETC) under section 88 of the *Taxation Act, 2007* (Ontario).
- The CETC is a refundable tax credit that is equal to an eligible percentage (10% to 30%) of the eligible expenditures incurred by a corporation for a qualifying work placement. The maximum credit amount is $1,000 for each qualifying work placement ending before March 27, 2009, and $3,000 for each qualifying work placement beginning after March 26, 2009. For a qualifying work placement that straddles March 26, 2009, the maximum credit amount is prorated.
- Eligible expenditures are salaries and wages (including taxable benefits) paid or payable to a student in a qualifying work placement, or fees paid or payable to an employment agency for services performed by the student in a qualifying work placement. These expenditures must be paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario. Expenditures for a work placement (WP) are not eligible expenditures if they are greater than the amounts that would be paid to an arm's length employee.
- A WP must meet all of the following conditions to be a qualifying work placement:
  - the student performs employment duties for a corporation under a qualifying co-operative education program (QCEP);
  - the WP has been developed or approved by an eligible educational institution as a suitable learning situation;
  - the terms of the WP require the student to engage in productive work;
  - the WP is for a period of at least 10 consecutive weeks or, in the case of an internship program, not less than 8 consecutive months and not more than 16 consecutive months;
  - the student is paid for the work performed in the WP;
  - the corporation is required to supervise and evaluate the job performance of the student in the WP;
  - the institution monitors the student's performance in the WP; and
  - the institution has certified the WP as a qualifying work placement.
- Make sure you keep a copy of the letter of certification from the Ontario eligible educational institution containing the name of the student, the employer, the institution, the term of the WP, and the name/discipline of the QCEP to support the claim. Do not submit the letter of certification with the *T2 Corporation Income Tax Return*.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Corporate information

110 Name of person to contact for more information	120 Telephone number including area code
Mike Grue	(613) 738-5499

Is the claim filed for a CETC earned through a partnership?* . . . . . 150 1 Yes ☐ 2 No ☒

If you answered **yes** to the question at line 150, what is the name of the partnership? . . . . . 160 _____

Enter the percentage of the partnership's CETC allocated to the corporation . . . . . 170 _____ %

* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 550 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 550 to claim the partner's share of the partnership's CETC. The allocated amounts can not exceed the amount of the partnership's CETC.

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year? . . . . . 200 1 Yes ☒ 2 No ☐
2. Was the corporation exempt from tax under Part III of the *Taxation Act*, 2007 (Ontario)? . . . . . 210 1 Yes ☐ 2 No ☒

If you answered **no** to question 1 or **yes** to question 2, then the corporation is **not eligible** for the CETC.

Part 3 – Eligible percentage for determining the eligible amount

Corporation's salaries and wages paid in the previous tax year * **300** 68,504,000

For eligible expenditures incurred before March 27, 2009:

- If line 300 is $400,000 or less, enter 15% on line 310.
- If line 300 is $600,000 or more, enter 10% on line 310.
- If line 300 is more than $400,000 and less than $600,000, enter the percentage on line 310 using the following formula:

$$\text{Eligible percentage} = 15\,\% - \left[5\,\% \times \frac{(\text{amount on line 300} \ \textbf{minus}\ \$\ 400{,}000)}{\$\ 200{,}000} \right]$$

Eligible percentage for determining the eligible amount . . . . . **310** 10.000 %

For eligible expenditures incurred after March 26, 2009:

- If line 300 is $400,000 or less, enter 30% on line 312.
- If line 300 is $600,000 or more, enter 25% on line 312.
- If line 300 is more than $400,000 and less than $600,000, enter the percentage on line 312 using the following formula:

$$\text{Eligible percentage} = 30\,\% - \left[5\,\% \times \frac{(\text{amount on line 300} \ \textbf{minus}\ \$\ 400{,}000)}{\$\ 200{,}000} \right]$$

Eligible percentage for determining the eligible amount . . . . . **312** 25.000 %

* If this is the first tax year of an amalgamated corporation and subsection 88(9) of the *Taxation Act, 2007* (Ontario) applies, enter the salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Calculation of the Ontario co-operative education tax credit

Complete a separate entry for each student for each qualifying work placement that ended in the corporation's tax year. If a qualifying work placement would otherwise exceed four consecutive months, divide the WP into periods of four consecutive months and enter each full period of four consecutive months as a separate WP. If the WP does not divide equally into four-month periods and if the period that is less than 4 months is 10 or more consecutive weeks, then enter that period as a separate WP. If that period is less than 10 consecutive weeks, then include it with the WP for the last period of 4 consecutive months. Consecutive WPs with two or more associated corporations are deemed to be with only one corporation, as designated by the corporations.

	A Name of university, college, or other eligible educational institution **400**	B Name of qualifying co-operative education program **405**
1.	CARLETON UNIVERSITY	ENGINEERING
2.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
3.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
4.	UNIVERSITY OF WATERLOO	ELECTRICAL ENGINEERING
5.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
6.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
7.	GEORGIAN COLLEGE	ELECTRICAL ENGINEERING
8.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
9.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
10.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
11.	GEORGIAN COLLEGE	ELECTRICAL ENGINEERING
12.	GEORGIAN COLLEGE	ELECTRICAL ENGINEERING
13.	ALGONQUIN COLLEGE	POWERLINE TECHNICIAN
14.	UNIVERSITY OF WATERLOO	MECHANICAL ENGINEERING
15.	UNIVERSITY OF WATERLOO	ELECTRICAL ENGINEERING

	C Name of student **410**	D Start date of WP (see note 1 below) **430**	E End date of WP (see note 2 below) **435**
1.	[redacted]	2014-09-09	2014-12-23

	C Name of student 410	D Start date of WP (see note 1 below) 430	E End date of WP (see note 2 below) 435
2.	[redacted]	2014-05-05	2014-08-29
3.	[redacted]	2014-05-05	2014-08-29
4.	[redacted]	2014-01-06	2014-04-25
5.	[redacted]	2014-05-05	2014-08-29
6.	[redacted]	2014-05-05	2014-08-29
7.	[redacted]	2014-09-02	2014-12-19
8.	[redacted]	2014-05-05	2014-08-29
9.	[redacted]	2014-05-05	2014-08-29
10.	[redacted]	2014-05-05	2014-08-29
11.	[redacted]	2014-01-13	2014-05-02
12.	[redacted]	2014-09-02	2014-12-23
13.	[redacted]	2014-05-05	2014-08-29
14.	[redacted]	2014-09-02	2014-12-23
15.	[redacted]	2014-09-02	2014-12-19

Note 1: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the start date for the separate WP.

Note 2: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the end date for the separate WP.

Part 4 – Calculation of the Ontario co-operative education tax credit (continued)

	F1 Eligible expenditures before March 27, 2009 (see note 1 below) 450	Eligible percentage before March 27, 2009 (from line 310 in Part 3)	F2 Eligible expenditures after March 26, 2009 (see note 1 below) 452	Eligible percentage after March 26, 2009 (from line 310a in Part 3)	X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
1.		10.000 %	8,736	25.000 %		14
2.		10.000 %	10,427	25.000 %		17
3.		10.000 %	10,537	25.000 %		17
4.		10.000 %	9,555	25.000 %		16
5.		10.000 %	10,976	25.000 %		17
6.		10.000 %	12,789	25.000 %		17
7.		10.000 %	9,235	25.000 %		15
8.		10.000 %	11,396	25.000 %		17
9.		10.000 %	10,552	25.000 %		17
10.		10.000 %	10,533	25.000 %		17
11.		10.000 %	9,547	25.000 %		16
12.		10.000 %	9,547	25.000 %		15
13.		10.000 %	14,129	25.000 %		17
14.		10.000 %	9,235	25.000 %		15
15.		10.000 %	9,555	25.000 %		15

	G Eligible amount (eligible expenditures **multiplied** by eligible percentage) (see note 2 below) 460	H Maximum CETC per WP (see note 3 below) 462	I CETC on eligible expenditures (column G or H, whichever is less) 470	J CETC on repayment of government assistance (see note 4 below) 480	K CETC for each WP (column I or column J) 490
1.	2,184	3,000	2,184		2,184
2.	2,607	3,000	2,607		2,607
3.	2,634	3,000	2,634		2,634
4.	2,389	3,000	2,389		2,389
5.	2,744	3,000	2,744		2,744
6.	3,197	3,000	3,000		3,000
7.	2,309	3,000	2,309		2,309
8.	2,849	3,000	2,849		2,849
9.	2,638	3,000	2,638		2,638
10.	2,633	3,000	2,633		2,633
11.	2,387	3,000	2,387		2,387
12.	2,387	3,000	2,387		2,387
13.	3,532	3,000	3,000		3,000
14.	2,309	3,000	2,309		2,309
15.	2,389	3,000	2,389		2,389

Ontario co-operative education tax credit (total of amounts in column K) **500** 38,459 **L**

or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount L:

Amount L _____ x percentage on line 170 in Part 1 _____ % = ... **M**

Enter amount L or M, whichever applies, on line 452 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 550, add the amounts from line L or M, whichever applies, on all the schedules and enter the total amount on line 452 of Schedule 5.

Note 1: Reduce eligible expenditures by all government assistance, as defined under subsection 88(21) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, for the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.

Note 2: Calculate the eligible amount (Column G) using the following formula:

Column G = (column F1 x percentage on line 310) + (column F2 x percentage on line 312)

Note 3: If the WP ends before March 27, 2009, the maximum credit amount for the WP is $1,000.
If the WP begins after March 26, 2009, the maximum credit amount for the WP is $3,000.
If the WP begins before March 27, 2009, and ends after March 26, 2009, calculate the maximum credit amount using the following formula:

($1,000 x X/Y) + [$3,000 x (Y – X)/Y]

where "X" is the number of consecutive weeks of the WP completed by the student before March 27, 2009, and "Y" is the total number of consecutive weeks of the student's WP.

Note 4: When claiming a CETC for repayment of government assistance, complete a **separate entry** for each repayment and complete columns A to E and J and K with the details for the previous year WP in which the government assistance was received.
Include the amount of government assistance repaid in the tax year multiplied by the eligible percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the CETC in that tax year.

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SCHEDULE 552

ONTARIO APPRENTICESHIP TRAINING TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule to claim an Ontario apprenticeship training tax credit (ATTC) under section 89 of the *Taxation Act, 2007* (Ontario).
- The ATTC is a refundable tax credit that is equal to a specified percentage (25% to 45%) of the eligible expenditures incurred by a corporation for a qualifying apprenticeship. Before March 27, 2009, the maximum credit for each apprentice is $5,000 per year to a maximum credit of $15,000 over the first 36-month period of the qualifying apprenticeship. After March 26, 2009, the maximum credit for each apprentice is $10,000 per year to a maximum credit of $40,000 over the first 48-month period of the qualifying apprenticeship. The maximum credit amount is prorated for an employment period of an apprentice that straddles March 26, 2009.
- Eligible expenditures are salaries and wages (including taxable benefits) paid to an apprentice in a qualifying apprenticeship or fees paid to an employment agency for the provision of services performed by the apprentice in a qualifying apprenticeship. These expenditures must be:
  - paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario;
  - for services provided by the apprentice during the first 36 months of the apprenticeship program, if incurred before March 27, 2009; and
  - for services provided by the apprentice during the first 48 months of the apprenticeship program, if incurred after March 26, 2009.
- An expenditure is not eligible for an ATTC if:
  - the same expenditure was used, or will be used, to claim a co-operative education tax credit; or
  - it is more than an amount that would be paid to an arm's length apprentice.
- An apprenticeship must meet the following conditions to be a qualifying apprenticeship:
  - the apprenticeship is in a qualifying skilled trade approved by the Ministry of Training, Colleges and Universities (Ontario); and
  - the corporation and the apprentice must be participating in an apprenticeship program in which the training agreement has been registered under the *Ontario College of Trades and Apprenticeship Act, 2009 or* the *Apprenticeship and Certification Act, 1998* or in which the contract of apprenticeship has been registered under the *Trades Qualification and Apprenticeship Act*.
- Make sure you keep a copy of the training agreement or contract of apprenticeship to support your claim. Do not submit the training agreement or contract of apprenticeship with your *T2 Corporation Income Tax Return*.
- File this schedule with your *T2 Corporation Income Tax Return*.

Part 1 – Corporate information (please print)

110 Name of person to contact for more information	120 Telephone number including area code
Mike Grue	(613) 738-5499

Is the claim filed for an ATTC earned through a partnership? * . . . . . **150** 1 Yes ☐ 2 No ☒

If **yes** to the question at line 150, what is the name of the partnership? . . . . . **160** _____

Enter the percentage of the partnership's ATTC allocated to the corporation . . . . . **170** _____ %

* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 552 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 552 to claim the partner's share of the partnership's ATTC. The total of the partners' allocated amounts can never exceed the amount of the partnership's ATTC.

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year? . . . . . **200** 1 Yes ☒ 2 No ☐
2. Was the corporation exempt from tax under Part III of the *Taxation Act, 2007* (Ontario)? . . . . . **210** 1 Yes ☐ 2 No ☒

If you answered **no** to question 1 or **yes** to question 2, then you are **not eligible** for the ATTC.

Part 3 – Specified percentage

Corporation's salaries and wages paid in the previous tax year * **300** 68,504,000

For eligible expenditures incurred before March 27, 2009:
- If line 300 is $400,000 or less, enter 30% on line 310.
- If line 300 is $600,000 or more, enter 25% on line 310.
- If line 300 is more than $400,000 and less than $600,000, enter the percentage on line 310 using the following formula:

$$\text{Specified percentage} = 30\,\% - \left[5\,\% \times \left(\frac{\text{amount on line 300} \ \textbf{minus}\ 400{,}000}{200{,}000} \right) \right]$$

Specified percentage . . . . . **310** 25.000 %

For eligible expenditures incurred after March 26, 2009:
- If line 300 is $400,000 or less, enter 45% on line 312.
- If line 300 is $600,000 or more, enter 35% on line 312.
- If line 300 is more than $400,000 and less than $600,000, enter the percentage on line 312 using the following formula:

$$\text{Specified percentage} = 45\,\% - \left[10\,\% \times \left(\frac{\text{amount on line 300} \ \textbf{minus}\ 400{,}000}{200{,}000} \right) \right]$$

Specified percentage . . . . . **312** 35.000 %

* If this is the first tax year of an amalgamated corporation and subsection 89(6) of the *Taxation Act, 2007* (Ontario) applies, enter salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Calculation of the Ontario apprenticeship training tax credit

Complete a **separate entry** for each apprentice that is in a qualifying apprenticeship with the corporation. When claiming an ATTC for repayment of government assistance, complete a **separate entry** for each repayment, and complete columns A to G and M and N with the details for the employment period in the previous tax year in which the government assistance was received.

	A Trade code 400	B Apprenticeship program/ trade name 405	C Name of apprentice 410
1.	434a	Powerline Technician	[redacted]
2.	434a	Powerline Technician	[redacted]
3.	434a	Powerline Technician	[redacted]
4.	434a	Powerline Technician	[redacted]
5.	434a	Powerline Technician	[redacted]
6.	434a	Powerline Technician	[redacted]
7.	434a	Powerline Technician	[redacted]
8.	434a	Powerline Technician	[redacted]
9.	434a	Powerline Technician	[redacted]
10.	434a	Powerline Technician	[redacted]
11.	434a	Powerline Technician	[redacted]
12.	434a	Powerline Technician	[redacted]
13.	434a	Powerline Technician	[redacted]
14.	434a	Powerline Technician	[redacted]
15.	434a	Powerline Technician	[redacted]
16.	434a	Powerline Technician	[redacted]
17.	434a	Powerline Technician	[redacted]
18.	434a	Powerline Technician	[redacted]
19.	434a	Powerline Technician	[redacted]

	D Original contract or training agreement number 420	E Original registration date of apprenticeship contract or training agreement (see note 1 below) 425	F Start date of employment as an apprentice in the tax year (see note 2 below) 430	G End date of employment as an apprentice in the tax year (see note 3 below) 435
1.	[redacted]	2011-10-17	2014-01-01	2014-12-31

	D Original contract or training agreement number 420	E Original registration date of apprenticeship contract or training agreement (see note 1 below) 425	F Start date of employment as an apprentice in the tax year (see note 2 below) 430	G End date of employment as an apprentice in the tax year (see note 3 below) 435
2.	[redacted]	2011-10-17	2014-01-01	2014-12-31
3.	[redacted]	2011-10-17	2014-01-01	2014-12-31
4.	[redacted]	2011-05-10	2014-01-01	2014-12-31
5.	[redacted]	2011-10-17	2014-01-01	2014-12-31
6.	[redacted]	2011-10-17	2014-01-01	2014-12-31
7.	[redacted]	2011-10-17	2014-01-01	2014-12-31
8.	[redacted]	2012-05-16	2014-01-01	2014-12-31
9.	[redacted]	2012-05-16	2014-01-01	2014-12-31
10.	[redacted]	2012-08-13	2014-01-01	2014-12-31
11.	[redacted]	2012-05-16	2014-01-01	2014-12-31
12.	[redacted]	2012-05-16	2014-01-01	2014-12-31
13.	[redacted]	2012-05-16	2014-01-01	2014-12-31
14.	[redacted]	2014-06-09	2014-06-09	2014-12-31
15.	[redacted]	2014-06-09	2014-06-09	2014-12-31
16.	[redacted]	2014-06-09	2014-06-09	2014-12-31
17.	[redacted]	2014-06-09	2014-06-09	2014-12-31
18.	[redacted]	2014-06-09	2014-06-09	2014-12-31
19.	[redacted]	2014-06-09	2014-06-09	2014-12-31

Note 1: Enter the original registration date of the apprenticeship contract or training agreement in all cases, even when multiple employers employed the apprentice.

Note 2: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the first day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the start date of employment as an apprentice for the tax year in which the government assistance was received.

Note 3: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the last day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the end date of employment as an apprentice for the tax year in which the government assistance was received.

Part 4 – Calculation of the Ontario apprenticeship training tax credit (continued)

	H1 Number of days employed as an apprentice in the tax year before March 27, 2009 (see note 1 below) 441	H2 Number of days employed as an apprentice in the tax year after March 26, 2009 (see note 1 below) 442	H3 Number of days employed as an apprentice in the tax year (column H1 **plus** column H2) 440	I Maximum credit amount for the tax year (see note 2 below) 445
1.		365	365	10,000
2.		365	365	10,000
3.		365	365	10,000
4.		365	365	10,000
5.		365	365	10,000
6.		365	365	10,000
7.		365	365	10,000
8.		365	365	10,000
9.		365	365	10,000
10.		365	365	10,000
11.		365	365	10,000
12.		365	365	10,000
13.		365	365	10,000
14.		206	206	5,644
15.		206	206	5,644
16.		206	206	5,644
17.		206	206	5,644
18.		206	206	5,644
19.		206	206	5,644

	J1 Eligible expenditures before March 27, 2009 (see note 3 below) 451	J2 Eligible expenditures after March 26, 2009 (see note 3 below) 452	J3 Eligible expenditures for the tax year (column J1 **plus** column J2) 450	K Eligible expenditures **multiplied** by specified percentage (see note 4 below) 460
1.		89,630	89,630	31,371
2.		82,026	82,026	28,709
3.		75,455	75,455	26,409
4.		103,777	103,777	36,322
5.		76,025	76,025	26,609
6.		78,197	78,197	27,369
7.		85,817	85,817	30,036
8.		70,942	70,942	24,830
9.		72,360	72,360	25,326
10.		72,180	72,180	25,263
11.		69,222	69,222	24,228
12.		69,073	69,073	24,176
13.		67,209	67,209	23,523
14.		27,704	27,704	9,696
15.		27,640	27,640	9,674
16.		28,453	28,453	9,959
17.		27,907	27,907	9,767
18.		27,791	27,791	9,727
19.		27,641	27,641	9,674

	L ATTC on eligible expenditures (lesser of columns I and K) 470	M ATTC on repayment of government assistance (see note 5 below) 480	N ATTC for each apprentice (column L or column M, whichever applies) 490
1.	10,000		10,000
2.	10,000		10,000
3.	10,000		10,000
4.	10,000		10,000
5.	10,000		10,000
6.	10,000		10,000
7.	10,000		10,000
8.	10,000		10,000
9.	10,000		10,000
10.	10,000		10,000
11.	10,000		10,000
12.	10,000		10,000
13.	10,000		10,000
14.	5,644		5,644
15.	5,644		5,644
16.	5,644		5,644
17.	5,644		5,644
18.	5,644		5,644
19.	5,644		5,644
	Ontario apprenticeship training tax credit (total of amounts in column N)	500	163,864 **O**

or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount O:

Amount O _____ x percentage on line 170 in Part 1 _____ % = ... _____ **P**

Enter amount O or P, whichever applies, on line 454 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 552, add the amounts from line O or P, whichever applies, on all the schedules, and enter the total amount on line 454 of Schedule 5.

Note 1: When there are multiple employment periods as an apprentice in the tax year with the corporation, do not include days in which the individual was not employed as an apprentice.
For H1: The days employed as an apprentice must be within 36 months of the registration date provided in column E.
For H2: The days employed as an apprentice must be within 48 months of the registration date provided in column E.

Note 2: Maximum credit = ($5,000 x H1/365*) + ($10,000 x H2/365*)
* 366 days, if the tax year includes February 29

Note 3: Reduce eligible expenditures by all government assistance, as defined under subsection 89(19) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, in respect of the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.
For J1: Eligible expenditures before March 27, 2009, must be for services provided by the apprentice during the first 36 months of the apprenticeship program.
For J2: Eligible expenditures after March 26, 2009, must be for services provided by the apprentice during the first 48 months of the apprenticeship program.

Note 4: Calculate the amount in column K as follows:
Column K = (J1 x line 310) + (J2 x line 312)

Note 5: Include the amount of government assistance repaid in the tax year multiplied by the specified percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the ATTC in that tax year.
Complete a **separate entry** for each repayment of government assistance.

HydroOttawa

July 13, 2015

Ministry of Finance - PIL
33 King Street W
P.O. Box 620
Oshawa, ON
L1H 8E9

RE : HYDRO OTTAWA LIMITED
BUSINESS NUMBER 86933 1363 RC0001
AMENDMENT - TAXATION YEAR ENDED DECEMBER 31, 2014

Hydro Ottawa Limited's T2 corporate tax return for the taxation year ended December 31, 2014 is being amended because some capital assets were inadvertently capitalized and included as additions in Schedule 8 in 2014. These capital assets were not available for use until March 2015 and therefore should not have been capitalized and included in Schedule 8 in 2014. These capital assets will be added to Schedule 8 for the taxation year ended December 31, 2015.

Please find attached the relevant amended schedules to the 2014 tax return :

- Schedule 200 T2 Corporate Income Tax Return
- Schedule 1 Net Income (Loss) for Income Tax Purposes
- Schedule 5 Tax Calculation Supplementary - Corporations
- Schedule 8 Capital Cost Allowance (CCA)
- Schedule 10 Cumulative Eligible Capital Deduction
- Line 996 Amended Tax Return Description of Changes

Yours sincerely,

Mike Grue
Treasurer

Hydro Ottawa Limited / Hydro Ottawa limitée
3025 Albion Road North, PO Box 8700 / chemin Albion Nord, C.P. 8700
Ottawa, Ontario K1G 3S4

www.hydroottawa.com

Canada Revenue Agency / Agence du revenu du Canada

AMENDED

T2 Corporation Income Tax Return

200

This form serves as a federal, provincial, and territorial corporation income tax return, unless the corporation is located in Quebec or Alberta. If the corporation is located in one of these provinces, you have to file a separate provincial corporation return.

All legislative references on this return are to the federal *Income Tax Act* and *Income Tax Regulations*. This return may contain changes that had not yet become law at the time of publication.

Send one completed copy of this return, including schedules and the *General Index of Financial Information* (GIFI), to your tax centre or tax services office. You have to file the return within six months after the end of the corporation's tax year.

For more information see **www.cra.gc.ca** or Guide T4012, *T2 Corporation – Income Tax Guide*.

055 Do not use this area

Identification

Business number (BN) 001 86339 1363 RC0001

Corporation's name
002 Hydro Ottawa Limited

Address of head office
Has this address changed since the last time we were notified? . . . . . 010 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 011 to 018.)
011 3025 Albion Road North
012 P.O. Box 8700
City: 015 Ottawa
Province, territory, or state: 016 ON
Country (other than Canada): 017
Postal code/Zip code: 018 K1G 3S4

Mailing address (if different from head office address)
Has this address changed since the last time we were notified? . . . . . 020 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 021 to 028.)
021 c/o
022
023
City: 025
Province, territory, or state: 026
Country (other than Canada): 027
Postal code/Zip code: 028

Location of books and records (if different from head office address)
Has the location of books and records changed since the last time we were notified? . . . . . 030 1 Yes ☐ 2 No ☒
(If **yes**, complete lines 031 to 038.)
031
032
City: 035
Province,territory, or state: 036
Country (other than Canada): 037
Postal code/Zip code: 038

040 Type of corporation at the end of the tax year

1 ☒ Canadian-controlled private corporation (CCPC)
2 ☐ Other private corporation
3 ☐ Public corporation
4 ☐ Corporation controlled by a public corporation
5 ☐ Other corporation (specify, below)

If the type of corporation changed during the tax year, provide the effective date of the change . . . . . 043 _____ YYYY MM DD

To which tax year does this return apply?
Tax year start: 060 2014-01-01 YYYY MM DD
Tax year-end: 061 2014-12-31 YYYY MM DD

Has there been an acquisition of control to which subsection 249(4) applies since the tax year start on line 060? . . . . . 063 1 Yes ☐ 2 No ☒
If **yes**, provide the date control was acquired . . . . . 065 _____ YYYY MM DD

Is the date on line 061 a deemed tax year-end according to subsection 249(3.1)? . . . . . 066 1 Yes ☐ 2 No ☒

Is the corporation a professional corporation that is a member of a partnership? . . . . . 067 1 Yes ☐ 2 No ☒

Is this the first year of filing after:
Incorporation? . . . . . 070 1 Yes ☐ 2 No ☒
Amalgamation? . . . . . 071 1 Yes ☐ 2 No ☒
If **yes**, complete lines 030 to 038 and attach Schedule 24.

Has there been a wind-up of a subsidiary under section 88 during the current tax year? . . . . . 072 1 Yes ☐ 2 No ☒
If **yes**, complete and attach Schedule 24.

Is this the final tax year before amalgamation? . . . . . 076 1 Yes ☐ 2 No ☒

Is this the final return up to dissolution? . . . . . 078 1 Yes ☐ 2 No ☒

If an election was made under section 261, state the functional currency used . . . . . 079 _____

Is the corporation a resident of Canada?
080 1 Yes ☒ 2 No ☐ If **no**, give the country of residence on line 081 and complete and attach Schedule 97.
081 _____

Is the non-resident corporation claiming an exemption under an income tax treaty? . . . . . 082 1 Yes ☐ 2 No ☒
If **yes**, complete and attach Schedule 91.

If the corporation is exempt from tax under section 149, tick one of the following boxes:
085
1 ☐ Exempt under paragraph 149(1)(e) or (l)
2 ☐ Exempt under paragraph 149(1)(j)
3 ☐ Exempt under paragraph 149(1)(t)
4 ☐ Exempt under other paragraphs of section 149

Do not use this area
095 096

Attachments

Financial statement information: Use GIFI schedules 100, 125, and 141.
Schedules – Answer the following questions. For each **yes** response, **attach** the schedule to the T2 return, unless otherwise instructed.

		Yes	Schedule
Is the corporation related to any other corporations?	150	X	9
Is the corporation an associated CCPC?	160	X	23
Is the corporation an associated CCPC that is claiming the expenditure limit?	161		49
Does the corporation have any non-resident shareholders who own voting shares?	151		19
Has the corporation had any transactions, including section 85 transfers, with its shareholders, officers, or employees, other than transactions in the ordinary course of business? Exclude non-arm's length transactions with non-residents	162		11
If you answered **yes** to the above question, and the transaction was between corporations not dealing at arm's length, were all or substantially all of the assets of the transferor disposed of to the transferee?	163		44
Has the corporation paid any royalties, management fees, or other similar payments to residents of Canada?	164		14
Is the corporation claiming a deduction for payments to a type of employee benefit plan?	165	X	15
Is the corporation claiming a loss or deduction from a tax shelter?	166		T5004
Is the corporation a member of a partnership for which a partnership account number has been assigned?	167		T5013
Did the corporation, a foreign affiliate controlled by the corporation, or any other corporation or trust that did not deal at arm's length with the corporation have a beneficial interest in a non-resident discretionary trust (without reference to section 94)?	168		22
Did the corporation own any shares in one or more foreign affiliates in the tax year?	169		25
Has the corporation made any payments to non-residents of Canada under subsections 202(1) and/or 105(1) of the federal *Income Tax Regulations*?	170		29
Did the corporation have a total amount over $1 million of reportable transactions with non-arm's length non-residents?	171		T106
For private corporations: Does the corporation have any shareholders who own 10% or more of the corporation's common and/or preferred shares?	173	X	50
Has the corporation made payments to, or received amounts from, a retirement compensation plan arrangement during the year?	172		
Does the corporation earn income from one or more Internet webpages or websites?	180		88
Is the net income/loss shown on the financial statements different from the net income/loss for income tax purposes?	201	X	1
Has the corporation made any charitable donations; gifts to Canada, a province, or a territory; gifts of cultural or ecological property; or gifts of medicine?	202	X	2
Has the corporation received any dividends or paid any taxable dividends for purposes of the dividend refund?	203	X	3
Is the corporation claiming any type of losses?	204		4
Is the corporation claiming a provincial or territorial tax credit or does it have a permanent establishment in more than one jurisdiction?	205	X	5
Has the corporation realized any capital gains or incurred any capital losses during the tax year?	206		6
i) Is the corporation claiming the small business deduction and reporting income from: a) property (other than dividends deductible on line 320 of the T2 return), b) a partnership, c) a foreign business, or d) a personal services business; or ii) does the corporation have aggregate investment income at line 440?	207		7
Does the corporation have any property that is eligible for capital cost allowance?	208	X	8
Does the corporation have any property that is eligible capital property?	210	X	10
Does the corporation have any resource-related deductions?	212		12
Is the corporation claiming deductible reserves (other than transitional reserves under section 34.2)?	213	X	13
Is the corporation claiming a patronage dividend deduction?	216		16
Is the corporation a credit union claiming a deduction for allocations in proportion to borrowing or an additional deduction?	217		17
Is the corporation an investment corporation or a mutual fund corporation?	218		18
Is the corporation carrying on business in Canada as a non-resident corporation?	220		20
Is the corporation claiming any federal or provincial foreign tax credits, or any federal or provincial logging tax credits?	221		21
Does the corporation have any Canadian manufacturing and processing profits?	227		27
Is the corporation claiming an investment tax credit?	231	X	31
Is the corporation claiming any scientific research and experimental development (SR&ED) expenditures?	232		T661
Is the total taxable capital employed in Canada of the corporation and its related corporations over $10,000,000?	233	X	33/34/35
Is the total taxable capital employed in Canada of the corporation and its associated corporations over $10,000,000?	234	X	
Is the corporation claiming a surtax credit?	237		37
Is the corporation subject to gross Part VI tax on capital of financial institutions?	238		38
Is the corporation claiming a Part I tax credit?	242		42
Is the corporation subject to Part IV.1 tax on dividends received on taxable preferred shares or Part VI.1 tax on dividends paid?	243		43
Is the corporation agreeing to a transfer of the liability for Part VI.1 tax?	244		45
Is the corporation subject to Part II - Tobacco Manufacturers' surtax?	249		46
For financial institutions: Is the corporation a member of a related group of financial institutions with one or more members subject to gross Part VI tax?	250		39
Is the corporation claiming a Canadian film or video production tax credit refund?	253		T1131
Is the corporation claiming a film or video production services tax credit refund?	254		T1177
Is the corporation subject to Part XIII.1 tax? (Show your calculations on a sheet that you identify as Schedule 92.)	255		92

Attachments – continued from page 2

		Yes	Schedule
Did the corporation have any foreign affiliates in the tax year?	271		T1134
Did the corporation own specified foreign property in the year with a cost amount over $100,000?	259		T1135
Did the corporation transfer or loan property to a non-resident trust?	260		T1141
Did the corporation receive a distribution from or was it indebted to a non-resident trust in the year?	261		T1142
Has the corporation entered into an agreement to allocate assistance for SR&ED carried out in Canada?	262		T1145
Has the corporation entered into an agreement to transfer qualified expenditures incurred in respect of SR&ED contracts?	263		T1146
Has the corporation entered into an agreement with other associated corporations for salary or wages of specified employees for SR&ED?	264		T1174
Did the corporation pay taxable dividends (other than capital gains dividends) in the tax year?	265	X	55
Has the corporation made an election under subsection 89(11) not to be a CCPC?	266		T2002
Has the corporation revoked any previous election made under subsection 89(11)?	267		T2002
Did the corporation (CCPC or deposit insurance corporation (DIC)) pay eligible dividends, or did its general rate income pool (GRIP) change in the tax year?	268	X	53
Did the corporation (other than a CCPC or DIC) pay eligible dividends, or did its low rate income pool (LRIP) change in the tax year?	269		54

Additional information

Did the corporation use the International Financial Reporting Standards (IFRS) when it prepared its financial statements?	270	1 Yes		2 No	X
Is the corporation inactive?	280	1 Yes		2 No	X

What is the corporation's main revenue-generating business activity? 221122 Electric Power Distribution

Specify the principal product(s) mined, manufactured, sold, constructed, or services provided, giving the approximate percentage of the total revenue that each product or service represents.

284	DIST. OF ELECTRICITY	285	100.000 %
286		287	%
288		289	%

Did the corporation immigrate to Canada during the tax year?	291	1 Yes		2 No	X
Did the corporation emigrate from Canada during the tax year?	292	1 Yes		2 No	X
Do you want to be considered as a quarterly instalment remitter if you are eligible?	293	1 Yes		2 No	
If the corporation was eligible to remit instalments on a quarterly basis for part of the tax year, provide the date the corporation ceased to be eligible	294	YYYY MM DD			
If the corporation's major business activity is construction, did you have any subcontractors during the tax year?	295	1 Yes		2 No	

Taxable income

Net income or (loss) for income tax purposes from Schedule 1, financial statements, or GIFI.	300		1,239,886	A
Deduct: Charitable donations from Schedule 2	311	212,515		
Gifts to Canada, a province, or a territory from Schedule 2	312			
Cultural gifts from Schedule 2	313			
Ecological gifts from Schedule 2	314			
Gifts of medicine from Schedule 2	315			
Taxable dividends deductible under section 112 or 113, or subsection 138(6) from Schedule 3	320			
Part VI.1 tax deduction*	325			
Non-capital losses of previous tax years from Schedule 4	331			
Net capital losses of previous tax years from Schedule 4	332			
Restricted farm losses of previous tax years from Schedule 4	333			
Farm losses of previous tax years from Schedule 4	334			
Limited partnership losses of previous tax years from Schedule 4	335			
Taxable capital gains or taxable dividends allocated from a central credit union	340			
Prospector's and grubstaker's shares	350			
Subtotal		212,515 ▶	212,515	B
Subtotal (amount A **minus** amount B) (if negative, enter "0")			1,027,371	C
Add: Section 110.5 additions or subparagraph 115(1)(a)(vii) additions	355			D
Taxable income (amount C **plus** amount D)	360		1,027,371	
Income exempt under paragraph 149(1)(t)	370			
Taxable income for a corporation with exempt income under paragraph 149(1)(t) (line 360 **minus** line 370)			1,027,371	Z

* This amount is equal to 3.5 times the Part VI.1 tax payable at line 724 on page 8.

Small business deduction

Canadian-controlled private corporations (CCPCs) throughout the tax year

Income from active business carried on in Canada from Schedule 7	400	1,239,886	A
Taxable income from line 360 on page 3, **minus** 100/28 3.57143 of the amount on line 632* on page 7, **minus** 4 times the amount on line 636** on page 7, and **minus** any amount that, because of federal law, is exempt from Part I tax	405	1,027,371	B
Business limit (see notes 1 and 2 below)	410	500,000	C

Notes:

1. For CCPCs that are not associated, enter $ 500,000 on line 410. However, if the corporation's tax year is less than 51 weeks, prorate this amount by the number of days in the tax year divided by 365, and enter the result on line 410.
2. For associated CCPCs, use Schedule 23 to calculate the amount to be entered on line 410.

Business limit reduction:

Amount C 500,000 x 415 *** 1,232,630 / 11,250 D = 54,783,556 E

Reduced business limit (amount C **minus** amount E) (if negative, enter "0") 425 F

Small business deduction

Amount A, B, C, or F, whichever is the least x 17 % = 430 G

Enter amount G on line I on page 7.

* Calculate the amount of foreign non-business income tax credit deductible on line 632 without reference to the refundable tax on the CCPC's investment income (line 604) and without reference to the corporate tax reductions under section 123.4.

** Calculate the amount of foreign business income tax credit deductible on line 636 without reference to the corporation tax reductions under section 123.4.

*** **Large corporations**

- If the corporation is not associated with any corporations in both the current and previous tax years, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **prior year** minus $10,000,000) x 0.225%.
- If the corporation is not associated with any corporations in the current tax year, but was associated in the previous tax year, the amount to be entered on line 415 is: (total taxable capital employed in Canada for the **current year** minus $10,000,000) x 0.225%.
- For corporations associated in the current tax year, see Schedule 23 for the special rules that apply.

General tax reduction for Canadian-controlled private corporations

Canadian-controlled private corporations throughout the tax year

Taxable income from page 3 (line 360 or amount Z, whichever applies)			1,027,371	A
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27				B
Amount QQ from Part 13 of Schedule 27				C
Personal service business income	432			D
Amount used to calculate the credit union deduction (amount F from Schedule 17)				E
Amount from line 400, 405, 410, or 425 on page 4, whichever is the least				F
Aggregate investment income from line 440 on page 6*				G
Subtotal (**add** amounts B to G)		▶		H
Amount A **minus** amount H (if negative, enter "0")			1,027,371	I
General tax reduction for Canadian-controlled private corporations – Amount I **multiplied** by 13 %			133,558	J

Enter amount J on line 638 on page 7.

* Except for a corporation that is, throughout the year, a cooperative corporation (within the meaning assigned by subsection 136(2)) or a credit union.

General tax reduction

Do not complete this area if you are a Canadian-controlled private corporation, an investment corporation, a mortgage investment corporation, a mutual fund corporation, or any corporation with taxable income that is not subject to the corporation tax rate of 38%.

Taxable income from page 3 (line 360 or amount Z, whichever applies)				K
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27				L
Amount QQ from Part 13 of Schedule 27				M
Personal service business income	434			N
Amount used to calculate the credit union deduction (amount F from Schedule 17)				O
Subtotal (**add** amounts L to O)		▶		P
Amount K **minus** amount P (if negative, enter "0")				Q
General tax reduction – Amount Q **multiplied** by 13 %				R

Enter amount R on line 639 on page 7.

Refundable portion of Part I tax

Canadian-controlled private corporations throughout the tax year

Aggregate investment income from Schedule 7 . . . . . 440 _____ x 26 2 / 3 % = ... _____ A

Foreign non-business income tax credit from line 632 on page 7 . . . . . _____ B

Deduct:

Foreign investment income from Schedule 7 . . . . . 445 _____ x 9 1 / 3 % = _____ C

(if negative, enter "0") _____ ▶ _____ D

Amount A **minus** amount D (if negative, enter "0") . . . . . _____ E

Taxable income from line 360 on page 3 . . . . . 1,027,371 F

Deduct:

Amount from line 400, 405, 410, or 425 on page 4, whichever is the least . . . . . _____ G

Foreign non-business income tax credit from line 632 on page 7 . . . _____ x 100 / 35 = _____ H

Foreign business income tax credit from line 636 on page 7 . . . . . _____ x 4 = _____ I

Subtotal _____ ▶ _____ J

1,027,371 K

x 26 2 / 3 % = 273,966 L

Part I tax payable minus investment tax credit refund (line 700 **minus** line 780 from page 8) . . . . . 130,106 M

Refundable portion of Part I tax – Amount E, L, or M, whichever is the least . . . . . 450 _____ N

Refundable dividend tax on hand

Refundable dividend tax on hand at the end of the previous tax year . . . . . 460 _____

Deduct: Dividend refund for the previous tax year . . . . . 465 _____

_____ ▶ _____ O

Add the total of:

Refundable portion of Part I tax from line 450 above . . . . . _____ P

Total Part IV tax payable from Schedule 3 . . . . . _____ Q

Net refundable dividend tax on hand transferred from a predecessor corporation on amalgamation, or from a wound-up subsidiary corporation . . . . . 480 _____

_____ ▶ _____ R

Refundable dividend tax on hand at the end of the tax year – Amount O **plus** amount R . . . . . 485 _____

Dividend refund

Private and subject corporations at the time taxable dividends were paid in the tax year

Taxable dividends paid in the tax year from line 460 on page 2 of Schedule 3 . . . . . 15,000,000 x 1 / 3 = 5,000,000 S

Refundable dividend tax on hand at the end of the tax year from line 485 above . . . . . _____ T

Dividend refund – Amount S or T, whichever is less . . . . . _____ U

Enter amount U on line 784 on page 8.

Part I tax

Base amount Part I tax – Taxable income from page 3 (line 360 or amount Z, whichever applies) **multiplied** by 38 % . . . 550 390,401 A

Recapture of investment tax credit from Schedule 31 . . . . . 602 B

Calculation for the refundable tax on the Canadian-controlled private corporation's (CCPC) investment income
(if it was a CCPC throughout the tax year)

Aggregate investment income from line 440 on page 6			C
Taxable income from line 360 on page 3	1,027,371	D	
Deduct:			
Amount from line 400, 405, 410, or 425 on page 4, whichever is the least		E	
Net amount (amount D **minus** amount E)	1,027,371 ▶	1,027,371	F

Refundable tax on CCPC's investment income – 6 2 / 3 % of whichever is less: amount C or amount F . . . . . 604 G

Subtotal (**add** amounts A, B, and G) 390,401 H

Deduct:

Small business deduction from line 430 on page 4			I
Federal tax abatement	608	102,737	
Manufacturing and processing profits deduction from Schedule 27	616		
Investment corporation deduction	620		
Taxed capital gains 624			
Additional deduction – credit unions from Schedule 17	628		
Federal foreign non-business income tax credit from Schedule 21	632		
Federal foreign business income tax credit from Schedule 21	636		
General tax reduction for CCPCs from amount J on page 5	638	133,558	
General tax reduction from amount R on page 5	639		
Federal logging tax credit from Schedule 21	640		
Eligible Canadian bank deduction under section 125.21	641		
Federal qualifying environmental trust tax credit	648		
Investment tax credit from Schedule 31	652	24,000	
Subtotal		260,295 ▶	260,295 J

Part I tax payable – Amount H **minus** amount J . . . . . 130,106 K

Enter amount K on line 700 on page 8.

Summary of tax and credits

Federal tax

Part I tax payable from amount K on page 7	700	130,106
Part II surtax payable from Schedule 46	708	
Part III.1 tax payable from Schedule 55	710	
Part IV tax payable from Schedule 3	712	
Part IV.1 tax payable from Schedule 43	716	
Part VI tax payable from Schedule 38	720	
Part VI.1 tax payable from Schedule 43	724	
Part XIII.1 tax payable from Schedule 92	727	
Part XIV tax payable from Schedule 20	728	
Total federal tax		130,106

Add provincial or territorial tax:

Provincial or territorial jurisdiction 750 ON
(if more than one jurisdiction, enter "multiple" and complete Schedule 5)

Net provincial or territorial tax payable (except Quebec and Alberta)	760	574,818	
Provincial tax on large corporations (Nova Scotia Schedule 342)	765		
(The Nova Scotia tax on large corporations is eliminated effective July 1, 2012.)			
Total provincial or territorial tax		574,818 ▶	574,818
Total tax payable	770		704,924 A

Deduct other credits:

Investment tax credit refund from Schedule 31	780		
Dividend refund from amount U on page 6	784		
Federal capital gains refund from Schedule 18	788		
Federal qualifying environmental trust tax credit refund	792		
Canadian film or video production tax credit refund (Form T1131)	796		
Film or video production services tax credit refund (Form T1177)	797		
Tax withheld at source	800		
Total payments on which tax has been withheld	801		
Provincial and territorial capital gains refund from Schedule 18	808		
Provincial and territorial refundable tax credits from Schedule 5	812		
Tax instalments paid	840	4,000,000	
Total credits	890	4,000,000 ▶	4,000,000 B

Refund code 894 1 Overpayment 3,295,076

Balance (amount A **minus** amount B) -3,295,076

If the result is positive, you have a **balance unpaid**. If the result is negative, you have an **overpayment**. Enter the amount on whichever line applies. Generally, we do not charge or refund a difference of $2 or less.

Balance unpaid

For information on how to make your payment, go to **www.cra-arc.gc.ca/payments**.

Enclosed payment 898

Direct deposit request

To have the corporation's refund deposited directly into the corporation's bank account at a financial institution in Canada, or to change banking information you already gave us, complete the information below:

☐ Start ☐ Change information 910 Branch number

914 Institution number 918 Account number

If the corporation is a Canadian-controlled private corporation throughout the tax year, does it qualify for the one-month extension of the date the balance of tax is due? 896 1 Yes ☐ 2 No ☒

If this return was prepared by a tax preparer for a fee, provide their EFILE number 920

Certification

I, 950 Simpson (Last name (print)) 951 Geoff (First name (print)) 954 CFO (Position, office, or rank),

am an authorized signing officer of the corporation. I certify that I have examined this return, including accompanying schedules and statements, and that the information given on this return is, to the best of my knowledge, correct and complete. I also certify that the method of calculating income for this tax year is consistent with that of the previous tax year except as specifically disclosed in a statement attached to this return.

955 2015-07-10 (Date (yyyy/mm/dd)) Signature of the authorized signing officer of the corporation 956 (613) 738-5499 (Telephone number)

Is the contact person the same as the authorized signing officer? If **no**, complete the information below 957 1 Yes ☐ 2 No ☒

958 Mike Grue (Name (print)) 959 (613) 738-5499 (Telephone number)

Language of correspondence – Langue de correspondance

Indicate your language of correspondence by entering **1** for English or **2** for French.
Indiquez votre langue de correspondance en inscrivant **1** pour anglais ou **2** pour français. 990 1

Privacy Act, personal information bank number CRA PPU 047

Canada Revenue Agency / Agence du revenu du Canada

Net Income (Loss) for Income Tax Purposes

SCHEDULE 1

Corporation's name	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- The purpose of this schedule is to provide a reconciliation between the corporation's net income (loss) as reported on the financial statements and its net income (loss) for tax purposes. For more information, see the T2 *Corporation Income Tax Guide*.
- All legislative references are to the *Income Tax Act*.

Amount calculated on line 9999 from Schedule 125				27,871,000 A
Add:				
Provision for income taxes – current	101	912,000		
Interest and penalties on taxes	103	6,439		
Amortization of tangible assets	104	30,249,000		
Amortization of intangible assets	106	5,791,000		
Loss on disposal of assets	111	1,509,282		
Charitable donations and gifts from Schedule 2	112	212,515		
Non-deductible meals and entertainment expenses	121	70,010		
Other reserves on lines 270 and 275 from Schedule 13	125	1,110,910		
Reserves from financial statements – balance at the end of the year	126	5,371,304		
Subtotal of additions		45,232,460	▶	45,232,460
Other additions:				
Miscellaneous other additions:				
604 Apprentice tax credit - Federal 2013 & 2014	35,878			
Employee Future Benefits expensed in F/S	597,824			
ARO expenses accrued in 2014	10,438			
Impairment charge	1,250,168			
Apprentice tax credit - Ontario 2014	163,864			
Coop education tax credit - Ontario 2014	38,459			
Total	2,096,631	294	2,096,631	
Subtotal of other additions		199	2,096,631	▶ 2,096,631
Total additions		500	47,329,091	▶ 47,329,091 B
Amount A **plus** amount B				75,200,091

Deduct:

Capital cost allowance from Schedule 8	403	64,818,889	
Cumulative eligible capital deduction from Schedule 10	405	91,757	
Other reserves on line 280 from Schedule 13	413	3,227,504	
Reserves from financial statements – balance at the beginning of the year	414	3,063,750	
Subtotal of deductions		71,201,900 ▶	71,201,900

Other deductions:

Miscellaneous other deductions:

700	ARO costs incurred in 2014		390	103,721	
701	AFUDC		391	1,857,000	
702	Employee Future Benefits paid during the year		392	570,527	
703	App & Coop Tax Credits	227,057			
	Total	227,057	393	227,057	
704					
	Total		394		
	Subtotal of other deductions		499	2,758,305 ▶	2,758,305
	Total deductions		510	73,960,205 ▶	73,960,205

Net income (loss) for income tax purposes – enter on line 300 of the T2 return 1,239,886

T2 SCH 1 E (12) Canada

Canada Revenue Agency | Agence du revenu du Canada

Schedule 5

Tax Calculation Supplementary – Corporations

Corporation's name	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- Use this schedule if, during the tax year, the corporation:
  - had a permanent establishment in more than one jurisdiction (corporations that have no taxable income should only complete columns A, B and D in Part 1);
  - is claiming provincial or territorial tax credits or rebates (see Part 2); or
  - has to pay taxes, other than income tax, for Newfoundland and Labrador, or Ontario (see Part 2).
- Regulations mentioned in this schedule are from the *Income Tax Regulations.*
- For more information, see the *T2 Corporation – Income Tax Guide.*
- Enter the regulation number in field 100 of Part 1.

Part 1 – Allocation of taxable income

100 _____ Enter the Regulation that applies (402 to 413).

A Jurisdiction Tick yes if the corporation had a permanent establishment in the jurisdiction during the tax year. *		B Total salaries and wages paid in jurisdiction	C (B x taxable income**) / G	D Gross revenue	E (D x taxable income**) / H	F Allocation of taxable income (C + E) x 1/2*** (where either G or H is nil, do not multiply by 1/2)
Newfoundland and Labrador	003 1 Yes ☐	103		143		
Newfoundland and Labrador Offshore	004 1 Yes ☐	104		144		
Prince Edward Island	005 1 Yes ☐	105		145		
Nova Scotia	007 1 Yes ☐	107		147		
Nova Scotia Offshore	008 1 Yes ☐	108		148		
New Brunswick	009 1 Yes ☐	109		149		
Quebec	011 1 Yes ☐	111		151		
Ontario	013 1 Yes ☐	113		153		
Manitoba	015 1 Yes ☐	115		155		
Saskatchewan	017 1 Yes ☐	117		157		
Alberta	019 1 Yes ☐	119		159		
British Columbia	021 1 Yes ☐	121		161		
Yukon	023 1 Yes ☐	123		163		
Northwest Territories	025 1 Yes ☐	125		165		
Nunavut	026 1 Yes ☐	126		166		
Outside Canada	027 1 Yes ☐	127		167		
Total		129 G		169 H		

* "Permanent establishment" is defined in Regulation 400(2).

** If the corporation has income or loss from an international banking centre: the taxable income is the amount on line 360 or line Z of the T2 return **plus** the total amount not required to be included, or **minus** the total amount not allowed to be deducted, in calculating the corporation's income under section 33.1 of the federal *Income Tax Act.* This does not apply to tax years starting after March 20, 2013.

*** For corporations other than those described under Regulation 402, use the appropriate calculation described in the Regulations to allocate taxable income.

Notes:

1. After determining the allocation of taxable income, you have to calculate the corporation's provincial or territorial tax payable. For more information on how to calculate the tax for each province or territory, see the instructions for Schedule 5 in the *T2 Corporation – Income Tax Guide.*
2. If the corporation has provincial or territorial tax payable, complete Part 2.

Part 2 – Ontario tax payable, tax credits, and rebates

Total taxable income	Income eligible for small business deduction	Provincial or territorial allocation of taxable income	Provincial or territorial tax payable before credits
1,027,371		1,027,371	118,148

Ontario basic income tax (from Schedule 500)	270	118,148		
Deduct: Ontario small business deduction (from Schedule 500)	402			
Subtotal		118,148	118,148	A6
Add:				
Ontario additional tax re Crown royalties (from Schedule 504)	274			
Ontario transitional tax debits (from Schedule 506)	276			
Recapture of Ontario research and development tax credit (from Schedule 508)	277			
Subtotal				B6
Subtotal (amount A6 **plus** amount B6)			118,148	C6
Deduct:				
Ontario resource tax credit (from Schedule 504)	404			
Ontario tax credit for manufacturing and processing (from Schedule 502)	406			
Ontario foreign tax credit (from Schedule 21)	408			
Ontario credit union tax reduction (from Schedule 500)	410			
Ontario transitional tax credits (from Schedule 506)	414			
Ontario political contributions tax credit (from Schedule 525)	415			
Subtotal				D6
Subtotal (amount C6 **minus** amount D6) (if negative, enter "0")			118,148	E6
Deduct: Ontario research and development tax credit (from Schedule 508)	416			
Ontario corporate income tax payable before Ontario corporate minimum tax credit and Ontario community food program donation tax credit for farmers (amount E6 **minus** amount on line 416) (if negative, enter "0")			118,148	F6
Deduct:				
Ontario corporate minimum tax credit (from Schedule 510)	418			
Ontario community food program donation tax credit for farmers (from Schedule 2)	420			
Ontario corporate income tax payable (amount F6 **minus** amounts on line 418 and line 420) (if negative, enter "0")			118,148	G6
Add:				
Ontario corporate minimum tax (from Schedule 510)	278	658,993		
Ontario special additional tax on life insurance corporations (from Schedule 512)	280			
Subtotal		658,993	658,993	H6
Total Ontario tax payable before refundable credits (amount G6 **plus** amount H6)			777,141	I6
Deduct:				
Ontario qualifying environmental trust tax credit	450			
Ontario co-operative education tax credit (from Schedule 550)	452	38,459		
Ontario apprenticeship training tax credit (from Schedule 552)	454	163,864		
Ontario computer animation and special effects tax credit (from Schedule 554)	456			
Ontario film and television tax credit (from Schedule 556)	458			
Ontario production services tax credit (from Schedule 558)	460			
Ontario interactive digital media tax credit (from Schedule 560)	462			
Ontario sound recording tax credit (from Schedule 562)	464			
Ontario book publishing tax credit (from Schedule 564)	466			
Ontario innovation tax credit (from Schedule 566)	468			
Ontario business-research institute tax credit (from Schedule 568)	470			
Subtotal		202,323	202,323	J6
Net Ontario tax payable or refundable credit (amount I6 **minus** amount J6) (if a credit, enter a negative amount) Include this amount on line 255.	290		574,818	K6

Summary

Enter the total net tax payable or refundable credits for all provinces and territories on line 255.

Net provincial and territorial tax payable or refundable credits **255** 574,818

If the amount on line 255 is positive, enter the net provincial and territorial tax payable on line 760 of the T2 return.
If the amount on line 255 is negative, enter the net provincial and territorial refundable tax credits on line 812 of the T2 return.

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Schedule 8

Capital Cost Allowance (CCA)

Corporation's name	Business Number	Tax year end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

For more information, see the section called "Capital Cost Allowance" in the *T2 Corporation Income Tax Guide*.

Is the corporation electing under *Regulation* 1101(5q)? **101** 1 Yes [ ] 2 No [X]

	1 Class number (See Note) 200	Description	2 Undepreciated capital cost at the beginning of the year (amount from column 12 of last year's schedule 8) 201	3 Cost of acquisitions during the year (new property must be available for use)* 203	4 Adjustments and transfers** 205	5 Proceeds of dispositions during the year (amount not to exceed the capital cost) 207	6 50% rule (1/2 of the amount, if any, by which the net cost of acquisitions exceeds column 5)*** 211	7 Reduced undepreciated capital cost	8 CCA rate % **** 212	9 Recapture of capital cost allowance***** (line 107 of Schedule 1) 213	10 Terminal loss (line 404 of Schedule 1) 215	11 Capital cost allowance (for declining balance method, column 7 **multiplied** by column 8, or a lower amount) (line 403 of Schedule 1) ****** 217	12 Undepreciated capital cost at the end of the year (column 6 **plus** column 7 **minus** column 11) 220
1.	1		202,217,253			0		202,217,253	4	0	0	8,088,690	194,128,563
2.	1b		23,817,714	1,549,117		0	774,559	24,592,272	6	0	0	1,475,536	23,891,295
3.	2	Dist equip pre 88	67,553,834			0		67,553,834	6	0	0	4,053,230	63,500,604
4.	3	buildings pre 88	10,182,929			0		10,182,929	5	0	0	509,146	9,673,783
5.	8		8,371,653	1,629,838		324	814,757	9,186,410	20	0	0	1,837,282	8,163,885
6.	10		5,328,903	2,197,399		97,865	1,049,767	6,378,670	30	0	0	1,913,601	5,514,836
7.	12		652,931	32,978,571		0	16,489,286	17,142,216	100	0	0	17,142,216	16,489,286
8.	42		422,370			0		422,370	12	0	0	50,684	371,686
9.	43.2	SOLAR ASSETS		114,096		0	57,048	57,048	50	0	0	28,524	85,572
10.	45		47,524			0		47,524	45	0	0	21,386	26,138
11.	47		318,548,295	67,628,004		29,918	33,799,043	352,347,338	8	0	0	28,187,787	357,958,594
12.	50		1,996,893	1,500,057		0	750,029	2,746,921	55	0	0	1,510,807	1,986,143
		Totals	639,140,299	107,597,082		128,107	53,734,489	692,874,785				64,818,889	681,790,385

Note: Class numbers followed by a letter indicate the basic rate of the class taking into account the additional deduction allowed. Class 1a: 4% + 6% = 10% (class 1 to 10%), class 1b: 4% + 2% = 6% (class 1 to 6%).

* Include any property acquired in previous years that has now become available for use. This property would have been previously excluded from column 3. List separately any acquisitions that are not subject to the 50% rule, see *Regulation* 1100(2) and (2.2).

** Enter in column 4, "Adjustments and transfers", amounts that increase or reduce the undepreciated capital cost. Items that **increase** the undepreciated capital cost include amounts transferred under section 85, or transferred on amalgamation or winding-up of a subsidiary. Items that **reduce** the undepreciated capital cost include government assistance received or entitled to be received in the year, or a reduction of capital cost after the application of section 80. See the *T2 Corporation Income Tax Guide* for other examples of adjustments and transfers to include in column 4.

*** The net cost of acquisitions is the cost of acquisitions (column 3) **plus** or **minus** certain adjustments and transfers from column 4. For exceptions to the 50% rule, see Interpretation Bulletin IT-285, *Capital Cost Allowance – General Comments*.

**** Enter a rate only if you are using the declining balance method. For any other method (for example the straight-line method, where calculations are always based on the cost of acquisitions), enter N/A. Then enter the amount you are claiming in column 11.

***** For every entry in column 9, the "Recapture of capital cost allowance" there must be a corresponding entry in column 5, "Proceeds of dispositions during the year". The recapture and terminal loss rules do not apply to passenger vehicles in Class 10.1.

****** If the tax year is shorter than 365 days, prorate the CCA claim. Some classes of property do not have to be prorated. See the *T2 Corporation Income Tax Guide* for more information.

T2 SCH 8 (14)

Canada

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SCHEDULE 10

CUMULATIVE ELIGIBLE CAPITAL DEDUCTION

Name of corporation	Business Number	Tax year-end Year Month Day
Hydro Ottawa Limited	86339 1363 RC0001	2014-12-31

- For use by a corporation that has eligible capital property. For more information, see the *T2 Corporation Income Tax Guide*.
- A separate cumulative eligible capital account must be kept for each business.

Part 1 – Calculation of current year deduction and carry-forward

Cumulative eligible capital - Balance at the end of the preceding taxation year (if negative, enter "0") . . . . . **200** 824,938 A

Add: Cost of eligible capital property acquired during the taxation year **222** 647,837

Other adjustments **226**

Subtotal (line 222 plus line 226) 647,837 x 3 / 4 = 485,878 B

Non-taxable portion of a non-arm's length transferor's gain realized on the transfer of an eligible capital property to the corporation after December 20, 2002 . . . . . **228** x 1 / 2 = C

amount B minus amount C (if negative, enter "0") 485,878 ▶ 485,878 D

Amount transferred on amalgamation or wind-up of subsidiary . . . . . **224** E

Subtotal (add amounts A, D, and E) **230** 1,310,816 F

Deduct: Proceeds of sale (less outlays and expenses not otherwise deductible) from the disposition of all eligible capital property during the taxation year . . . . **242** G

The gross amount of a reduction in respect of a forgiven debt obligation as provided for in subsection 80(7) . . . . . **244** H

Other adjustments . . . . . **246** I

(add amounts G,H, and I) x 3 / 4 = **248** J

Cumulative eligible capital balance (amount F minus amount J) . . . . . 1,310,816 K

(if amount K is negative, enter "0" at line M and proceed to Part 2)

Cumulative eligible capital for a property no longer owned after ceasing to carry on that business **249**

amount K 1,310,816

less amount from line 249

Current year deduction . . . . . 1,310,816 x 7.00 % = **250** 91,757 *

(line 249 plus line 250) (enter this amount at line 405 of Schedule 1) 91,757 ▶ 91,757 L

Cumulative eligible capital – Closing balance (amount K minus amount L) (if negative, enter "0") . . . . . **300** 1,219,059 M

* You can claim any amount up to the maximum deduction of 7%. The deduction may not exceed the maximum amount prorated by the number of days in the taxation year divided by 365.

Part 2 – Amount to be included in income arising from disposition

(complete this part only if the amount at line K is negative)

Amount from line K (show as positive amount)					N
Total of cumulative eligible capital (CEC) deductions from income for taxation years beginning after June 30, 1988			400	1	
Total of all amounts which reduced CEC in the current or prior years under subsection 80(7)			401	2	
Total of CEC deductions claimed for taxation years beginning before July 1, 1988	402	3			
Negative balances in the CEC account that were included in income for taxation years beginning before July 1, 1988	408	4			
Line 3 minus line 4 (if negative, enter "0")				5	
Total of lines 1, 2 and 5				6	
Amounts included in income under paragraph 14(1)(b), as that paragraph applied to taxation years ending after June 30, 1988 and before February 28, 2000, to the extent that it is for an amount described at line 400		7			
Amounts at line T from Schedule 10 of previous taxation years ending after February 27, 2000		8			
Subtotal (line 7 plus line 8)	409			9	
Line 6 minus line 9 (if negative, enter "0")					O
Line N minus line O (if negative, enter "0")					P
Line 5 x 1 / 2 =					Q
Line P minus line Q (if negative, enter "0")					R
Amount R x 2 / 3 =					S
Amount N or amount O, whichever is less					T
Amount to be included in income (amount S plus amount T) (enter this amount on line 108 of Schedule 1)			410		

Line 996 – Amended Tax Return – Description of Changes

Filing date of the amended tax return 2015-07-13

Abbreviated description . . . . . 2014 AMENDED TAX RETURN

996 Description of changes (*Maximum 500 lines*)

1.
2. The 2014 tax return is being amended because some capital assets were
3. incorrectly capitalized and included as additions in Schedule 8 in 2014.
4. These capital assets were not available for use until March 2015 and therefore
5. these assets should not have been capitalized and included in Schedule 8 in
6. 2014. The following amended 2014 schedules are submitted :
7.
8. - Schedule 200 T2 Corporation Income Tax Return
9. - Schedule 1 Net Income (Loss) for Income Tax Purposes
10. - Schedule 8 Capital Cost Allowance (CCA)
11. - Schedule 10 Cumulative Eligible Capital Deduction
12. - Schedule 5 Tax Calculation Supplementary Corporations
13. - Line 996 Amended Tax Return Description Changes
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Response to OEB Staff Interrogatory Question #26

Total References:

1. **Exhibit E Tab 1 Schedule 1 Page 5**
2. ***Report of the Board on Cost of Capital for Ontario's Regulated Utilities December 11, 2009* (2009 Report).**

Question 26:

5 Staff 26. Long Term Debt

Reference

1. Exhibit E Tab 1 Schedule 1 Page 5

2. *Report of the Board on Cost of Capital for Ontario's Regulated Utilities December 11, 2009* (2009 Report).

Hydro Ottawa states in Reference 1 that it calculated its forecast cost of long term debt using an approach that is used in the 2009 Report. In Reference 1 Table 2 Hydro Ottawa calculates the cost of its debt for 2016 – 2020.

i. Please state the source for the Government of Canada 10-year Yield for each of the years in Reference 1 Table 2.

ii. Please provide the calculation of each year's forecast of the Government of Canada 10-year Yields found in the table.

iii. Please show the Hydro Ottawa's calculation of the Historical Spread for the 30-year Government of Canada Yield over the 10-year Government of Canada Yield.

iv. Please show the calculations of the Hydro Ottawa Historical Spread over the Government of Canada 30-year Yield.

v. Please provide the spreadsheets used for these calculations.

Response:

i. The Government of Canada (GoC) 10-year yield used in Table 2 is taken from the Consensus Long Term Forecast for Canada, October 2014 release. A PDF copy is attached as ATT-OEB-Q26-A.

ii. The Consensus Long Term Forecast uses end of period rates while the Hydro Ottawa forecast borrowing requirements assume mid-year funding, therefore we have used the average rate for each year as calculated as follows:

Consensus Long Term Forecast for Canada, October 2014

Year	Consensus Long Term Forecast GoC 10 year Beginning of the year	Consensus Long Term Forecast GoC 10 year End of the year	Average*
2016	3.0	3.6	3.3
2017	3.6	4.1	3.9
2018	4.1	4.3	4.2
2019	4.3	4.4	4.4
2020	4.4	4.4	4.4

*rounded-up to the nearest tenth

iii. The GoC 10-year and 30-year yields are taken directly from the Bank of Canada's website using the monthly average for the V39055 & V39056 lookup tables respectively. Please see the calculations in attachment ATT-OEB-Q26-B.

iv. The Hydro Ottawa historical spreads over GoC 30-year yields are based on the BMO weekly indicative rates provided to Hydro Ottawa. Please see the calculations in attachment ATT-OEB-Q26-B.

v. As requested, please find the calculations in ATT-OEB-Q26-B.

continued from page 3

France

* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	1.9	2.1	0.4	0.4	0.4	0.8	1.3	1.5	1.6	1.6	1.4
Household Consumption*	1.7	0.3	-0.5	0.3	0.2	0.9	1.2	1.4	1.4	1.5	1.4
Business Investment*	3.8	4.0	0.3	-0.6	-1.0	0.8	2.3	2.7	2.5	2.4	2.1
Manufacturing Production*	4.9	3.9	-3.4	-1.2	-0.2	0.9	1.7	1.8	1.8	1.7	0.9
Consumer Prices*	1.5	2.1	2.0	0.9	0.6	1.0	1.3	1.4	1.6	1.7	1.7
Current Account Balance (Euro bn)	-25.5	-35.2	-44.4	-27.7	-29.6	-27.1	-29.5	-25.2	-24.8	-26.4	-23.9
10 Year Treasury Bond Yield, %[2]	3.4	3.2	2.0	2.4	1.4 [3]	1.7 [4]	2.2	2.6	2.9	3.2	3.4

United Kingdom

* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	1.9	1.6	0.7	1.7	3.1	2.6	2.3	2.1	2.1	2.2	2.2
Household Consumption*	0.5	-0.1	1.5	1.6	2.4	2.6	2.2	2.2	2.1	2.3	2.3
Gross Fixed Investment*	5.9	2.3	0.7	3.2	8.4	7.0	5.1	4.6	3.9	3.8	4.1
Manufacturing Production*	4.7	1.8	-1.3	-0.1	3.2	1.9	1.4	1.4	1.3	1.3	1.3
Retail Prices (underlying rate)*	4.8	5.3	3.2	3.1	2.5	2.8	3.3	3.5	3.4	3.4	3.2
Consumer Prices*	3.3	4.5	2.8	2.6	1.7	1.9	2.2	2.3	2.3	2.3	2.3
Current Account Balance (£ bn)	-40.6	-27.0	-61.9	-72.4	-70.9	-65.7	-61.1	-55.5	-55.9	-57.3	-57.1
10 Year Treasury Bond Yield, %[2]	3.6	2.1	2.0	2.8	2.8 [3]	3.2 [4]	3.5	3.7	3.7	3.8	3.7

Italy

* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	1.7	0.4	-2.4	-1.9	-0.3	0.5	1.0	1.1	1.1	1.1	1.1
Household Consumption*	1.5	-0.3	-4.0	-2.6	0.1	0.5	0.8	1.0	1.0	1.0	1.2
Gross Fixed Investment*	0.6	-2.2	-8.0	-4.7	-1.7	0.4	1.6	1.9	2.0	1.9	1.7
Industrial Production*	6.8	1.2	-6.5	-3.1	-0.4	0.8	1.6	1.9	1.9	1.9	2.3
Consumer Prices*	1.5	2.8	3.0	1.2	0.2	0.6	1.2	1.5	1.6	2.0	1.9
Current Account Balance (Euro bn)	-52.6	-47.2	-4.6	15.5	22.5	23.8	17.3	12.6	10.1	3.7	-2.0
10 Year Treasury Bond Yield, %[2]	4.9	7.0	4.5	4.1	2.5 [3]	2.7 [4]	3.1	3.8	4.2	4.3	4.7

Canada

* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	3.4	2.5	1.7	2.0	2.3	2.5	2.4	2.3	2.1	2.1	2.0
Personal Expenditure*	3.5	2.3	1.9	2.4	2.5	2.3	2.2	2.2	2.2	2.2	2.0
Machinery & Eqpt Investment*	10.6	8.6	5.2	-0.2	-0.8	4.4	4.3	3.8	2.9	2.9	2.8
Industrial Production*	6.0	3.9	0.9	1.9	3.8	2.5	2.3	2.5	2.4	2.1	2.2
Consumer Prices*	1.8	2.9	1.5	1.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0
Current Account Balance (C$ bn)	-58.4	-48.5	-62.2	-60.3	-45.4	-38.2	-31.0	-26.5	-23.5	-22.4	-19.8
10 Year Treasury Bond Yield, %[2]	3.2	1.9	1.8	2.8	2.4 [3]	3.0 [4]	3.6	4.1	4.3	4.4	4.4

Euro zone

* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	1.9	1.6	-0.6	-0.4	0.8	1.2	1.5	1.6	1.6	1.6	1.5
Private Consumption*	1.0	0.3	-1.4	-0.6	0.7	1.1	1.3	1.3	1.3	1.3	1.3
Gross Fixed Investment*	-0.6	1.7	-3.8	-2.8	1.1	2.1	2.4	2.6	2.9	2.7	2.3
Industrial Production*	7.3	3.5	-2.5	-0.7	1.0	2.0	2.3	1.8	2.0	1.9	1.8
Consumer Prices*	1.6	2.7	2.5	1.3	0.5	1.0	1.3	1.6	1.7	1.9	1.9
Current Account Balance (Euro bn)	10.0	12.1	133	228	226	233	165	165	165	136	152

[1]*Signifies average for period* [2]*End period* [3]*End January 2015* [4]*End October 2015*

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Forecast Yield for 2015-2020 Issuances Terms						
	2015		2016		2017	
	10 year	30 year	10 year	30 year	10 year	30 year
Government of Canada Yield	3.00%	3.56%	3.60%	4.16%	4.10%	4.66%
Hydro Ottawa Spread	1.17%	1.52%	1.17%	1.52%	1.17%	1.52%
Forecast Yield for Hydro Ottawa	**4.17%**	**5.08%**	**4.77%**	**5.68%**	**5.27%**	**6.18%**
	2018		2019		2020	
	10 year	30 year	10 year	30 year	10 year	30 year
Government of Canada Yield	4.30%	4.86%	4.40%	4.96%	4.40%	4.96%
Hydro Ottawa Spread	1.17%	1.52%	1.17%	1.52%	1.17%	1.52%
Forecast Yield for Hydro Ottawa	**5.47%**	**6.38%**	**5.57%**	**6.48%**	**5.57%**	**6.48%**

October 2014 CF

Canada											
* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	3.4	2.5	1.7	2.0	2.3	2.5	2.4	2.3	2.1	2.1	2.0
Personal Expenditure*	3.5	2.3	1.9	2.4	2.5	2.3	2.2	2.2	2.2	2.2	2.0
Machinery & Eqpt Investment*	10.6	8.6	5.2	-0.2	-0.8	4.4	4.3	3.8	2.9	2.9	2.8
Industrial Production*	6.0	3.9	0.9	1.9	3.8	2.5	2.3	2.5	2.4	2.1	2.2
Consumer Prices*	1.8	2.9	1.5	1.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0
Current Account Balance (C$ bn)	-58.4	-48.5	-62.2	-60.3	-45.4	-38.2	-31.0	-26.5	-23.5	-22.4	-19.8
10 Year Treasury Bond Yield, %[2]	3.2	1.9	1.8	2.8	2.4 [3]	3.0 [4]	3.6	4.1	4.3	4.4	4.4

Euro zone											
* % change over previous year	Historical				Consensus Forecasts						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020-2024[1]
Gross Domestic Product*	1.9	1.6	-0.6	-0.4	0.8	1.2	1.5	1.6	1.6	1.6	1.5
Private Consumption*	1.0	0.3	-1.4	-0.6	0.7	1.1	1.3	1.3	1.3	1.3	1.3
Gross Fixed Investment*	-0.6	1.7	-3.8	-2.8	1.1	2.1	2.4	2.6	2.9	2.7	2.3
Industrial Production*	7.3	3.5	-2.5	-0.7	1.0	2.0	2.3	1.8	2.0	1.9	1.8
Consumer Prices*	1.6	2.7	2.5	1.3	0.5	1.0	1.3	1.6	1.7	1.9	1.9
Current Account Balance (Euro bn)	10.0	12.1	133	228	226	233	165	165	165	136	152

[1] *Signifies average for period* [2] *End period* [3] *End January 2015* [4] *End October 2015*

5-year Historical Spread for 30-year GoC over 10-year GoC			
Month	**30-year GoC***	**10-year GoC***	**30-year over 10-year spread**
Jan-10	4.05	3.49	0.56
Feb-10	4.03	3.42	0.61
Mar-10	4.06	3.49	0.57
Apr-10	4.07	3.67	0.40
May-10	3.84	3.45	0.39
Jun-10	3.74	3.30	0.44
Jul-10	3.74	3.19	0.55
Aug-10	3.56	2.95	0.61
Sep-10	3.48	2.88	0.60
Oct-10	3.44	2.77	0.67
Nov-10	3.57	3.02	0.55
Dec-10	3.62	3.20	0.42
Jan-11	3.69	3.25	0.44
Feb-11	3.80	3.42	0.38
Mar-11	3.74	3.27	0.47
Apr-11	3.76	3.33	0.43
May-11	3.57	3.15	0.42
Jun-11	3.46	2.99	0.47
Jul-11	3.40	2.94	0.46
Aug-11	3.07	2.45	0.62
Sep-11	2.85	2.20	0.65
Oct-11	2.91	2.30	0.61
Nov-11	2.73	2.12	0.61
Dec-11	2.56	1.99	0.57
Jan-12	2.56	1.98	0.58
Feb-12	2.61	2.02	0.59
Mar-12	2.67	2.11	0.56
Apr-12	2.62	2.06	0.56
May-12	2.46	1.92	0.54
Jun-12	2.33	1.75	0.58
Jul-12	2.27	1.66	0.61
Aug-12	2.38	1.83	0.55
Sep-12	2.42	1.84	0.58
Oct-12	2.40	1.81	0.59
Nov-12	2.33	1.74	0.59
Dec-12	2.35	1.77	0.58
Jan-13	2.50	1.93	0.57
Feb-13	2.59	1.97	0.62
Mar-13	2.55	1.85	0.70
Apr-13	2.40	1.75	0.65
May-13	2.53	1.90	0.63
Jun-13	2.76	2.24	0.52
Jul-13	2.93	2.44	0.49
Aug-13	3.09	2.61	0.48
Sep-13	3.19	2.70	0.49
Oct-13	3.09	2.52	0.57
Nov-13	3.13	2.56	0.57
Dec-13	3.22	2.67	0.55
Jan-14	3.08	2.53	0.55
Feb-14	3.00	2.42	0.58
Mar-14	2.97	2.45	0.52
Apr-14	2.96	2.44	0.52
May-14	2.85	2.32	0.53
Jun-14	2.83	2.30	0.53
Jul-14	2.74	2.19	0.55
Aug-14	2.62	2.06	0.56
Sep-14	2.71	2.18	0.53
Oct-14	2.55	2.01	0.54
Average			**0.55**

Hydro Ottawa 2.5-yr Historical Spreads over 30-year GoC Per BMO

	Spread
2-Mar-12	145
16-Mar-12	143
30-Mar-12	144
5-Apr-12	144
13-Apr-12	149
20-Apr-12	159
4-May-12	163
11-May-12	166
18-May-12	168
25-May-12	167
1-Jun-12	169
8-Jun-12	166
15-Jun-12	168
22-Jun-12	168
29-Jun-12	167
6-Jul-12	167
13-Jul-12	163
20-Jul-12	165
27-Jul-12	164
3-Aug-12	163
10-Aug-12	162
17-Aug-12	161
24-Aug-12	159
31-Aug-12	161
7-Sep-12	160
14-Sep-12	158
21-Sep-12	155
28-Sep-12	156
5-Oct-12	153
12-Oct-12	155
19-Oct-12	156
26-Oct-12	160
2-Nov-12	164
9-Nov-12	166
23-Nov-12	165
30-Nov-12	164
7-Dec-12	165
14-Dec-12	163
4-Jan-13	157
11-Jan-13	155
18-Jan-13	156
25-Jan-13	156
1-Feb-13	157
8-Feb-13	157
15-Feb-13	156
1-Mar-13	158
8-Mar-13	157
22-Mar-13	154
29-Mar-13	156
5-Apr-13	155
12-Apr-13	156
19-Apr-13	157
26-Apr-13	155
17-May-13	147
24-May-13	145
31-May-13	145
7-Jun-13	146
14-Jun-13	149
21-Jun-13	150
28-Jun-13	152
5-Jul-13	150
12-Jul-13	148
19-Jul-13	147
26-Jul-13	147
2-Aug-13	147
9-Aug-13	146
16-Aug-13	149
23-Aug-13	153
30-Aug-13	156
6-Sep-13	159

Hydro Ottawa 2.5-yr Historical Spreads over 30-year GoC Per BMO

	Spread
13-Sep-13	162
20-Sep-13	161
27-Sep-13	155
4-Oct-13	155
11-Oct-13	154
18-Oct-13	157
25-Oct-13	151
1-Nov-13	150
8-Nov-13	147
15-Nov-13	146
22-Nov-13	146
29-Nov-13	146
6-Dec-13	145
13-Dec-13	145
20-Dec-13	144
3-Jan-14	142
10-Jan-14	141
17-Jan-14	143
24-Jan-14	141
31-Jan-14	145
7-Feb-14	145
14-Feb-14	143
21-Feb-14	143
28-Feb-14	141
7-Mar-14	140
14-Mar-14	140
21-Mar-14	141
28-Mar-14	139
4-Apr-14	139
11-Apr-14	140
18-Apr-14	142
25-Apr-14	140
2-May-14	142
9-May-14	143
23-May-14	144
30-May-14	145
6-Jun-14	145
13-Jun-14	146
20-Jun-14	143
27-Jun-14	144
4-Jul-14	143
11-Jul-14	143
18-Jul-14	144
25-Jul-14	145
1-Aug-14	148
8-Aug-14	148
15-Aug-14	151
22-Aug-14	152
29-Aug-14	152
5-Sep-14	151
12-Sep-14	150
19-Sep-14	147
26-Sep-14	151
3-Oct-14	151
10-Oct-14	153
17-Oct-14	158
24-Oct-14	159
31-Oct-14	157
7-Nov-14	156
14-Nov-14	156
21-Nov-14	156
28-Nov-14	155
5-Dec-14	155
12-Dec-14	160
Avg	**152**

Response to OEB Staff Interrogatory Question #27

Total References:

1. ***OEB Letter June 12, 2015, Issuance of New Cost Allocation Policy for Street Lighting Rate Class***
2. **(Exhibit G-1-1)**

Question 27:

7 Staff 27. Street Lighting

Reference

OEB Letter June 12, 2015, Issuance of New Cost Allocation Policy for Street Lighting Rate Class

The OEB will be posting a revised cost allocation model in mid-July incorporating the policy for street lighting.

i. Please use the updated OEB model for the allocation of costs for 2016 – 2020.
ii. Please redesign the rates for 2016 – 2020 based on the results of the cost allocations.

Response:

i & ii. Please see response to Ontario Energy Board Staff Interrogatory Question #1.

Response to OEB Staff Interrogatory Question #28

Total References:

1. **Exhibit C Tab 1 Schedule 2 Attachment C-1(A)**
2. **Cost Allocation Model**

Question 28:

Reference

OEB Letter June 12, 2015, Issuance of New Cost Allocation Policy for Street Lighting Rate Class

In the first Reference, volumetric forecast only developed peak demands for rate classes that have billing demands. Reference 2 uses peak demands for all rate classes as allocators.

i. Did Hydro Ottawa use the peak demands from the forecast in Reference 1?

ii. How did Hydro Ottawa develop the peak demand data by class in Tab I8 Demand Data.

Response:

i) Hydro Ottawa used the peak demand from the Itron forecast to develop its load forecast.

ii) The peak demand data by class in Tab I8 of the cost allocation ("CA") model uses actual data for GS 1,500 to 4,999kW and Large Use classes and the Hydro One 2006 CAIF for all remaining classes. Please see Exhibit C-1-1 attachment G-1(A)Hydro Ottawa CA Report by Elenchus for further details.

Response to OEB Staff Interrogatory Question #29

Total References:

1. **EDDVAR Continuity Schedule (Exhibit I-8-1)**
2. **Exhibit B/Tab 4/ Schedule 1**

Question 29:

9 Staff 29. EDDVAR Continuity Schedule

Reference

1. EDDVAR Continuity Schedule

2. Exhibit B/Tab 4/ Schedule 1

OEB staff requires additional information to validate the calculation of the rate riders.

i. Please explain the calculation for the projected interest balance in Other Regulatory Assets – Sub Account - Deferred IFRS Transition Costs column BN, amount of $251,105.

Reference 2 states that Hydro Ottawa is proposing to return the over collected of $5,974k related to stranded meters to rate payers. Hydro Ottawa has shown this amount in the EDDVAR model for Account 1555 on Tab 2 Continuity Schedule as a negative value and has not shown allocated to rate classes under Tab 6. Allocation of Balances.

ii. Pease explain why it is not allocated.

iii. Is there an offsetting entry?

iv. Please explain why the entry is in column BM which is for interest.

OEB staff notes that the exact same negative amount is also shown under Account 1508 Incremental Capital Charges.

v. Please indicate and provide evidence if the entries under these two accounts are shown correctly.

vi. Please explain why the entry is in column BM which is for interest.

Response:

i. The calculation in the projected interest balance in Other Regulatory Assets – Sub Account - Deferred IFRS Transition Costs account 1508 column BN is the principle for 2014 of $110k and the projected principle for 2015 of $141k, totalling $251k. In absence of a 2014 or 2015 principle column in the 2015 EDDVAR model, this cell was used so these amounts would be included in the disposition of Group 2 account calculations. Please refer to Appendix 2-U updated June 29, 2015 and Exhibit I-1-8 ORIGINAL Section 4.2 Explanation of Variances starting at line 28 for further details. It remains the intent of Hydro Ottawa Limited ("Hydro Ottawa") to dispose of USofA 1508 – Other regulatory Assets – Sub Account – Deferred IFRS Transition Costs including a forecast for the bridge year, 2015.

ii. Hydro Ottawa allocated the over collection of $5,974k related to stranded meters to rate payers using account 1508, as account 1555 does not flow through to the rate riders in the 2015 EDDVAR model.

iii. There is no offsetting entry, please refer to part ii.

iv. In absence of columns for principle amounts in 2014 and 2015 in the 2015 EDDVAR model, Hydro Ottawa used the interest column to reflect these amounts.

v. Further to the response in part ii of this question, Hydro Ottawa confirms that the total claim in account 1555 of $5,974k is correct, it was also inputted into account 1508 Incremental Capital Charges solely for the purpose of flowing through to the rate riders using the model provided. Hydro Ottawa confirms that neither of these amounts is interest.

vi. Please refer to the response in part iv to this question.