OPERATING COSTS

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OVERVIEW

Operating Costs

This Exhibit provides evidence for supporting Operating Costs. These include Operations, Maintenance and Administration ("OM&A") costs; Depreciation and Amortization expenses; Payments in Lieu of Taxes ("PILs"); and Property Taxes. More particularly, OM&A costs in this Exhibit represent OPUCN's integrated set of asset maintenance and customer activity needs to meet public and employee safety objectives; to comply with the Distribution System Code ("DSC"), environmental requirements and government direction; and, to maintain distribution business service quality and reliability that meet or exceed regulated performance levels. OM&A costs also include the provision of services to customers connected to OPUCN's distribution system and meeting the requirements of the OEB's Standard Supply Service Code ("SSSC"), DSC and Retail Settlement Code ("RSC"). Operating costs for the Test Years range from $16.3 million in the 2015 Test Year to $19.1 million in the 2019 Test Year. Within these amounts, OM&A costs (including property taxes) range from $12.1 million in the 2015 Test Year to $13.2 million in the 2019 Test Year, as shown in Table 4-1.

Operating costs for 2011 Actual year, are provided on a Canadian Generally Accepted Accounting Principles ("CGAAP") basis. The operating costs for the 2012 to 2013 historical years, the 2014 Bridge Year and the 2015 to 2019 Test Years are provided on a Modified International Financial Reporting Standards ("MIFRS") basis , in accordance with the Board's guidelines. In connection with OPUCN's cost of service application for 2012 rates (EB-2011-0073), OPUCN adopted MIFRS in compliance with the Board's letter dated March 15, 2011 – *Use of Modified IFRS as a Basis for Filing Cost of Service Applications for 2012 Rates*.

As noted in Exhibit 1, this Application is being filed as a Custom IR Application as provided in the Board's Renewed Regulatory Framework for Electricity ("RRFE"). The five Test Years for this Application are 2015-2019.

OM&A TEST YEAR LEVELS

The proposed OM&A costs for the Test Years range from $12.1 million in the 2015 Test Year to $13.2 million in the 2019 Test Year. The 2019 forecast expenditures of $13.2 million are 14.8% or $1.7 million higher than the 2012 expenditures approved by the OEB in OPUCN's latest rebasing application (EB-2011-0073), and 17.3% or $1.9 million higher than the utility's subsequent actual 2012 expenditures. Overall, the cost increases from the 2012 Board-Approved to 2019 Test Year amounts represent an average of 2.0% a year. OPUCN has endeavoured to maintain a reasonable balance between necessary investments and customer bill impacts in developing its OM&A forecasts for the 2015-2019 Test Years.

TABLE 4-1 – OM&A LEVELS 2011-2019 (INCLUDES PROPERTY TAXES)

Year	Reporting Basis	$	Year over Year Change	CAGR v 2012 Approved
2011 Actual	CGAAP	10,323		
2012 Board Approved	MIFRS	11,480	11.2%	
2012 Actual	MIFRS	11,240	8.9%	
2013 Actual	MIFRS	11,210	-0.3%	-2.4%
2014 Bridge Year	MIFRS	11,291	0.7%	-0.8%
2015 Test Year	MIFRS	12,146	7.6%	1.9%
2016 Test Year	MIFRS	12,614	3.9%	2.4%
2017 Test Year	MIFRS	12,887	2.2%	2.3%
2018 Test Year	MIFRS	13,110	1.7%	2.2%
2019 Test Year	MIFRS	13,183	0.6%	2.0%

OVERALL TRENDS IN COSTS

OM&A Trend Analysis

Table 4-2 - OM&A Trend Analysis provides an analyses of the key OM&A metrics from 2011 Actual through to the 2019 Test Year.

The analysis shows cumulative average growth in total OM&A of 2.0% when compared to the approved OM&A amounts from the last rebasing year (2012). The primary driver for the cumulative average growth rate in OM&A is a planned increase in OPUCN's full time equivalent employees ("FTE") of 6, from 75 to 81, required to support the expected

increase in customer connections. Forecast customer connections are expected to increase by more than 16% over the same period.

TABLE 4-2 OM&A TREND ANALYSIS

OM&A Trends $000's except per customer	2011 Actual	2012 Approved	2012 Actual	2013 Actual	2014 Bridge
FTE's	69	75	74	74	75
Year over Year Change		8.7%	7.0%	0.1%	1.4%
CAGR vs 2012 Approved				-1.4%	-0.1%
Labour	5,867	6,574	6,471	6,952	6,999
Year over Year Change		12.1%	10.3%	7.4%	0.7%
CAGR vs 2012 Approved				5.7%	3.2%
Benefits	2,311	2,602	2,609	2,304	2,207
Year over Year Change		12.6%	12.9%	-11.7%	-4.2%
CAGR vs 2012 Approved				-11.5%	-7.9%
Other OM&A	2,145	2,304	2,161	1,955	2,085
Year over Year Change		7.4%	0.7%	-9.5%	6.7%
CAGR vs 2012 Approved				-15.1%	-4.9%
Total OM&A	10,323	11,480	11,240	11,210	11,291
Year over Year Change		11.2%	8.9%	-0.3%	0.7%
CAGR vs 2012 Approved				-2.4%	-0.8%
Number of Customers	53,071	54,410	53,395	53,925	54,613
OM&A cost per customer	$194.5	$211.0	$210.5	$207.9	$206.8
Year over Year Change		8.5%	8.2%	-1.3%	-0.5%
CAGR vs 2012 Approved				-1.5%	-1.0%

OM&A Trends $000's except per customer	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
FTE's	80	85	84	83	81
Year over Year Change	7.3%	5.2%	-0.2%	-1.5%	-2.8%
CAGR vs 2012 Approved	7.2%	12.7%	12.5%	10.8%	7.7%
Labour	7,512	7,948	8,144	8,284	8,290
Year over Year Change	7.3%	5.8%	2.5%	1.7%	0.1%
CAGR vs 2012 Approved	4.5%	4.9%	4.4%	3.9%	3.4%
Benefits	2,275	2,347	2,383	2,424	2,450
Year over Year Change	3.1%	3.2%	1.5%	1.7%	1.1%
CAGR vs 2012 Approved	-4.4%	-2.6%	-1.7%	-1.2%	-0.9%
Other OM&A	2,359	2,320	2,360	2,402	2,444
Year over Year Change	13.1%	-1.7%	1.8%	1.8%	1.8%
CAGR vs 2012 Approved	0.8%	0.2%	0.5%	0.7%	0.8%
Total OM&A	12,146	12,614	12,887	13,110	13,183
Year over Year Change	7.6%	3.9%	2.2%	1.7%	0.6%
CAGR vs 2012 Approved	1.9%	2.4%	2.3%	2.2%	2.0%
Number of Customers	56,251	57,939	59,677	61,467	63,311
OM&A cost per customer	$215.9	$217.7	$215.9	$213.3	$208.2
Year over Year Change	4.4%	0.8%	-0.8%	-1.2%	-2.4%
CAGR vs 2012 Approved	0.8%	0.8%	0.5%	0.2%	-0.2%

The “Number of Customers” excludes streetlight, sentinel light and unmetered scattered load connections as per OEB’s *Yearbook* calculations of “OM&A Cost per Customer” metric.

Table 4-3 - OM&A Indexed at IRM Rates illustrates the level of OM&A cost assumed under the Board expectations for productivity and efficiency, given a "steady-state mode" of operations; that is, normal customer growth.

TABLE 4-3 - OM&A INDEXED AT IRM RATES

OM&A - at IRM Index Rates $000's	2012 Approved	2013 Actual	2014 Bridge	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Total OM&A	11,480							
IRM %		1.08%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
Total OM&A @ IRM Rates		11,604	11,784	11,967	12,152	12,341	12,532	12,726
OM&A Requested				12,146	12,614	12,887	13,110	13,183
Difference				(179)	(462)	(546)	(578)	(457)

The Board-Approved productivity factor applicable to OPUCN for purposes of the 2014 IRM rate adjustments was zero percent. Although the Board applied a 0.72% productivity factor to 2013 IRM rate adjustments, more current analysis within and underlying the Report clarifies realistic expectations for productivity at 0%. Consequently, OPUCN has used a 0% productivity factor for all years within its IRM index analysis in Table 4-3. The Stretch Factors used in the index analysis in Table 4-3 correspond to historical and current Board-Approved values for OPUCN.

The projected OM&A costs of $13.2 million in 2019 are $0.5 million higher than would be expected to be approved from 2012 to that year ($12.7 million), as calculated using IRM based adjustments for inflation less the productivity and stretch factors applicable to OPUCN. The drivers behind this request are detailed later in this application.

The "*Empirical Research in Support of Incentive Rate-Setting: 2013 Benchmarking Update*" report ("Rate Setting Report") provided to the OEB by Pacific Economics Group Research LLC (PEG) in July 2014 notes that, "for the average company, the number of customers was found to be a more important cost driver than the other two combined. For each 1% change in number of customers, cost was estimated to change by 0.44%". Applying this to OPUCN, expected OM&A costs for 2019 would be $13.6 million, or $0.4 million greater than forecast. OPUCN considers the $0.4 million to represent

productivity efficiencies embedded within its forecast although the nature of these efficiencies have not been specifically identified.

OPUCN recognizes the expectation of the Board for productivity and is committed to delivering such to its customers to provide them with electricity distribution at a reasonable cost.

Table 4-4 - OM&A by Customer, which is a metric reported by the OEB in its *Annual Yearbook of Electricity Distributors*, illustrates the embedded efficiencies within OPUCN's forecast for the period 2015 to 2019. Adjusting OM&A costs for inflation, using IRM actual and assumed rates as the inflation rate, OM&A per customer reduces by approximately $23 per customer (11.0%) in 2019 compared to the level approved by the OEB in OPUCN's most recent rebasing application (EB-2011-0073). OPUCN believes this is another reasonable representation of embedded efficiencies totaling $1.3 million which includes both expected productivity and the incremental ($0.4 million) gains identified previously.

TABLE 4-4 – OM&A PER CUSTOMER 2011-2019

OM&A per Customer $000's except per customer	2011 Actual	2012 Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Number of Customers	53,071	54,410	53,395	53,925	54,613	56,251	57,939	59,677	61,467	63,311
OM&A Costs ($000s)	10,323	11,480	11,240	11,210	11,291	12,146	12,614	12,887	13,110	13,183
OM&A per Customer	195	211	211	208	207	216	218	216	213	208
Inflation Adjusted										
Inflation % (IRM Rate)				1.08%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
OM&A Costs				11,090	11,000	11,652	11,917	11,988	12,010	11,893
OM&A per Customer	195	211	211	206	201	207	206	201	195	188

PEG – Benchmarking the Forecasted Cost of Oshawa PUC Networks (PEG Report)

PEG is a leading utility cost research consultancy who have filed rigorous benchmarking and productivity studies in regulatory proceedings for two decades. Some of their work in Ontario includes benchmarking evidence for Enbridge Gas Distribution and Hydro One Networks, and twice developed power distributor benchmarking and productivity

studies for the Board. The Board has used PEG's studies to set X factors in IR price escalation formulas and for the Board's latest IR cycle, PEG developed econometric total cost benchmarking models along with a study of trends in the productivity of Ontario power distributors.

OPUCN retained PEG to appraise its forecasted total cost for the IR plan period using the Board's econometric total cost model for OPUCN to benchmark the Company's forecast of its total costs from 2015 to 2019. For benchmarking purposes, total cost is represented by the sum of OM&A expenses plus capital cost.

The appraisal revealed that OPUCN's cost performance will gradually rise from a level commensurate with a Group 3 stretch factor in 2015 to levels commensurate with a Group 2 stretch factor in later years of the plan. Forecasted cost will be 11.7% below the econometric cost benchmark on average.

In addition to the benchmarking exercise, PEG calculated the productivity growth implicit in the Company's cost forecast. PEG reported that the productivity of operation, maintenance, and administration inputs would average 2.17% annual growth. The productivity of capital inputs would average 0.12% growth. Total factor productivity would average 0.87% annual growth. The OM&A and total factor productivity trends are well above the average historical trends for Ontario power distributors which PEG calculated in their recent work for the Board.

The following table compares the forecasted productivity trends with the average trends for Ontario power distributors. Compared to both the nine-year 2003through 2011 period and the ten-year 2003through 2012 period, the forecasted OM&A and total factor productivity trends of OPUCN are well above the average historical trends for the industry.

	Comparison of Productivity Trends		
	OPUCN Average	Ontario Distributor Averages	
	2015 – 2019	2003 – 2011	2003 – 2012
OM&A	2.17%	0.51%	- 0.40%
Capital	0.12%	0.01%	- 0.26%
Total Productivity Factor	0.87%	0.19%	- 0.33%

The PEG Report supports OPUCN's assertion that its investments in capital expenditures are fair and reasonable, and comparable to spending levels of other LDCs in the Province. In addition, the PEG Report provides an independent position that OPUCN's OM&A expenses will remain among the highest efficiency levels as determined by the Board's benchmarking studies.

The full PEG Report can be found below as an Appendix to Exhibit 1.

Inflation Rate Assumptions

The Board has specified an approach to an inflation factor within the Rate Setting Report. The Board has adopted a 2-factor input price index ("IPI") that includes a labour and non-labour component that are weighted based on estimates from a review of the proportionate cost shares by medium and large distributors (70% Non-Labour and 30% Labour).

OPUCN submits that the estimated weightings do not correspond to its actual labour and non-labour weightings for purposes of analyzing an OM&A price index. The labour (including benefits) component of OM&A is relatively consistent at 61% of OM&A with the remainder categorized as non-labour. OPUCN has used its actual historical weightings for purposes of its forecast.

OPUCN has used the inflation rate for labour costs as per its current collective bargaining agreement, details of which are described in the Employee Compensation section below, and for other OM&A costs has used rates from the Conference Board of Canada CPI for Ontario (2% 2015 & 2016, 2.1% 2017 forward).

Summary of Operating Costs

Table 4-5 provides a summary of operating costs for the previous Board-Approved Year and the relevant historical years, the 2014 Bridge Year and the 2015-2019 Test Years.

TABLE 4-5 – SUMMARY OF OPERATING COSTS 2011-2019

	2011 Actual (CGAAP)	2012 Board Approved (MIFRS)	2012 Actual (MIFRS)	2013 Actual (MIFRS)	2014 Bridge Year (MIFRS)
OM&A (excluding Property Taxes)	10,178	11,331	11,091	11,058	11,136
Property Taxes	144	149	149	152	155
Depreciation and Amortization	5,076	2,858	3,032	3,652	3,845
PILS (income taxes)	1,637	325	47	162	123
Total Operating Costs	**17,036**	**14,663**	**14,320**	**15,024**	**15,260**

	2015 Test Year (MIFRS)	2016 Test Year (MIFRS)	2017 Test Year (MIFRS)	2018 Test Year (MIFRS)	2019 Test Year (MIFRS)
OM&A (excluding Property Taxes)	11,987	12,453	12,722	12,941	13,011
Property Taxes	158	162	165	168	172
Depreciation and Amortization	3,896	4,847	5,001	5,203	5,371
PILS (income taxes)	148	304	365	469	485
Total Operating Costs	**16,190**	**17,765**	**18,253**	**18,782**	**19,039**

Associated Cost Drivers and Significant Changes

The major drivers that produce significant changes in OM&A levels in the Test Years relative to the historical years and the 2014 Bridge Year are as follows:

- Inflation
- Succession planning to manage high level of retirements in the period
- Additional 5.8 FTE's to 2012 Board-Approved to handle customer connection growth assumed in period

In addition to OM&A, Operating Costs include Depreciation and Amortization expenses; Payments in Lieu of Taxes ("PILs"); and Property Taxes. These costs are discussed below.

Depreciation and Amortization

OPUCN adheres to Modified International Financial Reporting Standards (MIFRS) capitalization accounting treatments for rate making and regulatory reporting purposes. OPUCN's most recent rebasing application (EB-2011-0073) included the transition to MIFRS effective January 1, 2012. Depreciation is computed on a straight-line basis over the estimated useful life of the item of property, plant and equipment, with six months of depreciation charged in the year of addition. The depreciable amount of an asset is determined after deducting its estimated residual value, if material. OPUCN has no property, plant and equipment with residual values.

Depreciation expense includes depreciation of current and forecast fixed assets, plus amortization of the Property Plant & Equipment ("PP&E") Deferral Account approved in OPUCN's 2012 Cost of Service rate application. The PP&E Deferral Account balance is a result of the restatement of January 1, 2012 PP&E balances under MIFRS, and is being amortized over four years ending in 2015.

OPUCN's 2015 Test Year depreciation expense, excluding amortization of the PP&E Deferral account, is $4,491,588, an increase of $1,415,404 or 46.0% from the 2012 Board-Approved amount.

The increase in depreciation expense in 2015 is due to significantly higher capital expenditures in the period 2011-2014 than in prior years, a trend that is forecast to continue in the 2015-2019 period.

PILs

OPUCN is liable for the payment of PILs on its taxable income computed in accordance with Section 93 of the *Electricity Act 1998* (Ontario) as amended. OPUCN is exempt from paying income taxes under the *Income Tax Act* (Canada) and the *Corporations Tax Act* (Ontario). OPUCN proposed 2015 Test Year PILs are $148,243, a decrease of

$177,128 or 54.4% as compared to the 2012 COS Board-Approved allowance for PILs. This reduction is primarily due to increased timing differences between depreciation of assets for accounting purposes and depreciation of assets for income tax purposes (Capital Cost Allowance or "CCA") driven by high levels of capital expenditure. OPUCN follows the guidance as specified in the Board's Accounting Procedures Handbook. Due to significant capital investments in recent years and the disparity between useful asset lives for taxation as compared to accounting, CCA materially exceeds depreciation creating timing differences which reduces the effective amount of PILs payable on taxable income well below the amount otherwise computed by applying the combined federal and Ontario rates of PILs to regulatory income before PILs.

Business Environment Changes

There have been no major changes to OPUCN's business environment since the previous Board-Approved Test Year. OPUCN is not aware of any expected changes to the business environment in the Bridge Year and the Test Years covered in this Application.

Property Taxes

OPUCN pays property taxes to the City of Oshawa on the facilities that it owns. Property taxes on the administration facilities are recorded in account 6105 Taxes Other Than Income Taxes. All other Property Taxes are allocated to OM&A as an expense to the departments occupying those facilities. Table 4-6 below summarizes the Property Taxes for all of OPUCN's properties:

TABLE 4-6 – PROPERTY TAXES 2011-2019

Location	2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
36 Keewatin	8,128	8,450	8,448	8,845	8,959	9,138	9,321	9,507	9,697	9,891
1427 Harmony Rd N	9,310	9,134	9,131	9,446	9,567	9,758	9,954	10,153	10,356	10,563
S/S 0 Wentworth St E	8,688	9,232	9,229	9,501	9,622	9,815	10,011	10,211	10,416	10,624
0 Stevenson Rd S	7,244	7,164	7,162	8,859	9,692	9,886	10,084	10,286	10,491	10,701
100 Simcoe St S	60,247	62,062	62,045	59,148	59,981	61,180	62,404	63,652	64,925	66,223
25 Taunton Rd E	7,568	8,109	8,107	8,354	8,461	8,630	8,803	8,979	9,159	9,342
0 Bloor St W	10,904	10,697	10,694	11,029	11,171	11,394	11,622	11,855	12,092	12,333
E/S Wilson Rd N	2,535	2,632	2,631	2,336	2,536	2,587	2,639	2,692	2,745	2,800
495 Stevenson Rd N	8,327	9,085	9,083	9,337	9,456	9,646	9,839	10,035	10,236	10,441
0 Emma St	9,631	10,419	10,416	10,651	10,787	11,003	11,223	11,448	11,677	11,910
124 Colborne St W	6,019	6,163	6,161	7,141	7,362	7,510	7,660	7,813	7,969	8,129
490 Trick Ave	5,838	6,204	6,202	7,644	7,742	7,897	8,055	8,216	8,380	8,548
Total	144,439	149,350	149,309	152,292	155,338	158,445	161,613	164,846	168,143	171,506

Summary of Cost Drivers

Table 4-7 presents OM&A costs for 2011 through 2019. OPUCN has also provided a high-level breakdown of cost drivers for each year.

TABLE 4-7 – OM&A 2011 – 2019

	2011 Actual (CGAAP)	2012 Board Approved (MIFRS)	2012 Actual (MIFRS)	2013 Actual (MIFRS)	2014 Bridge Year (MIFRS)
Opening Balance	9,112,991	11,480,220	10,322,790	11,240,450	11,210,095
Salaries & Wages	384,911	(103,433)	604,308	480,709	47,824
Benefits	225,216	6,308	297,750	(304,935)	(96,565)
Allocated Expenses	324,165	13,690	222,220	(319,978)	200,872
Other	275,508	(156,335)	(206,618)	113,849	(70,753)
Total OM&A	**10,322,790**	**11,240,450**	**11,240,450**	**11,210,095**	**11,291,473**

	2015 Test Year (MIFRS)	2016 Test Year (MIFRS)	2017 Test Year (MIFRS)	2018 Test Year (MIFRS)	2019 Test Year (MIFRS)
Opening Balance	11,291,473	12,145,702	12,614,203	12,886,688	13,109,806
Salaries & Wages	512,868	435,674	195,855	140,310	5,640
Benefits	67,486	71,950	35,992	41,257	25,955
Allocated Expenses	(145,612)	(119,064)	(96,180)	(98,344)	(100,557)
Other	419,488	79,941	136,818	139,895	142,647
Total OM&A	**12,145,702**	**12,614,203**	**12,886,688**	**13,109,806**	**13,183,490**

The high-level cost drivers are as follows:

- Salaries and wages include overtime and incentive–based remuneration. The primary determinants of changes in salary and wage costs are annual inflation and changes in staffing levels.
- Benefits include current and post-retirement health benefits, employer payroll taxes and pensions. Changes in Ontario Municipal Employees Retirement System ("OMERS") employer contribution rates and other benefit rates, together with actuarial valuation changes to post-retirement benefit obligations, can drive changes in these costs.
- Allocated expenses are primarily labour costs allocated to capital jobs, jobbing work and affiliates. The primary determinants of changes in allocated expenses are annual inflation and changes in staffing levels, as well as changes in levels of service provided to affiliates.
- Other includes third-party costs for existing core business requirements such as: facilities costs; repairs and maintenance on equipment, fleet and buildings; tree trimming; consulting and outside service provider costs; insurance; computer maintenance; software licences; and training and development. The primary determinants of changes in other expenses are price inflation.

SUMMARY AND COST DRIVER TABLES

Summary of Recoverable OM&A Expenses

OPUCN's total recoverable OM&A Expenses, excluding property taxes, are provided in Table 4-8 below, with Bridge Year and Test Years compared to 2012 Board-Approved, 2012 Actuals and 2013 Actuals.

TABLE 4-8 SUMMARY OF TOTAL RECOVERABLE OM&A EXPENSES 2012 – 2019

	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Reporting Basis	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**
Total Recoverable OM&A Expenses	11,033,491	11,111,093	11,959,797	12,422,525	12,690,388	12,908,854	12,978,260
Comarison to 2012 Board Approved	11,330,870						
$ Change	(297,379)	(219,776)	628,928	1,091,656	1,359,518	1,577,985	1,647,391
% Change	-2.6%	-1.9%	5.6%	9.6%	12.0%	13.9%	14.5%
CAGR	-2.6%	-1.0%	1.8%	2.3%	2.3%	2.2%	2.0%
Comarison to 2012 Actuals	11,067,089						
$ Change	(33,598)	44,004	892,708	1,355,436	1,623,299	1,841,765	1,911,171
% Change	-0.3%	0.4%	8.1%	12.2%	14.7%	16.6%	17.3%
CAGR	-0.3%	0.2%	2.6%	2.9%	2.8%	2.6%	2.3%
Comarison to 2013 Actuals							
$ Change		77,603	926,306	1,389,035	1,656,897	1,875,364	1,944,769
% Change		0.7%	8.4%	12.6%	15.0%	17.0%	17.6%
CAGR		0.7%	4.1%	4.0%	3.6%	3.2%	2.7%

Tables 4-9 and 4-10 below provide a summary of OPUCN's recoverable OM&A Expenses, excluding property taxes, by major functions.

TABLE 4-9 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-JA - SUMMARY OF RECOVERABLE OM&A EXPENSES 2011 – 2019

	2011 Actuals	Last Rebasing Year (2012 Board-Approved)	Last Rebasing Year (2012 Actuals)	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Reporting Basis	**CGAAP**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**	**MIFRS**
Operations	749,243	982,254	1,167,906	919,397	1,025,060	1,288,019	1,484,147	1,593,497	1,579,144	1,410,513
Maintenance	1,048,680	1,409,450	1,094,190	1,313,715	1,311,703	1,346,279	1,375,515	1,405,469	1,436,077	1,467,354
SubTotal	**1,797,923**	**2,391,704**	**2,262,096**	**2,233,112**	**2,336,763**	**2,634,298**	**2,859,662**	**2,998,966**	**3,015,221**	**2,877,866**
%Change (year over year)				-1.3%	4.6%	12.7%	8.6%	4.9%	0.5%	-4.6%
%Change (Test Year vs Last Rebasing Year - Actual)						16.5%	26.4%	32.6%	33.3%	27.2%
CAGR vs 2012 Actual						5.2%	6.0%	5.8%	4.9%	3.5%
Billing and Collecting	2,358,686	2,433,401	2,398,127	2,462,960	2,594,648	2,653,062	2,715,401	2,780,102	2,846,477	2,914,572
Community Relations	973,010	945,160	1,004,587	1,092,298	1,097,367	1,161,723	1,309,846	1,337,732	1,366,218	1,395,314
Administrative and General	5,022,130	5,560,605	5,402,280	5,245,121	5,082,316	5,510,715	5,537,617	5,573,587	5,680,939	5,790,507
SubTotal	**8,353,826**	**8,939,166**	**8,804,993**	**8,800,379**	**8,774,330**	**9,325,500**	**9,562,864**	**9,691,422**	**9,893,633**	**10,100,394**
%Change (year over year)			-1.5%	-0.1%	-0.3%	6.3%	2.5%	1.3%	2.1%	2.1%
%Change (Test Year vs Last Rebasing Year - Actual)						5.9%	8.6%	10.1%	12.4%	14.7%
CAGR vs 2012 Actual						1.9%	2.1%	1.9%	2.0%	2.0%
Total	**10,151,749**	**11,330,870**	**11,067,089**	**11,033,491**	**11,111,093**	**11,959,797**	**12,422,525**	**12,690,388**	**12,908,854**	**12,978,260**
%Change (year over year)			-2.3%	-0.3%	0.7%	7.6%	3.9%	2.2%	1.7%	0.5%
CAGR vs 2012 Actual						2.6%	2.9%	2.8%	2.6%	2.3%

Operations	749,243	982,254	1,167,906	919,397	1,025,060	1,288,019	1,484,147	1,593,497	1,579,144	1,410,513
Maintenance	1,048,680	1,409,450	1,094,190	1,313,715	1,311,703	1,346,279	1,375,515	1,405,469	1,436,077	1,467,354
Billing and Collecting	2,358,686	2,433,401	2,398,127	2,462,960	2,594,648	2,653,062	2,715,401	2,780,102	2,846,477	2,914,572
Community Relations	973,010	945,160	1,004,587	1,092,298	1,097,367	1,161,723	1,309,846	1,337,732	1,366,218	1,395,314
Administrative and General	5,022,130	5,560,605	5,402,280	5,245,121	5,082,316	5,510,715	5,537,617	5,573,587	5,680,939	5,790,507
Total	**10,151,749**	**11,330,870**	**11,067,089**	**11,033,491**	**11,111,093**	**11,959,797**	**12,422,525**	**12,690,388**	**12,908,854**	**12,978,260**
%Change (year over year)			-2.3%	-0.3%	0.7%	7.6%	3.9%	2.2%	1.7%	0.5%

TABLE 4-10 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-JA - SUMMARY OF RECOVERABLE OM&A EXPENSES 2011 – 2019

VARIANCES

	2011 Actuals	Last Rebasing Year (2012 Board-Approved)	Variance 2012 BA – 2011 Actuals	Last Rebasing Year (2012 Actuals)	Variance 2012 Actuals vs. 2012 BA	2013 Actuals	Variance 2013 Actuals vs. 2012 Actuals	2014 Bridge Year	Variance 2014 Bridge vs. 2013 Actuals
Operations	749,243	982,254	(233,011)	1,167,906	185,652	919,397	(248,509)	1,025,060	105,663
Maintenance	1,048,680	1,409,450	(360,770)	1,094,190	(315,260)	1,313,715	219,525	1,311,703	(2,012)
Billing and Collecting	2,358,686	2,433,401	(74,715)	2,398,127	(35,274)	2,462,960	64,833	2,594,648	131,688
Community Relations	973,010	945,160	27,850	1,004,587	59,427	1,092,298	87,711	1,097,367	5,068
Administrative and General	5,022,130	5,560,605	(538,475)	5,402,280	(158,325)	5,245,121	(157,158)	5,082,316	(162,805)
Total Recoverable OM&A Expenses	10,151,749	11,330,870	(1,179,121)	11,067,089	(263,781)	11,033,491	(33,598)	11,111,093	77,603
Variance from previous year				915,340		(33,598)		77,603	
Percent change (year over year)				9.0%		-0.3%		0.7%	
Simple average of % variance for all years						-0.3%			
Compound Growth Rate (2014 Actuals vs. 2011 Actuals)						4.3%			

	2015 Test Year	Variance 2015 Test vs. 2014 Bridge	2016 Test Year	Variance 2016 Test vs. 2015 Test	2017 Test Year	Variance 2017 Test vs. 2016 Test	2018 Test Year	Variance 2018 Test vs. 2017 Test	2019 Test Year	Variance 2019 Test vs. 2018 Test
Operations	1,288,019	262,959	1,484,147	196,129	1,593,497	109,350	1,579,144	(14,353)	1,410,513	(168,631)
Maintenance	1,346,279	34,576	1,375,515	29,236	1,405,469	29,954	1,436,077	30,608	1,467,354	31,276
Billing and Collecting	2,653,062	58,414	2,715,401	62,339	2,780,102	64,701	2,846,477	66,374	2,914,572	68,096
Community Relations	1,161,723	64,356	1,309,846	148,122	1,337,732	27,887	1,366,218	28,485	1,395,314	29,097
Administrative and General	5,510,715	428,399	5,537,617	26,902	5,573,587	35,970	5,680,939	107,352	5,790,507	109,568
Total OM&A Expenses	11,959,797	848,704	12,422,525	462,728	12,690,388	267,862	12,908,854	218,467	12,978,260	69,406
Variance from previous year	848,704		462,728		267,862		218,467		69,406	
Percent change (year over year)	7.6%		3.9%		2.2%		1.7%		0.5%	
Percent Change: Test year vs. Most Current Actual	8.4%		12.6%		15.0%		17.0%		17.6%	
Simple average of % variance for all years		4.0%		4.0%		3.7%		3.4%		3.1%
Compound Annual Growth Rate for all years vs. 2011 Actuals		4.5%		4.5%		4.2%		3.9%		3.5%
Compound Annual Growth Rate for all years vs. 2012 Actuals		2.7%		3.1%		2.9%		2.8%		2.5%

Note:

1 "BA" = Board-Approved

Operations and Maintenance Costs

The increase in Operations and Maintenance costs from 2012 Actual ($2,262,096) to the 2015 Test Year ($2,634,298) is 16.5%, and to the 2019 Test Year ($2,877,866) is 27.2%. The compound annual growth rate for the years 2015 to 2019 compared to 2012 Actual is 5.2%, 6.0%, 5.8%, 4.9% and 3.5% respectively.

The main drivers of the increase are:

- Inflation estimated to average approximately 2.0% over the period to 2019;
- A net increase in FTE's of 4.4 over the period to accommodate customer and city growth;
- A temporary spike in labour costs in 2015 to 2017 due to overlap caused by succession planning for large number of retirements;
- Offsetting cost reductions from:
  - reduced vehicle expenses from modernised fleet; and
  - lower security expenses due to move from mostly manual based security system to more modern system with improved equipment and remote video monitoring.

Billing and Collecting

The increase in Billing and Collecting costs from 2012 Actual ($2,398,127) to the 2015 Test Year ($2,653,062) is 10.6%, and to the 2019 Test Year ($2,914,572) is 21.5%. The compound annual growth rate for the years 2015 to 2019 compared to 2012 Actual is 3.4%, 3.2%, 3.0%, 2.9% and 2.8% respectively.

The main drivers of the increase are:

- Inflation estimated to average approximately 2.0% over the period to 2019;
- An increase in bad debt expense of $184,753 in 2019 compared to 2012 Actual. The 2012 amount is not representative of actual run rates as it included an adjustment to the 2011 provision for expected increases in bad debts resulting from new customer service rules that did not materialise. The 2019 amount is

based on the average annual write-offs over the period 2011 to 2013, uplifted to reflect projected customer and energy cost growth.

Community Relations

The increase in Community Relations costs from 2012 Actual ($1,004,587) to the 2015 Test Year ($1,161,723) is 15.6%, and to the 2019 Test Year ($1,395,314) is 38.9%. The compound annual growth rate for the years 2015 to 2019 compared to 2012 Actual is 5.0%, 6.9%, 5.9%, 5.3% and 4.8% respectively.

The main drivers of the increase are:

- Inflation estimated to average approximately 2.0% over the period to 2019;
- the addition of 1 FTE to accommodate customer growth;
- the addition of subcontracted services to fulfil additional requirements covering customer engagement, communications and privacy rules in accordance with the Board's guidelines outlined in its RRFE Report.

Administrative and General

The increase in Administrative and General costs from 2012 Actual ($5,402,280) to the 2015 Test Year ($5,510,715) is 2.0%, and to the 2019 Test Year ($5,790,507) is 7.2%. The compound annual growth rate for the years 2015 to 2019 compared to 2012 Actual is 0.7%, 0.6%, 0.6%, 0.8% and 1.0% respectively.

The main drivers of the increase are:

- Inflation estimated to average approximately 2.0% over the period to 2019;
- the addition of 1.4 FTE to accommodate increased requirements in IT to manage increasing use of advanced technologies;
- the addition of subcontracted services to support increased use of technology in the maintenance and support of the distribution system;
- Offsetting cost reductions from reduced annual costs related to post-retirement benefits, driven by the latest (2013) actuarial valuation. The projected reduction in 2015 is approximately $400,000 compared to 2012 Actual, with primarily inflationary increases projected thereafter. Without this saving, the compound

annual growth rate for the year 2019 compared to 2012 Actual would be approximately 2.3%.

OM&A COST DRIVERS

OPUCN has provided its OM&A Cost Drivers in Table 4-11 (corresponding to the Board's Appendix 2-JB). The closing balance for each year becomes the opening balance for the following year for purposes of assessing incremental cost drivers.

TABLE 4-11 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-JB – RECOVERABLE OM&A COST DRIVER TABLE 2011 – 2019

OM&A	2011 Actuals	Last Rebasing Year (2012 Approved)	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Reporting Basis	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Opening Balance	$9,112,991	$11,480,220	$11,240,450	$11,210,095	$11,291,473	$12,145,702	$12,614,203	$12,886,688	$13,109,806
Labour inflation (including progression)	$168,800	$0	$253,924	$154,093	$126,181	$167,917	$173,089	$175,582	$186,486
Succession Planning (Retirements)	$0	$0	$0	$0	$77,793	$160,666	$23,728	$(34,302)	$(179,869)
New Hires	$48,233	$(69,723)	$0	$74,950	$179,173	$107,811	$0	$0	$0
Overlap re Leavers/ Replacements	$218,610	$(32,084)	$5,444	$(87,024)	$101,630	$0	$0	$0	$0
Overtime re Dec 2012 Ice Storm			$184,609	$(184,609)					
Labour Other (including overtime)	$(50,732)	$(1,626)	$36,733	$90,414	$28,091	$(721)	$(961)	$(969)	$(978)
Labour sub-total	**$384,911**	**$(103,433)**	**$480,709**	**$47,824**	**$512,868**	**$435,674**	**$195,855**	**$140,310**	**$5,640**
Benefits	$225,216	$6,308	$(304,935)	$(96,565)	$67,486	$71,950	$35,992	$41,257	$25,955
Subcontractors	$8,925	$(29,049)	$23,961	$(147,047)	$165,037	$1,803	$33,965	$34,644	$35,337
Legal & Consulting Fees	$(216,255)	$15,783	$43,534	$(172,406)	$115,844	$(13,994)	$6,296	$6,426	$6,558
Provision for Doubtful Accounts	$108,860	$(140,092)	$124,950	$9,339	$9,248	$9,433	$10,103	$10,315	$10,531
Capital Taxes	$(61,959)	$0	$0	$0	$0	$0	$0	$0	$0
Materials (including Inventory Writedowns)	$(7,328)	$144,270	$(129,507)	$13,035	$3,614	$3,686	$3,948	$4,031	$4,115
Insurance	$20,701	$(79,493)	$57,004	$6,029	$(28,509)	$5,920	$6,341	$6,474	$6,610
Allocations to Capital and Jobbing Work	$324,165	$13,690	$(319,978)	$200,872	$(145,612)	$(119,064)	$(96,180)	$(98,344)	$(100,557)
Regulatory Fees		$10,361	$(906)	$15,595	$97,225	$3,783	$4,052	$4,137	$4,224
IT Licensing costs (mainly Smart Meters)		$(30,802)	$24,013	$46,356	$3,767	$3,842	$4,115	$4,202	$4,290
SR&ED ITC's credited to OM&A			$(111,362)	$66,362					
Smart Meter OM&A Variance Ac Release	$392,825								
Other	$29,739	$(47,312)	$82,161	$91,985	$53,263	$65,467	$67,998	$69,667	$70,981
Closing Balance	$10,322,790	$11,240,450	$11,210,095	$11,291,473	$12,145,702	$12,614,203	$12,886,688	$13,109,806	$13,183,490

ANALYSIS OF PRINCIPAL COST DRIVERS

Each of the principal cost drivers are further analyzed below, with material variances that are outliers to the historical trend explained.

Labour

Total labour cost is increasing at a compound annual growth rate of 3.4% (5.8 FTE's) to the 2019 Test Year versus 2012 Board-Approved amounts, and at a compound annual growth rate of 3.6% (7.0 FTE's) to the 2019 Test Year versus 2012 Actual. This compares to projected customer growth of 16.4% and 18.6% versus 2012 Board-Approved and 2012 Actual amounts respectively.

An estimated 20 employees will be eligible to retire in the years 2014 to 2018, with necessary overlap periods being required for approximately 8 of these positions. This succession planning will temporarily add costs in the years 2015 to 2018 before being fully eliminated in 2019.

Benefits

Projected post-retirement benefits costs and projections used in the Application were provided to OPUCN by its independent advisor and actuary, K-W Actuarial Services Inc., a firm of consultants and actuaries with considerable experience in the field of pensions and benefits. This application includes significantly reduced annual costs related to the post-retirement benefits, driven by the latest (2013) actuarial valuation. The projected reduction in 2015 is approximately $400,000 compared to 2012 Actual, with just inflationary increases projected thereafter. The 2013 and 2012 reports from K-W Actuarial Services Inc. are provided in Appendix 4-1 of this Exhibit. Changes to other benefits offered by OPUCN to its employees are limited to inflation and increases in the number of FTE's. OPUCN has commissioned K-W Actuarial Services Inc. to provide an actuarial report updated to December 31, 2014 and plans to update its forecast post-retirement benefit costs for any material differences resulting from the update.

Subcontractors

Subcontractors provide a number of critical services to OPUCN and its customers and include tree trimming; customer billing; utility locates; building and equipment maintenance; metering services; IT support; and security services.

In 2013, OPUCN undertook a review of its security systems and services which determined that a system with an increased number of 24-hour monitored video cameras along with improvements to building access systems would offer more effective security to its buildings, equipment and employees. A one-time capital investment of $55,000 was made in 2013 which is projected to yield annual operating savings of $120,000 effective from July 2013. This saving accounts for the majority of the year over year reduction seen in 2014.

OPUCN has made, and is planning to continue making investments in various IT systems related to grid modernization to enhance value provided to the customer including enhanced system reliability and resilience. This will involve distribution automation, intelligent devices and software applications to mitigate customer impact to system outages, reduce system restoration time and improve customer communication. The additional resources required to maintain these systems will be provided primarily by contractors, driving the increased subcontractor expenses in 2015 and 2016.

Allocations to Capital and Jobbing Work

OPUCN's last rebasing in 2012 (EB-2011-0073) was completed based on MIFRS and included appropriate changes to its capitalization policy to exclude from capital any costs which are not directly attributable to an item of PP&E, as part of the transition to MIFRS. The increase in 2012 relative to 2011 is primarily driven by this adjustment.

The change in 2013 allocations, an increase of $319,978, is primarily driven by an adjustment to vehicle allocation rates resulting from the major refresh of the fleet that occurred in late 2011 and throughout 2012, along with an increase in the proportion of design work related to capital projects.

The forecast reduction in allocations in 2014 is driven by a reduction in the labour burden rate caused by the reduction in benefit costs resulting from the significantly reduced annual costs related to post-retirement benefits, as noted in the benefits section above.

Changes to allocations in the years 2015 to 2019 are driven by inflation and changes in the number of FTE's.

RECOVERABLE OM&A COSTS PER CUSTOMER AND PER FTE

Table 4-12 summarizes OM&A costs year-over-year on a per-customer and per-FTE basis.

TABLE 4-12 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-L - OM&A PER CUSTOMER AND PER FTE 2011 – 2019

	2011 Actuals	Last Rebasing Year - 2012- Board Approved	Last Rebasing Year - 2012 - Actual	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Reporting Basis	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Number of Customers	53,071	54,410	53,395	53,925	54,613	56,251	57,939	59,677	61,467	63,311
Total Recoverable OM&A from Appendix 2-JB	$10,322,790	$11,480,220	$11,240,450	$11,210,095	$11,291,473	$12,145,702	$12,614,203	$12,886,688	$13,109,806	$13,183,490
OM&A cost per customer	$195	$211	$211	$208	$207	$216	$218	$216	$213	$208
Number of FTEs	69	75	74	74	75	80	85	84	83	81
Customers/FTEs	769	725	723	730	729	700	685	707	739	784
OM&A Cost per FTE	$149,633	$153,070	$152,241	$151,659	$150,704	$151,097	$149,192	$152,716	$157,696	$163,162

Total OM&A per customer in 2012 was $211, for both Board-Approved and Actual. This metric is projected to increase in the years 2015 to 2018 due mainly to costs associated with succession planning mentioned above, before settling back to a level marginally below the Board-Approved and actual levels for 2012. When inflation is factored in (using 2.0% as an annual average), the OM&A per customer is projected to drop significantly over the period to 2019. Table 4-13 below illustrates this in greater detail.

TABLE 4-13 – INFLATION ADJUSTED OM&A PER CUSTOMER 2012 – 2019

	Last Rebasing Year - 2012- Board Approved	Last Rebasing Year - 2012 - Actual	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Number of Customers	54,410	53,395	53,925	54,613	56,251	57,939	59,677	61,467	63,311
Total Recoverable OM&A	$11,480,220	$11,240,450	$11,210,095	$11,291,473	$12,145,702	$12,614,203	$12,886,688	$13,109,806	$13,183,490
OM&A cost per customer	$211	$211	$208	$207	$216	$218	$216	$213	$208
OM&A Adjusted for Inflation 2.0%	$11,480,220	$11,240,450	$10,990,289	$10,853,011	$11,445,166	$11,653,574	$11,671,870	$11,641,132	$11,477,021
Inflation Adj. OM&A cost/customer	$211	$211	$204	$199	$203	$201	$196	$189	$181

The trend in the number of customers per FTE, as illustrated by Table 4-12, is positive. The projected number of customers per FTE in 2019 forecasts an increase of 8.0% and 8.3% compared with 2012 Board-Approved and Actuals respectively.

The OM&A cost per FTE is projected to increase by $10,092 in 2019 compared with the 2012 Board-Approved amount, and by $10,921 in 2019 compared with 2012 Actual. When inflation is factored in (using 2.0% as an annual average), the OM&A per FTE is projected to drop significantly over the period to 2019. Table 4-14 below illustrates this in greater detail.

TABLE 4-14 – INFLATION ADJUSTED OM&A PER FTE 2012 – 2019

	Last Rebasing Year - 2012- Board Approved	Last Rebasing Year - 2012 - Actual	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Total Recoverable OM&A	$11,480,220	$11,240,450	$11,210,095	$11,291,473	$12,145,702	$12,614,203	$12,886,688	$13,109,806	$13,183,490
Number of FTEs	75	74	74	75	80	85	84	83	81
OM&A cost per FTE	$153,070	$152,241	$151,659	$150,704	$151,097	$149,192	$152,716	$157,696	$163,162
OM&A Adjusted for Inflation 2.0%	$11,480,220	$11,240,450	$10,990,289	$10,853,011	$11,445,166	$11,653,574	$11,671,870	$11,641,132	$11,477,021
Inflation Adjusted OM&A cost/FTE	$153,070	$152,241	$148,685	$144,852	$142,382	$137,831	$138,320	$140,030	$142,042

INCREASE IN OM&A EXPENSE IN RELATION TO A DECREASE IN CAPITALIZED OVERHEAD

OPUCN's last rebasing in 2012 (EB-2011-0073) was completed based on MIFRS and included appropriate changes to its capitalization policy to exclude from capital any costs which are not directly attributable to an item of PP&E, as part of the transition to MIFRS. This application does not include any further changes in OM&A expense related to capitalization policies.

PROGRAM DELIVERY COSTS WITH VARIANCE ANALYSIS

Overview of Program Delivery Costs

This section provides a variance analysis of OPUCN's OM&A cost by major function, consistent with section 2.7.3 of the Board's Chapter 2 Filing Requirements. Although OPUCN's internal systems are set up to capture OM&A costs primarily by cost centre or function, OPUCN has made best efforts to identify OM&A costs by program, and, if not, by major functions.

Table 4-15 below (Appendix 2-JC) summarizes OPUCN's OM&A costs by major function and is provided in this Exhibit for the 2011 Actual year through the 2019 Test Year. Table 4-16 utilises the data from Appendix 2-JC to illustrate the compound annual growth rates by program, with 2012 Board-Approved, 2012 Actual and 2013 Actual all compared to 2015 and 2019 Test Years.

TABLE 4-15 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-JC - OM&A COST BY PROGRAM 2011-2019

Programs	2011 Actuals	Last Rebasing Year (2012 Board-Approved)	Last Rebasing Year (2012 Actuals)	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year	Variance (2015 Test Year vs. 2013 Actuals)	Variance (2015 Test Year vs. Last Rebasing Year (2012 Board-Approved)	Variance (2016 Test Year vs. 2015 Test Year)	Variance (2017 Test Year vs. 2016 Test Year)	Variance (2018 Test Year vs. 2017 Test Year)	Variance (2019 Test Year vs. 2018 Test Year)
Reporting Basis	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
Operations																
Operations Management	611,614	726,605	667,244	699,535	681,802	811,768	827,988	844,605	861,555	878,846	112,233	85,163	16,220	16,617	16,951	17,291
Engineering	142,441	296,209	262,464	274,202	258,435	314,794	404,242	412,397	420,717	429,205	40,592	18,585	89,448	8,156	8,320	8,488
Technical Design	569,011	664,458	741,561	777,664	797,375	910,923	979,248	1,025,563	1,015,533	993,836	133,259	246,465	68,325	46,315	(10,030)	(21,697)
Grid Construction & Maintenance	2,990,755	3,406,588	3,296,708	3,560,112	3,543,770	3,674,622	3,830,004	3,970,145	4,044,708	3,978,482	114,510	268,034	155,381	140,141	74,563	(66,227)
Underground Utility Locates (subcontracted)	258,420	269,000	269,493	384,057	288,762	297,156	303,099	309,161	315,344	321,651	(86,901)	28,156	5,943	6,062	6,183	6,307
Tree Trimming (subcontracted)	143,889	147,000	147,360	146,936	136,311	135,732	138,447	141,216	144,040	146,921	(11,204)	(11,268)	2,715	2,769	2,824	2,881
Sub-Total Operations	4,716,131	5,509,860	5,384,829	5,842,506	5,706,455	6,144,996	6,483,028	6,703,087	6,801,898	6,748,942	302,490	635,136	338,032	220,059	98,812	(52,956)
Metering																
Meter Reading & Data Management	395,434	366,214	457,777	364,839	377,348	411,386	420,129	429,086	438,234	447,578	46,547	45,173	8,743	8,957	9,148	9,344
Meter Operations (installs etc)	283,364	287,150	265,605	275,215	281,280	331,140	387,408	396,082	404,950	414,016	55,925	43,990	56,268	8,674	8,868	9,067
Smart Meter Program Incremetal Costs	546,653	70,000	54,967	68,938	87,251	88,996	90,776	92,683	94,629	96,616	20,059	18,996	1,780	1,906	1,946	1,987
Sub-Total Metering	1,225,451	723,363	778,350	708,992	745,880	831,523	898,313	917,850	937,813	958,211	122,531	108,159	66,791	19,537	19,963	20,398
Facilities																
Facilities Management	236,839	278,624	282,836	259,525	261,488	269,602	275,379	281,418	287,590	293,896	10,077	(9,023)	5,778	6,039	6,171	6,307
Rent - Property	264,000	271,920	286,544	292,263	297,457	303,406	309,474	315,973	322,608	329,383	11,142	31,486	6,068	6,499	6,635	6,775
Vehicle Expenses	341,876	378,340	349,104	335,749	342,464	349,314	356,300	363,782	371,422	379,221	13,564	(29,026)	6,986	7,482	7,639	7,800
Utility Costs	101,544	100,297	94,920	106,833	108,970	111,149	113,372	115,753	118,184	120,666	4,316	10,852	2,223	2,381	2,431	2,482
Maintenance, Janitorial & Security	286,785	262,786	294,518	249,465	262,997	258,021	180,095	183,697	187,370	191,118	8,556	(4,765)	(77,926)	3,602	3,674	3,747
Sub-Total Facilities	1,231,044	1,291,967	1,307,923	1,243,835	1,273,375	1,291,491	1,234,620	1,260,623	1,287,174	1,314,284	47,656	(476)	(56,871)	26,003	26,551	27,111
Customer Service																
Customer Service Management	217,619	257,474	231,201	255,553	252,150	257,189	262,328	267,607	272,991	278,485	1,635	(286)	5,139	5,279	5,385	5,493
Customer Service General	896,981	1,049,932	980,612	1,002,855	1,084,092	1,103,591	1,200,521	1,227,189	1,254,452	1,282,320	100,736	53,660	96,929	26,669	27,262	27,869
Customer Billing	434,108	450,114	434,223	476,054	476,886	462,679	471,933	481,371	490,999	500,819	(13,375)	12,565	9,254	9,439	9,627	9,820
Bad Debts	549,996	416,500	278,111	406,996	418,000	426,360	434,887	444,020	453,344	462,864	19,364	9,860	8,527	9,133	9,324	9,520
Postage and Printing (Billing)	418,868	440,167	445,248	438,187	453,731	467,636	484,722	502,464	520,888	540,021	29,450	27,469	17,086	17,742	18,424	19,133
Collections Reconnects & Notice Serving	58,335	56,362	69,640	71,688	82,514	84,164	85,848	87,565	89,316	91,102	12,476	27,803	1,683	1,717	1,751	1,786
LEAP Program	26,603	0	24,052	24,312	25,041	27,460	30,064	31,293	32,479	33,219	3,148	27,460	2,605	1,228	1,186	740
Sub-Total Customer Service	2,602,509	2,670,549	2,463,086	2,675,645	2,792,415	2,829,080	2,970,303	3,041,509	3,114,468	3,188,830	153,434	158,531	141,223	71,206	72,960	74,361

TABLE 4-15 – CHAPTER 2 FILING REQUIREMENT APPENDIX 2-JC - OM&A COST BY PROGRAM 2011-2019 (CONTINUED)

Programs	2011 Actuals	Last Rebasing Year (2012 Board-Approved)	Last Rebasing Year (2012 Actuals)	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year	Variance (2015 Test Year vs. 2013 Actuals)	Variance (2015 Test Year vs. Last Rebasing Year (2012 Board-Approved)	Variance (2016 Test Year vs. 2015 Test Year)	Variance (2017 Test Year vs. 2016 Test Year)	Variance (2018 Test Year vs. 2017 Test Year)	Variance (2019 Test Year vs. 2018 Test Year)
General & Administrative																
Finance & Regulatory Affairs	774,798	762,953	768,604	806,626	813,370	842,384	859,819	877,756	896,069	914,765	35,759	79,431	17,435	17,937	18,313	18,696
IT Operations	214,267	281,680	259,244	285,434	287,958	401,709	409,743	418,107	426,642	435,351	116,275	120,029	8,034	8,364	8,535	8,709
Community Relations	94,831	102,082	97,030	101,004	104,699	158,776	212,929	217,216	221,589	226,050	57,772	56,694	54,152	4,287	4,373	4,461
Employee Health & Safety	169,235	214,246	224,575	224,986	205,838	230,618	235,115	239,782	244,545	249,405	5,632	16,372	4,497	4,667	4,763	4,860
Human Resources	165,420	159,882	186,796	177,188	182,352	197,878	181,450	185,150	188,926	192,779	20,690	37,996	(16,428)	3,700	3,776	3,853
Stores	266,079	294,769	362,775	365,697	382,741	386,420	364,812	302,108	308,757	315,552	20,723	91,651	(21,608)	(62,704)	6,649	6,796
Sub-Total General & Administrative	1,684,630	1,815,613	1,899,023	1,960,935	1,976,958	2,217,786	2,263,868	2,240,119	2,286,527	2,333,902	256,851	402,173	46,082	(23,749)	46,408	47,375
Corporate																
Management Fees	480,000	480,000	480,000	480,000	480,000	489,600	499,392	509,879	520,587	531,519	9,600	9,600	9,792	10,487	10,707	10,932
Post Retirement Benefits expense	1,062,095	1,184,205	1,135,166	724,420	598,457	610,426	622,635	635,710	649,060	662,690	(113,994)	(573,779)	12,209	13,075	13,350	13,630
Insurance - General & Property	263,437	334,807	259,961	316,301	322,286	293,731	299,606	305,898	312,322	318,880	(22,569)	(41,075)	5,875	6,292	6,424	6,559
Regulatory Costs	212,191	246,613	236,253	235,346	250,941	348,166	351,949	356,001	360,138	364,362	112,820	101,553	3,783	4,052	4,137	4,224
Audit, Legal & Consulting Fees	175,207	290,337	276,360	340,756	175,610	258,175	263,339	268,764	274,300	279,951	(82,581)	(32,162)	5,164	5,425	5,536	5,651
Other Corporate Costs and Adjustments	428,431	477,798	550,746	529,598	613,417	617,554	629,872	642,757	655,906	669,325	87,956	139,755	12,318	12,885	13,149	13,419
											0	0	0	0	0	0
Sub-Total Corporate	2,621,361	3,013,761	2,938,484	2,626,422	2,440,712	2,617,653	2,666,794	2,719,009	2,772,313	2,826,727	(8,768)	(396,108)	49,140	52,215	53,304	54,415
Allocations & Recoveries																
Grid Construction & Maintenance	(1,995,679)	(2,133,123)	(2,052,444)	(1,954,593)	(1,717,928)	(1,752,121)	(1,821,852)	(1,867,590)	(1,914,357)	(1,962,177)	202,473	381,003	(69,732)	(45,738)	(46,767)	(47,819)
Technical Design & Engineering	(470,880)	(337,056)	(337,005)	(408,517)	(415,666)	(472,940)	(483,581)	(494,462)	(505,587)	(516,963)	(64,423)	(135,885)	(10,641)	(10,881)	(11,125)	(11,376)
Meter Operations (installs etc)	(183,943)	(139,050)	(157,168)	(181,412)	(184,587)	(212,817)	(217,606)	(222,502)	(227,508)	(232,627)	(31,405)	(73,767)	(4,788)	(4,896)	(5,006)	(5,119)
Stores Recoveries	(593,426)	(259,207)	(206,187)	(260,543)	(265,102)	(269,742)	(275,811)	(282,017)	(288,362)	(294,850)	(9,199)	(10,535)	(6,069)	(6,206)	(6,345)	(6,488)
Vehicle Recoveries	(359,442)	(525,000)	(528,707)	(776,538)	(790,127)	(803,954)	(822,043)	(840,539)	(859,451)	(878,789)	(27,417)	(278,954)	(18,089)	(18,496)	(18,912)	(19,338)
OPA CDM Programs	(167,526)	(164,800)	(178,873)	(189,757)	(193,078)	(196,457)	(200,877)	(205,397)	(210,018)	(214,743)	(6,700)	(31,656)	(4,420)	(4,520)	(4,621)	(4,725)
Other Allocated Costs (inc. Shared Services)	(131,878)	(136,007)	(220,167)	(229,171)	(233,171)	(237,241)	(242,565)	(248,009)	(253,576)	(259,267)	(8,070)	(101,234)	(5,324)	(5,444)	(5,567)	(5,692)
Sub-Total Allocations & Recoveries	(3,902,774)	(3,694,243)	(3,680,553)	(4,000,531)	(3,799,659)	(3,945,272)	(4,064,335)	(4,160,516)	(4,258,860)	(4,359,417)	55,260	(251,028)	(119,064)	(96,180)	(98,344)	(100,557)
Property Taxes	144,439	149,350	149,309	152,292	155,338	158,445	161,613	165,007	168,473	172,010	6,153	9,095	3,169	3,394	3,465	3,538
Total	**10,322,790**	**11,480,220**	**11,240,450**	**11,210,095**	**11,291,473**	**12,145,702**	**12,614,203**	**12,886,688**	**13,109,806**	**13,183,490**	**935,607**	**665,482**	**468,502**	**272,484**	**223,118**	**73,684**
% Change											**8.35%**	**5.80%**	**3.86%**	**2.16%**	**1.73%**	**0.56%**

Table 4-16 illustrates the compound annual growth rates by program, with 2012 Board-Approved, 2012 Actual and 2013 Actual all compared to 2015 and 2019 Test Years.

TABLE 4-16 – COMPOUND ANNUAL GROWTH RATES BY PROGRAM

Programs	CAGR 2012 Approved to 2015 Test Year	CAGR 2012 Actuals to 2015 Test Year	CAGR 2013 Actuals to 2015 Test Year	CAGR 2012 Approved to 2019 Test Year	CAGR 2012 Actuals to 2019 Test Year	CAGR 2013 Actuals to 2019 Test Year
Operations						
Operations Management	3.76%	6.75%	7.72%	2.75%	4.01%	3.88%
Engineering	2.05%	6.25%	7.15%	5.44%	7.28%	7.75%
Technical Design	11.09%	7.10%	8.23%	5.92%	4.27%	4.17%
Grid Construction & Maintenance	2.56%	3.68%	1.60%	2.24%	2.72%	1.87%
Underground Utility Locates (subcontracted)	3.37%	3.31%	(12.04)%	2.59%	2.56%	(2.91)%
Tree Trimming (subcontracted)	(2.62)%	(2.70)%	(3.89)%	(0.01)%	(0.04)%	(0.00)%
Sub-Total Operations	3.70%	4.50%	2.56%	2.94%	3.28%	2.43%
Metering						
Meter Reading & Data Management	3.95%	(3.50)%	6.19%	2.91%	(0.32)%	3.47%
Meter Operations (installs etc)	4.87%	7.63%	9.69%	5.37%	6.55%	7.04%
Smart Meter Program Incremetal Costs	8.33%	17.42%	13.62%	4.71%	8.39%	5.79%
Sub-Total Metering	4.75%	2.23%	8.30%	4.10%	3.01%	5.15%
Facilities						
Facilities Management	(1.09)%	(1.58)%	1.92%	0.77%	0.55%	2.09%
Rent - Property	3.72%	1.92%	1.89%	2.78%	2.01%	2.01%
Vehicle Expenses	(2.63)%	0.02%	2.00%	0.03%	1.19%	2.05%
Utility Costs	3.48%	5.40%	2.00%	2.68%	3.49%	2.05%
Maintenance, Janitorial & Security	(0.61)%	(4.31)%	1.70%	(4.45)%	(5.99)%	(4.34)%
Sub-Total Facilities	(0.01)%	(0.42)%	1.90%	0.24%	0.07%	0.92%
Customer Service						
Customer Service Management	(0.04)%	3.61%	0.32%	1.13%	2.69%	1.44%
Customer Service General	1.68%	4.02%	4.90%	2.90%	3.91%	4.18%
Customer Billing	0.92%	2.14%	(1.41)%	1.54%	2.06%	0.85%
Bad Debts	0.78%	15.31%	2.35%	1.52%	7.55%	2.17%
Postage and Printing (Billing)	2.04%	1.65%	3.31%	2.96%	2.80%	3.54%
Collections Reconnects & Notice Serving	14.30%	6.52%	8.35%	7.10%	3.91%	4.08%
LEAP Program	0.00%	4.52%	6.28%	0.00%	4.72%	5.34%
Sub-Total Customer Service	1.94%	4.73%	2.83%	2.57%	3.76%	2.97%

TABLE 4-16 - COMPOUND ANNUAL GROWTH RATES BY PROGRAM (Continued)

Programs (continued)	CAGR 2012 Approved to 2015 Test Year	CAGR 2012 Actuals to 2015 Test Year	CAGR 2013 Actuals to 2015 Test Year	CAGR 2012 Approved to 2019 Test Year	CAGR 2012 Actuals to 2019 Test Year	CAGR 2013 Actuals to 2019 Test Year
General & Administrative						
Finance & Regulatory Affairs	3.36%	3.10%	2.19%	2.63%	2.52%	2.12%
IT Operations	12.56%	15.72%	18.63%	6.42%	7.69%	7.29%
Community Relations	15.86%	17.84%	25.38%	12.03%	12.84%	14.37%
Employee Health & Safety	2.49%	0.89%	1.24%	2.19%	1.51%	1.73%
Human Resources	7.37%	1.94%	5.68%	2.71%	0.45%	1.42%
Stores	9.44%	2.13%	2.79%	0.98%	(1.97)%	(2.43)%
Sub-Total General & Administrative	6.90%	5.31%	6.35%	3.65%	2.99%	2.94%
Corporate						
Management Fees	0.66%	0.66%	1.47%	1.47%	1.00%	1.71%
Post Retirement Benefits expense	(19.82)%	(18.68)%	(7.96)%	(7.40)%	(8.20)%	(1.47)%
Insurance - General & Property	(4.27)%	4.16%	(0.69)%	2.96%	(3.63)%	0.14%
Regulatory Costs	12.18%	13.80%	5.73%	6.38%	21.63%	7.56%
Audit, Legal & Consulting Fees	(3.84)%	(2.24)%	(0.52)%	0.18%	(12.96)%	(3.22)%
Other Corporate Costs and Adjustments	8.93%	3.89%	4.93%	2.82%	7.99%	3.98%
Sub-Total Corporate	(4.59)%	(3.78)%	(0.91)%	(0.55)%	(0.17)%	1.23%
Allocations & Recoveries						
Grid Construction & Maintenance	(6.35)%	(5.14)%	(1.19)%	(0.64)%	(5.32)%	0.06%
Technical Design & Engineering	11.95%	11.96%	6.30%	6.30%	7.60%	4.00%
Meter Operations (installs etc)	15.24%	10.63%	7.63%	5.76%	8.31%	4.23%
Stores Recoveries	1.34%	9.37%	1.86%	5.24%	1.75%	2.08%
Vehicle Recoveries	15.26%	14.99%	7.64%	7.53%	1.75%	2.08%
OPA CDM Programs	6.03%	3.17%	3.85%	2.65%	1.75%	2.08%
Other Allocated Costs (inc. Shared Services)	20.38%	2.52%	9.65%	2.36%	1.75%	2.08%
Sub-Total Allocations & Recoveries	2.22%	2.34%	2.39%	2.45%	(0.69)%	1.44%
Property Taxes	1.99%	2.00%	2.00%	2.04%	2.04%	2.05%
Total	**1.90%**	**2.62%**	**4.09%**	**2.00%**	**2.30%**	**2.74%**

PROGRAM AND FUNCTION OVERVIEW

OPUCN has provided Appendix 2-JC OM&A Programs in this Exhibit, on the basis of major function/department, in accordance with section 2.7.3 “Program Delivery Costs with Variance Analysis” of the Board’s Chapter 2 Filing Requirements. This section provides a brief overview of OPUCN’s major programs and functions along with additional background underlying the costs.

Operations Management

Operations Management is responsible for management and supervision of the grid construction & maintenance, technical design, and metering activities. The current number of FTE’s is 5.4, increasing to 6.5 in 2015 with the addition of a supervisor for the technical design department in late 2014. This additional headcount is required to handle the increased volume of design work driven by projected customer and city growth in Oshawa. The resulting compound annual growth is 2.75% from 2012 Board-Approved to 2019 Test Year, 4.01% from 2012 Actual to 2019 Test Year, and 3.88% from 2013 Actual to 2019 Test Year.

Engineering

The engineering department is responsible for asset management, distribution system planning, operating standards, smart grid and green energy initiatives, technical support to the design technicians for capital projects, and provision of distribution system asset information to many departments within OPUCN.

The annual cost of the Engineering department approved in the last rebasing application (2012) was $296,209 which included two FTE’s. This application proposes the addition of one FTE in 2016, with, after approximately seven months overlap, an offsetting reduction of one FTE in the stores group. The objective is to hire in Engineering a Manager Asset Management who will also be responsible for procurement and inventory management. As a result, Engineering department costs are projected to see a compound annual growth of 5.44% from 2012 Board-Approved to

2019 Test Year, 7.28% from 2012 Actual to 2019 Test Year, and 7.75% from 2013 Actual to 2019 Test Year.

Technical Design

The Technical Design department is responsible for designs and estimates related to capital projects, customer service connections and subdivisions. As noted previously, OPUCN is projected to experience significant customer and city growth over the period covered by this application. This growth results in a significant increase in the number of services, plant relocation work, subdivisions and capital rebuild work and as projected by the City, this volume is expected to accelerate especially with the opening of the Hwy 407 extension. The current number of FTE's is 7.4, and is projected to increase to 8.4 with the addition of additional resources to better handle the increased workload. As a result, Technical Design department costs are projected to see a compound annual growth of 5.92% from 2012 Board-Approved to 2019 Test Year, 4.27% from 2012 Actual to 2019 Test Year, and 4.17% from 2013 Actual to 2019 Test Year. The cost increase is partially offset by increased allocations to capital work.

Grid Construction & Maintenance

The Grid Construction & Maintenance department is responsible for the construction of the capital expansion and enhancement projects, and preventative maintenance programs. They respond to emergency power outages and unplanned events and repair or replace failed or defective equipment to restore services. They also assist with the development, training and enforcement of safe work procedures, through researching various guides and regulations, including: the *Occupational Health & Safety Act* and *Regulations for Construction Projects*; *Electrical and Utilities Safety Association Rule Book* and *Safe Practice Guides*; *Utility Work Protection Code*; *Ministry of Transportation Act* regarding safe work area protection and material transporting; and, *Workplace Hazardous Materials Information System* ("WHMIS").

The Grid Construction & Maintenance workforce of 26 FTE's at September 2014 has 9 men with continuous service ranging from 25 to 32 years, of whom at least 6 are expected to retire in the next 4 years. A succession plan is in place for the period to

ensure replacements are in place, in advance where apprentices are to be hired, early enough to avoid any decline in operational capability and will result in some overlap to facilitate training. Additionally, OPUCN plans to increase the ongoing 'normalised' headcount by 1 to 27 FTE's to reflect the growth during the period 2015 to 2019. Table 4-17 below illustrates the FTE over the period from 2012 Board-Approved to the 2019 Test Year.

TABLE 4-17 GRID CONSTRUCTION & MAINTENANCE FTE'S

	2012 Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Opening FTE's	26.0	24.3	25.8	26.0	26.7	27.8	29.1	29.6	28.8
Retirements	0.0	0.0	0.0	0.0	(1.3)	(1.7)	(0.5)	(0.8)	(1.8)
Replacements	0.0	0.0	0.0	0.7	1.3	3.0	1.0	0.0	0.0
New Hires	0.0	1.6	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Overlaps			0.2						
Closing FTE's	26.0	25.8	26.0	26.7	27.8	29.1	29.6	28.8	27.0

The cost increase is partially offset by increased allocations to capital work. The resulting compound annual growth is 2.24% from 2012 Board-Approved to 2019 Test Year, 2.72% from 2012 Actual to 2019 Test Year, and 1.87% from 2013 Actual to 2019 Test Year. The 2013 comparison is lower due to non-recurring ice storm costs included in 2013.

Underground Utility Locates

As part of its' ongoing commitment to operational efficiency, OPUCN has put a lot of effort into enhancing its' Geographic Information System (GIS) system, in particular the ability of the GIS system to deliver underground utility locating services for excavating. The improved GIS system allows OPUCN to clear a higher percentage of "dig requests" remotely using Ontario One-Call than previously, resulting in lower costs per request. The cost of remotely clearing a dig request is on average between 10 to 12 times less than dispatching a resource to the site to do a visual or physical check. 2014 represents the first year in which this enhanced capability will be taken advantage of, resulting in a projected annual saving of $88,000, despite a similar number of dig requests.

Compared to the years 2010, 2011 and 2012, which had on average 17% less requests, costs in 2014 and through the forecast period of 2015-2019 are estimated to be only marginally higher before inflation.

The resulting compound annual growth is 2.59% from 2012 Board-Approved to 2019 Test Year, 2.56% from 2012 Actual to 2019 Test Year, and negative 2.91% from 2013 Actual to 2019 Test Year. The 2013 comparison is lower due to increased activity in 2013 compared to 2012.

Tree Trimming

Tree trimming has been carried out on a four-year cycle in the past, but to help reduce the frequency and cause of outages resulting from tree contact, OPUCN's approach to tree trimming moved towards an improved, less costly and more efficient three-year cycle starting in 2011.

This has enabled OPUCN to reduce annual costs in 2014 by 7.3% compared to 2012 Board-Approved and by 7.5% compared to 2012 Actual. The resulting compound annual growth is 0.01% from 2012 Board-Approved to 2019 Test Year, 0.04% from 2012 Actual to 2019 Test Year, and 0.00% from 2013 Actual to 2019 Test Year.

Metering

The OPUCN metering department is responsible for the installation, testing, and commissioning of new and existing simple and complex metering installations, along with administration and management of the Advanced Metering Infrastructure ("AMI") system and other meter data related systems.

Regulatory changes and developing technologies which are expanding meter capabilities and utilisation, along with growth in Oshawa, has led to a significant increase in the volume of work required of OPUCN meter technicians. OPUCN proposes to add 1 FTE to enable it to meet its regulatory obligations and customer service expectations. The meter reading operation has also seen growing cost pressures since the last approved rate application in 2012, with increased software

licensing and support costs associated with OPUCN's Operational Data Store ("ODS") system and increased settlement costs driven by the FIT/MicroFIT programs. These factors are driving the compound annual growth in Metering department costs of 4.10% from 2012 Board-Approved to 2019 Test Year, 3.01% from 2012 Actual to 2019 Test Year, and 5.15% from 2013 Actual to 2019 Test Year.

Facilities

The facilities function is responsible for general maintenance and security of OPUCN facilities and the management of the OPUCN fleet of vehicles. OPUCN's main facility, rented from the City of Oshawa, is located in downtown Oshawa and includes office space for all employees, a stores/warehouse area, along with a garage and parking lot for all company vehicles.

The OPUCN vehicle fleet was significantly refreshed in 2011 and 2012, with a planned replacement program for remaining aged vehicles scheduled over the course of this rate application period. As a result, forecast maintenance costs are projected to be similar in 2019 to those approved in the 2012 Rate Application for the year 2012 due to a combination of lower repair costs and better fuel economy. The compound annual growth in vehicle expenses is 0.03% from 2012 Board-Approved to 2019 Test Year, 1.19% from 2012 Actual to 2019 Test Year, and 2.05% from 2013 Actual to 2019 Test Year.

In 2013, OPUCN undertook a review of its security systems and services which determined that a system with an increased number of 24-hour monitored video cameras along with improvements to building access systems would offer more effective security to its buildings, equipment and employees. A one-time capital investment of $55,000 was made in 2013 which is projected to yield annual operating savings of $120,000 effective from July 2013. This saving is the primary driver behind the Maintenance, Janitorial & Security negative compound annual growth of 4.45% from 2012 Board-Approved to 2019 Test Year, 5.99% from 2012 Actual to 2019 Test Year, and 4.34% from 2013 Actual to 2019 Test Year.

The efficiencies noted above, together with a keen focus on cost control, yield compound annual growth numbers for the facilities function of 0.24% from 2012 Approved to 2019 Test Year, 0.07% from 2012 Actual to 2019 Test Year, and 0.92% from 2013 Actual to 2019 Test Year.

Customer Service

The customer service department is responsible for liaising with OPUCN's approximate 55,000 customers. Activities performed include billing (mostly outsourced to a non-affiliated third party), call centre, collections, and other back office functions.

The number of customers serviced by OPUCN is projected to grow by approximately 9,000 (17%) from actual number at the end of 2013 to 2019. Despite this growth in customer numbers of 17%, total Customer Service costs are projected to see a compound annual growth of just 2.57% from 2012 Board-Approved to 2019 Test Year, 3.76% from 2012 Actual to 2019 Test Year, and 2.97% from 2013 Actual to 2019 Test Year.

OPUCN proposes to add 1 FTE to enable it to meet its regulatory obligations and customer service expectations, resulting in a projected total of 14.0 FTE's compared to current, and 2012 Board-Approved, total of 13.0. This represents an FTE increase of 7.7% and compares to a projected customer increase of 17%. Excluding this additional FTE, total Customer Service costs compound annual growth would be 2.57% from 2012 Approved to 2019 Test Year, 3.76% from 2012 Actual to 2019 Test Year, and 2.97% from 2013 Actual to 2019 Test Year.

In 2012, OPUCN initiated a concerted effort to migrate as many customers as possible to electronic billing with considerable success to date. As of August 2014, 19% of customers receive their bills electronically, compared to below 8% in early 2012. This represents over 6,000 customers since the campaign began, or approximately $60,000 in cost reductions on an annualised basis. This has, however, only managed to partially offset an average annual growth of 7% in postage costs from 2011 to 2014, with a 15% increase in 2014 alone. With its continued focus on maximising the number of customers receiving bills electronically, OPUCN is nevertheless projecting growth in

customer billing and printing cost growth of 2.96% from 2012 Board-Approved to 2019 Test Year, 2.80% from 2012 Actual to 2019 Test Year, and 3.54% from 2013 Actual to 2019 Test Year.

General & Administrative

The General & Administrative function is made up of the following departments: Finance & Regulatory Affairs; IT Operations; Community Relations; Employee Health & Safety; Human Resources; and Stores. The projected compound annual growth of the General & Administrative function is 3.65% from 2012 Board-Approved to 2019 Test Year, 2.99% from 2012 Actual to 2019 Test Year, and 2.94% from 2013 Actual to 2019 Test Year. This increase is driven primarily by an increase in IT subcontractor costs to help manage the investments in various IT systems related to grid modernization and the addition of subcontracted resources to fulfill additional requirements covering customer engagement, communications and privacy rules, partially offset by the reduction of one stores FTE to be replaced by an engineering position with supervisory duties for stores.

Corporate

The Corporate functions include holding company management fees, executive compensation, postretirement benefit costs as well as insurance, regulatory, legal, audit, consulting and other costs. These costs in total are projected to grow at a compound annual growth rate of negative 0.91% from 2012 Board-Approved to 2019 Test Year, negative 0.55% from 2012 Actual to 2019 Test Year, and 1.23% from 2013 Actual to 2019 Test Year. The reduction relative to 2012 Board-Approved and actual, and the moderate increase compared to 2013, is driven primarily by a reduction in the post-retirement benefit cost projections driven by the latest (2013) actuarial valuation of the liability.

Allocations & Recoveries

Allocations & recoveries includes the allocation of operations and maintenance labour and vehicle costs to capital and jobbing work where those costs are deemed to be directly attributable, and also allocations to affiliates for services provided and to OPA

CDM programs. These costs in total are projected to grow at a compound annual growth rate of 2.39% from 2012 Board-Approved to 2019 Test Year, negative 2.45% from 2012 Actual to 2019 Test Year, and 1.44% from 2013 Actual to 2019 Test Year. Included in these numbers is a reduction in the burden rate driven by the reduction in post-retirement expenses.

ADDITIONAL DETAILS ON OPERATING COSTS

Overview of Additional Details on Operating Costs

As stated in section 2.7.3 of the Chapter 2 Filing Requirements, the Board requires further detail on the following items:

- Employee Compensation;
- Shared Services and Corporate Cost Allocation;
- Purchase of Non Affiliate Services;
- One-time Costs;
- Regulatory Costs;
- Low Income Energy Assistance Programs (“LEAP”); and
- Charitable and Political Donations.

Further information on each of these categories of costs are detailed on the following pages.

EMPLOYEE COMPENSATION

Union

OPUCN's unionized employees are represented by the International Brotherhood of Electrical Workers ("IBEW"). The current Collective Bargaining Agreement ("CBA") is effective from March 1 2014 and expires March 2018. The current agreement, which was entered into in 2014, includes annual wage increases of 1.75% per year for 2014 and 2015, and 2.25% per year for 2016 and 2017.

Executive/Management/Non-Union

Executive and management compensation plan consists of salaries and benefits. Each position within the Company has been placed on a pay scale which is reviewed annually by senior management and the Board of Directors' HR Committee. Each employee's position within their respective range is reviewed based on performance and an inflationary adjustment. Changes to senior management compensation, if any, are approved by the Board of Directors. OPUCN offers an incentive plan to management and non-union staff which ranges between 5% and 10% of base salary, the final payout being made based on performance compared to targets set at the beginning of the year.

Benefits

A comprehensive and competitive benefits package exists which includes medical insurance, life insurance, long-term disability insurance, vacation, non-pension post-retirement benefits, and matching contributions to the OMERS pension plan.

OPUCN's employees are members of OMERS. Table 4-18 below details the OMERS pension premium information for 2011 Actual through to the 2019 Test Year. OPUCN has forecast future premiums using current rates.

TABLE 4-18 –PENSION PREMIUM INFORMATION

	2011 Actual	2012 Approved	2012 Actual	2013 Actual	2014 Bridge
OMERS Premiums Paid	449,637	503,465	576,909	674,395	685,838
	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
OMERS Premiums Paid	719,850	744,098	753,833	760,900	756,946

OPUCN pays certain health, dental, and life insurance benefits on behalf of its retired employees. Actual premiums and expenses paid, and expenses accrued for 2011 Actual through to the 2019 Test Year are shown in Table 4-19 below. The 2014 forecast expense is as per the actuarial valuation prepared for 2013. OPUCN has forecast future years expenses based on 2014 estimate plus inflation.

TABLE 4-19 –POST-RETIREMENT BENEFIT INFORMATION

	2011 Actual	2012 Approved	2012 Actual	2013 Actual	2014 Bridge
Premiums & Expenses Paid	525,204	608,000	519,495	455,470	557,284
Change in Accrued Liability	558,780	512,000	624,300	268,800	0
Total	1,083,985	1,120,000	1,143,795	724,270	557,284
	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Premiums & Expenses Paid	568,430	579,798	591,904	604,262	616,879
Change in Accrued Liability	0	0	0	0	0
Total	568,430	579,798	591,904	604,262	616,879

OPUCN has commissioned K-W Actuarial Services Inc. to provide an actuarial report updated to December 31, 2014 and plans to update its forecast post-retirement benefit costs for any material differences resulting from the update.

FTE's and Costs

Information on employee numbers, costs, variances and FTE movements are summarised in the tables below. Employee complement, compensation and benefits are

set out in Table 4-20 (from the Board's Appendix 2-K), year over year changes are illustrated in Table 4-21, while Table 4-22 utilises the data from Appendix 2-K to illustrate the compound annual growth rate, with 2012 Board-Approved, 2012 Actual and 2013 Actual all compared to 2015 and 2019 Test Years.

TABLE 4-20 –EMPLOYEE COMPLEMENT AND COMPENSATION (CHAPTER 2 APPENDICES 2-K)

	2011 Actuals	Last Rebasing Year - 2012 Board Approved	Last Rebasing Year - 2012 Actual	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Number of Employees (FTEs including Part-Time)										
Management	17	18	18	18	18	19	20	20	20	20
Non-Management	52	57	56	56	57	61	65	64	63	61
Total	69	75	74	74	75	80	85	84	83	81
Total Salary and Wages including ovetime and incentive pay ($000's)										
Management	$1,543	$1,899	$1,759	$1,935	$1,911	$2,110	$2,217	$2,262	$2,307	$2,353
Non-Management	$4,324	$4,676	$4,711	$5,017	$5,088	$5,402	$5,731	$5,882	$5,977	$5,936
Total	$5,867	$6,574	$6,471	$6,952	$6,999	$7,512	$7,948	$8,144	$8,284	$8,290
Total Benefits (Current + Accrued) ($000's)										
Management	$601	$718	$710	$641	$622	$652	$684	$698	$713	$727
Non-Management	$1,709	$1,885	$1,899	$1,663	$1,585	$1,622	$1,662	$1,684	$1,711	$1,722
Total	$2,311	$2,602	$2,609	$2,304	$2,207	$2,275	$2,347	$2,383	$2,424	$2,450
Total Compensation (Salary, Wages, & Benefits) ($000's)										
Management	$2,144	$2,616	$2,469	$2,576	$2,533	$2,763	$2,901	$2,960	$3,020	$3,081
Non-Management	$6,033	$6,560	$6,610	$6,680	$6,674	$7,024	$7,393	$7,567	$7,688	$7,659
Total	$8,177	$9,177	$9,079	$9,255	$9,207	$9,787	$10,294	$10,526	$10,708	$10,740

TABLE 4-21 – EMPLOYEE COMPLEMENT AND COMPENSATION YEAR OVER YEAR CHANGE

	Last Rebasing Year - 2012 Board Approved	Last Rebasing Year - 2012 Actual	2013 Actuals	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Number of Employees (FTEs including Part-Time)									
Management	0.7	0.7	(0.2)	(0.2)	1.8	0.7	0.0	0.0	0.0
Non-Management	5.3	4.2	0.3	1.2	3.7	3.5	(0.2)	(1.3)	(2.3)
Total	6.0	4.8	0.1	1.0	5.5	4.2	(0.2)	(1.3)	(2.3)
Total %	8.7%	7.0%	0.1%	1.4%	7.3%	5.2%	(0.2)%	(1.5)%	(2.8)%
Total Salary and Wages including ovetime and incentive pay ($000's)									
Management	$356	$217	$175	$(24)	$199	$107	$45	$45	$46
Non-Management	$352	$387	$305	$71	$314	$329	$151	$95	$(41)
Total	$708	$604	$481	$48	$513	$436	$196	$140	$6
Total %	12.1%	10.3%	7.4%	0.7%	7.3%	5.8%	2.5%	1.7%	0.1%
Total Benefits (Current + Accrued) ($000's)									
Management	$116	$108	$(69)	$(19)	$31	$32	$14	$14	$15
Non-Management	$175	$189	$(236)	$(77)	$37	$40	$22	$27	$11
Total	$291	$298	$(305)	$(97)	$67	$72	$36	$41	$26
Total %	12.6%	12.9%	(11.7)%	(4.2)%	3.1%	3.2%	1.5%	1.7%	1.1%
Total Compensation (Salary, Wages, & Benefits) ($000's)									
Management	$472	$325	$106	$(43)	$230	$139	$59	$60	$61
Non-Management	$527	$577	$69	$(6)	$351	$369	$173	$122	$(29)
Total	$999	$902	$176	$(49)	$580	$508	$232	$182	$32
Total %	12.2%	11.0%	1.9%	(0.5)%	6.3%	5.2%	2.3%	1.7%	0.3%

TABLE 4-22 –EMPLOYEE COMPLEMENT AND COMPENSATION COMPOUND ANNUAL AVERAGE GROWTH (CAGR)

Compound Average Annual Growth (CAGR)	CAGR 2012 Approved to 2015 Test Year	CAGR 2012 Actuals to 2015 Test Year	CAGR 2013 Actuals to 2015 Test Year	CAGR 2012 Approved to 2019 Test Year	CAGR 2012 Actuals to 2019 Test Year	CAGR 2013 Actuals to 2019 Test Year
Number of Employees (FTEs including Part-Time)						
Management	2.4%	2.4%	4.2%	1.5%	1.5%	2.0%
Non-Management	2.3%	3.0%	4.3%	0.9%	1.2%	1.3%
Total	2.3%	2.9%	4.3%	1.1%	1.3%	1.5%
Total Salary and Wages including ovetime and incentive pay						
Management	3.6%	6.2%	4.4%	3.1%	4.2%	3.3%
Non-Management	4.9%	4.7%	3.8%	3.5%	3.4%	2.8%
Total	4.5%	5.1%	4.0%	3.4%	3.6%	3.0%
Total Benefits (Current + Accrued)						
Management	(3.1)%	(2.8)%	0.9%	0.2%	0.4%	2.1%
Non-Management	(4.9)%	(5.1)%	(1.2)%	(1.3)%	(1.4)%	0.6%
Total	(4.4)%	(4.5)%	(0.6)%	(0.9)%	(0.9)%	1.0%
Total Compensation (Salary, Wages, & Benefits)						
Management	1.8%	3.8%	3.6%	2.4%	3.2%	3.0%
Non-Management	2.3%	2.0%	2.5%	2.2%	2.1%	2.3%
Total	2.2%	2.5%	2.8%	2.3%	2.4%	2.5%

Outside of inflation, there are three components driving the changes summarized in the tables above:

- Additional 5.8 FTE's to 2012 Board-Approved to handle growth assumed in period (see Table 4-23 below),
- Succession planning to manage high level of retirements in the period, resulting in temporary spike in costs (see Table 4-23 below), and
- Reduced annual costs related to post-retirement benefits, driven by the latest (2013) actuarial valuation. The projected reduction in 2015 is approximately

$500,000 compared to 2012 Actual, with primarily inflationary increases projected thereafter.

The reasoning behind the addition of 5.8 FTE's to the 2012 Board-Approved number, and the temporary spike in cost due to succession planning, are explained in the 'Program And Function Overview' section earlier in this chapter. Table 4-23 below provides a summary by function of the FTE changes, separately identifying movements by retirements, replacements, new hires and overlaps.

TABLE 4-23 – ANALYSIS OF FTE MOVEMENTS 2012 BOARD-APPROVED TO 2019 TEST YEAR

	2012 Approved	2012 Actual	2013 Actual	2014 Bridge	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test	2012 App to 2019	2014 to 2019
Opening FTE's	**75.0**	**69.0**	**73.8**	**73.9**	**74.9**	**80.4**	**84.6**	**84.4**	**83.1**	**75.0**	**73.9**
Retirements											
Grid Construction & Maintenance	-	-	-	-	(1.3)	(1.7)	(0.5)	(0.8)	(1.8)	(6.0)	(6.0)
Technical Design	-	-	-	-	-	-	-	(0.5)	(0.5)	(1.0)	(1.0)
Stores	-	-	-	-	-	(0.3)	(0.7)	-	-	(1.0)	(1.0)
Retirements sub-total	**0.0**	**0.0**	**0.0**	**0.0**	**(1.3)**	**(2.0)**	**(1.2)**	**(1.3)**	**(2.3)**	**(8.0)**	**(8.0)**
Replacements											
Grid Construction & Maintenance	-	-	-	0.7	1.3	3.0	1.0	-	-	6.0	6.0
Technical Design	-	-	-	-	-	1.0	-	-	-	1.0	1.0
Engineering	-	-	-	-	-	0.7	0.3	-	-	1.0	1.0
Replacements sub-total	**0.0**	**0.0**	**0.0**	**0.7**	**1.3**	**4.7**	**1.3**	**0.0**	**0.0**	**8.0**	**8.0**
New Hires											
Grid Construction & Maintenance	-	1.6	-	-	1.0	-	-	-	-	1.0	1.0
Customer Service	-	1.0	-	-	-	1.0	-	-	-	1.0	1.0
IT	-	-	-	0.4	1.0	-	-	-	-	0.4	1.4
Technical Design	-	-	-	0.4	1.0	-	-	-	-	1.4	1.4
Operations Management	-	-	-	0.5	0.5	-	-	-	-	1.0	1.0
Metering	-	-	-	-	0.5	0.5	-	-	-	1.0	1.0
New Hires sub-total	**0.0**	**2.6**	**0.0**	**1.3**	**4.0**	**1.5**	**0.0**	**0.0**	**0.0**	**5.8**	**6.8**
Overlaps	**0.0**	**2.2**	**0.1**	(1.0)	1.4	(0.1)	(0.3)	-	-	0.0	0.1
Closing FTE's	**75.0**	**73.8**	**73.9**	**74.9**	**80.4**	**84.6**	**84.4**	**83.1**	**80.8**	**80.8**	**80.8**

SHARED SERVICES AND CORPORATE COST ALLOCATION

Oshawa Power & Utility Corporation ("OPUC") is the parent company of OPUCN and charges OPUCN a management fee. The management fee is currently $480,000 per year and is projected to increase in line with inflation through the period covered by this rate application.

OPUCN allocates a share of its administrative costs to affiliate companies Oshawa PUC Energy Services Inc. ("OPUCES") and Oshawa PUC Services Inc. (OPUCS"). These allocations are based on the cost of the services provided and are reviewed annually. OPUCN charges a contracted market rate for Pole or Duct space rented by OPUCS.

A summary of charges to affiliates for services provided for each year is provided in Tables 4-24 to 4-32, corresponding to the Board's Appendix 2-N. OPUCN has provided Appendix 2-N for the 2012 Board-Approved Year, historical years 2011 and 2013; for the 2014 Bridge Year; and for the 2015-2019 Test Years.

TABLE 4-24 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2011 ACTUAL

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$51,941	$48,520
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$92,377	$86,293
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$24,898	$24,898
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$21,299	$21,299
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,691	$3,691

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate Costs	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	61.7%	$480,000
(Parent)	(LDC)				

TABLE 4-25 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2012 BOARD APPROVED

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$51,052	$47,864
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$96,696	$90,658
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$21,935	$21,935
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$2,261	$2,261

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	61.7%	$480,000
(Parent)	(LDC)				

TABLE 4-26 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2013 ACTUAL

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$58,852	$55,178
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$96,696	$90,658
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$9,395	$9,395

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	59.2%	$480,000
(Parent)	(LDC)				

TABLE 4-27 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2014 BRIDGE YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$73,990	$69,370
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$85,567	$80,225
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,500	$3,500

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$480,000
(Parent)	(LDC)				

TABLE 4-28 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2015 TEST YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$75,469	$70,997
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$87,279	$82,106
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,570	$3,570

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$489,600
(Parent)	(LDC)				

TABLE 4-29 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2016 TEST YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$76,979	$72,417
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$89,024	$83,748
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,641	$3,641

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$499,392
(Parent)	(LDC)				

TABLE 4-30 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2017 TEST YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$78,518	$73,865
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$90,805	$85,423
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,714	$3,714

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$509,380
(Parent)	(LDC)				

TABLE 4-31 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2018 TEST YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$80,089	$75,342
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$92,621	$87,132
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,789	$3,789

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$519,567
(Parent)	(LDC)				

TABLE 4-32 – CHAPTER 2 - APPENDIX 2-N - SHARED SERVICES/CORPORATE COST ALLOCATIONS 2019 TEST YEAR

Shared Services

Name of Company		Service Offered	Pricing Methodology	Price for the Service	Cost for the Service
From	To			$	$
OPUCN	OPUCES	Admin Fees	Actual Cost + Approved Rate of Return	$81,690	$76,849
OPUCN	OPUCS	Admin Fees	Actual Cost + Approved Rate of Return	$94,473	$88,874
OPUCN	OPUCS	Joint Use Pole Rental	Actual Cost	$27,356	$27,356
OPUCN	OPUCS	Duct Fibre Optic Rental	Actual Cost	$22,356	$22,356
OPUCN	OPUCS	Miscellaneous work	Actual Cost	$3,864	$3,864

Corporate Cost Allocation

Name of Company		Service Offered	Pricing Methodology	% of Corporate	Amount Allocated
From	To			%	$
OPUC	*OPUCN*	Management Fees	Cost Based	55.4%	$529,959
(Parent)	(LDC)				

Reconciliation of Revenue in Appendix 2-N

The Board's Filing Requirements require applicants to provide a reconciliation of the revenue in Appendix 2-N to the amounts included in Other Revenue in Exhibit 3. Only "Joint Use Pole Rental" and "Duct Fibre Optic Rental" in Tables 4-24 to 4-32 above are also included in Other Revenue as reported in Exhibit 3. Both are reported within USA Account 4610, Rent from Electric Property. Table 4-33 below reconciles the Other Revenue amounts in Tables 4-24 to 4-32 above to the Other Revenue amounts in Exhibit 3.

TABLE 4-33 – RECONCILIATION TO "OTHER REVENUE" IN EXHIBIT 3

Extract from Exhibit 3 - Other Revenue

USA	Description	Actual 2011	Actual 2012	Actual 2013	Bridge 2014	Test 2015	Test 2016	Test 2017	Test 2018	Test 2019
Pole Rental - OPUCS		24,898	27,356	27,356	27,356	27,356	27,356	27,356	27,356	27,356
Duct Rental - OPUCS		21,299	21,935	22,356	22,356	22,356	22,356	22,356	22,356	22,356
Pole Rental - Non-Affiliates		102,585	151,653	129,727	126,676	126,676	126,676	126,676	126,676	126,676
4210 Rent from Electric Property		148,782	200,944	179,439	176,388	176,388	176,388	176,388	176,388	176,388

Extract from Exhibit 4 - Appendix 2-N Shared Services Allocations

From	To - Description	Actual 2011	Actual 2012	Actual 2013	Bridge 2014	Test 2015	Test 2016	Test 2017	Test 2018	Test 2019
OPUCN - OPUCS : Pole Rental		24,898	27,356	27,356	27,356	27,356	27,356	27,356	27,356	27,356
OPUCN - OPUCS : Duct Rental		21,299	21,935	22,356	22,356	22,356	22,356	22,356	22,356	22,356

ONE-TIME COSTS

With the exception of costs related to this Application discussed below under Regulatory Costs, OPUCN is not proposing to recover any other one-time costs in this Application over a period of time. The estimated cost for completing this Application is being amortized over a period of five years.

PURCHASE OF NON-AFFILIATE SERVICES

All supplier and contractor expenditures have been sourced and procured using the activities, practices and processes defined within OPUCN's Corporate Procurement and Corporate Expenditure Approval Policies. All procurements of services and materials are supported by an approved Purchase Order ("PO") prior to any commitments, with the exception of services and materials provided for Legal, Consulting, Recruiting, Utilities (water, gas, hydro and telephone), Regulatory, Financial, and Employee benefits. See Appendix 4-2 for OPUCN's Corporate Purchasing Policy.

OPUCN purchases many services and products from third parties. Tables 4-34 to 4-37 disclose the expenditures by vendor where the annual amount exceeded $100,000 per year, for the years 2011, 2012, 2013 and 2014 (September year to date), respectively.

Purchases for 2014 to 2019 operating and capital works will continue to be based on the methodology contained within OPUCN's Procurement Policy, which has been attached as Appendix 4-2.

TABLE 4-34– 2011 NON-AFFILIATE SUPPLIERS

Vendor	2011 Amount	Product or Service	Procurement Method
CG Power Systems Canada	2,060,086	Transformers	RFI
HD Supply Power Solutions	1,551,224	Material	RFI
OMERS	885,804	Pension Plan for Employees	n/a
ERTH	823,814	Billing Software & Services	Tender
Wajax Industries	735,709	Vehicle Purchases	Quote
Green Shield	698,486	Employee/Retiree Benefits	Tender
Posi-Plus Ontario Inc.	615,943	Vehicle Purchases	Quote
Elster Meters	610,942	Metering Equipment	Tender
City Of Oshawa	480,836	Property Rental & Taxes	n/a
Eaton Industries	465,795	Breaker Replacement	Quote
Canada Post	360,000	Postage	n/a
The Mearie Group	343,843	Insurance	Quote
Guelph Utility Pole Company	342,511	Material	RFI
Optilinx Systems Inc.	314,365	Directional Boring	Tender
Danco Building Services	285,769	Building Repairs & Maintenance	Quote
Promark Telecon Inc.	281,055	Underground Locates	Tender
Brass Industrial Services Inc.	255,756	Vacuum Excavation	Tender
Intergraph Canada Ltd.	229,698	GIS System	RFP
Utilismart Corporation	228,319	Metering (MAS System) Services	Tender
Borden Ladner Gervais	218,025	Legal & Consulting Services	Quote
Guillevin International Inc.	204,400	Material	RFI
Honeywell Limited	193,619	CDM Installations	Quote
Timberland Equipment Ltd.	191,716	Vehicle Purchases	Quote
Ernst & Young	184,957	Auditing Services	Tender
Ontario Line Clearing	172,290	Tree Trimming	Tender
Ogilvy Renault LLP (In Trust)	171,995	Late Payment Class Action Settlen	n/a
M.E.T. Utilities Management	162,968	Meter Services	Tender
Black & Macdonald	147,625	Grid Construction Subcontractor	Tender
Securitas Canada Limited	144,178	Security Services	RFP
Lidaco Contracting Ltd	139,004	Backhoe Operater	Tender
Ontario Energy Board	138,981	Regulatory Fees	n/a
Coutts And Flim Surveying Inc.	125,176	Subcontracted Design	Quote
Snyder Construction	119,066	Building Renovations	Quote
PTC Accounting & Finance	117,447	Staffing Agency	Quote
Nedco	112,538	CDM Installations	Quote
Paddy's Market	111,905	Electronic Equipment (Insurance)	Quote
Suncor Energy Products	110,636	Fuel Supplies	Quote
Harper Detroit Diesel-Allison	106,176	Vehicle Repair	RFP
Ontario Motor Sales	104,358	Vehicle Purchases	Quote

TABLE 4-35 – 2012 NON-AFFILIATE SUPPLIERS

Vendor	2012 Amount	Product or Service	Procurement Method
CG Power Systems Canada	2,918,185	Transformers	RFI
HD Supply Power Solutions	1,746,446	Material	RFI
OMERS	1,124,158	Pension Plan for Employees	n/a
Green Shield	778,870	Employee/Retiree Benefits	Tender
ERTH	590,760	Billing Software & Services	Tender
City Of Oshawa	481,384	Property Rental & Taxes	n/a
Posi-Plus Ontario Inc.	478,738	Vehicle Purchases	Quote
Willis Energy Services (Ont) Ltd.	426,283	CDM Subcontractor	Quote
Canada Post	405,000	Postage	n/a
The Mearie Group	402,486	Insurance	Quote
Eaton Industries	363,432	Breaker Replacement	Quote
ITM Group	360,600	IT Support & Computing Equipme	Quote
Promark Telecon Inc.	288,875	Underground Locates	Tender
Riggs Distler	284,180	Grid Construction Subcontractor	Tender
Elster Meters	271,390	Metering Equipment	Tender
Brass Industrial Services Inc.	244,052	Vacuum Excavation	Tender
Guelph Utility Pole Company	233,260	Material	RFI
Guillevin International Inc.	207,269	Material	RFI
Black & Macdonald	197,994	Grid Construction Subcontractor	Tender
Intergraph Canada Ltd.	179,732	GIS System	RFP
Harper Detroit Diesel-Allison	179,612	Vehicle Repair	RFP
Jomar Softcorp International	179,472	ODS System	Tender
Ontario Line Clearing	168,733	Tree Trimming	Tender
Ernst & Young	163,292	Auditing Services	Tender
Ontario Energy Board	162,725	Regulatory Fees	n/a
M.E.T. Utilities Management	156,715	Meter Services	Tender
Suncor Energy Products	156,551	Fuel Supplies	Quote
Ontario Motor Sales	154,506	Vehicle Purchases	Quote
Securitas Canada Limited	151,828	Security Services	RFP
Lidaco Contracting Ltd	144,572	Backhoe Operater	Tender
Danco Building Services	139,667	Building Repairs & Maintenance	Quote
NBM Engineering Inc.	134,093	Subcontracted Design	Quote
Utilismart Corporation	132,294	Metering (MAS System) Services	Tender
Loblaws Inc.	122,555	CDM Program Incentives	n/a

TABLE 4-36 – 2013 NON-AFFILIATE SUPPLIERS

Vendor	2013 Amount	Product or Service	Procurement Method
HD Supply Power Solutions	2,822,815	Material	RFI
OMERS	1,329,581	Pension Plan for Employees	n/a
Guelph Utility Pole Company	1,145,794	Material	RFI
Westmore Poleline And Electric	842,076	Grid Construction Subcontractor	Tender
Riggs Distler	755,503	Grid Construction Subcontractor	Tender
K-Line Maint & Const Ltd	753,139	Grid Construction Subcontractor	Tender
CG Power Systems Canada	710,375	Transformers	RFI
Green Shield	662,314	Employee/Retiree Benefits	Tender
ERTH	605,674	Billing Software & Services	Tender
Willis Energy Services (Ont) Ltd.	549,485	CDM Subcontractor	Quote
City Of Oshawa	483,451	Property Rental & Taxes	n/a
Promark Telecon Inc.	470,854	Underground Locates	Tender
The Mearie Group	457,741	Insurance	Quote
G & W Electric Ltd	391,825	Grid Construction Subcontractor	Tender
Canada Post	390,000	Postage	n/a
Brass Industrial Services Inc.	352,323	Vacuum Excavation	Tender
NBM Engineering Inc.	295,039	Subcontracted Design	Quote
Guillevin International Inc.	292,276	Material	RFI
Elster Meters	268,203	Metering Equipment	Tender
Honeywell Limited	265,134	CDM Installations	Quote
M.E.T. Utilities Management	196,666	Meter Services	Tender
Ontario Line Clearing	185,981	Tree Trimming	Tender
H.M. Brooks (Oshawa) Limited	159,555	Vault Repairs	Tender
Ernst & Young	155,923	Auditing Services	Tender
Sub-Terrain Directional Drilling	154,509	Directional Boring	Tender
Lidaco Contracting Ltd	152,081	Backhoe Operater	Tender
Coco Paving Inc.	151,498	Grid Construction Subcontractor	Tender
Coutts And Flim Surveying Inc.	147,217	Subcontracted Design	Quote
Suncor Energy Products	137,652	Fuel Supplies	Quote
Ontario Energy Board	134,659	Regulatory Fees	n/a
Intergraph Canada Ltd.	134,067	GIS System	RFP
Hard-Co Construction Ltd.	127,938	Grid Construction Subcontractor	Tender
Eaton Industries	127,515	Breaker Replacement	Quote
Caldwell Partners	103,163	HR Consulting	Quote
Langley Utlities Contracting	101,925	Grid Construction Subcontractor	Tender
Harper Detroit Diesel-Allison	101,530	Vehicle Repair	RFP

TABLE 4-37 – 2014 SEPTEMBER YTD NON-AFFILIATE SUPPLIERS

Vendor	2014 (Sep YTD) Amount	Product or Service	Procurement Method
HD Supply Power Solutions	1,691,256	Material	RFI
OMERS	1,045,922	Pension Plan for Employees	n/a
CG Power Systems Canada	889,310	Transformers	RFI
Green Shield	474,347	Employee/Retiree Benefits	Tender
Guelph Utility Pole Company	417,272	Material	RFI
The Mearie Group	411,742	Insurance	Quote
City Of Oshawa	363,283	Property Rental & Taxes	n/a
G & W Electric Ltd	343,600	Grid Construction Subcontractor	Tender
ERTH	333,130	Billing Software & Services	Tender
Canada Post	270,000	Postage	n/a
Promark Telecon Inc.	259,889	Underground Locates	Tender
Hard-Co Construction Ltd.	234,260	Grid Construction Subcontractor	Tender
Willis Energy Services (Ont) Ltd.	212,810	CDM Subcontractor	Quote
Brass Industrial Services Inc.	211,952	Vacuum Excavation	Tender
Asplundh Canada ULC	151,591	Tree Trimming	Tender
M.E.T. Utilities Management	138,248	Meter Services	Tender
NBM Engineering Inc.	138,019	Subcontracted Design	Quote
Ernst & Young	136,866	Auditing Services	Tender
Guillevin International Inc.	132,143	Material	RFI
Lakeridge Health	130,350	CDM Program Incentives	n/a
Riggs Distler	125,393	Grid Construction Subcontractor	Tender
Gowling Lafleur Henderson LLP	113,772	Consulting (Rate Application)	Quote
Lidaco Contracting Ltd	107,300	Backhoe Operater	Tender
Suncor Energy Products	93,628	Fuel Supplies	Quote
Ontario Energy Board	91,955	Regulatory Fees	n/a
Harper Detroit Diesel-Allison	86,539	Vehicle Repair	RFP
Sub-Terrain Directional Drilling	85,382	Directional Boring	Tender
Elster Meters	78,158	Metering Equipment	Tender
Metsco	71,755	Engineering - Consulting (COS)	Quote

REGULATORY COSTS

Regulatory costs include on-going expenses incurred in connection with Decisions and Orders on Cost Awards for hearings, proceedings, technical sessions, and other matters before the Board or other regulatory bodies. Costs include:

- Annual assessment fees paid to the Board;
- Board costs pursuant to Section 30 of the *Ontario Energy Board Act*, 1998;
- legal and consulting costs for rate applications and other regulatory matters; and
- Intervenor costs.

Regulatory costs in the 2015 Test Year are estimated to be $348,166, an increase of $97,225 from the 2014 Bridge Year. Table 4-38, below identifies the incremental costs expected to be incurred for this Application. OPUCN proposes to recover these costs evenly over the 2015 - 2019 Test Years, as identified in the section on “One Time Costs”.

Table 4-38 below details regulatory costs included within Uniform System of Accounts (“USoA”) account 5655. OPUCN has not included the costs of regulatory staff or other staff working on regulatory applications in Account 5655. These costs are included in Accounts 5605, 5610, and 5615.

OPUCN estimates that it will incur incremental costs of $973,694 in respect of this Application. This estimate includes special studies, reports, preparation, defence and adjudication costs, as well as Board and intervenor costs. Increases in costs were budgeted as it is expected that there will be increased requirements for legal and consulting support due to the complexity of this Application and its effective duration. OPUCN identifies these as “one-time” costs under Regulatory. These costs will have been incurred and expensed in 2014 but are excluded from the OM&A amounts reported for those years in this Exhibit. OPUCN is requesting recovery of these costs over the five Test Years included in this Custom IR Application (from 2015 through 2019 inclusive). One-fifth ($194,739) of the total amount incurred is included as an expense to OM&A in each of the years 2015 through 2019 inclusive.

TABLE 4-38 – EXTRACT FROM APPENDIX 2-M - REGULATORY COST SCHEDULE 2011 – 2019

Regulatory Cost Category	Ongoing or One-time Cost? [2]	Last Rebasing Year (2012 Board Approved)	Most Current Actuals Year 2013	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
OEB Annual Assessment	On-Going	$ 141,855	$ 129,211	$ 144,441	$ 147,330	$ 150,277	$ 153,282	$ 156,348	$ 159,475
OEB Section 30 Costs (OEB-initiated)	On-Going	$ -	$ 4,648	$ 4,741	$ 4,836	$ 4,932	$ 5,031	$ 5,132	$ 5,234
Amortisation of Rate Application costs	One-Time	$ 100,000	$ 100,000	$ 100,000	$ 194,739	$ 194,739	$ 194,739	$ 194,739	$ 194,739
Advertisement costs - new rates	On-Going	$ 4,759	$ 1,488	$ 1,759	$ 2,000	$ 2,040	$ 2,081	$ 2,122	$ 2,165
Other	On-Going	$ -	$ -	$ -	-$ 739	-$ 39	$ 868	$ 1,798	$ 2,749
Sub-total - Ongoing Costs [3]		$ 146,614	$ 135,347	$ 150,941	$ 153,427	$ 157,211	$ 161,263	$ 165,400	$ 169,624
Sub-total - One-time Costs [4]		$ 100,000	$ 100,000	$ 100,000	$ 194,739	$ 194,739	$ 194,739	$ 194,739	$ 194,739
Total - USA Account 5655		$ 246,614	$ 235,347	$ 250,941	$ 348,166	$ 351,949	$ 356,001	$ 360,138	$ 364,362
Annual % Change			**-4.6%**	**6.6%**	**38.7%**	**1.1%**	**1.2%**	**1.2%**	**1.2%**

One-time costs related to this cost of service application to be amortized over the test year plus the IRM period.

Expert Witness costs	$ 20,000						
Legal costs	$ 350,000						
Consultants' costs	$ 434,500						
Unamortised 2012 Rate Application costs	$ 47,686						
OEB costs	$ 29,461						
Intervenor costs	$ 92,047						
Total	$ 973,694		$ 194,739	$ 194,739	$ 194,739	$ 194,739	$ 194,739

LOW INCOME ENERGY ASSISTANCE PROGRAMS

OPUCN has actively supported LEAP since 2011. Customer Care works closely with the lead agencies, namely the United Way. In 2013, OPUCN provided $24,312 in LEAP funding which assisted 48 families in Oshawa by providing financial support.

As prescribed by the Board, OPUCN contributes 0.12% of the Board-Approved distribution revenue requirement annually to LEAP. The contributions for the 2015 through 2019 Test Years are forecast to be $27,460, $30,064, $31,293, $32,479, and $33,219, respectively.

OPUCN submits annual LEAP reporting to the Board in compliance with the 2013 LEAP Manual. OPUCN is compliant with the Board's requirements regarding financial assistance opportunities in conjunction with social agencies, CDM initiatives, and customer service changes specific to low-income sector customers.

CHARITABLE AND POLITICAL DONATIONS

OPUCN has not included any charitable or political donations in the revenue requirement for the Test Years, other than contributions to programs that provide assistance to low income consumers as identified in the preceding Schedule of this Exhibit. The following Table 4-39 summarizes the LEAP donations from 2011 Board-Approved through the 2019 Test Year.

TABLE 4-39 – LEAP DONATIONS 2011 – 2019

	2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Bridge Year
LEAP	$ 26,603	$ 24,052	$ 24,052	$ 24,312	$ 26,072

	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
LEAP	$ 27,460	$ 30,064	$ 31,293	$ 32,479	$ 33,219

DEPRECIATION, AMORTIZATION, AND DEPLETION

Overview of Depreciation, Amortization, and Depletion

OPUCN adheres to Modified International Financial Reporting Standards ("MIFRS") capitalization accounting treatments for rate making and regulatory reporting purposes. OPUCN's most recent rebasing application (EB-2011-0073) included the transition to MIFRS effective January 1, 2012. Depreciation is computed on a straight-line basis over the estimated useful life of the item of PP&E, with six months of depreciation charged in the year of addition. The depreciable amount of an asset is determined after deducting its estimated residual value, if material. OPUCN has no items of PP&E with residual values. In accordance with MIFRS standards, the components of each item of PP&E are depreciated separately.

In its 2012 application, OPUCN adopted, for asset depreciation purposes, the typical useful lives recommended by Kinectrics in its' Asset Depreciation Study prepared for the OEB. OPUCN retained an independent 3rd party, Metsco, with the objective of establishing the typical useful life (TUL) of major fixed assets employed on OPUCN's distribution system. The resulting report, completed in January 2014, found the typical useful life of the majority of the assets employed on OPUCN's distribution system were accurately reflected in the Kinectrics report, with the exception of six asset classes. A copy of the Metsco report is included in this application as Appendix 4-3. Table 4-40 below summarizes the asset classes where Metsco recommends a TUL different to Kinectrics.

TABLE 4-40 – OPUCN ASSET DEPRECIATION STUDY CONCLUSIONS

Asset Class	Typical Useful Life (Kinectrics Conclusion)	Typical Useful Life (Metsco Conclusion)
Power Transformers employed at Distribution Stations	45 years	40 years
Station Independent Circuit breakers	45 years	40 years
Overhead conductors	60 years	45 years
Overhead Line switches	45 years	40 years
SCADA System	20 years	8 years
Direct Buried Secondary Cables	35 years	42.5 years

Power Transformers

Metsco analysed the actual useful service life for a batch of power transformers that have been retired from service at OPCUN during the past five years. The results of this analysis indicate the mean useful life of power transformers at OPUCN to be 39 years.

Station Independent Circuit breakers

The Kinectrics report indicates that based on broader industry experience, the typical life expectancy of individual circuit breakers is 40 years. It is also noteworthy that only three of the six utilities surveyed by Kinectrics provided information relevant to this asset and there were extremely large deviations in service age data obtained from them. Kinectrics did not investigate the reasons behind such large deviations, but it is possible the deviations were caused by mixing indoor and outdoor mounted circuit breakers in the same category and not excluding the circuit breakers which might have been completely overhauled. One of the utilities reported typical service life of 70 years for circuit breakers, which was likely achieved through major refurbishment or rehabilitation of original breakers with additional capital expenditure.

In Metsco's opinion, because this asset class is composed of a broad category of different types of circuit breakers, some installed indoors and some installed outdoors, the surveys performed by Kinectrics did not correctly reveal the typical useful life of outdoor circuit breakers. For this asset, the typical useful life based on the overall industry experience, as reported by Kinectrics, more accurately represents the typical useful life of circuit breakers employed on OPUCN system.

Overhead conductors

The Kinectrics report, summarizes the typical useful life of overhead line conductors. As shown, it concludes the typical useful life of overhead line conductors to be 60 years. We agree the conductors on distribution lines often outlive the poles and are not usually on the critical path to determine end of life for a line section. But typically, whenever a line is rebuilt with new poles, the conductors are also replaced at the same time, because it is economically prudent to do so.

To avail of the hypothetical useful life of 60 years for the line conductors supported on wood poles with typical useful life of 45 years, the line will need to be rebuild in a piecemeal fashion; i.e. all the wood poles will need be replaced when a majority of them have reached the end of their service life after 45 years and then 15 years later the conductors will need to replaced. Such piece meal construction of medium voltage lines would also require live-line construction techniques. Electric utilities' practical experience indicates that it is more economical to construct the line in a single stage replacing all the components at the same time, rather than constructing the line in a piece meal manner.

Thus while we agree the conductors often outlive poles in terms of their performance degradation, because it is more economical to reconstruct the overhead lines by changing all the components at the same time rather than reconstructing the line in stages, the effective typical useful life for overhead line conductors is equal to the typical useful life of the wood poles. Therefore we believe it is appropriate to employ 45 years to be the typical useful life for overhead line conductors, because a vast majority of the overhead lines at OPUCN are supported on wood poles.

Overhead Line switches

The Kinectrics report shows that the six utilities responding to their survey reported typical useful life of 30 years (1), 35 years (1), 40 years (2) and 50 years (2), which results in mean useful life of 41 years. Kinectrics has indicated their opinion of the typical useful life for this asset in broader industry to be 50 years, but no evidence is provided in the report to support this belief. Based on the results of the survey gathered

by Kinectrics and based on OPUCN's own operating experience, the correct typical useful life of this asset is 40.

SCADA System

Metsco investigations into OPUCN SCADA history reveal that the control room hardware and software components were installed in 2008. In late 2013 one of the SCADA Workstation failed and was replaced, providing service life of 5 years. OPUCN also upgraded the two servers at the same time. While performing the above listed computer hardware replacements and upgrades, OPUCN also upgraded the SCADA Software. In the substation RTUs, the original analog and control boards are still in service for about 20 years, but the CPUs required replacement after about 15 years of service.

To maximize the benefits of major investments into the advanced revenue metering systems, many LDCs are implementing major upgrades to their SCADA systems to incorporate smart grid functions, i.e. outage management systems. Such advanced functions require both hardware and software upgrades prior to these components reaching the end of their mechanical life due failure in service.

In view of the foregoing, in our opinion, the typical useful life of SCADA system is of the order of 8 years, rather than 20 years, proposed in Kinectrics report.

Direct Buried Secondary Cables

The Kinectrics report suggests typical useful life of 35 years for direct buried secondary cables. The six utilities surveyed by Kinectrics reported typical useful life for secondary cables of 20, 40, 40, 45, 50 and 60 years, which yields mean typical mean life of 42.5 years. Kinectrics report suggests typical service life of 35 years for direct buried secondary cables, based on the general industry experience. In our opinion there is no evidence to support this assumption and the typical useful life of this asset should be 42.5 years.

OPUCN is proposing to adopt the typical useful life recommended by Metsco for the asset classes above, resulting in an annual increase in depreciation expense of

approximately $60,000. Further explanations are provided in the attached Metsco report (Appendix 4-3) for useful lives proposed in the application that differ from those contained in the Kinectrics Report.

OPUCN maintains the proposed levels of depreciation/amortization expense are appropriately reflective of the useful lives of the assets and the Board`s accounting policies. Apart from the changes to the estimated useful lives of certain asset classes noted above, there are no other changes to OPUCN's depreciation/amortization policy since the last cost of service filing.

The following Table 4-41 and Table 4-42 details the asset class service lives as recommended by Kinectrics, and compares with the current and proposed service lives adopted by OPUCN.

TABLE 4-41 – APPENDIX 2-BB – SERVICE LIFE COMPARISON (PART I OF II)

		Asset Details			Useful Life			USoA Account Number	USoA Account Description	Current		Proposed	
Parent*	#	Category| Component | Type			MIN UL	TUL	MAX UL			Years	Rate	Years	Rate
OH	1	Fully Dressed Wood Poles	Overall		35	45	75	1830	Poles, Towers and Fixtures	45	2%	45	2%
			Cross Arm	Wood	20	40	55	1830	Poles, Towers and Fixtures	40	3%	40	3%
				Steel	30	70	95						
	2	Fully Dressed Concrete Poles	Overall		50	60	80	1830	Poles, Towers and Fixtures	60	2%	60	2%
			Cross Arm	Wood	20	40	55	1830	Poles, Towers and Fixtures	40	3%	40	3%
				Steel	30	70	95						
	3	Fully Dressed Steel Poles	Overall		60	60	80						
			Cross Arm	Wood	20	40	55						
				Steel	30	70	95						
	4	OH Line Switch			30	45	55	1835	Overhead Conductors and Devices	45	2%	40	3%
	5	OH Line Switch Motor			15	25	25						
	6	OH Line Switch RTU			15	20	20						
	7	OH Integral Switches			35	45	60	1835	Overhead Conductors and Devices	45	2%	45	2%
	8	OH Conductors			50	60	75	1835	Overhead Conductors and Devices	60	2%	45	2%
	9	OH Transformers & Voltage Regulators			30	40	60	1850	Line Transformers	40	3%	40	3%
	10	OH Shunt Capacitor Banks			25	30	40						
	11	Reclosers			25	40	55						
TS & MS	12	Power Transformers	Overall		30	45	60	1820	Distribution Station Equipment	45	2%	45	2%
			Bushing		10	20	30						
			Tap Changer		20	30	60						
	13	Station Service Transformer			30	45	55	1820	Distribution Station Equipment	45	2%	40	3%
	14	Station Grounding Transformer			30	40	40						
	15	Station DC System	Overall		10	20	30						
			Battery Bank		10	15	15						
			Charger		20	20	30						
	16	Station Metal Clad Switchgear	Overall		30	40	60	1820	Distribution Station Equipment	40	3%	40	3%
			Removable Breaker		25	40	60						
	17	Station Independent Breakers			35	45	65	1820	Distribution Station Equipment	45	2%	40	3%
	18	Station Switch			30	50	60	1820	Distribution Station Equipment	50	2%	50	2%
	19	Electromechanical Relays			25	35	50	1820	Distribution Station Equipment	35	3%	35	3%
	20	Solid State Relays			10	30	45						
	21	Digital & Numeric Relays			15	20	20						
	22	Rigid Busbars			30	55	60						
	23	Steel Structure			35	50	90						
UG	24	Primary Paper Insulated Lead Covered (PILC) Cables			60	65	75						
	25	Primary Ethylene-Propylene Rubber (EPR) Cables			20	25	25						
	26	Primary Non-Tree Retardant (TR) Cross Linked Polyethylene (XLPE) Cables Direct Buried			20	25	30						
	27	Primary Non-TR XLPE Cables in Duct			20	25	30						
	28	Primary TR XLPE Cables Direct Buried			25	30	35						
	29	Primary TR XLPE Cables in Duct			35	40	55	1845	Underground Conductors and Devices	40	3%	40	3%
	30	Secondary PILC Cables			70	75	80						
	31	Secondary Cables Direct Buried			25	35	40	1845	Underground Conductors and Devices	35	3%	42.5	2%
	32	Secondary Cables in Duct			35	40	60	1845	Underground Conductors and Devices	40	3%	40	3%

TABLE 4-42 – APPENDIX 2-BB – SERVICE LIFE COMPARISON (PART II OF II)

	33	Network Tranformers	Overall	20	35	50							
			Protector	20	35	40							
	34	Pad-Mounted Transformers		25	40	45	1850	Line Transformers	40	3%	40	3%
	35	Submersible/Vault Transformers		25	35	45	1850	Line Transformers	35	3%	35	3%
	36	UG Foundation		35	55	70	1845&1850	Underground Conductors and Devices	55	2%	55	2%
	37	UG Vaults	Overall	40	60	80	1850	Line Transformers	60	2%	60	2%
			Roof	20	30	45							
	38	UG Vault Switches		20	35	50	1845	Underground Conductors and Devices	35	3%	35	3%
	39	Pad-Mounted Switchgear		20	30	45	1845	Underground Conductors and Devices	30	3%	30	3%
	40	Ducts		30	50	85	1845	Underground Conductors and Devices	50	2%	50	2%
	41	Concrete Encased Duct Banks		35	55	80	1845	Underground Conductors and Devices	55	2%	55	2%
	42	Cable Chambers		50	60	80							
S	43	Remote SCADA		15	20	30	1975	Load Management Controls - Utility Prem	20	5%	8	13%

Table F-2 from Kinetrics Report[1]

	Asset Details		Useful Life Range	USoA Account Number	USoA Account Description	Current		Proposed	
#	Category| Component | Type					Years	Rate	Years	Rate
1	Office Equipment		5-15	1955&1960	Communication & Misc. Equipment	10	10%	10	10%
2	Vehicles	Trucks & Buckets	5-15	1930	Transportation Equipment	10	10%	10	10%
		Trailers	5-20	1930	Transportation Equipment	12	8%	12	8%
		Vans	5-10	1930	Transportation Equipment	8	13%	8	13%
3	Administrative Buildings		50-75						
4	Leasehold Improvements		Lease dependent	1910	Leasehold Improvements	5	20%	5	20%
5	Station Buildings	Station Buildings	50-75	1808	Buildings and Fixtures	62	2%	62	2%
		Parking	25-30	1808	Buildings and Fixtures	42	2%	42	2%
		Fence	25-60	1808	Buildings and Fixtures	42	2%	42	2%
		Roof	20-30	1808	Buildings and Fixtures	42	2%	42	2%
6	Computer Equipment	Hardware	3-5	1920	Computer Equipment - Hardware	4	25%	4	25%
		Software	2-5	1611	Computer Software	3	33%	3	33%
7	Equipment	Power Operated	5-10						
		Stores	5-10						
		Tools, Shop, Garage Equipment	5-10	1940	Tools, Shop and Garage Equipment	7	14%	7	14%
		Measurement & Testing Equipment	5-10	1945	Measurement and Testing Equipment	7	14%	7	14%
8	Communication	Towers	60-70						
		Wireless	2-10						
9	Residential Energy Meters		25-35	1860	Meters	30	3%	30	3%
10	Industrial/Commercial Energy Meters		25-35	1860	Meters	30	3%	30	3%
11	Wholesale Energy Meters		15-30						
12	Current & Potential Transformer (CT & PT)		35-50	1860	Meters	42	2%	42	2%
13	Smart Meters		5-15	1860	Meters	10	10%	10	10%
14	Repeaters - Smart Metering		10-15						
15	Data Collectors - Smart Metering		15-20						

ASSET RETIREMENT OBLIGATIONS

OPUCN does not have any Asset Retirement Obligations ("AROs"), or associated depreciation or accretion expenses in relation to the AROs, to report as part of this Application.

DETAILS FOR DEPRECIATION, AMORTIZATION AND DEPLETION BY ASSET GROUP

OPUCN has provided details for Depreciation, Amortization and Depletion by asset group for the Historical, Bridge and Test Years, including asset amount and depreciation rate in Appendices 2-CA to 2-CE below (Tables 4-43 to 4-52). These amounts agree to the balances in Appendix 2-BA - Fixed Asset Continuity Schedules provided in Appendix 2-1 of Exhibit 2. Appendices 2-CA to 2-CE have been provided in CGAAP for 2011 and in MIFRS for 2012 to 2019.

TABLE 4-43 – APPENDIX 2-CA - 2011 CGAAP: DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Opening Regulatory Gross PP&E as at Jan 1, 2011 (a)	Less Fully Depreciated (b)	Net for Depreciation (c)	Additions (d)	Total for Depreciation (e) = (c) + ½ x (d) [1]	Years (f)	Depreciation Rate (g) = 1 / (f)	Depreciation Expense (h) = (e) / (f)	2011 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)
1611	Computer Software (Formally known as Account 1925)	235,770	225,929	9,841	395,951	207,817	2	50%	103,909	103,908	0
1612	Land Rights (Formally known as Account 1906)	0		0	0	0		0%	0	0	0
1805	Land	293,875		293,875	0	293,875		0%	0	0	0
1808	Buildings	570,963	41,469	529,494	0	529,494	42	2%	12,607	10,360	2,247
1810	Leasehold Improvements	0		0	0	0		0%	0	0	0
1815	Transformer Station Equipment >50 kV	0		0	0	0		0%	0	0	0
1820	Distribution Station Equipment <50 kV	12,057,872	3,239,548	8,818,324	2,744,991	10,190,820	30	3%	339,694	341,272	(1,578)
1825	Storage Battery Equipment	0		0	0	0		0%	0	0	0
1830	Poles, Towers & Fixtures	0		0	0	0		0%	0	0	0
1835	Overhead Conductors & Devices	50,225,428	8,696,990	41,528,438	3,040,545	43,048,711	27	4%	1,594,397	1,631,888	(37,492)
1840	Underground Conduit	0		0	0	0		0%	0	0	0
1845	Underground Conductors & Devices	63,940,852	11,642,615	52,298,237	3,317,591	53,957,032	23	4%	2,345,958	2,310,962	34,996
1850	Line Transformers	15,755,642	3,250,175	12,505,467	68,951	12,539,942	35	3%	358,284	361,878	(3,594)
1855	Services (Overhead & Underground)	0		0	0	0		0%	0	0	0
1860	Meters	9,133,509	777,566	8,355,943	0	8,355,943	30	3%	278,531	319,708	(41,177)
1860	Meters (Smart Meters)	0		0	6,780,571	3,390,286	10	10%	339,029	877,708	(538,679)
1905	Land	0		0	0	0		0%	0	0	0
1908	Buildings & Fixtures	0		0	0	0		0%	0	0	0
1910	Leasehold Improvements	296,465	124,275	172,190	334,285	339,332	10	10%	33,933	20,314	13,619
1915	Office Furniture & Equipment (5 years)	0		0	0	0		0%	0	0	0
1915	Office Furniture & Equipment (10 years)	707,745	600,028	107,717	10,958	113,196	10	10%	11,320	13,588	(2,268)
1920	Computer Equipment - Hardware	2,074,786	1,904,300	170,486	37,421	189,197	4	25%	47,299	53,177	(5,877)
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0		0	0	0		0%	0	0	0
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0		0	0	0		0%	0	0	0
1930	Transportation Equipment	3,622,595	2,446,926	1,175,669	585,197	1,468,267	8	13%	183,533	179,915	3,619
1935	Stores Equipment	24,516	23,366	1,150	0	1,150	7	14%	164	115	49
1940	Tools, Shop & Garage Equipment	1,415,480	615,228	800,252	110,102	855,303	7	14%	122,186	93,569	28,617
1945	Measurement & Testing Equipment	405,788	330,208	75,580	0	75,580	7	14%	10,797	56,592	(45,795)
1950	Power Operated Equipment	0		0	0	0		0%	0	0	0
1955	Communications Equipment	264,585	96,488	168,097	2,000	169,097	5	20%	33,819	9,611	24,209
1955	Communication Equipment (Smart Meters)	0		0	0	0		0%	0	0	0
1960	Miscellaneous Equipment	23,602	23,602	0	0	0		0%	0	0	0
1970	Load Management Controls Customer Premises	107,035	107,035	(0)	0	(0)		0%	0	0	0
1975	Load Management Controls Utility Premises	1,021,693	490,179	531,514	0	531,514	10	10%	53,151	42,448	10,704
1980	System Supervisor Equipment	293,582	293,582	0	0	0	5	20%	0	0	0
1985	Miscellaneous Fixed Assets	0		0	0	0		0%	0	0	0
1990	Other Tangible Property	0		0	0	0		0%	0	0	0
1995	Contributions & Grants	(28,454,846)	(23,602)	(28,431,244)	(930,791)	(28,896,639)	45	2%	(642,148)	(1,156,810)	514,662
etc.				0		0		0%	0		0
				0		0		0%	0		0
	Total	**134,016,940**	**34,905,907**	99,111,032	16,497,773	107,359,919			5,226,465	5,270,203	(43,738)

TABLE 4-44 – APPENDIX 2-CB - 2011 MIFRS DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Opening NBV as at Jan 1, 2011 [5] (a)	Additions (d)	Average Remaining Life of Opening NBV [4] (i)	Years (new additions only) [3] (f)	Depreciation Rate on New Additions (g) = 1 / (f)	Depreciation Expense on Opening NBV (j) = (a) / (i)	Depreciation Expense on Additions [1] (h)=((d)*0.5)/(f)	2011 Depreciation Expense (k) = (j) + (h)	2011 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (k) - (l)	Depreciation Expense on 2011 Full Year Additions (n) = (d)/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2011 Full Year Depreciation [6] (p) = (j) + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	57,768	395,951	1.5	3	33.33%	**38,512**	**65,992**	**104,504**	103,908	**595**	**131,984**	40,490	**130,006**
1612	Land Rights (Formally known as Account 1906)	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1805	Land	293,875	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1808	Buildings	360,134	0	39.2	62	1.61%	**9,198**	**0**	**9,198**	10,360	**(1,162)**	**0**	(5,037)	**14,236**
1810	Leasehold Improvements	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	5,311,308	2,744,991	17.0	45	2.22%	**312,430**	**30,500**	**342,930**	341,272	**1,658**	**61,000**	118,521	**254,909**
1825	Storage Battery Equipment	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	15,393,255	0	22.0	45	2.22%	**699,693**	**0**	**699,693**	0	**699,693**	**0**	313,314	**386,379**
1835	Overhead Conductors & Devices	7,375,320	3,040,545	23.0	55	1.82%	**320,666**	**27,641**	**348,307**	1,631,888	**(1,283,581)**	**55,283**	172,774	**203,174**
1840	Underground Conduit	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	20,570,108	3,317,591	22.0	38	2.63%	**935,005**	**43,653**	**978,657**	2,310,962	**(1,332,305)**	**87,305**	359,190	**663,120**
1850	Line Transformers	20,271,338	68,951	20.0	40	2.50%	**1,013,567**	**862**	**1,014,429**	361,878	**652,551**	**1,724**	372,956	**642,335**
1855	Services (Overhead & Underground)	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1860	Meters	3,275,990	0	14.0	30	3.33%	**233,999**	**0**	**233,999**	1,197,416	**(963,417)**	**0**	(478,728)	**712,727**
1860	Meters (Smart Meters)	190,564	6,780,571	9.0	10	10.00%	**21,174**	**339,029**	**360,202**	0	**360,202**	**678,057**	711,630	**(12,399)**
1905	Land	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	169,642	334,285	3.0	5	20.00%	**56,547**	**33,428**	**89,976**	20,314	**69,662**	**66,857**	(27,206)	**150,610**
1915	Office Furniture & Equipment (10 years)	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1915	Office Furniture & Equipment (5 years)	43,621	10,958	2.0	5	20.00%	**21,810**	**1,096**	**22,906**	13,588	**9,318**	**2,192**	15,594	**8,408**
1920	Computer Equipment - Hardware	119,693	37,421	3.0	4	25.00%	**39,898**	**4,678**	**44,575**	53,177	**(8,601)**	**9,355**	49,253	**0**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	(57,524)	0		4	25.00%	**0**	**0**	**0**	0	**0**	**0**	(1,209)	**1,209**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	0		4	25.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1930	Transportation Equipment	527,400	585,197	4.0	10	10.00%	**131,850**	**29,260**	**161,110**	179,915	**(18,805)**	**58,520**	89,424	**100,945**
1935	Stores Equipment	403	0	4.0	7	14.29%	**101**	**0**	**101**	115	**(14)**	**0**	(187)	**288**
1940	Tools, Shop & Garage Equipment	670,450	110,102	6.0	7	14.29%	**111,742**	**7,864**	**119,606**	93,569	**26,037**	**15,729**	(83,536)	**211,007**
1945	Measurement & Testing Equipment	212,545	0	5.0	7	14.29%	**42,509**	**0**	**42,509**	56,592	**(14,083)**	**0**	30,099	**12,410**
1950	Power Operated Equipment	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	22,797	2,000	3.0	10	10.00%	**7,599**	**100**	**7,699**	9,611	**(1,911)**	**200**	2,438	**5,361**
1955	Communication Equipment (Smart Meters)	0	0		10	10.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1960	Miscellaneous Equipment	35,809	0	5.0	10	10.00%	**7,162**	**0**	**7,162**	0	**7,162**	**0**	(9,087)	**16,249**
1970	Load Management Controls Customer Premises	70,871	0	10.0	20	5.00%	**7,087**	**0**	**7,087**	0	**7,087**	**0**	7,087	**0**
1975	Load Management Controls Utility Premises	321,804	0	12.0	20	5.00%	**26,817**	**0**	**26,817**	42,448	**(15,631)**	**0**	9,323	**17,494**
1980	System Supervisor Equipment	(1)	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0	0			0.00%	**0**	**0**	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	(22,617,001)	(930,791)	20.0	45	2.22%	**(1,130,850)**	**(10,342)**	**(1,141,192)**	(1,156,810)	**15,617**	**(20,684)**	(596,796)	**(554,738)**
etc.		0	0			0.00%	**0**	**0**	**0**		**0**	**0**		**0**
						0.00%	**0**	**0**	**0**		**0**	**0**		**0**
	Total	**52,620,170**	**16,497,773**				**2,906,516**	**573,760**	**3,480,276**	**5,270,203**	**(1,789,927)**	**1,147,520**	**1,090,306**	**2,963,730**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)								0					
	Total								**3,480,276**					

TABLE 4-45 – APPENDIX 2-CC - 2012 MIFRS DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2012 Depreciation Expense [1] (h)=2011 Full Year Deprecation + ((d)*0.5)/(f)	2012 Depreciation Expense per Apppendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)	Depreciation Expense on 2012 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2012 Full Year Depreciation [3] (p) = 2011 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	459,115	3	33.33%	**206,525**	206,525	**0**	**153,038**	2,464	**280,580**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**14,236**	14,236	**0**	**0**	0	**14,236**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	4,461,905	45	2.22%	**304,486**	304,486	**0**	**99,153**	52	**354,010**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	1,593,281	45	2.22%	**404,082**	404,082	**0**	**35,406**	0	**421,786**
1835	Overhead Conductors & Devices	806,545	55	1.82%	**210,507**	210,507	**0**	**14,664**	111	**217,728**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	878,003	38	2.63%	**674,673**	674,673	**0**	**23,105**	1,981	**684,244**
1850	Line Transformers	1,865,329	40	2.50%	**665,651**	665,651	**0**	**46,633**	0	**688,968**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1860	Meters	0	30	3.33%	**712,727**	712,727	**0**	**0**	609	**712,118**
1860	Meters (Smart Meters)	247,975	10	10.00%	**0**	0	**0**	**24,798**		**12,399**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	200,046	5	20.00%	**170,615**	170,615	**0**	**40,009**	1,402	**189,218**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**0**	0	**0**	**0**	978	**(978)**
1915	Office Furniture & Equipment (5 years)	6,911	10	10.00%	**8,754**	8,754	**0**	**691**		**9,099**
1920	Computer Equipment - Hardware	0	4	25.00%	**0**	0	**0**	**0**	3,008	**(3,008)**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	129,776	4	25.00%	**17,430**	17,430	**0**	**32,444**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	1,405,317	10	10.00%	**171,211**	171,211	**0**	**140,532**	0	**241,477**
1935	Stores Equipment	0	7	14.29%	**288**	288	**0**	**0**	288	**0**
1940	Tools, Shop & Garage Equipment	84,728	7	14.29%	**217,059**	217,059	**0**	**12,104**	42,543	**180,567**
1945	Measurement & Testing Equipment	14,905	7	14.29%	**13,475**	13,475	**0**	**2,129**	0	**14,539**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	147,267	10	10.00%	**12,724**	12,724	**0**	**14,727**	19	**20,068**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	62,078	10	10.00%	**19,353**	19,353	**0**	**6,208**	3,313	**19,144**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	20	5.00%	**17,494**	17,494	**0**	**0**	0	**17,494**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	(1,271,166)	45	2.22%	**(568,862)**	(572,038)	**3,176**	**(28,248)**	(642)	**(582,344)**
	Total	**11,092,013**			**3,272,427**	**3,269,251**	**3,176**	**617,394**	**56,126**	**3,524,998**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(3,176)					
	Total				**3,269,251**					

TABLE 4-46 – APPENDIX 2-CD – 2013 MIFRS DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2013 Depreciation Expense [1] (h)=2012 Full Year Deprecation + ((d)*0.5)/(f)	2013 Depreciation Expense per Apppendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)	Depreciation Expense on 2013 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2013 Full Year Depreciation [3] (p) = 2012 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	377,372	3	33.33%	**343,476**	366,622	**(23,146)**	**125,791**	0	**406,371**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**14,236**	14,197	**39**	**0**	0	**14,236**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	3,998	45	2.22%	**354,055**	322,548	**31,507**	**89**	0	**354,099**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	4,590,574	45	2.22%	**472,792**	481,215	**(8,423)**	**102,013**	0	**523,798**
1835	Overhead Conductors & Devices	1,587,521	55	1.82%	**232,160**	268,031	**(35,871)**	**28,864**	0	**246,592**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	2,500,792	38	2.63%	**717,149**	803,428	**(86,279)**	**65,810**	220	**749,834**
1850	Line Transformers	2,370,264	40	2.50%	**718,596**	738,775	**(20,179)**	**59,257**	0	**748,225**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1860	Meters	57,203	30	3.33%	**713,072**	0	**713,072**	**1,907**	491	**713,534**
1860	Meters (Smart Meters)	514,823	10	10.00%	**38,140**	747,565	**(709,425)**	**51,482**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	18,265	5	20.00%	**191,044**	153,806	**37,238**	**3,653**	39,781	**153,090**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(978)**	0	**(978)**	**0**	3,777	**(4,754)**
1915	Office Furniture & Equipment (5 years)	31,131	10	10.00%	**10,656**	9,661	**995**	**3,113**		**12,213**
1920	Computer Equipment - Hardware	241,584	4	25.00%	**27,190**	86,794	**(59,604)**	**60,396**	11,294	**46,093**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	17,542	10	10.00%	**242,354**	274,279	**(31,925)**	**1,754**	3,470	**239,761**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	112,253	7	14.29%	**188,586**	200,143	**(11,557)**	**16,036**	55,988	**140,615**
1945	Measurement & Testing Equipment	19,169	7	14.29%	**15,909**	14,792	**1,117**	**2,738**	0	**17,278**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	4,280	10	10.00%	**20,282**	20,482	**(200)**	**428**	4,628	**15,868**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**19,144**	19,187	**(43)**	**0**	6,430	**12,714**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	20	5.00%	**17,494**	17,447	**47**	**0**	0	**17,494**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	(1,699,267)	45	2.22%	**(601,225)**	(687,172)	**85,947**	**(37,761)**	(1,934)	**(618,172)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**10,747,504**			**3,767,783**	**3,851,800**	**(84,017)**	**485,570**	**124,146**	**3,886,421**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				84,017					
	Total				**3,851,800**					

TABLE 4-47 – APPENDIX 2-CE - 2014 MIFRS BRIDGE YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2014 Depreciation Expense [1] (h)=2013 Full Year Depreciation + ((d)*0.5)/(f)	2014 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)	Depreciation Expense on 2014 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2014 Full Year Depreciation [3] (p) = 2013 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	354,000	3	33.33%	**465,371**	406,214	**59,157**	**118,000**	89,202	**435,169**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**14,236**	14,197	**39**	**0**	0	**14,236**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	1,083,303	45	2.22%	**366,136**	390,557	**(24,421)**	**24,073**	4,735	**373,437**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	2,927,293	45	2.22%	**556,324**	554,572	**1,752**	**65,051**	16,001	**572,848**
1835	Overhead Conductors & Devices	2,386,694	55	1.82%	**268,289**	252,090	**16,199**	**43,394**	8,872	**281,114**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	3,626,126	38	2.63%	**797,546**	817,879	**(20,332)**	**95,424**	9,292	**835,967**
1850	Line Transformers	490,969	40	2.50%	**754,362**	774,738	**(20,376)**	**12,274**	2,174	**758,325**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1860	Meters	275,544	30	3.33%	**718,126**	776,351	**(58,225)**	**9,185**	552	**722,167**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	180,000	5	20.00%	**171,090**	133,851	**37,238**	**36,000**	4,687	**184,402**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(4,754)**	0	**(4,754)**	**0**	1,382	**(6,136)**
1915	Office Furniture & Equipment (5 years)	20,000	10	10.00%	**13,213**	7,441	**5,772**	**2,000**		**14,213**
1920	Computer Equipment - Hardware	186,000	4	25.00%	**69,343**	128,947	**(59,604)**	**46,500**	0	**92,593**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	52,906	10	10.00%	**242,406**	274,109	**(31,703)**	**5,291**	0	**245,051**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	136,397	7	14.29%	**150,358**	176,452	**(26,094)**	**19,485**	42,816	**117,284**
1945	Measurement & Testing Equipment	9,933	7	14.29%	**17,987**	16,817	**1,171**	**1,419**	41	**18,656**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	0	10	10.00%	**15,868**	15,854	**14**	**0**	0	**15,868**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**12,714**	12,757	**(43)**	**0**	0	**12,714**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**17,494**	17,447	**48**	**0**	0	**17,494**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(618,172)**	(706,399)	**88,227**	**0**	(80)	**(618,092)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**11,729,165**			**4,125,470**	**4,063,873**	**61,596**	**478,097**	**179,674**	**4,184,844**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(61,596)					
	Total Depreciation expense to be included in the test year revenue requirement				**4,063,873**					

TABLE 4-48 – APPENDIX 2-CE - 2015 MIFRS TEST YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2015 Depreciation Expense 1 (h)=2014 Full Year Depreciation + ((d)*0.5)/(f)	2015 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)	Depreciation Expense on 2015 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2015 Full Year Depreciation [3] (p) = 2014 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	739,565	3	33.33%	**558,430**	433,162	**125,268**	**246,522**	64,648	**617,043**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	750,000	62	1.61%	**20,284**	20,245	**39**	**12,097**	2,264	**24,068**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	1,820,436	45	2.22%	**393,664**	455,298	**(61,634)**	**40,454**	5,731	**408,160**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**		**0**
1830	Poles, Towers & Fixtures	3,293,076	45	2.22%	**609,438**	609,644	**(206)**	**73,179**	30,276	**615,751**
1835	Overhead Conductors & Devices	1,806,925	55	1.82%	**297,541**	352,536	**(54,995)**	**32,853**	15,942	**298,025**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**		**0**
1845	Underground Conductors & Devices	2,940,615	38	2.63%	**874,659**	824,580	**50,079**	**77,385**	17,522	**895,829**
1850	Line Transformers	461,496	40	2.50%	**764,094**	784,527	**(20,434)**	**11,537**	4,245	**765,617**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**		**0**
1860	Meters	612,278	30	3.33%	**732,371**	805,129	**(72,758)**	**20,409**	4,670	**737,906**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	247,500	5	20.00%	**209,152**	171,269	**37,883**	**49,500**	0	**233,902**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(6,136)**	0	**(6,136)**	**0**	240	**(6,377)**
1915	Office Furniture & Equipment (5 years)	27,500	10	10.00%	**15,588**	9,434	**6,154**	**2,750**		**16,963**
1920	Computer Equipment - Hardware	266,511	4	25.00%	**125,907**	180,849	**(54,942)**	**66,628**	8,196	**151,026**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	420,000	10	10.00%	**266,051**	293,863	**(27,811)**	**42,000**	12,745	**274,307**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	112,216	7	14.29%	**125,300**	147,464	**(22,164)**	**16,031**	17,064	**116,252**
1945	Measurement & Testing Equipment	11,781	7	14.29%	**19,497**	18,346	**1,151**	**1,683**	2,077	**18,261**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	0	10	10.00%	**15,868**	15,854	**14**	**0**	0	**15,868**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**12,714**	12,757	**(43)**	**0**	0	**12,714**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**17,494**	58,017	**(40,523)**	**0**	0	**17,494**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(618,092)**	(701,387)	**83,295**	**0**	(6,708)	**(611,384)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**13,509,900**			**4,531,358**	**4,491,588**	**39,771**	**693,028**	**178,912**	**4,698,960**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(39,771)					
	Total Depreciation expense to be included in the test year revenue requirement				**4,491,588**					

TABLE 4-49 – APPENDIX 2-CE - 2016 MIFRS TEST YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2016 Depreciation Expense 1 (h)=2015 Full Year Depreciation + ((d)*0.5)/(f)	2016 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance 2 (m) = (h) - (l)	Depreciation Expense on 2016 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2016 Full Year Depreciation 3 (p) = 2015 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	445,026	3	33.33%	**691,214**	502,319	**188,895**	**148,342**	63,627	**701,759**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	1,000,000	62	1.61%	**32,133**	32,094	**39**	**16,129**	0	**40,197**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	2,209,912	45	2.22%	**432,715**	503,368	**(70,653)**	**49,109**	8,041	**449,229**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**		**0**
1830	Poles, Towers & Fixtures	2,465,328	45	2.22%	**643,144**	664,493	**(21,349)**	**54,785**	39,578	**630,959**
1835	Overhead Conductors & Devices	1,330,295	55	1.82%	**310,118**	383,286	**(73,168)**	**24,187**	20,703	**301,509**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**		**0**
1845	Underground Conductors & Devices	2,293,927	38	2.63%	**926,012**	883,051	**42,962**	**60,366**	24,161	**932,035**
1850	Line Transformers	403,769	40	2.50%	**770,664**	793,616	**(22,952)**	**10,094**	5,889	**769,822**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**		**0**
1860	Meters	615,546	30	3.33%	**748,165**	849,076	**(100,911)**	**20,518**	7,825	**750,599**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	90,000	5	20.00%	**242,902**	171,591	**71,312**	**18,000**	42,418	**209,485**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(6,377)**	0	**(6,377)**	**0**	0	**(6,377)**
1915	Office Furniture & Equipment (5 years)	10,000	10	10.00%	**17,463**	11,069	**6,394**	**1,000**		**17,963**
1920	Computer Equipment - Hardware	172,405	4	25.00%	**172,576**	211,296	**(38,720)**	**43,101**	16,222	**177,905**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	415,000	10	10.00%	**295,057**	324,118	**(29,061)**	**41,500**	0	**315,807**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	113,630	7	14.29%	**124,368**	121,070	**3,299**	**16,233**	5,867	**126,618**
1945	Measurement & Testing Equipment	62,162	7	14.29%	**22,702**	21,581	**1,120**	**8,880**	100	**27,042**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	0	10	10.00%	**15,868**	15,854	**14**	**0**	0	**15,868**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**12,714**	11,074	**1,640**	**0**	0	**12,714**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**17,494**	46,497	**(29,003)**	**0**	45,562	**(28,068)**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(611,384)**	(698,115)	**86,731**	**0**	(19)	**(611,365)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**$ 11,627,000**			**4,955,083**	**4,847,338**	**107,745**	**512,246**	**279,973**	**4,931,233**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(107,745)					
	Total Depreciation expense to be included in the test year revenue requirement				**4,847,338**					

TABLE 4-50 – APPENDIX 2-CE - 2017 MIFRS TEST YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2017 Depreciation Expense 1 (h)=2016 Full Year Depreciation + ((d)*0.5)/(f)	2017 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (I)	Variance [2] (m) = (h) - (I)	Depreciation Expense on 2017 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2017 Full Year Depreciation [3] (p) = 2012 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	135,847	3	33.33%	**724,400**	476,505	**247,895**	**45,282**	0	**747,041**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**40,197**	40,158	**39**	**0**	0	**40,197**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	3,752,553	45	2.22%	**490,924**	576,258	**(85,334)**	**83,390**	9,681	**522,938**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**		**0**
1830	Poles, Towers & Fixtures	2,513,403	45	2.22%	**658,885**	715,642	**(56,757)**	**55,853**	43,827	**642,985**
1835	Overhead Conductors & Devices	1,678,904	55	1.82%	**316,771**	415,322	**(98,550)**	**30,526**	23,041	**308,993**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**		**0**
1845	Underground Conductors & Devices	2,343,596	38	2.63%	**962,872**	933,285	**29,586**	**61,674**	30,968	**962,740**
1850	Line Transformers	427,447	40	2.50%	**775,165**	801,198	**(26,032)**	**10,686**	6,931	**773,577**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**		**0**
1860	Meters	748,515	30	3.33%	**763,074**	898,798	**(135,724)**	**24,951**	11,694	**763,855**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	45,000	5	20.00%	**213,985**	127,163	**86,822**	**9,000**	15,510	**202,975**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(6,377)**	0	**(6,377)**	**0**	1	**(6,378)**
1915	Office Furniture & Equipment (5 years)	5,000	10	10.00%	**18,213**	11,387	**6,825**	**500**		**18,463**
1920	Computer Equipment - Hardware	98,267	4	25.00%	**190,189**	198,711	**(8,522)**	**24,567**	30,198	**172,274**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	440,000	10	10.00%	**337,807**	335,065	**2,741**	**44,000**	172	**359,635**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	111,444	7	14.29%	**134,578**	117,558	**17,020**	**15,921**	4,082	**138,457**
1945	Measurement & Testing Equipment	72,023	7	14.29%	**32,186**	23,646	**8,541**	**10,289**	155	**37,176**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	0	10	10.00%	**15,868**	15,854	**14**	**0**	0	**15,868**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**12,714**	6,299	**6,414**	**0**	738	**11,976**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**(28,068)**	790	**(28,858)**	**0**	0	**(28,068)**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(611,365)**	(692,669)	**81,304**	**0**	(4)	**(611,361)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**$ 12,372,000**			**5,139,552**	**5,000,972**	**138,580**	**416,638**	**176,995**	**5,170,876**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(138,580)					
	Total Depreciation expense to be included in the test year revenue requirement				**5,000,972**					

TABLE 4-51 – APPENDIX 2-CE– 2018 MIFRS TEST YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2018 Depreciation Expense 1 (h)=2017 Full Year Depreciation + ((d)*0.5)/(f)	2018 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (l)	Variance [2] (m) = (h) - (l)	Depreciation Expense on 2018 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2018 Full Year Depreciation [3] (p) = 2012 Full Year Depreciation + (n) - (o)
1611	Computer Software (Formally known as Account 1925)	242,233	3	33.33%	**787,413**	357,257	**430,156**	**80,744**	0	**827,785**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**40,197**	40,158	**39**	**0**	0	**40,197**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	1,509,126	45	2.22%	**539,706**	640,394	**(100,688)**	**33,536**	11,317	**545,157**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	2,768,562	45	2.22%	**673,747**	765,551	**(91,804)**	**61,524**	52,281	**652,228**
1835	Overhead Conductors & Devices	1,960,089	55	1.82%	**326,812**	452,569	**(125,756)**	**35,638**	27,699	**316,932**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	4,137,983	38	2.63%	**1,017,187**	1,008,014	**9,173**	**108,894**	38,192	**1,033,442**
1850	Line Transformers	467,856	40	2.50%	**779,425**	808,842	**(29,417)**	**11,696**	8,636	**776,637**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1860	Meters	602,576	30	3.33%	**773,898**	949,960	**(176,062)**	**20,086**	15,576	**768,365**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	45,000	5	20.00%	**207,475**	118,827	**88,648**	**9,000**	1,827	**210,148**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(6,378)**	0	**(6,378)**	**0**	0	**(6,378)**
1915	Office Furniture & Equipment (5 years)	5,000	10	10.00%	**18,713**	11,848	**6,864**	**500**		**18,963**
1920	Computer Equipment - Hardware	261,160	4	25.00%	**204,919**	190,191	**14,728**	**65,290**	0	**237,564**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	190,000	10	10.00%	**369,135**	366,143	**2,991**	**19,000**	0	**378,635**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	118,548	7	14.29%	**146,924**	119,736	**27,188**	**16,935**	22,101	**133,291**
1945	Measurement & Testing Equipment	135,915	7	14.29%	**46,884**	38,436	**8,449**	**19,416**	176	**56,416**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	31,950	10	10.00%	**17,466**	17,452	**14**	**3,195**	2,646	**16,418**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**11,976**	6,286	**5,689**	**0**	0	**11,976**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**(28,068)**	0	**(28,068)**	**0**	0	**(28,068)**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(611,361)**	(688,593)	**77,232**	**0**	(4,923)	**(606,437)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**$ 12,476,000**			**5,413,604**	**5,203,071**	**210,533**	**485,456**	**175,527**	**5,480,805**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(210,533)					
	Total Depreciation expense to be included in the test year revenue requirement				**5,203,071**					

TABLE 4-52– APPENDIX 2-CE – 2019 MIFRS TEST YEAR DEPRECIATION AND AMORTIZATION EXPENSE

Account	Description	Additions (d)	Years (new additions only) (f)	Depreciation Rate on New Additions (g) = 1 / (f)	2019 Depreciation Expense 1 (h)=2018 Full Year Depreciation + ((d)*0.5)/(f)	2019 Depreciation Expense per Appendix 2-B Fixed Assets, Column K (I)	Variance [2] (m) = (h) - (I)	Depreciation Expense on 2019 Full Year Additions (n)=((d))/(f)	Less Depreciation Expense on Assets Fully Depreciated during the year (o)	2019 Full Year Depreciation [3]
1611	Computer Software (Formally known as Account 1925)	194,233	3	33.33%	**860,158**	232,570	**627,588**	**64,744**	0	**892,530**
1612	Land Rights (Formally known as Account 1906)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1805	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1808	Buildings	0	62	1.61%	**40,197**	40,158	**39**	**0**	0	**40,197**
1810	Leasehold Improvements	0		0.00%	**0**	0	**0**	**0**	0	**0**
1815	Transformer Station Equipment >50 kV	0		0.00%	**0**	0	**0**	**0**	0	**0**
1820	Distribution Station Equipment <50 kV	2,506,205	45	2.22%	**573,004**	686,847	**(113,843)**	**55,693**	15,055	**585,795**
1825	Storage Battery Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1830	Poles, Towers & Fixtures	2,553,440	45	2.22%	**680,599**	817,672	**(137,073)**	**56,743**	59,002	**649,969**
1835	Overhead Conductors & Devices	1,658,650	55	1.82%	**332,011**	490,445	**(158,434)**	**30,157**	31,289	**315,800**
1840	Underground Conduit	0		0.00%	**0**	0	**0**	**0**	0	**0**
1845	Underground Conductors & Devices	2,204,630	38	2.63%	**1,062,450**	1,081,624	**(19,174)**	**58,017**	44,755	**1,046,703**
1850	Line Transformers	439,264	40	2.50%	**782,128**	816,309	**(34,181)**	**10,982**	10,065	**777,553**
1855	Services (Overhead & Underground)	0		0.00%	**0**	0	**0**	**0**	0	**0**
1860	Meters	602,200	30	3.33%	**778,402**	985,260	**(206,858)**	**20,073**	28,024	**760,414**
1860	Meters (Smart Meters)	0	10	10.00%	**63,881**	0	**63,881**	**0**		**63,881**
1905	Land	0		0.00%	**0**	0	**0**	**0**	0	**0**
1908	Buildings & Fixtures	0		0.00%	**0**	0	**0**	**0**	0	**0**
1910	Leasehold Improvements	45,000	5	20.00%	**214,648**	126,000	**88,648**	**9,000**	0	**219,148**
1915	Office Furniture & Equipment (10 years)	0		0.00%	**(6,378)**	0	**(6,378)**	**0**	0	**(6,378)**
1915	Office Furniture & Equipment (5 years)	5,000	10	10.00%	**19,213**	12,214	**6,999**	**500**		**19,463**
1920	Computer Equipment - Hardware	99,160	4	25.00%	**249,959**	178,667	**71,292**	**24,790**	0	**262,354**
1920	Computer Equip.-Hardware(Post Mar. 22/04)	0	4	25.00%	**33,652**	0	**33,652**	**0**		**33,652**
1920	Computer Equip.-Hardware(Post Mar. 19/07)	0	4	25.00%	**0**	0	**0**	**0**		**0**
1930	Transportation Equipment	170,000	10	10.00%	**387,135**	384,165	**2,970**	**17,000**	169	**395,466**
1935	Stores Equipment	0	7	14.29%	**0**	0	**0**	**0**	0	**0**
1940	Tools, Shop & Garage Equipment	115,431	7	14.29%	**141,536**	115,985	**25,551**	**16,490**	11,959	**137,822**
1945	Measurement & Testing Equipment	135,836	7	14.29%	**66,119**	57,291	**8,828**	**19,405**	758	**75,063**
1950	Power Operated Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1955	Communications Equipment	31,950	10	10.00%	**18,015**	20,647	**(2,632)**	**3,195**	0	**19,613**
1955	Communication Equipment (Smart Meters)	0	10	10.00%	**0**	0	**0**	**0**		**0**
1960	Miscellaneous Equipment	0	10	10.00%	**11,976**	6,286	**5,689**	**0**	0	**11,976**
1970	Load Management Controls Customer Premises	0	20	5.00%	**0**	0	**0**	**0**	0	**0**
1975	Load Management Controls Utility Premises	0	8	12.50%	**(28,068)**	0	**(28,068)**	**0**	0	**(28,068)**
1980	System Supervisor Equipment	0		0.00%	**0**	0	**0**	**0**	0	**0**
1985	Miscellaneous Fixed Assets	0		0.00%	**0**	0	**0**	**0**	0	**0**
1990	Other Tangible Property	0		0.00%	**0**	0	**0**	**0**	0	**0**
1995	Contributions & Grants	0	45	2.22%	**(606,437)**	(681,444)	**75,007**	**0**	(2,867)	**(603,571)**
etc.				0.00%	**0**		**0**	**0**		**0**
				0.00%	**0**		**0**	**0**		**0**
	Total	**$ 10,761,000**			**5,674,200**	**5,370,697**	**303,503**	**386,790**	**198,211**	**5,669,384**
	Depreciation exp. adj. from gain or loss on the retirement of assets (pool of like assets)				(303,503)					
	Total Depreciation expense to be included in the test year revenue requirement				**5,370,697**					

PAYMENTS IN LIEU OF CORPORATE TAXES CALCULATION AND PROPERTY TAX

OPUCN is liable for the payment of PILs on its taxable income computed in accordance with Section 93 of the *Electricity Act* 1998 (Ontario) as amended. OPUCN is exempt from paying income taxes under the *Income Tax Act* (Canada) and the *Corporations Tax Act* (Ontario). OPUCN proposed 2015 Test Year PILs are $148,243, a decrease of $100,241 or 40.3% as compared to the 2012 COS Board-Approved allowance for PILs. This reduction is primarily due to increased timing differences between depreciation of assets for accounting purposes and depreciation of assets for income tax purposes (Capital Cost Allowance or "CCA") driven by high levels of capital expenditure. OPUCN follows the guidance as specified in the Board's Accounting Procedures Handbook. Due to significant capital investments in recent years and the disparity between useful asset lives for taxation as compared to accounting, CCA materially exceeds depreciation creating timing differences which reduces the effective amount of PILs payable on taxable income well below the amount otherwise computed by applying the combined federal and Ontario rates of PILs to regulatory income before PILs.

Table 4-53 below provides a summary by year of PILs payable for the years 2011 to 2019.

TABLE 4-53 – PILS PAYABLE 2011 – 2019

Year	PILs
2011 Actual	$1,826,054
2012 Board Approved	$248,484
2012 Actual	$69,600
2013 Actual	$149,015
2014 Bridge Year	$122,986
2015 Test Year	$148,243
2016 Test Year	$303,736
2017 Test Year	$365,184
2018 Test Year	$468,774
2019 Test Year	$485,017

Tables 4-54 and 4-55 below provide summary details behind the PILs calculations, including adjustments to taxable income, for the years 2011 to 2019.

TABLE 4-54 – TAX CALCULATIONS 2011 – 2014

Description		2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Bridge
Net Income Before Taxes (Return on Equity)		6,053,748	3,045,203	3,563,158	3,063,500	2,428,803
Tax Adjustments to Accounting Income (Detail below)		764,481	(1,756,692)	(2,306,945)	(2,130,679)	(1,832,629)
Regulatory Taxable Income	A	6,818,229	1,288,511	1,256,213	932,821	596,175
Ontario Income Taxes	B	11.75%	11.25%	11.50%	11.50%	11.50%
Income tax payable	C = A * B	801,142	144,957	144,464	107,274	68,560
Ontario Small Business Threshold	D	500,000	500,000	500,000	500,000	500,000
Rate reduction	E	-7.25%	-6.75%	-7.00%	-7.00%	-7.00%
Ontario Small business credit	F = D * E	(36,250)	(33,750)	(35,000)	(35,000)	(35,000)
CMT	G			30,000		
Ontario Income tax	J = C + F + G	764,892	111,207	139,464	72,274	33,560
Combined Tax Rate and PILs						
Effective Ontario Tax Rate	K = J / A	11.22%	8.63%	11.10%	7.75%	5.63%
Federal tax rate	L	16.50%	15.00%	15.00%	15.00%	15.00%
Combined tax rate	M = L + L	27.72%	23.63%	26.10%	22.75%	20.63%
Total Income Taxes	N = A * M	1,889,900	304,484	327,896	212,198	122,986
Investment Tax Credits	O	63,846	0	227,269	59,183	0
Miscellaneous Tax Credits	P	0	56,000	31,027	4,000	0
Total Tax Credits	Q = O + P	63,846	56,000	258,296	63,183	0
Corporate PILs/Income Tax Provision for Year	R = N - Q	1,826,054	248,484	69,600	149,015	122,986
Corporate PILs/Income Tax Provision Gross Up [1]	S = 1 - M	n/a	76.37%	n/a	n/a	n/a
	T = R / S - N	0	76,888	0	0	0
Income Tax (grossed-up) -Test Years Only	U = R + T	**1,826,054**	**325,372**	**69,600**	**149,015**	**122,986**

Adjustments to Taxable Income

Description	2011 Actual	2012 Board Approved	2012 Actual	2013 Actual	2014 Bridge
Additions to Accounting Income:					
Amortization of tangible assets	5,076,100	3,076,184	3,269,200	3,851,800	4,063,873
Amortization of MIFRS PP&E Deferral Account	0	(218,490)	(237,300)	(199,656)	(218,490)
Reserves from financial statements- balance at end of year	11,053,051	11,243,273	11,632,961	12,047,773	11,868,800
Loss on disposal of assets	0	0	78,877	208,000	302,875
SR&ED expenditures deducted on financial statements	0	0	463,987	136,113	0
Recapture of SR&ED expenditures	217,314	0	0	12,854	0
Apprenticeship Tax Credits	3,045	56,000	31,222	0	0
Other Additions	32,241	0	52,438	98,840	23,144
Total Additions	16,381,751	14,156,967	15,291,385	16,155,723	16,040,202
Deductions from Accounting Income:					
Capital cost allowance from Schedule 8	4,799,454	5,182,386	5,856,744	6,437,002	5,751,725
Reserves from financial statements - opening balance	10,282,728	10,731,273	11,053,051	11,632,961	12,047,773
SR&ED expenses claimed in year	143,088	0	594,885	0	0
Capitalized Interest	245,400	0	90,821	107,078	73,333
Gain on disposal of assets	141,000	0	0	0	0
ITC's recorded for accounting	0	0	0	111,362	0
Other Deductions	5,600	0	2,829	(2,000)	0
Total Deductions	15,617,270	15,913,659	17,598,330	18,286,402	17,872,831
Tax Adjustments to Accounting Income	764,481	(1,756,692)	(2,306,945)	(2,130,679)	(1,832,629)

TABLE 4-55 – TAX CALCULATIONS 2015 – 2019

Description		2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Net Income Before Taxes (Return on Equity)		3,905,649	4,198,129	4,459,929	4,729,159	4,955,089
Tax Adjustments to Accounting Income (Detail below)		(3,176,430)	(2,882,143)	(2,912,063)	(2,790,390)	(2,955,025)
Regulatory Taxable Income	A	729,220	1,315,986	1,547,865	1,938,770	2,000,064
Ontario Income Taxes	B	11.50%	11.50%	11.50%	11.50%	11.50%
Income tax payable	C = A * B	83,860	151,338	178,005	222,959	230,007
Ontario Small Business Threshold	D	500,000	500,000	500,000	500,000	500,000
Rate reduction	E	-7.00%	-7.00%	-7.00%	-7.00%	-7.00%
Ontario Small business credit	F = D * E	(35,000)	(35,000)	(35,000)	(35,000)	(35,000)
CMT	G					
Ontario Income tax	J = C + F + G	48,860	116,338	143,005	187,959	195,007
Combined Tax Rate and PILs						
Effective Ontario Tax Rate	K = J / A	6.70%	8.84%	9.24%	9.69%	9.75%
Federal tax rate	L	15.00%	15.00%	15.00%	15.00%	15.00%
Combined tax rate	M = L + L	21.70%	23.84%	24.24%	24.69%	24.75%
Total Income Taxes	N = A * M	158,243	313,736	375,184	478,774	495,017
Investment Tax Credits	O	5,000	5,000	5,000	5,000	5,000
Miscellaneous Tax Credits	P	5,000	5,000	5,000	5,000	5,000
Total Tax Credits	Q = O + P	10,000	10,000	10,000	10,000	10,000
Corporate PILs/Income Tax Provision for Year	R = N - Q	148,243	303,736	365,184	468,774	485,017
Corporate PILs/Income Tax Provision Gross Up [1]	S = 1 - M	78.30%	76.16%	75.76%	75.31%	75.25%
	T = R / S - N	41,085	95,079	116,836	153,724	159,524
Income Tax (grossed-up) -Test Years Only	U = R + T	**189,328**	**398,815**	**482,020**	**622,498**	**644,541**

Adjustments to Taxable Income

Description	2015 Test	2016 Test	2017 Test	2018 Test	2019 Test
Additions to Accounting Income:					
Amortization of tangible assets	4,491,588	4,847,338	5,000,972	5,203,071	5,370,697
Amortization of MIFRS PP&E Deferral Account	(595,125)	0	0	0	0
Reserves from financial statements- balance at end of year	11,868,800	11,868,800	11,868,800	11,868,800	11,868,800
Loss on disposal of assets	396,446	265,096	182,214	403,265	381,240
SR&ED expenditures deducted on financial statements	0	0	0	0	0
Recapture of SR&ED expenditures	0	0	0	0	0
Apprenticeship Tax Credits	5,000	5,000	5,000	5,000	5,000
Other Additions	23,144	23,144	23,144	23,144	23,144
Total Additions	16,189,853	17,009,379	17,080,130	17,503,280	17,648,881
Deductions from Accounting Income:					
Capital cost allowance from Schedule 8	7,424,149	7,949,389	8,050,060	8,351,536	8,661,772
Reserves from financial statements - opening balance	11,868,800	11,868,800	11,868,800	11,868,800	11,868,800
SR&ED expenses claimed in year	0	0	0	0	0
Capitalized Interest	73,333	73,333	73,333	73,333	73,333
Gain on disposal of assets	0	0	0	0	0
ITC's recorded for accounting	0	0	0	0	0
Other Deductions	0	0	0	0	0
Total Deductions	19,366,283	19,891,522	19,992,193	20,293,669	20,603,906
Tax Adjustments to Accounting Income	(3,176,430)	(2,882,143)	(2,912,063)	(2,790,390)	(2,955,025)

Tables 4-56 to 4-58 provide details behind the calculation of Capita Cost Allowance ("CCA") for each of the years 2011 through to 2019.

TABLE 4-56 –CCA CALCULATIONS 2011 – 2013 ACTUAL

2011 Actual

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	43,616,635	0	0	0	0	43,616,635	4.0%	1,744,665	41,871,970
8	Office Equip, other machinery & Equip.	900,614	123,060	0	0	61,530	962,144	20.0%	192,429	831,245
10	Rolling stock, computer hardware	514,817	573,908	(44,398)	94,000	239,954	710,373	30.0%	213,112	737,215
10.1	Chevrolet Volt	0	31,500	0	0	15,750	15,750	30.0%	4,725	26,775
12	Computer software	0	395,951	0	0	197,976	197,976	100.0%	197,976	197,976
13	Leasehold Improvements - Straight Line	0	334,285	0	0	167,143	167,143	16.7%	27,857	306,428
42	Fibre optics	38,671	0	0	0	0	38,671	12.0%	4,641	34,030
45	Computer hardware- accelerated	20,859	0	0	0	0	20,859	45.0%	9,387	11,472
45.1	Computers-1921	17,795	0	0	0	0	17,795	55.0%	9,787	8,008
47	Transmission/Distribution equip	22,915,461	14,776,457	0	1,961,287	6,407,585	29,323,046	8.0%	2,345,844	33,384,787
50	Gen. Purpose DP equip/sw	8,426	0	0	0	0	8,426	55.0%	4,634	3,792
52	Gen. Purpose DP equip/sw (pre2009)	0	0	44,398	0	0	44,398	100.0%	44,398	0
Total		68,033,278	16,235,161	0	2,055,287	7,089,937	75,123,215		4,799,454	77,413,698

2012 Actual

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	41,871,970	0	0	0	0	41,871,970	4.0%	1,674,879	40,197,091
8	Office Equip, other machinery & Equip.	831,245	315,890	0	0	157,945	989,190	20.0%	197,838	949,297
10	Rolling stock, computer hardware	737,215	1,437,117	0	0	718,559	1,455,774	30.0%	436,732	1,737,600
10.1	Chevrolet Volt	26,775	0	0	0	0	26,775	30.0%	8,033	18,743
12	Computer software	197,976	459,115	0	0	229,558	427,533	100.0%	427,533	229,558
13	Leasehold Improvements - Straight Line	306,428	200,046	0	0	100,023	406,451	16.7%	65,716	440,758
42	Fibre optics	34,030	0	0	0	0	34,030	12.0%	4,084	29,947
45	Computer hardware- accelerated	11,472	0	0	0	0	11,472	45.0%	5,163	6,310
45.1	Computers-1921	8,008	0	0	0	0	8,008	55.0%	4,404	3,603
47	Transmission/Distribution equip	33,384,787	8,458,926	(204,515)	150,734	4,154,096	37,538,883	8.0%	3,003,111	38,485,354
50	Gen. Purpose DP equip/sw	3,792	129,776	0	0	64,888	68,680	55.0%	37,774	95,794
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		77,413,698	11,000,870	(204,515)	150,734	5,425,068	82,838,766		5,865,265	82,194,054

2013 Actual

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	40,197,091	0	0	0	0	40,197,091	4.0%	1,607,884	38,589,207
8	Office Equip, other machinery & Equip.	949,297	185,308	0	0	92,654	1,041,951	20.0%	208,390	926,215
10	Rolling stock, computer hardware	1,737,600	49,342	0	0	24,671	1,762,271	30.0%	528,681	1,258,261
10.1	Chevrolet Volt	18,742	0	0	0	0	18,742	30.0%	5,622	13,119
12	Computer software	229,558	377,372	0	0	188,686	418,244	100.0%	418,244	188,686
13	Leasehold Improvements - Straight Line	440,758	18,265	0	0	9,133	449,891	16.7%	76,734	382,289
42	Fibre optics	29,946	0	0	0	0	29,946	12.0%	3,593	26,352
45	Computer hardware- accelerated	6,310	0	0	0	0	6,310	45.0%	2,839	3,470
45.1	Computers-1921	3,604	0	0	0	0	3,604	55.0%	1,982	1,622
47	Transmission/Distribution equip	38,485,354	9,622,688	0	0	4,811,344	43,296,698	8.0%	3,463,736	44,644,306
50	Gen. Purpose DP equip/sw	95,794	242,213	0	0	121,107	216,900	55.0%	119,295	218,712
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		82,194,053	10,495,188	0	0	5,247,594	87,441,647		6,437,002	86,252,239

TABLE 4-57 –CCA CALCULATIONS 2014 BRIDGE & 2015/6 TEST YEARS

2014 Bridge Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	38,589,207	0	0	0	0	38,589,207	4.0%	1,543,568	37,045,639
8	Office Equip, other machinery & Equip.	926,215	166,330	0	0	83,165	1,009,380	20.0%	201,876	890,669
10	Rolling stock, computer hardware	1,258,261	238,906	0	0	119,453	1,377,714	30.0%	413,314	1,083,853
10.1	Chevrolet Volt	13,119	0	0	0	0	13,119	30.0%	3,936	9,183
12	Computer software	188,686	354,000	0	0	177,000	365,686	100.0%	365,686	177,000
13	Leasehold Improvements - Straight Line	382,289	180,000	0	0	90,000	472,289	10.0%	47,229	515,060
42	Fibre optics	26,352	0	0	0	0	26,352	12.0%	3,162	23,190
45	Computer hardware- accelerated	3,470	0	0	0	0	3,470	45.0%	1,562	1,909
45.1	Computers-1921	1,622	0	0	0	0	1,622	55.0%	892	730
47	Transmission/Distribution equip	44,644,306	10,789,929	(73,333)	0	5,358,298	50,002,604	8.0%	3,050,208	52,310,694
50	Gen. Purpose DP equip/sw	218,712	0	0	0	0	218,712	55.0%	120,291	98,420
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		86,252,239	11,729,165	(73,333)	0	5,827,916	92,080,155		5,751,725	92,156,346

2015 Test Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	37,045,639	0	0	0	0	37,045,639	4.0%	1,481,826	35,563,813
8	Office Equip, other machinery & Equip.	890,669	151,496	0	0	75,748	966,417	20.0%	193,283	848,881
10	Rolling stock, computer hardware	1,083,853	686,511	0	0	343,256	1,427,108	30.0%	428,132	1,342,232
10.1	Chevrolet Volt	9,183	0	0	0	0	9,183	30.0%	2,755	6,428
12	Computer software	177,000	739,565	0	0	369,782	546,782	100.0%	546,782	369,782
13	Leasehold Improvements - Straight Line	515,060	247,500	0	0	123,750	638,810	10.0%	63,881	698,679
42	Fibre optics	23,190	0	0	0	0	23,190	12.0%	2,783	20,407
45	Computer hardware- accelerated	1,909	0	0	0	0	1,909	45.0%	859	1,050
45.1	Computers-1921	730	0	0	0	0	730	55.0%	401	328
47	Transmission/Distribution equip	52,310,694	11,684,827	(73,333)	0	5,805,747	58,116,441	8.0%	4,649,315	59,272,872
50	Gen. Purpose DP equip/sw	98,420	0	0	0	0	98,420	55.0%	54,131	44,289
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		92,156,346	13,509,900	(73,333)	0	6,718,283	98,874,629		7,424,149	98,168,763

2016 Test Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	35,563,813	0	0	0	0	35,563,813	4.0%	1,422,553	34,141,261
8	Office Equip, other machinery & Equip.	848,881	185,792	0	0	92,896	941,777	20.0%	188,355	846,318
10	Rolling stock, computer hardware	1,342,232	587,405	0	0	293,702	1,635,934	30.0%	490,780	1,438,856
10.1	Chevrolet Volt	6,428	0	0	0	0	6,428	30.0%	1,929	4,500
12	Computer software	369,782	445,026	0	0	222,513	592,295	100.0%	592,295	222,513
13	Leasehold Improvements - Straight Line	698,679	90,000	0	0	45,000	743,679	10.0%	74,368	714,311
42	Fibre optics	20,407	0	0	0	0	20,407	12.0%	2,449	17,958
45	Computer hardware- accelerated	1,050	0	0	0	0	1,050	45.0%	472	577
45.1	Computers-1921	328	0	0	0	0	328	55.0%	181	148
47	Transmission/Distribution equip	59,272,872	10,318,778	(73,333)	0	5,122,722	64,395,595	8.0%	5,151,648	64,366,669
50	Gen. Purpose DP equip/sw	44,289	0	0	0	0	44,289	55.0%	24,359	19,930
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		98,168,763	11,627,000	(73,333)	0	5,776,833	103,945,597		7,949,389	101,773,042

TABLE 4-58 –CCA CALCULATIONS 2017- 2019 TEST YEARS

2017 Test Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	34,141,261	0	0	0	0	34,141,261	4.0%	1,365,650	32,775,610
8	Office Equip, other machinery & Equip.	846,318	188,467	0	0	94,234	940,551	20.0%	188,110	846,675
10	Rolling stock, computer hardware	1,438,856	538,267	0	0	269,134	1,707,990	30.0%	512,397	1,464,726
10.1	Chevrolet Volt	4,500	0	0	0	0	4,500	30.0%	1,350	3,150
12	Computer software	222,513	135,847	0	0	67,924	290,437	100.0%	290,437	67,924
13	Leasehold Improvements - Straight Line	714,311	45,000	0	0	22,500	736,811	10.0%	73,681	685,630
42	Fibre optics	17,958	0	0	0	0	17,958	12.0%	2,155	15,803
45	Computer hardware- accelerated	577	0	0	0	0	577	45.0%	260	318
45.1	Computers-1921	148	0	0	0	0	148	55.0%	81	67
47	Transmission/Distribution equip	64,366,669	11,464,418	(73,333)	0	5,695,543	70,062,212	8.0%	5,604,977	70,152,777
50	Gen. Purpose DP equip/sw	19,930	0	0	0	0	19,930	55.0%	10,962	8,969
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		101,773,042	12,372,000	(73,333)	0	6,149,333	107,922,375		8,050,060	106,021,648

2018 Test Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	32,775,610	0	0	0	0	32,775,610	4.0%	1,311,024	31,464,586
8	Office Equip, other machinery & Equip.	846,675	291,413	0	0	145,706	992,381	20.0%	198,476	939,611
10	Rolling stock, computer hardware	1,464,726	451,160	0	0	225,580	1,690,306	30.0%	507,092	1,408,795
10.1	Chevrolet Volt	3,150	0	0	0	0	3,150	30.0%	945	2,205
12	Computer software	67,924	242,233	0	0	121,117	189,040	100.0%	189,040	121,117
13	Leasehold Improvements - Straight Line	685,630	45,000	0	0	22,500	708,130	10.0%	70,813	659,817
42	Fibre optics	15,803	0	0	0	0	15,803	12.0%	1,896	13,907
45	Computer hardware- accelerated	318	0	0	0	0	318	45.0%	143	175
45.1	Computers-1921	67	0	0	0	0	67	55.0%	37	30
47	Transmission/Distribution equip	70,152,777	11,446,193	(73,333)	0	5,686,430	75,839,207	8.0%	6,067,137	75,458,501
50	Gen. Purpose DP equip/sw	8,969	0	0	0	0	8,969	55.0%	4,933	4,036
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		106,021,648	12,476,000	(73,333)	0	6,201,333	112,222,982		8,351,536	110,072,779

2019 Test Year

CCA Class	Description	UCC Opening Balance	Additions	Adjustments	Proceeds of Dispositions	50% Rule	Reduced UCC	CCA %	CCA	UCC Closing Balance
1	Buildings, distr equipment	31,464,586	0	0	0	0	31,464,586	4.0%	1,258,583	30,206,003
8	Office Equip, other machinery & Equip.	939,611	288,218	0	0	144,109	1,083,720	20.0%	216,744	1,011,085
10	Rolling stock, computer hardware	1,408,795	269,160	0	0	134,580	1,543,375	30.0%	463,012	1,214,943
10.1	Chevrolet Volt	2,205	0	0	0	0	2,205	30.0%	661	1,543
12	Computer software	121,117	194,233	0	0	97,117	218,233	100.0%	218,233	97,117
13	Leasehold Improvements - Straight Line	659,817	45,000	0	0	22,500	682,317	10.0%	68,232	636,585
42	Fibre optics	13,907	0	0	0	0	13,907	12.0%	1,669	12,238
45	Computer hardware- accelerated	175	0	0	0	0	175	45.0%	79	96
45.1	Computers-1921	30	0	0	0	0	30	55.0%	16	13
47	Transmission/Distribution equip	75,458,501	9,964,389	(73,333)	0	4,945,528	80,404,028	8.0%	6,432,322	78,917,234
50	Gen. Purpose DP equip/sw	4,036	0	0	0	0	4,036	55.0%	2,220	1,816
52	Gen. Purpose DP equip/sw (pre2009)	0	0	0	0	0	0	100.0%	0	0
Total		110,072,779	10,761,000	(73,333)	0	5,343,833	115,416,612		8,661,772	112,098,673

CONSERVATION AND DEMAND MANAGEMENT COSTS

CDM Costs

Funding for OPUCN's CDM activities is provided through the OPA.

OPUC has not applied to the OEB for a Board-Approved CDM program and is not planning to do so in this Application.

Lost Revenue Adjustment Mechanism

OPUCN is not making an LRAM claim for CDM programs at this time.

APPENDIX 4-1 – ACTUARIAL REPORT ON POST-RETIREMENT BENEFITS AS AT DECEMBER 31, 2013

K-W ACTUARIAL SERVICES INC.

102 - 515 Riverbend Drive
Kitchener ON N2K 3S2

Phone: (519) 579-1255
Fax: (519) 579-5010

January 23, 2014

Mr. Phil Martin
Vice President, Finance and Regulatory Compliance
Oshawa Power and Utilities Commission
100 Simcoe Street South
Oshawa ON L1H 7M7

sent by email only

Dear Phil:

Re: 2013 Report for Accounting Purposes for Oshawa Power and Utilities Commission

As requested, we have prepared extrapolations for 2013 expense purposes. This report covers Oshawa Power and Utilities Commission's (the Company) post-employment benefits plan.

I am pleased to confirm the following:

a) I am aware that the Company intends to use this work as audit evidence;
b) I am a member in good standing with the Canadian Institute of Actuaries (the CIA);
c) We have been engaged by the Company's management to prepare the disclosure information;
d) My work has been performed in accordance with the standards of the CIA and our understanding of CPA Canada Handbook Section 2461 accounting standards;
e) The extrapolation includes all employee future benefit plans for which we have been retained.
f) A materiality level of no higher than $50,000 has been applied;
g) No matters have come to my attention between the extrapolation date and the date of this report that would have a material effect on the results;
h) I have included the effect of all known substantive commitments in my calculations;
i) To the best of my knowledge, there were no events subsequent to the fiscal year end date and prior to the date of the report which would have a material impact on the results of the year-end disclosures.
j) I am not aware of any settlements or curtailments during the fiscal period;
k) The following information outlines the plans and methods used to value them:
   (i) The December 2012 valuation performed on the plan was based on membership

as summarized in the following tables:

Age	Active Employees			Average	Average
Group	Male	Female	Total	Service	Life Ins.
Up to 25	1	0	1	1.2	99,000
25 to 30	4	0	4	1.8	105,000
30 to 35	1	2	3	3.0	125,333
35 to 40	2	2	4	7.6	114,500
40 to 45	9	6	15	10.6	139,067
45 to 50	14	7	21	13.8	131,905
50 to 55	10	6	16	19.0	140,375
55 to 60	4	4	8	17.2	127,375
60 to 65	3	0	3	17.3	134,667
Totals	48	27	75	13.2	131,707
Category 1	26	15	41	20.5	
Category 2	6	4	10	7.4	
Category 3	2	1	3	4.6	
Category 4	7	2	9	2.2	
Category 5	7	5	12	3.4	
Totals	48	27	75	13.2	
Life Option 1	22	13	35		
Life Option 2	2	1	3		
Life Option 3	0	1	1		
Life Option 4	24	12	36		
Totals	48	27	75		

Age	Retired Employees			Average
Group	Male	Female	Total	Life Ins.
55 to 60	1	3	4	32,045
60 to 65	15	7	22	28,444
65 to 70	10	10	20	30,794
70 to 75	6	5	11	31,263
75 to 80	7	1	8	42,537
80 to 85	9	1	10	43,771
85 to 90	2	0	2	49,350
Totals	50	27	77	33,642
Single	3	4	7	
Family	47	23	70	

Age Group	Survivors Male	Female	Total
60 to 65	0	1	1
65 to 70	0	1	1
70 to 75	0	2	2
75 to 80	0	2	2
80 to 85	0	3	3
85 to 90	0	6	6
90 to 95	0	6	6
95 to 100	0	2	2
Totals	0	23	23

(ii) Claims for the three years from 2010 through 2012 averaged $376,421 per year. These average of these claims were divided by the retiree exposure to establish monthly claims cost of:

	Single	Family
Health under 65	222.63	445.26
Health 65 +	90.81	181.62
Dental under 65	99.47	198.94
Dental 65+	34.75	69.50

(iii) Plan Provisions summary:

- Life insurance benefits are provided to employees who retire under the following circumstances:
  - Employees who retire under Plan Option 1 receive an insurance benefit of $2,000 payable on the retiree's death.
  - Employees who retire under Plan Option 2, 3, or 4 receive an insurance benefit equal to 50% of final annual earnings, reducing by 2.5% per year to an ultimate benefit of 25% of final earnings.
- Supplemental health (drugs, vision, semi-private hospital, and extended health services) and dental benefits are provided to retirees under the following circumstances:
  - Category 1 employees are provided lifetime health and dental benefits; surviving spouses are covered for the survivor's lifetime.
  - Category 2 employees who retire with a minimum of 20 years of continuous service receive lifetime health benefits and dental benefits to age 65; surviving spouses receive lifetime health benefits and dental benefits payable to the employee's age 65.
  - Category 3 employees who retire with a minimum of 25 years of continuous service receive lifetime health benefits and dental

benefits to age 65; surviving spouses receive lifetime health benefits and dental benefits to the employee's age 65.

- Category 4 employees who retire with at least 25 years of continuous service receive lifetime health benefits and dental benefits to age 65; surviving spouses receive health and dental benefits for two years. Benefits are 80% paid by the Company and 20% paid by the retiree.
- Category 5 employees are not eligible for post-employment health and dental benefits.
- Dispensing fee payments are limited to $12.99.

- As of the end of 2013, the following number of employees/retirees are eligible under the above Category groups:

Group	Active	Retired
Category 1	40	90
Category 2	10	
Category 3	3	
Category 4	9	
Category 5	9	

(iv) The following summarizes the assumptions used:

- Discount rate 4.00% for the extrapolation from January 1, 2013 to December 31, 2013; a rate of 4.75% is used to value benefits as at December 31, 2013. The single discount rate is the rate, rounded to the nearest 0.25%, that duplicates the plan's obligations determined using the Fiera Capital/CIA yield curve as at December 31, 2013.
- Returns on invested funds are moot as the plan is not funded.
- Salary growth rate 3.0% per year.
- Inflation 2.0% per year.
- Mortality is on the basis of the 1994 Uninsured Pensioner Mortality Table projected on a generational basis using scale AA.
- Termination of employment is assumed using the Ontario Light termination rates with no termination after the attainment of age 55.
- Age nearest birthday for current age.
- Retirement is assumed to occur at the later of age 60 and current age plus one year.
- Health care costs are presumed to increase 8% in the year following the valuation, this rate decreasing each year to an ultimate rate of 4% after 6 years. Similarly, dental costs are presumed to increase 6% after one year, this

rate reducing to an ultimate rate of 4% over 6 years. The dispensing fee portion of these costs is limited to the current $12.99 maximum.

- No provision for disability is included.
- The cost method is the accrued benefit method with projected benefits prorated by service.
- Attribution age is the age at which benefits could, with continued future service, become available (i.e. attainment of age 55 and service requirements).
- The following table shows a sample of the mortality and termination rates:

	UP 1994 Mortality Table		Projection Scale AA		Light Termination
Age	Male	Female	Male	Female	Rate
25	0.000711	0.000313	0.010	0.014	0.100
30	0.000862	0.000377	0.005	0.010	0.056
35	0.000915	0.000514	0.005	0.011	0.032
40	0.001153	0.000763	0.008	0.015	0.022
45	0.001697	0.001046	0.013	0.016	0.017
50	0.002773	0.001536	0.018	0.017	0.012
55	0.004758	0.002466	0.019	0.008	
60	0.008576	0.004773	0.016	0.005	
65	0.015629	0.009286	0.014	0.005	
70	0.025516	0.014763	0.015	0.005	
75	0.040012	0.024393	0.014	0.008	
80	0.066696	0.042361	0.010	0.007	
85	0.104559	0.072836	0.007	0.006	
90	0.164442	0.125016	0.004	0.003	
95	0.251189	0.200229	0.002	0.002	

The attached tables provide details of the 2013 disclosure; 2012 amounts are included for comparison purposes.

Please let me know if you require further information.

Sincerely,

W.M. (Bill) Loucks, FSA, FCIA
Direct 519-804-2894
Att:

Oshawa PUC

Fiscal Year	**2012**	**2013**
Discount rate at start of period	5.60%	4.00%
Discount rate at end of period	4.00%	4.75%
Interest rate on assets	N/A	N/A
EARSL Period	12.02	10.90
Reconcile Obligation		
Obligation at start of year	13,203,400	10,713,718
Revaluation	0	0
Transfer	0	0
Plan amendments in year	0	0
Employer current service cost	286,700	189,118
Member contributions	0	0
Benefit payments	(495,700)	(345,535)
Interest on obligation	739,500	425,420
Obligation at end of year	13,733,900	10,982,721
Actual obligations at end of year	10,713,718	9,897,792
(Gain)/Loss recognized at end of year	(3,020,182)	(1,084,929)
Reconcile Plan Funds		
Asset at start of period	0	0
Employer contributions	495,700	345,535
Benefit payments	(495,700)	(345,535)
Fund earnings	0	0
Asset at end of period	0	0
Expense		
Current service cost	286,700	189,118
Interest on obligation	739,500	425,420
Interest on assets	0	0
Amortize transition amount	0	0
Amortize plan improvements	0	0
Amortize gains and losses	93,800	0
Expense	1,120,000	614,538

Oshawa PUC

Fiscal Year	2012	2013
Transition obligation (asset)		
Transition amount at start of period	0	0
Amortization during period	0	0
Transition amount at end of period	0	0
Prior service costs		
Unamortized amount at start if period	0	0
Past service in period	0	0
Amortization during period	0	0
Unamortized amount at end of period	0	0
Actuarial (gains) & losses		
Unamortized amount at start	2,447,700	(666,282)
10% Window	1,320,300	1,071,400
Amount subject to amortization	1,127,400	0
(Gain) or Loss in period	(3,020,182)	(1,084,929)
Amortization during period	93,800	0
Unamortized (gain)/loss at end	(666,282)	(1,751,211)
Balance sheet asset (liability)		
Amount at start of period	(10,755,700)	(11,380,000)
Expense in period	(1,120,000)	(614,538)
Employer contribution	495,700	345,535
Amount at end of period	(11,380,000)	(11,649,003)
Reconcile funded status		
Benefit obligation at end of period	10,713,718	9,897,792
Asset value at end of period	0	0
Funded status - surplus (deficit)	(10,713,718)	(9,897,792)
Unamortized transition obligation (asset)	0	0
Unamortized prior service costs	0	0
Unamortized (gains) & losses	(666,282)	(1,751,211)
Balance sheet asset (liability)	(11,380,000)	(11,649,003)

Oshawa PUC

Fiscal Year	2012	2013
Sensitivity Testing:		
Obligation at end of fiscal year:		
Obligation using current discount rate	10,713,718	9,897,792
Change with 1.0% **lower** rate	1,791,469	1,499,720
Change with 1.0% **higher** rate	(1,409,742)	(1,195,901)
Estimated expense for next year:		
Expense using current discount rate	614,538	557,284
Change with 1.0% **lower** rate	1,341	3,329
Change with 1.0% **higher** rate	(3,740)	(4,963)
Projected Benefit Payments		
In 1st year following fiscal year	469,000	513,000
In 2nd year following fiscal year	513,000	504,000
In 3rd year following fiscal year	504,000	496,000
In 4th year following fiscal year	496,000	480,000
In 5th year following fiscal year	480,000	505,000
In 6th through 10th year following fiscal year	2,722,000	2,801,000

APPENDIX 4-2 - CORPORATE PURCHASING POLICY

Purchasing Policy

POLICY AND PROCEDURES	
Oshawa Power & Utilities Corporation	DEPARTMENT: PURCHASING SUBJECT: PURCHASING POLICY POLICY #: PU - 1101 ISSUE DATE: REVISION DATE: PAGE: Page 1 of 6

Policy

Oshawa Power & Utilities Corporation and its subsidiaries (OPUC) promote decision making processes for procurement that are consistent with the strategic objectives of the Corporation. Established guidelines for purchasing and binding the corporation in contractual agreements with Vendors or Contractors is clearly defined and laid out in the Procedures section of this policy. Modification to the guidelines of this policy can occur only on revision to the Policy.

Employees must adhere to the authority level, procurement process and associated dollar values found in the guidelines as set out in Appendix “A” for such occurrences as the placing and handling of Purchase Orders, drafting Tenders, Request for Proposals, Request for Quotes, and Contracts.

Procedure

The Materials Manager is designated as the person responsible for Purchasing.

Purchase requisitions are forwarded to the Materials Manager for, monitoring of authority limits, procurement process, possible supply from or inclusion in inventory and tax considerations, if applicable.

For purchase of materials or services $200.00 or less

A small pad order, petty cash or credit/purchasing card is used.

(Small pad orders and petty cash are available in Purchasing/Stores)

For purchase of materials over $200.00 and less than $2,000.00

A purchase order is required for the acquisition of all materials and services exceeding $200.00 in value when a credit/purchasing card is not the method of procurement. Exceptions are listed in Appendix “B”.

For Purchases up to $500.00 by Purchasing Card

A purchasing card is used by designated employees, for purchases up to $500.00.

For Purchases over $2,000.00

The Materials Manager in consultation with staff will procure all materials or services greater than $2,000.00 using the competitive procurement process as set out in “Tenders, Request for Proposals and Request for Quotations”.

The purchase of goods and/or services having pricing or value in excess of $2,000.00, including taxes shall not be authorized unless:

The required goods and/or services have been requisitioned in accordance with this Policy and prescribed procedure

A method of purchase permitted under this Policy has been used and the purchase has been approved, in writing, by the appropriate level of authority as detailed in Appendix “A”

For Purchases over $10,000.00

All purchases of materials and services greater than $10,000.00 must be approved, in writing, by two Executive Officers before the requisition is forwarded to the Materials Manager, except for materials to fulfill requirements of an approved work order.

Work Orders must be authorized by the VP, of Engineering and Operations.

Tenders, Request for Proposals and Request for Quotations

Tenders, RFP and RFQ approval of purchases relative to dollar value are set out in Appendix “A”.

Tenders require at least three written sealed quotes, received on or before a specified closing date and time, to be opened by the Materials Manager and the Department Head or their designate for evaluation and formalization for the Purchase Order.

All records of tenders, RFPs and RFQs including the original copies should be retained by Purchasing.

Reports will be prepared by the Materials Manager, forwarded to the Department Head for approval/signature and then forwarded to the Executive for approval/signatures {minimum two}.

Sole source purchases

These purchases must be approved by two Executive Officers.

Confirmation of purchase orders

Confirmation of approved purchase orders will only be issued as per the approval requirements listed in Appendix “A”.

Confidentiality, Contingency Agreements

Any agreement that binds the corporation must be approved by the Department Head and forwarded to the Executive for review. If approved, it will be signed by one of the Executive Officers.

Signed Contracts/Agreements related to purchasing must be forwarded to the Materials Manager for record keeping and contract management.

Materials Manager’s Responsibilities

The Materials Manager is responsible to see that the following ideals are attained during the purchasing process.

Procure the necessary quality and quantity of goods and/or services in an efficient, timely and cost effective manner, while maintaining the controls necessary for OPUC, in accordance with approved Purchasing Procedures.

Encourage a transparent, competitive bidding process practical for the acquisition and disposal of goods and/or services.

Delegate the appropriate level of authority to enable OPUC to meet service requirements.

Ensure that employees who are responsible for the requisitioning and purchasing of goods and/or services have a clear set of guidelines to take an appropriate action or make the appropriate decision.

It is the responsibility of the Materials Manager to administer and review the Corporate Purchasing Policy on an annual basis. The Materials Manager is responsible for issuing and receiving quotations, tenders, contracts and proposals.

The Materials Manager in consultation with a Department Head may remove a vendor from consideration for contracts under this Policy on the basis of poor performance or non-performance on an OPUC contract.

Department Head's Responsibilities

The Department Head is responsible for reporting, in writing, to the Materials Manager all instances of unsatisfactory vendor performance.

When the process is non compliant with the Policy and Procedures, the Department Head is required to obtain the written approval of two Executive Officers and forward such approval to Purchasing, authorizing the purchase to proceed.

Staff's Responsibilities

All staff is responsible for following the Purchasing Policy as outlined within, for ensuring that all items purchased meet the Corporation's Standards and/or an approved Electrical Standard as per Ontario Regulation 22/04.

APPENDIX "A"

Authority Limits

Dollar Range	Procurement Process	Authority Level
Any Dollar Value	Emergency Purchase	Department Head
0 – 200.00	Small Pad Order	Employee
0 – 500.00	Purchasing Card	Employee
0 – 2,000.00	Credit Card	Department Head
0 – 5,000.00	Credit Card	Executive Officer
0 – 10,000.00 Training and Conference Booking	Credit Card	Executive Assistant
2,000.00 – 10,000.00	Informal or Formal Quotation	Materials Manager & Department Head
10,000.00 + Capital Works Projects Only	Informal or Formal Quotation, Tender, Request for Proposal	Materials Manager & Executive Officer
10,000.00 +	Formal Quotation/Tender Direct Negotiation Contract Extension Request for Proposal	Two Executive Officers
Sole Source Purchase		Two Executive Officers

APPENDIX "B"

The following items are not subject to the OPUC's purchasing policy and procedures and a purchase order is not required:

1.0 Purchasing Card Purchases
2.0 Petty Cash Items
3.0 Cheque Requisition
4.0 Training and Education
    (a) Conferences
    (b) Courses
    (c) Seminars
    (d) Conventions
    (e) Memberships
    (f) Periodicals
    (g) Magazines
    (h) Subscriptions
    (i) Staff Training
    (j) Staff Development
    (k) Staff Workshops
5.0 Refundable Employee Expenses
    (a) Cash Advances
    (b) Meal Allowances
    (c) Travel Expenses
    (d) Entertainment
    (e) Miscellaneous – Non-Travel
    (f) Hotel Accommodation
    (g) Mileage
6.0 General Expenses
    (a) Licences (vehicles, elevators, radios, etc.)
    (b) Banking and underwriting services where covered by agreements
    (c) Real Estate including land, buildings, leasehold interests, easements, encroachments and licenses
    (d) Items of a confidential nature
    (e) Professional and special services, including appraisals, medical, etc.
    (f) Freight charges
7.0 Utilities
    (a) Postage
    (b) Water and Sewage Charges
    (c) Hydro
    (d) Natural Gas
    (e) Telephone Service i.e. Bell Canada

APPENDIX 4-3 – ASSET DEPRECIATION STUDY

See attached.

APPENDIX 4-4 – ANNUAL ELECTRICAL UTILITY CUSTOMER SATISFACTION SURVEY

See Exhibit 1, Tab D, Schedule 1.

APPENDIX 4-5– 2013 CORPORATE TAX RETURN

See attached.

ASSET DEPRECIATION STUDY

Prepared by:

METSCO Energy Solutions

January, 2014

OPUCN Asset Depreciation Study

Prepared by: _____
Shawn Otal, MBA, P.Eng.

Peer Review by: _____
Thor Hjartarson, M.A.Sc., P.Eng.

January, 2014

CONTENTS

DISCLAIMER

This report was prepared by METSCO Energy Solutions Inc. (METSCO) for the sole benefit of – Oshawa PUC Networks Inc. (OPCUN) - (the Client), in accordance with the terms of METSCO proposal and the Client's Purchase Order.

Neither the Client nor METSCO, nor any other person acting on their behalf makes any warranty, expressed or implied, or assumes any legal responsibility for the accuracy of any information or for the completeness or usefulness of any apparatus, product or process disclosed, or accept liability for the use, or damages resulting from the use, thereof. Neither do they represent that their use would not infringe upon privately owned rights.

Furthermore, the Client and METSCO HEREBY DISCLAIM ANY AND ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER ARISING BY LAW, CUSTOM, OR CONDUCT, WITH RESPECT TO ANY OF THE INFORMATION CONTAINED IN THIS REPORT. In no event shall the Client or METSCO be liable for incidental or consequential damages because of use or any information contained in this report.

CREDENTIALS OF THE CONSULTANT

This report has been prepared by METSCO Energy Solutions Inc. (METSCO), a Canadian corporation engaged in the business of providing consulting services to electricity generating transmission and distribution companies. The firm routinely provides consulting services aimed at improving the operating efficiency and financial performance of power systems, covering a broad area, including asset condition assessment, asset management and investment planning into transmission and distribution (T&D) systems' asset sustainment. These report has been prepared by Mr. Shawn Otal and Mr. Thor Hjartarson.

Mr. Shawn Otal is a professional electrical engineer with MBA from Schulich School of Business, specializing in Economics. Mr. Otal has over 35 years of experience in the power sector, spanning a broad area including power system planning, design, operations, research and development. He is the CEO and President of METSCO Energy Solutions Inc., and has previously served in senior professional roles with Kinectrics Inc., Acres International Inc., Westinghouse Canada and ENMAX Power Corporation. Over the recent years, Mr. Otal has worked extensively on consulting assignments aimed at improving the financial and operating performance of power delivery systems in Canada and around the world. His clients include provincial and municipal electric utilities in Canada, electrical equipment manufacturers, electrical safety authorities, Canadian Electricity Association (CEA and CEATI), the World Bank, Asian Development Bank and Ontario Energy Board. He is a member of Professional Engineers Ontario (PEO) and Association of Professional Engineers and Geoscientists of Alberta (APEGA) and is a Senior Member of IEEE. Mr. Otal has authored sixteen major R&D publications.

Mr. Thor Hjartarson is a professional electrical engineer with over 20 years of experience in electrical and power engineering. He graduated from the University of Iceland, Reykjavik, and received a M.A.Sc degree in Electrical Engineering from the University of British Columbia, Vancouver, BC, Canada. In former role at Toronto Hydro he lead a large asset management division with responsibilities for planning, engineering, reliability analysis, system studies, record management, data quality, mobility and GIS improvements where he was recognized for transforming an existing older culture of engineering practice to a dynamic powerhouse of technical innovation and knowledge. He has strong technical background in transmission and distribution engineering leadership in innovation of asset management principles. One of the founders of Health Index methodology in utility asset condition assessment and has lead comprehensive implementations of a risk based investment planning methodologies. In his previous consulting career, he has had experience with over 30 well known electrical power companies around the world. He has authored several technical papers focusing on T&D asset management.

EXECUTIVE SUMMARY

This report summarizes the results of an Asset Depreciation Study, completed by METSCO in January 2014 on behalf of OPUCN with the objective establishing the typical useful life of major fixed assets employed on OPUCN's distribution system.

In 2010 Ontario Energy Board retained an independent contractor - Kinectrics Inc. to perform a detailed depreciation study covering all fixed assets employed on Ontario's distribution systems, to assist the LDCs in making the transition from GAAP to IFRS. In determining the typical useful life of various assets employed by OPUCN, rather than duplicating the work effort previously spent by Kinectrics in carrying out additional surveys, we have used the Kinectrics report as a reference in preparing this depreciation study.

The assets covered by the report have been grouped into the following four sections:

a) Distribution station assets;
b) Overhead distribution system assets;
c) Underground distribution system assets; and
d) Auxiliary assets.

Our conclusions, duly supported by the facts, arguments and analysis provided in this report, differ from the Kinectrics' conclusions for the assets tabulated below:

Asset Class	**Typical Useful Life (Kinectrics Conclusion)**	**Typical Useful Life (Our Conclusion)**
Power Transformers employed at Distribution Stations	45 years	40 years
Station Independent Circuit breakers	45 years	40 years
Overhead conductors	60 years	45 years
Overhead Line switches	45 years	40 years
SCADA System	20 years	8 years
Direct Buried Secondary Cables	35 years	42 years

For all of the remaining assets employed on OPUCN's distribution system, including the solid state relays and all of the auxiliary assets, in our opinion the estimates of typical useful life provided in the Kienctrics report accurately represent the typical useful life for each of those assets. It is also noted that all of the protection and control relays employed at OPUCN substations are microprocessor /solid state type.

1 Introduction

This report summarizes the results of an Asset Depreciation Study, completed by METSCO in January 2014 on behalf of OPUCN with the objective establishing the typical useful life of major fixed assets employed on OPUCN's distribution system.

Effective January 1, 2011, Ontario Energy Board (OEB) mandated all local distribution companies (LDCs) in Ontario to adopt International Financial Reporting Standards (IFRS). Under IFRS rules, business entities are required to amortize the cost of fixed assets, including property, plant, and equipment used in business, over the period of time that they provide useful service, with the depreciation rates determined through assets' service life studies. Prior to adoption of IFRS, asset service lives were arbitrarily specified by the regulator and up until 2010, all electricity distributors in Ontario including OPUCN; used the amortization rates for fixed assets prescribed by Ontario Hydro (the regulator prior to restructuring of the electricity business in Ontario).

In 2010 Ontario Energy Board retained an independent contractor - Kinectrics Inc. to perform a detailed depreciation study covering all fixed assets employed on Ontario's distribution systems, to assist the LDCs in making the transition from GAAP to IFRS. This approach was chosen to minimize the need and cost to Ontario consumers of a myriad of detailed studies by individual distributors. Therefore, in determining the typical useful life of various assets, rather than duplicating the work effort previously spent by Kinectrics in carrying out additional surveys, we have used the Kinectrics report as a reference in preparing this depreciation study. To allow an easy comparison of this report with the reference, we have used the same terms and definitions in this report as were used in the Kinectrics report.

The assets covered by the report have been grouped into the following four sections:

a) Distribution station assets;
b) Overhead distribution system assets;
c) Underground distribution system assets; and
d) Auxiliary assets.

2 DISTRIBUTION STATION ASSETS

2.1. Power Transformers

The key role of station transformers is to step down transmission or sub-transmission voltage to distribution voltage. In case of OPUCN, a total of 16 station transformers employed in 8 municipal stations step down from 44 kV sub-transmission voltages to 13.2 kV.

The main components of power transformers employed at municipal stations are:

- primary and secondary coils, made of copper or aluminium conductors
- magnetic core made of iron laminations
- insulation system, commonly consisting of cellulose paper and mineral oil
- transformer tank, either sealed or breather type, and
- primary and secondary bushings and auxiliary devices.

The most critical component in transformer aging and eventual end of life consideration is the insulation system, consisting of mineral oil and cellulose paper. Transformer oil consists of hydrocarbon compounds that degrade with time due to oxidation, resulting in formation of moisture, organic acids and sludge. The oil oxidation rate is a function of operating temperature. Increased acidity and moisture content in insulating oil causes accelerated degradation of insulation paper. Formation of sludge adversely impacts the cooling efficiency of transformer, resulting in higher operating temperatures and further increasing the rate of oxidation of both the oil and the paper. Condition assessment of transformer oil, therefore, provides extremely useful information in assessing the health and condition of a transformer.

The paper insulation consists of long cellulose chains, that break as the paper ages (oxidizes). Tensile strength and ductility of insulation paper are important properties that are determined by the average length of the cellulose chains. As the paper oxidizes, its mechanical strength is gradually reduced, making it weak and brittle. This can lead to insulation failure if the transformer is subjected to mechanical shocks that are common in normal operating conditions. Insulation degradation and failure can also result from electrical activity inside insulation, such as partial discharge activity, which is initiated if the level of moisture in oil builds up or if other minor defects develop within the insulation. Partial discharge and other electrical and thermal faults in the transformer can be detected and monitored by measurement of hydrocarbon gases in the oil through Dissolved Gas Analysis (DGA).

Because the failure of a power transformer in service has serious impacts on reliability and can also lead to catastrophic tank failures, power transformers are generally retired from service when the results of lab tests, visual inspections combined with service age indicate high probability of failure in service.

Transformer operating temperature (determined by typical load levels), environmental factors (ambient temperature, pollution levels and exposure to rain/snow/ice), operating practices (short time overloading of transformers) and preventative maintenance (drying and reconditioning of insulation system) impact the useful service life of power transformers. For example a lightly

loaded transformer typically provides a significantly longer service life in comparison to a heavily loaded transformer. Similarly, transformer service life can be extended beyond its typical life through rehabilitation of the insulation system, i.e. periodic removal of moisture from insulation system replacement of winding coils, but such programs are not always an economic option for power transformers with small and medium ratings.

Exhibit 1, reproduced below from the Kinectrics report, summarizes their report's conclusions and documents the results of surveys performed by Kinectrics:

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Overall	30	45	60
Bushing	10	20	30
Tap Changer	20	30	60

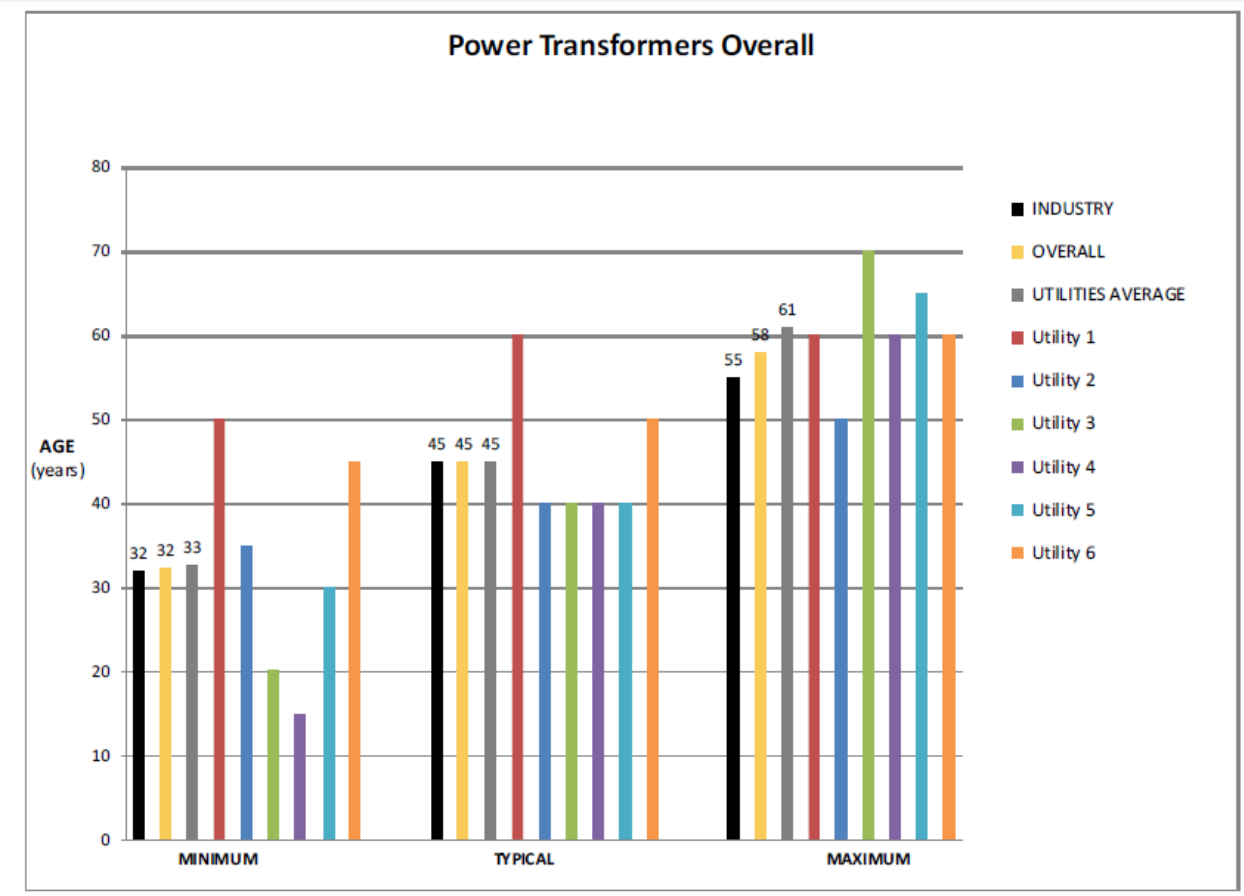

Exhibit 1: Useful Life of Power Transformers

As shown in Exhibit 1, Kinectrics report concludes typical useful life of power transformers to be 45 years. In case of on-load tap changers the typical useful life is concluded to be 30 years,

which is significantly less due to the faster degradation of their condition caused by the presence of electrical arcing during tap changer operation.

As shown in Exhibit 1, Utility 1 reported minimum useful life of 50 years, maximum useful life of 60 years and the typical useful life also equal to 60 years for this asset. There appears to be an error in Utility 1's response, because the typical life expectancy is expected to lie in between the maximum and minimum useful life values. Four of the remaining five LDCs surveyed by Kinectrics, reported typical useful life of 40 years for this asset. Since the transformer loading, operating and maintenance practices as well as environmental conditions within the service territory of OPUCN are similar to all other LDCs operating in Southern Ontario, the typical useful life of power transformers at OPUCN is also expected to be the same as reported by the vast majority of surveyed LDCs, i.e. 40 years. All of the power transformers employed at OPUCN are equipped with on-load tap changers and the OLTC operation results in faster degradation of the insulation system.

We have independently analysed the actual useful service life for a batch of power transformers that have been retired from service at OPCUN during the past five years. The results of this analysis are summarized in Exhibit 2 and indicate the mean useful life of power transformers at OPUCN to be 39 years.

Station	Transformer	Installed Date	Removal Date	Age (years)
MS 2	T1	1975	2012	37
	T2	1968	2012	44
MS 11	T1	1971	2011	40
	T2	1979	2011	32
MS 13	T1	1968	2011	43
	T2	1968	2013 ….	45
MS 15	T1	1976	2012	36
	T2	1967	2012	36
				Average:39

Exhibit 2: Actual Service Life Provided by Power Transformers at OPUCN

In view of the foregoing, in our opinion, 40 years is a more accurate value for the typical useful life of power transformers at OPUCN, rather than the 45 year estimate proposed in Kinectrics report.

2.2. Metal Clad Switchgear and Circuit Breakers

OPUCN employs 15kV class medium voltage metal-clad switchgear in indoor applications at each of the eight municipal substations. The original switchgear employed magnetic-air circuit breakers with arc-chutes, which are being replaced by OPCUN with vacuum circuit breakers in the original switchgear cells, as they reach the end of their useful service life.

A number of factors influence the overall rate of wear and severity of degradation of circuit breakers, including type of the insulating medium, design of the contacts, operating environment, and the duty cycle of the circuit breaker. Load current switching or fault current interruption seldom lead to sudden failure of circuit breakers, but repeated operations result in overall wear and tear which lead to eventual end of life.

Air magnetic breakers employ the magnetic effect of the current in their design, by forcing the electric arc produced during opening on the contacts into an arc chute. The arc chute causes elongation of the arc path and allows cooling, splitting and eventual extinction of the arc. In some designs, an auxiliary puffer is employed to blast air into the arc, which allows successful interruption of low-level currents with weaker magnetic fields. Air magnetic breakers represent the second oldest technology in circuit breaker design, next to OCBs. They are no longer in manufacture and have been superseded by SF6 and vacuum technologies since the late 1970s.

When a circuit breaker interrupts current, an electrical arc is produced in the ionized insulation medium. In order for the circuit breaker action to succeed, the large amount of energy contained in the arc must be successfully extinguished by the breaker's interrupting medium. Depending on the type of arc interrupting medium employed, circuit breakers are classified as oil circuit breakers, magnetic air circuit breakers, SF-6 circuit breakers or vacuum circuit breakers. In order to deliver the desired functions, circuit breakers are required to possess the following properties and characteristics:

a) Highly conductive contact material, capable of withstanding repeated arcs;
b) High quality of contact make with extremely low resistance;
c) High quality contact mating, capable of retaining high conductivity over time;
d) Adequate contacts parting distance in open position for the rated voltage;
e) Adequate line to ground insulation for the rated voltage;
f) Stable insulating medium, capable of withstanding repeated arcs;
g) Fast speed during opening and closing of contacts;
h) Appropriate arc blowing techniques to extinguish arcs;
i) Adequate energy imparting mechanisms for making or breaking of short circuit currents.

The operating mechanism of circuit breakers consists of numerous moving parts that are subject to wear and tear during breaker operation. Because circuit breakers are required to frequently "make" and "break" heavy currents, the contacts are subjected to arcing that accompanies such operations. Each time a circuit breaker opens or closes the contact surfaces undergo some degradation and degraded contacts produces higher degree of arcing in subsequent operations. Heat produced during contact arcing also decomposes the metal surface from the contacts as well as the insulation medium and the by-products so decomposed are deposited in surrounding insulation materials. The mechanical energy required to generate high contact velocities also results in wear and tear of the mechanical parts in operating mechanism.

The findings and conclusions of the Kinectrics' report are summarized in Exhibit 3. As shown, their report concludes 40 years to be the typical useful life for metal clad switchgear and removable breakers used in metal clad switchgear. During the utility surveys, four of the six

surveyed LDC indicated 40 years to be the typical useful life of metal clad switchgear on their systems.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Overall	30	40	60
Removable Breaker	25	40	60

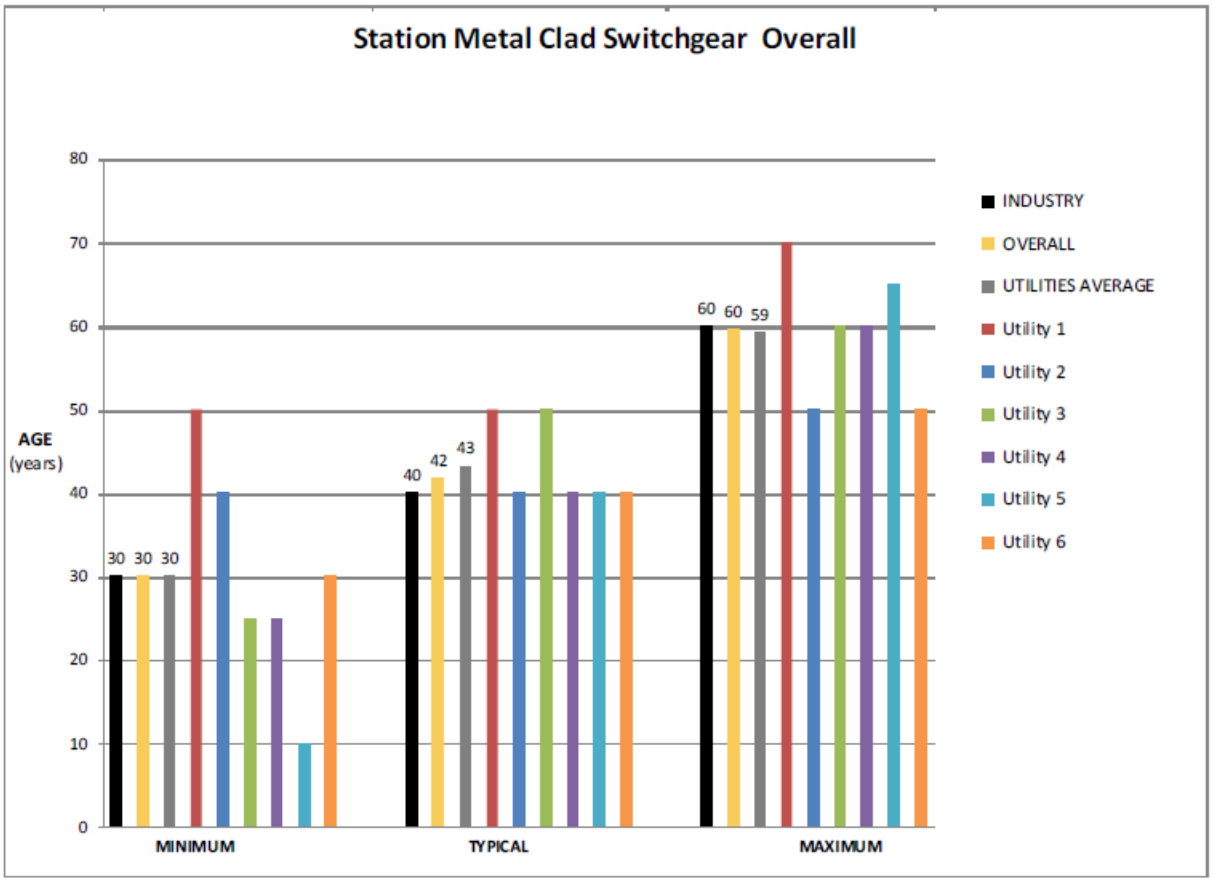

Exhibit 3: Typical Useful Life of Metal Clad Switchgear (Kinectrics Report)

Based on OPUCN's own experience, circuit breakers in metal clad switchgear, employed at MS-9, MS-7, MS-11, MS-13, and MS-14 have been replaced after mean useful service life of approximately 40 years. In view of the above, we concur with Kinectrics recommendation for the typical useful life of metal clad switchgear and circuit breakers in metal-clad switchgear to be 40 years.

2.3. Station Independent Breakers

The asset class covers both outdoor and indoor mounted circuit breakers, not in metal clad enclosures. In accordance with the definitions provided in the Kinectrics report, the 44 kV outdoor circuit breakers employed at OPUCN stations fall within this category. OPUCN has a total of sixteen (16) circuit breakers in service that fall in this category. The mean service life of these circuit breakers is currently 38 years and most of these circuit breakers are intended to be replaced during the next five years, which would yield an average service life of approximately 40 years.

Generally speaking, in relation to the indoor mounted circuit breakers, the outdoor mounted circuit breakers experience more adverse and hostile environmental conditions, that increase the rate and severity of circuit breaker condition degradation. The following factors represent additional environmental degradation of outdoor mounted circuit breakers:

- Corrosion of enclosures and metal parts;
- Potential ingress of moisture into operating parts and insulating system;
- Bushing/insulator deterioration under the influence of moisture, fog, ice; and
- Deterioration of mechanical parts and linkages in operating mechanism.

On the other hand, the 44 kV breakers are less frequently called upon to operate and break short circuit current and therefore, the wear and tear from operational use is expected to be less than those experienced by 13.8 kV circuit breakers in indoor metal clad switchgear.

Exhibit 4 summarizes Kinectrics findings for this asset class. As shown, the Kinectrics report indicates that based on broader industry experience, the typical life expectancy of individual circuit breakers is 40 years. It is also noteworthy that only three of the six utilities surveyed by Kinectrics provided information relevant to this asset and there were extremely large deviations in service age data obtained from them. Kinectrics did not investigate the reasons behind such large deviations, but it is possible the deviations were caused by mixing indoor and outdoor mounted circuit breakers in the same category and not excluding the circuit breakers which might have been completely overhauled. One of the utilities reported typical service life of 70 years for circuit breakers, which was likely achieved through major refurbishment or rehabilitation of original breakers with additional capital expenditure.

In our opinion, because this asset class is composed of a broad category of different types of circuit breakers, some installed indoors and some installed outdoors, the surveys performed by Kinectrics did not correctly reveal the typical useful life of outdoor circuit breakers. For this asset, the typical useful life based on the overall industry experience, as reported by Kinectrics, more accurately represents the typical useful life of circuit breakers employed on OPUCN system. We recommend OPUCN to adopt 40 years to be the typical useful life for this asset, to match the broader industry experience reported by Kinectrics.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Station Independent Breakers	35	45	65

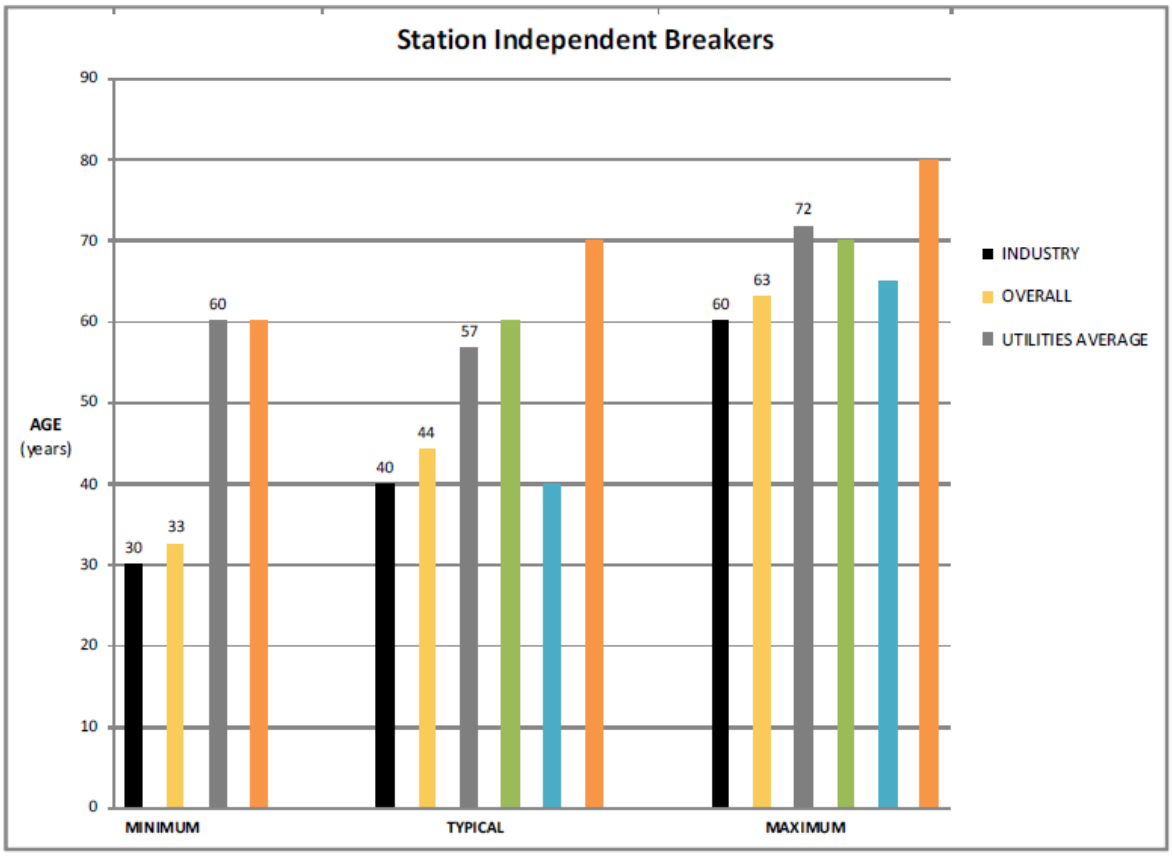

Exhibit 4: Typical Useful Life of Independent Circuit Breakers (Kinectrics Report)

2.4. Microprocessor Relays

The function of protection relays on distribution systems is to detect and annunciate abnormal operating conditions and initiate circuit breaker or recloser trip to isolate faulty circuits from healthy circuits. Protection relays obtain their input from instrument transformers, process the information and automatically take corrective action with adequate speed and selectivity. Electro-mechanical designs of protection relays have been in use in the industry for several decades, but the industry best practice has been to replace these relays with solid state and microprocessor relays. The micro-processor and the solid state relays do not require frequent calibrations, but they are vulnerable to damage from voltage and current surges.

All of the protection and control relays employed at OPUCN substations are microprocessor type. As shown in Exhibit 5, the Kinectrics report recommends 20 years to be the typical useful life for this asset and we agree this is an accurate estimate of the typical useful life for this asset.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Digital & Numeric Relays	15	20	20

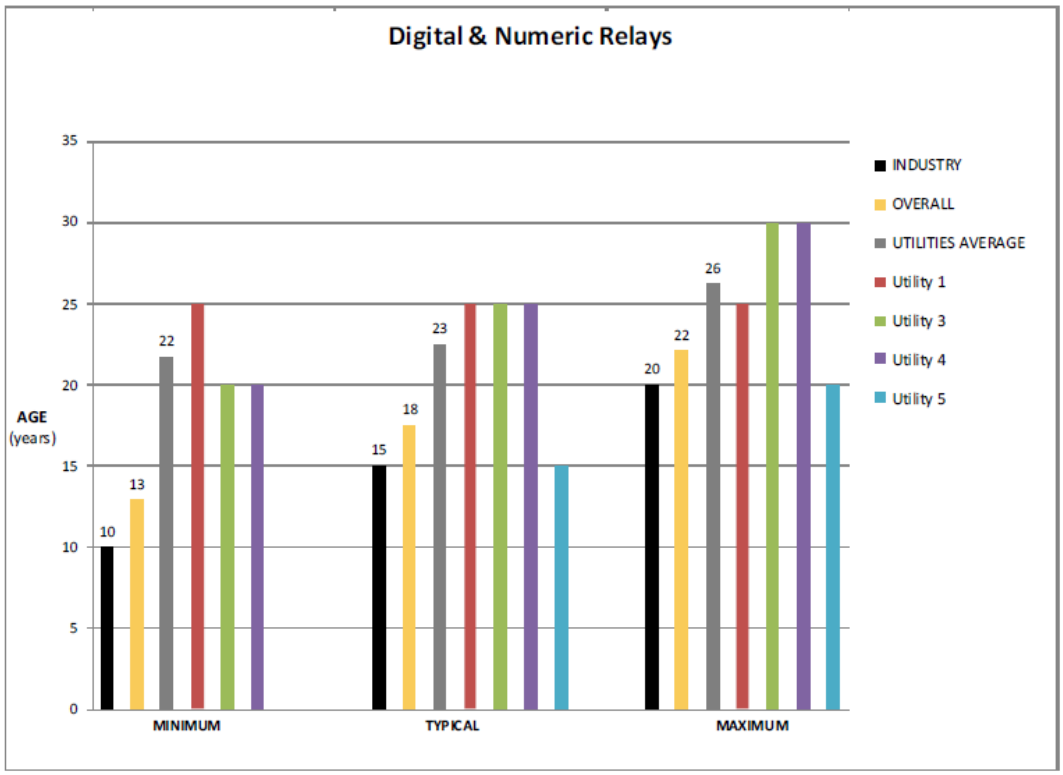

Exhibit 5: Typical Useful Life of Digital Microprocessor Relays (Kinectrics Report)

2.5. Remote Supervisory Control and Data Acquisition System (SCADA)

SCADA systems on power distribution systems are used for data acquisition related to status and condition of field mounted equipment as well as for remote control of field mounted equipment. While SCADA systems have traditionally been employed by local distribution companies for remote control of substation equipment, however modern SCADA systems can provide much more advanced functions, i.e. automated isolation of feeder sections through operation of line mounted switches, automated outage management, automated demand control etc.

As shown in Exhibit 6, the Kinectrics report recommends 20 years to be the typical useful life for this asset.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Remote SCADA	15	20	30

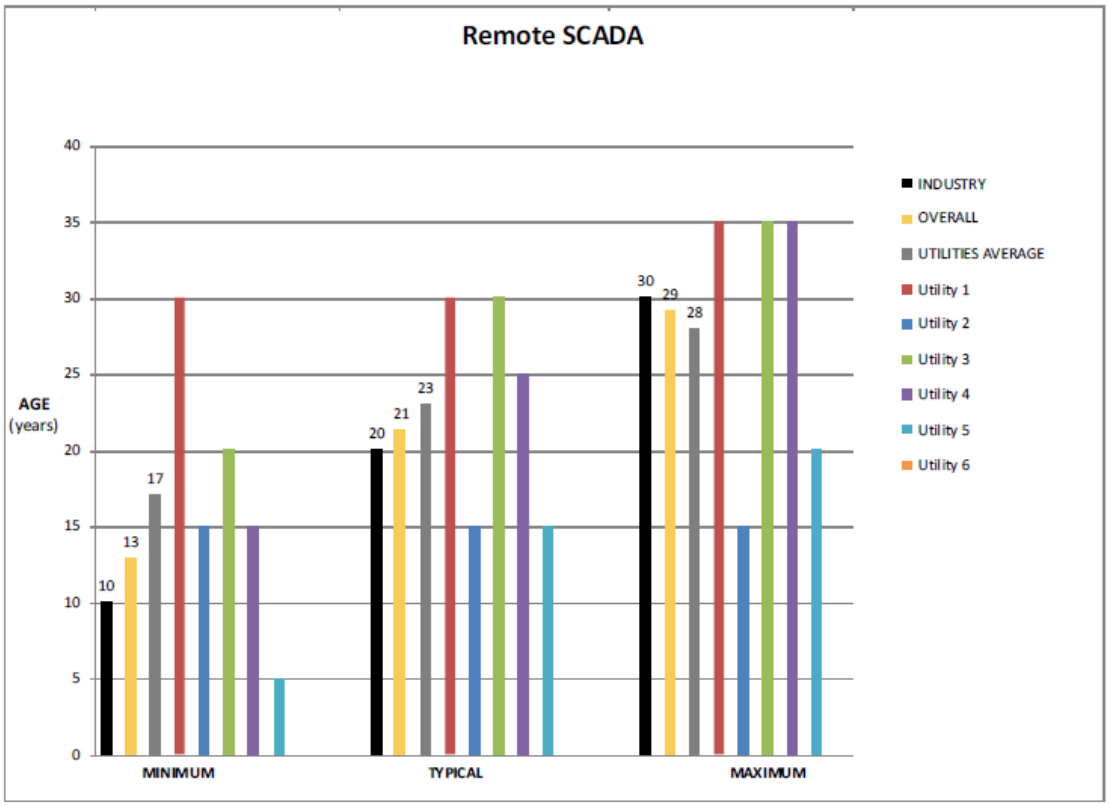

Exhibit 6: Typical Useful Life of Remote SCADA System (Kinectrics Report)

SCADA systems consist of multiple sub-systems, as listed below:

(a) Remote terminal units (RTUs) - that connect to sensors and convert sensor signals to digital data. They have telemetry hardware capable of sending digital data to the supervisory system, as well as receiving digital commands from the supervisory system. RTUs have embedded control capabilities such as ladder logic to accomplish boolean logic operations.

(b) Telemetry system – which connects RTUs with control centers. Telemetry systems include both wired communications media such as leased telephone lines and WAN circuits and wireless telemetry media, such as satellite, licensed and unlicensed radio, cellular and microwave.

(c) Data acquisition server –the software service that allows clients to access data from the field devices using standard protocols. It uses industrial protocols to connect software services, via telemetry, with field devices such as RTUs.

(d) A human–machine interface or HMI is the apparatus or device which presents processed data to a human operator, and through this, the human operator monitors and interacts with the process. The HMI is a client that requests data from a data acquisition server.

Components employed on the above described SCADA subsystems can be categorized into three main groups: (i) computer hardware, (ii) computer software, and (iii) the communications architecture. The typical useful life of SCADA system is a function of the typical useful life of these components. While the SCADA components may provide a service life of 20 years without component failures, as proposed in the Kinectrics report, the end of life for the SCADA systems is typically caused much earlier, due to hardware failures or the software becoming obsolete. The hardware and software components in most cases require upgrades after service life of approximately 5 years, while the communications infrastructure components may provide a service life of 10 to 20 years.

Our investigations into OPUCN SCADA history reveal that the control room hardware and software components were installed in 2008. In late 2013 one of the SCADA Workstation failed and was replaced, providing service life of 5 years. OPUCN also upgraded the two servers at the same time. While performing the above listed computer hardware replacements and upgrades, OPUCN also upgraded the SCADA Software. In the substation RTUs, the original analog and control boards are still in service for about 20 years, but the CPUs required replacement after about 15 years of service.

To maximize the benefits of major investments into the advanced revenue metering systems, many LDCs are implementing major upgrades to their SCADA systems to incorporate smart grid functions, i.e. outage management systems. Such advanced functions require both hardware and software upgrades prior to these components reaching the end of their mechanical life due failure in service.

In view of the foregoing, in our opinion, the typical useful life of SCADA system is of the order of 8 years, rather than 20 years, proposed in Kinectrics report.

2.6. Other Assets Employed in Distribution Stations

For all of the remaining assets employed in Distribution Stations, in our opinion the estimates of typical useful life provided in the Kinectrics report accurately represent the typical useful life for each of those assets.

3 Overhead Distribution System Assets

3.1. Fully Dressed Wood Poles

This asset class includes the wood pole, cross arm, bracket, insulator, cutouts, arresters, anchors and guys. The most significant component of this asset is the wood pole itself, commonly utilizing Red Pine, Jack Pine, and Western Red Cedar (WRC) species. The poles are either butt treated or full length treated with preservatives.

The most critical degradation process for wood poles involves biological and environmental mechanisms such as fungal decay, wildlife damage and effects of weather. Fungi attack both external surfaces and the internal heartwood of wood poles. The process of fungal decay requires the presence of fungus spores in the presence of water and oxygen. For this reason, the area of the pole most susceptible to fungal decay is at and around the ground line, although pole rot is also known to begin at the top of the pole. To prevent the decay of wood poles, utilities treat them with preservatives before installation. Wood preservatives have two basic functions:

- keep out moisture that supports fungi by sealing the surfaces, and
- kill off the fungal spores.

The following factors represent some of the more critical factors affecting wood pole strength as poles age:

- Original type and class of wood pole;
- Original defects in wood (e.g. knots, cracks or rot);
- Rate of decay in service life which depends on type of treatment and environmental conditions;
- Pole damage by woodpeckers, insects, and other wildlife; and
- Wood burns.

Several types of damage can also deform bolt holes in poles. Generally, such deformities do not present immediate problems. However, in some cases deformed holes can result in both failure of the structure and failure of other components attached to the pole. Bolts also can become loose, elongated, bent, cracked, sheared/broken and lost.

The types of insulators and configurations typically used in distribution systems include dead-end, suspension, post and pin types. The insulating portion may consist of porcelain or polymer. The metallic parts usually are made from zinc coated ductile or malleable iron. Both electrical and mechanical stresses may affect insulators. Degradation and eventual failure generally result from the loss of either dielectric or mechanical strength. Mechanical loading on suspension and line post insulators consists of a combination of tensile, torsional, cantilever, vibration and compression forces resulting from factors such as conductor vibration and galloping, accumulation of high density snow or ice, and sudden ice shedding. Line post, strut and pin type insulators are unique since they may experience a combination of cantilever, transverse and tensile forces simultaneously. Impact or contact induced damage also may occur.

Contamination of insulator surface with road salt, freezing rain, and snow accumulation may induce flashovers resulting in dielectric failure of insulators. Electrical flashovers can cause both external and internal damage to porcelain and composite insulators.

Degradation or reduction in strength of insulator hardware may occur due to the following:

- Loss of galvanization and corrosion of steel members;
- Loss in strength due to fatigue;
- Loosening of hardware due to conductor vibrations; or
- Hardware failure during major storm events.

ASSET COMPONENTIZATION		USEFUL LIFE (years)		
		MIN UL	TUL	MAX UL
Overall		35	45	75
Cross Arm	Wood	20	40	55
	Steel	30	70	95

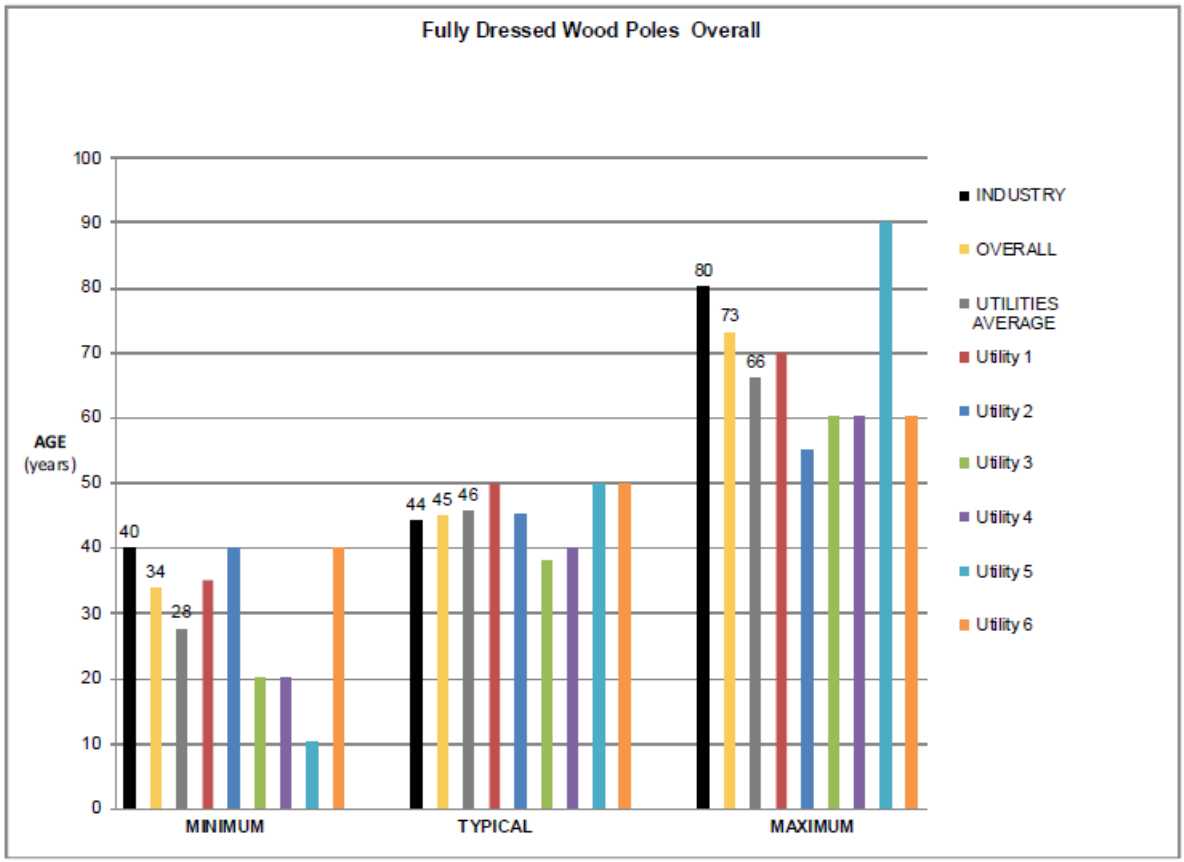

Exhibit 7: Typical Useful Life of Fully Dressed Wood Poles (Kinectrics Report)

Exhibit 7 documents the results of utility surveys performed by Kinectrics and summarizes their conclusions of the typical useful of this asset class. The Kinectrics report recommends a typical useful life of 45 years for this asset.

We analysed relevant data from the OPUCN records. The number of poles removed from service on various line rebuild projects, completed during the recent years, and their useful service life are indicated in Exhibit 8 below. The data indicate mean service life of approximately 45 years was achieved for the wood poles. Therefore, we conclude 45 years to an accurate estimate of the typical useful life of wood poles at OPUCN.

Number of Poles	Useful Service Life (years)
21	40
22	45
3	30
27	40
24	40
2	45
15	45
3	40
3	50
18	40
37	50
77	40
70	50
42	45
109	50
Mean Service Life (Years)	45.22

Exhibit 8: Actual Service Life of Wood Poles on OPCUN Distribution System

3.2. Overhead Line Conductors

Line conductors allow flow of current through them facilitating the movement of power from substations to customers' premises. Overhead line conductors are typically supported on wood pole structures to which they are attached by insulators suitable for the voltage at which the lines operate. The conductors on a line are sized by taking into account the amount of current to be carried. The maximum current carrying capacity of conductors is determined by their thermal rating. However distribution line conductors are commonly sized to provide the right balance between energy loss in conductors (copper loss) and the capital cost of conductors. As a result

the distribution lines often operate under loads significantly below the thermal rating of the conductors.

Overhead line conductors must have adequate tensile strength, enabling them to be stretched between poles. Distribution lines typically have span length of 40 m to 60 m. Three different types of conductors are commonly used on distribution lines:

- Aluminium Conductors Steel Reinforced (ACSR),
- Aluminium Stranded Conductors (ASC),
- Aluminium Alloy Conductors (AAC).

Steel reinforced aluminium conductors have galvanized steel core strands that supply most of their tensile strength. The steel core has both tensile and ductile properties, allowing the core to withstand both longitudinal forces and bending movements without failure. AAC conductors cost less in relation to ACSR conductors, but their tensile strength is significantly lower than those of the ACSR conductors. Both the price and tensile strength of AAC conductors lie in between those of ASC and ACSR conductors.

Because of the relatively short span lengths employed on distribution lines in relation to transmission lines, the tensile strength of conductors on distribution lines is not as critical as it is on transmission lines. Most distribution utilities these days, therefore, employ all aluminium conductors on distribution lines. Aluminium alloy conductors are sometimes used on distribution lines with longer span lengths.

As current passes through the conductors, the resistance causes its temperature to rise, the temperature change is proportional to the square of the load current passing through the conductor. The rise in temperature causes the conductor to lengthen and sag between points of support, reducing the height of the conductor above ground. Although it seldom happens on distribution lines, line operation at loads beyond conductors' thermal rating of approximately 90° C may lead to annealing of conductors, resulting in permanent loss of its tensile strength.

To provide their intended functions on distribution lines, conductors must retain both their conductive properties and mechanical (i.e., tensile) strength. Aluminium conductors have three primary modes of degradation, corrosion, fatigue and creep. The rate of each degradation mode depends on several factors, including the size and construction of the conductor as well as environmental and operating conditions.

Generally, corrosion represents the most critical life-limiting factor for ACSR conductors. Environmental conditions affect degradation rates from corrosion. Both aluminium and zinc-coated steel core conductors are susceptible to corrosion from chlorine-based pollutants, even in low concentrations, but the rate of corrosion of steel core is significantly greater than that of aluminium. While fatigue degradation is a serious concern for transmission lines that are strung with significantly higher tension, it is commonly not a serious issue for distribution lines.

Overloaded lines operating beyond their thermal capacity can suffer from a loss of tensile strength due to annealing at elevated operating temperatures. Each elevated temperature event

adds cumulative damage to the conductors. After loss of 10% of a conductor's rated tensile strength, significant sag occurs, requiring either re-sagging or replacement of the conductor. ACSR conductors can withstand greater annealing degradation compared to ASC.

Phase to phase power arcs can result from conductor galloping during severe storm events. This can cause localized burning and melting of a conductor's aluminium strands, reducing strength at those sites and potentially leading to conductor failures.

Other forms of conductor damage include:

- Broken strands (i.e., outer and inners)
- Strand abrasion
- Elongation (i.e., change in sags and tensions)
- Burn damage (i.e., power arc/clashing)
- Bird-caging.

Exhibit 9, reproduced below from the Kinectrics report, summarizes the typical useful life of overhead line conductors. As shown, it concludes the typical useful life of overhead line conductors to be 60 years. We agree the conductors on distribution lines often outlive the poles and are not usually on the critical path to determine end of life for a line section. But typically, whenever a line is rebuilt with new poles, the conductors are also replaced at the same time, because it is economically prudent to do so.

To avail of the hypothetical useful life of 60 years for the line conductors supported on wood poles with typical useful life of 45 years, the line will need to be rebuild in a piecemeal fashion; i.e. all the wood poles will need be replaced when a majority of them have reached the end of their service life after 45 years and then 15 years later the conductors will need to replaced. Such piece meal construction of medium voltage lines would also require live-line construction techniques. Electric utilities' practical experience indicates that it is more economical to construct the line in a single stage replacing all the components at the same time, rather than constructing the line in a piece meal manner.

Thus while we agree the conductors often outlive poles in terms of their performance degradation, because it is more economical to reconstruct the overhead lines by changing all the components at the same time rather than reconstructing the line in stages, the effective typical useful life for overhead line conductors is equal to the typical useful life of the wood poles. Therefore we recommend OPUCN to employ 45 years to be the typical useful life for overhead line conductors, because a vast majority of the overhead lines at OPUCN are supported on wood poles.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
OH Conductors	50	60	75

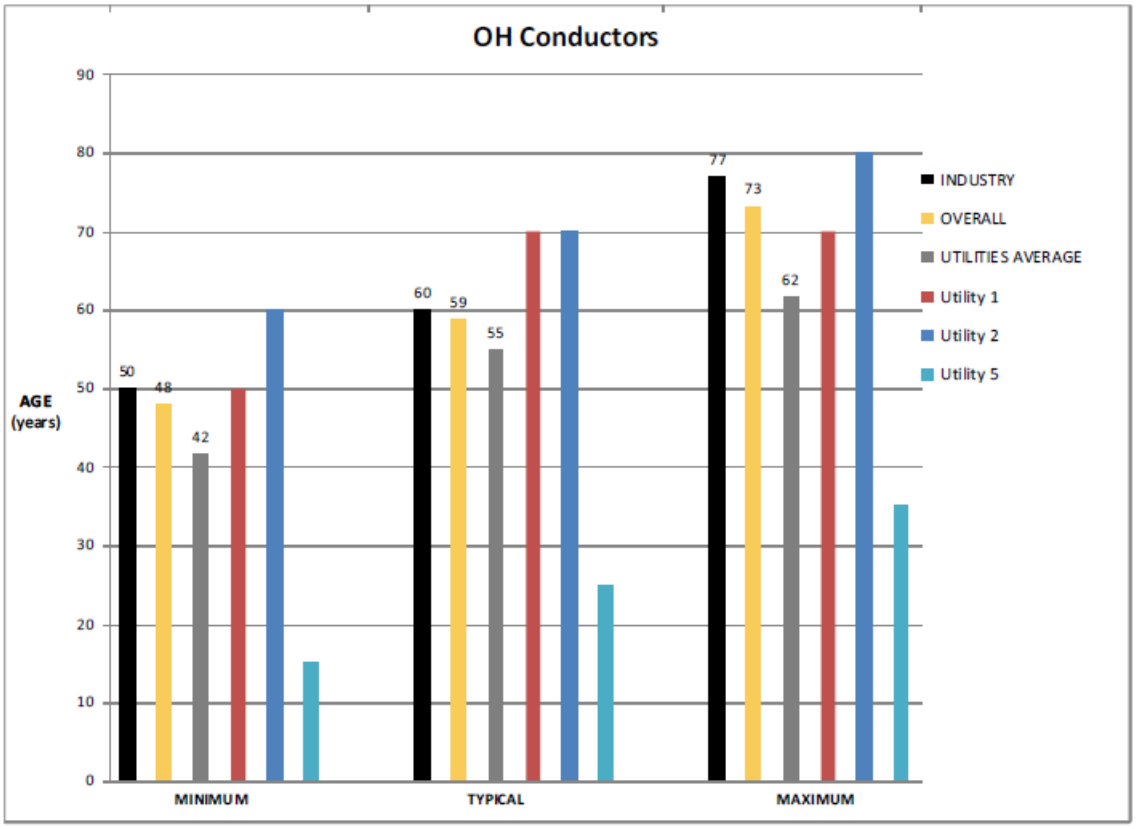

Exhibit 9: Typical Useful Life of OH Conductors (Kinectrics Report)

3.3. Overhead Line Switches

This asset class consists of overhead line switches, focusing primarily on 3-phase outdoor pole-mounted switches but also includes in-line switches. The primary function of switches is to allow for isolation of line sections or equipment for maintenance, safety or other operating requirements. The operating mechanism can be either a manual gang operating linkage or a simple hook stick.

The performance degradation modes associated with overhead line switches include corrosion of hardware, mechanical deterioration of linkages in operating mechanism, switch blades falling out of alignment, switch blade contacts burn out due to arcing, loose connections or cracked insulators. The rate and severity of these degradation processes depends on the operating duties

and environment in which the equipment is installed. In most cases, corrosion or rust represents a critical degradation process. The rate of deterioration depends heavily on environmental conditions in which the equipment operates. Corrosion typically occurs around the mechanical linkages of these switches. Corrosion can cause seizing. When lubrication dries out, the switch operating mechanism may seize making the disconnect switch inoperable. In addition, when blades fall out of alignment, excessive arcing may result. In heavy industrial areas, chemical pollution or road salt spray can also result in faster degradation.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
OH Line Switch	30	45	55

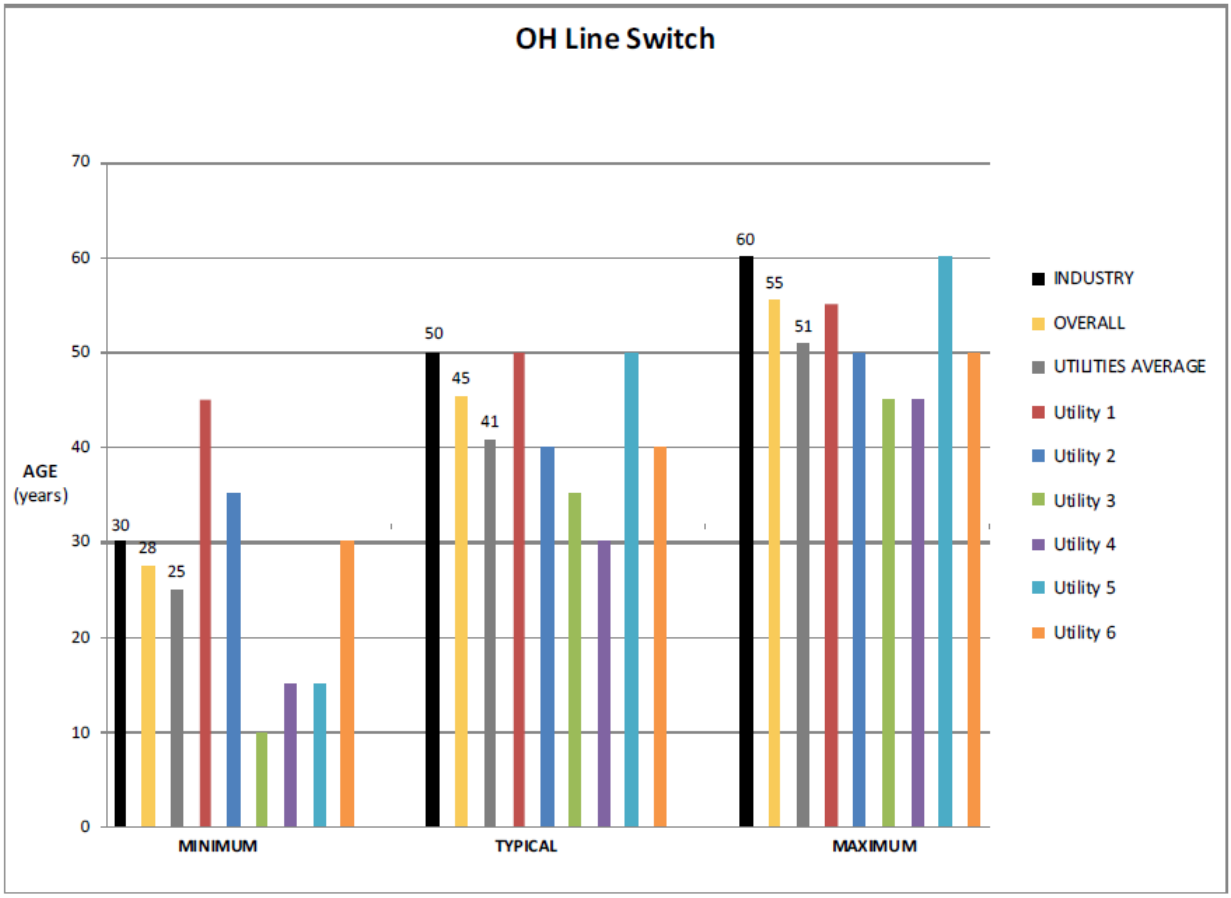

Exhibit 10: Typical Useful Life of Overhead Line Switches (Kinectrics Report)

Exhibit 10, reproduced from the Kinectrics' report, summarizes the survey results and conclusions of the Kinectrics report. As shown, the six utilities responding the Kinectrics survey reported typical useful life of 30 years (1), 35 years (1), 40 years (2) and 50 years (2), which results in mean useful life of 41 years. Kinectrics has indicated their opinion of the typical useful life for this asset in broader industry to be 50 years, but no evidence is provided in the report to support this belief. Based on the results of the survey gathered by Kinectrics and based on

OPUCN's own operating experience, the correct typical useful life of this asset is 40 years and we recommend OPUCN adopt 40 years TUL for this asset.

3.4. Other Assets Employed on Overhead Distribution System

For all of the remaining assets employed on overhead lines, including distribution transformers, voltage regulators and reclosers, in our opinion the estimates of typical useful life provided in the Kinectrics report accurately represent the typical useful life for each of those assets.

4 Underground Distribution System Assets

4.1. Underground Vault Switches

Underground vault switches are used to switch underground feeders or sub-loops are rated to make and break load current. Due to space constraints in underground vaults air-insulated switches are rarely used. Oil insulated switches were commonly used in the past in this application, however SF-6 insulated switches are more commonly used these days.

The health degradation modes for underground vault switches include mechanical failures due to corrosion of operating mechanism, rusting of enclosure and contamination of insulating oil with moisture. The SF6 switch failure modes include degradation of seals and gaskets that result in gas leak.

As summarized in Exhibit 11, the Kinectrics report concludes 35 years to the typical useful life for this asset and we agree with their conclusion.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
UG Vault Switches	20	35	50

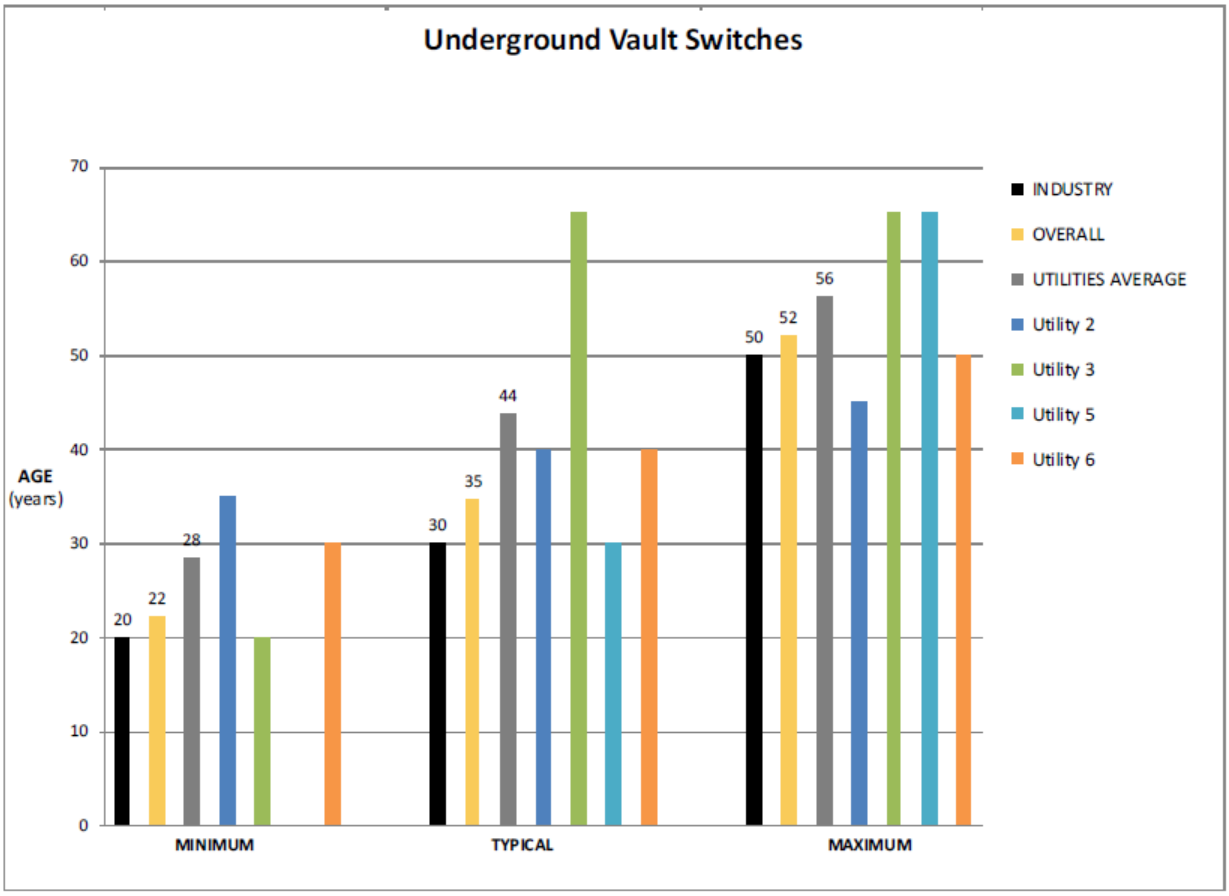

Exhibit 11: Typical Useful Life of Vault Mounted Switches (Kinectrics Report)

4.2. Underground Vaults

Underground vaults permit installation of transformers, switchgear or other equipment and are used when it is not practical to install such equipment on above grade pads. The vaults are typically built of reinforced concrete, using poured in place techniques. In locations subject to flooding floor drains and sump pumps are provided. Vaults where heat generating equipment such as distribution transformers are installed are also equipped with ventilation grates. Man access is provided through the top. When vaults are located in road ways, sidewalks, parking lots or other areas open to vehicular traffic, the structures must be designed by a structural engineer. Since vaults are confined spaces, they must be adequately sized to rescue trapped workers during a fire or explosion inside the vault or manhole.

The common degradation mode vaults is the deterioration of concrete structures due to concrete spalling and corrosion of rebar, sinking of the roof top surfaces allowing rain water to collect and flood the vaults. Functional obsolescence, where the size of the vault no longer meets the space requirements can also lead to end of life of a structure.

As summarized in Exhibit 12, the Kinectrics report concludes 60 years to the typical useful life for this asset and we agree with their conclusion.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Overall	40	60	80
Roof	20	30	45

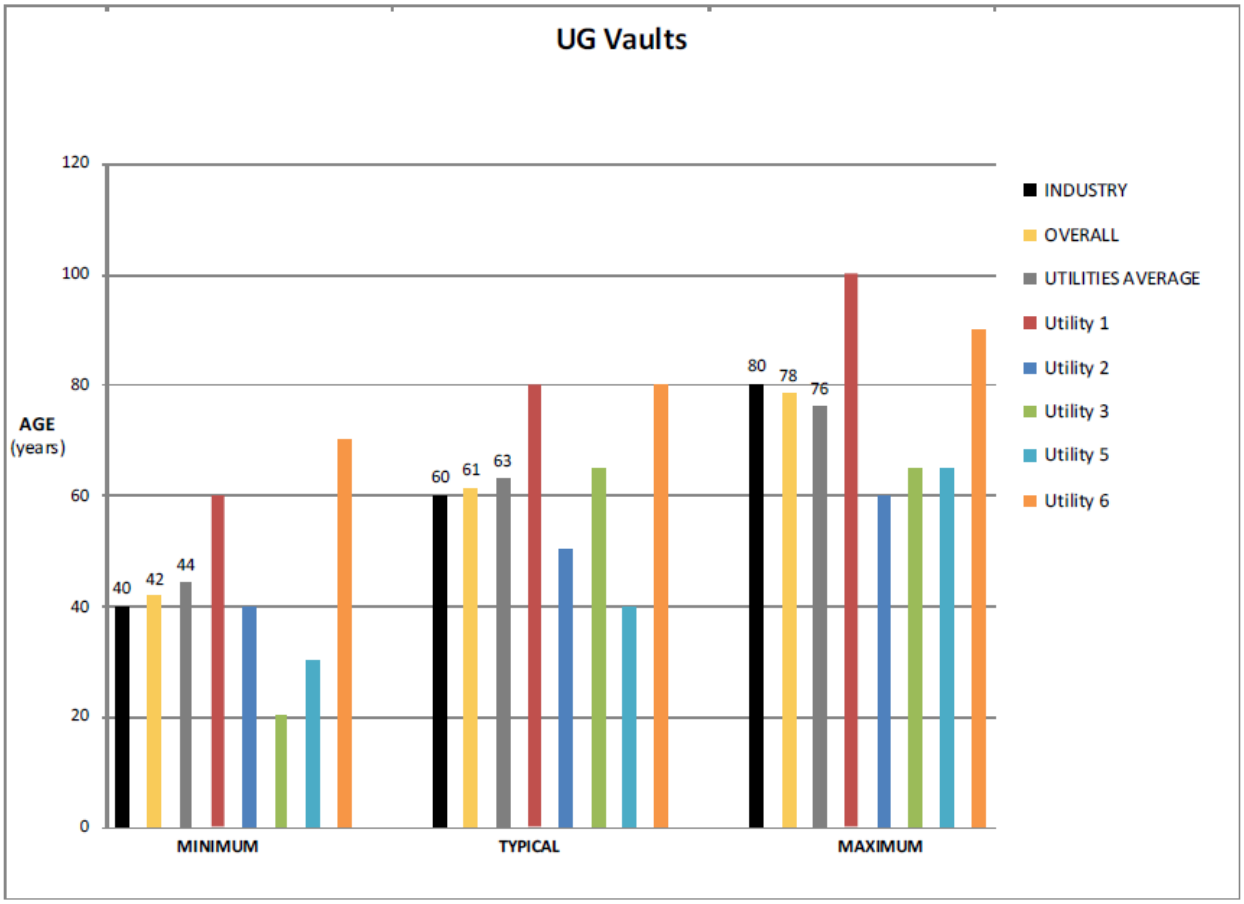

Exhibit 12: Typical Useful Life of Equipment Vaults (Kinectrics Report)

4.3. Cable Chambers

Cable Chambers or manholes permit cable pulling into underground ducts and provide access to splices for periodic inspections or maintenance. Cable chambers of many different styles, shapes

and sizes are in use. Pre-cast cable chambers are typically installed in boulevards and road allowances, outside of the travelled pavement portion of the road. Poured in place cable chambers are used under the travelled portion of the road to meet the required structural strength.

The common degradation mode for cable chambers is the deterioration of concrete structures due to concrete spalling and corrosion of rebar, sinking of the roof top surfaces allowing rain water to collect and flood the cable chamber. Functional obsolescence, where the size of the manhole no longer meets the space requirements can also lead to end of life of a structure.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Cable Chambers	50	60	80

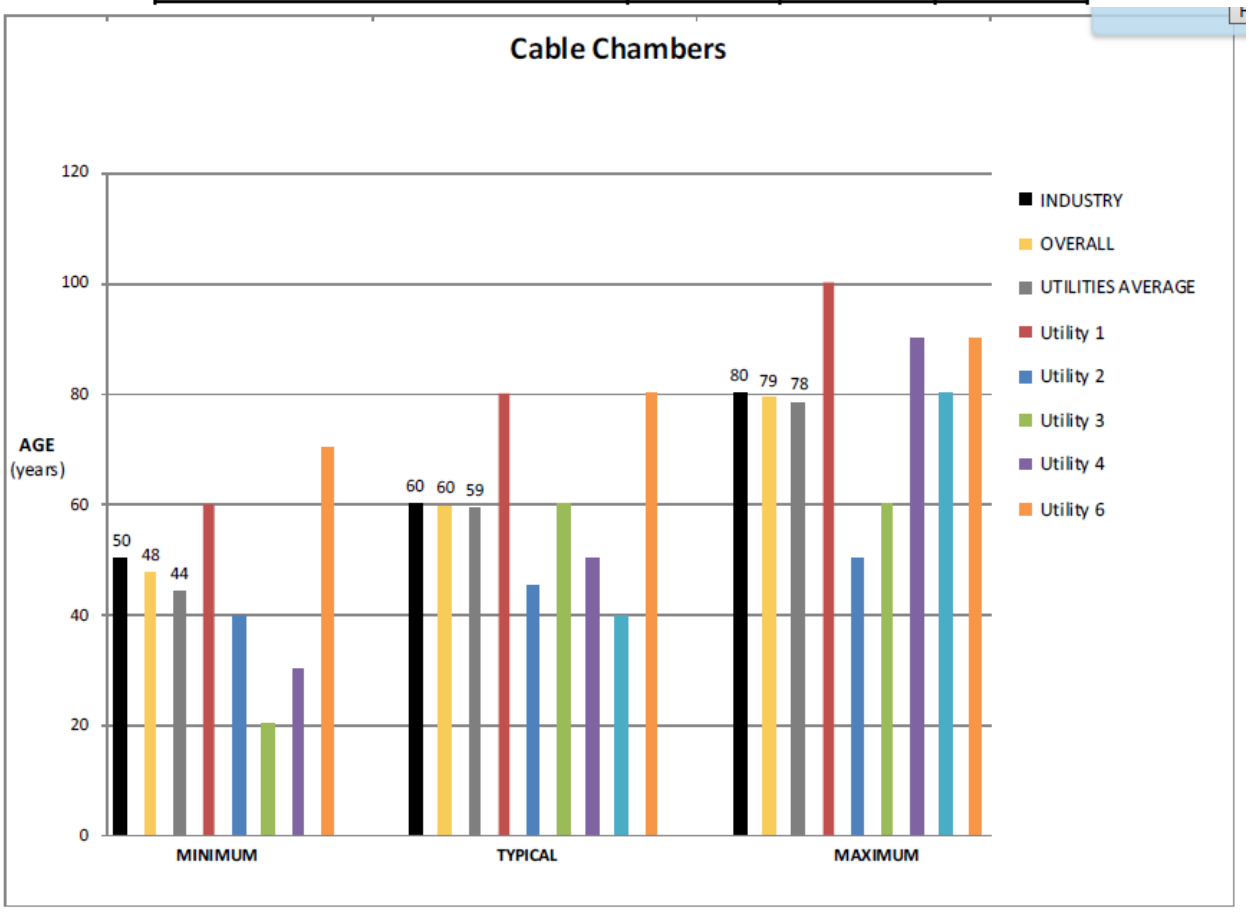

Exhibit 13: Typical Useful Life of Cable Chambers (Kinectrics Report)

As summarized in Exhibit 13, the Kinectrics report concludes 60 years to the typical useful life for this asset and we agree with their conclusion.

4.4. Concrete Encased Duct Banks

Concrete encased duct banks are commonly used for installation of underground cables in downtown city centers. The ducts connecting cable chambers and equipment vaults provide convenient means of pulling cables to serve new loads or replace older cables at the end of their useful life.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Concrete Encased Duct Banks	35	55	80

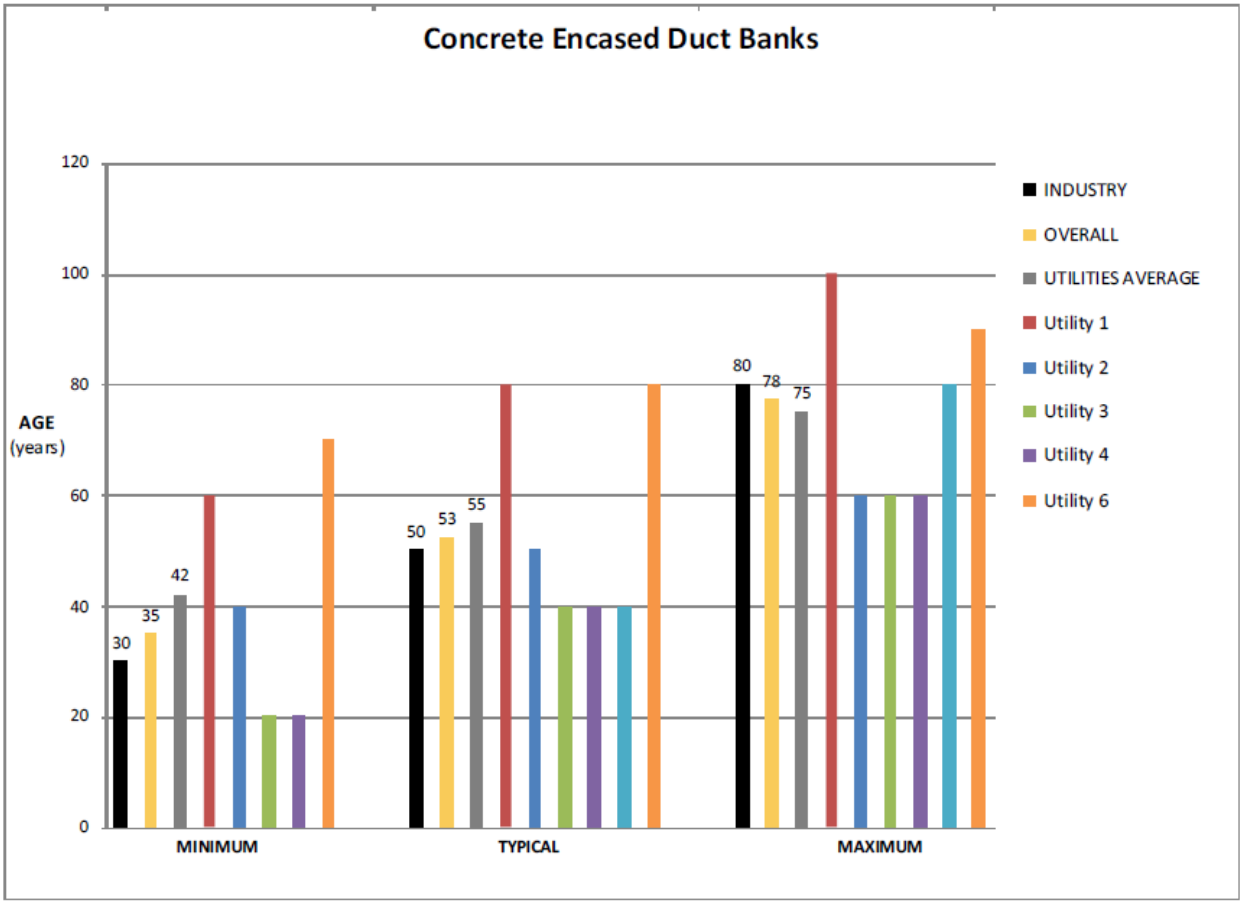

Exhibit 14: Typical Useful Life of Concrete Encased Duct Banks (Kinectrics Report)

As summarized in Exhibit 14, the Kinectrics report concludes 55 years to the typical useful life for this asset and we agree with their conclusion.

4.5. Direct Buried Primary Cable

Medium voltage cables may employ either copper or aluminum conductors. They may be constructed in either single phase or three phase configurations. Two major types of cables are in common use in Ontario: paper insulated lead covered (PILC) and cross linked polyethylene (XLPE).

The original designs of medium voltage cables were constructed out of oil impregnated layers of paper covered with a lead jacket and these cables are commonly referred to as paper insulated lead covered (PILC) cables. For these cables, the two significant long-term degradation processes are corrosion of the lead sheath and dielectric degradation of the oil impregnated paper insulation. Isolated sites of corrosion resulting in moisture penetration or isolated sites of dielectric deterioration resulting in insulation breakdown can result in localized failures. However, if either of these conditions becomes widespread there will be frequent cable failures and the cable can be deemed to be at effective end-of-life.

Polymer insulations for cables were introduced as an economic alternative to PILC cables in 1970's. The insulation system in these cables consists of a semi-conducting sheath over the conductor, the insulation, another semi-conducting layer over the insulation, a metallic shield tape or concentric neutral and a jacket. For the early generation of these cables, manufactured in the 1970's, two unexpected factors entered into the failure mechanism: presence of impurities in the insulation system and ingress of moisture that made these cables susceptible to premature failures due to water treeing. Water treeing in XLPE cables of 1970's vintage are the major cause of excessive cable failures on distribution system. Corrosion of concentric neutral conductors is another potential mode of failure.

Water treeing is the most significant degradation process for polymeric cables. The original design of cables with polymeric sheaths allowed water to penetrate and come into contact with the insulation. In the presence of electric fields water migration can result in treeing and ultimately breakdown. The rate of growth of water trees is dependent on the quality of the polymeric insulation and the manufacturing process. Any contamination voids or discontinuities will accelerate degradation. This has been the reason for poor reliability and relatively short lifetimes of early polymeric cables. As manufacturing processes have improved the performance and ultimate life of this type of cable has also improved. In addition to manufacturing improvements, development of tree retardant XLPE cables and designs to incorporate metal foil barriers and water migration control have further reduced the rate of deterioration due to treeing.

Distribution underground cables are one of the more challenging assets on electricity systems from a condition assessment and asset management viewpoint. Underground cables are relatively expensive and have long effective lifetimes. However, it is very difficult and therefore very expensive to obtain meaningful condition information for buried cables. Furthermore, cable systems have a good reliability record and when failures do occur they can be repaired at much lower cost than replacement. For all these reasons, the standard approach to managing cable systems has been monitoring of cable failure rates and the impacts of in service failures on

reliability and operating costs. Since it takes significantly longer to locate and repair cable faults to restore power following a failure in case of direct buried cables, the consequences of failures are significantly higher in case of direct buried cables in relation of cables installed in duct and manhole system. This results in typical useful life of direct buried cables to be significantly less than the cables installed in duct/manhole systems.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Primary TR XLPE Cables - Direct Buried	25	30	35

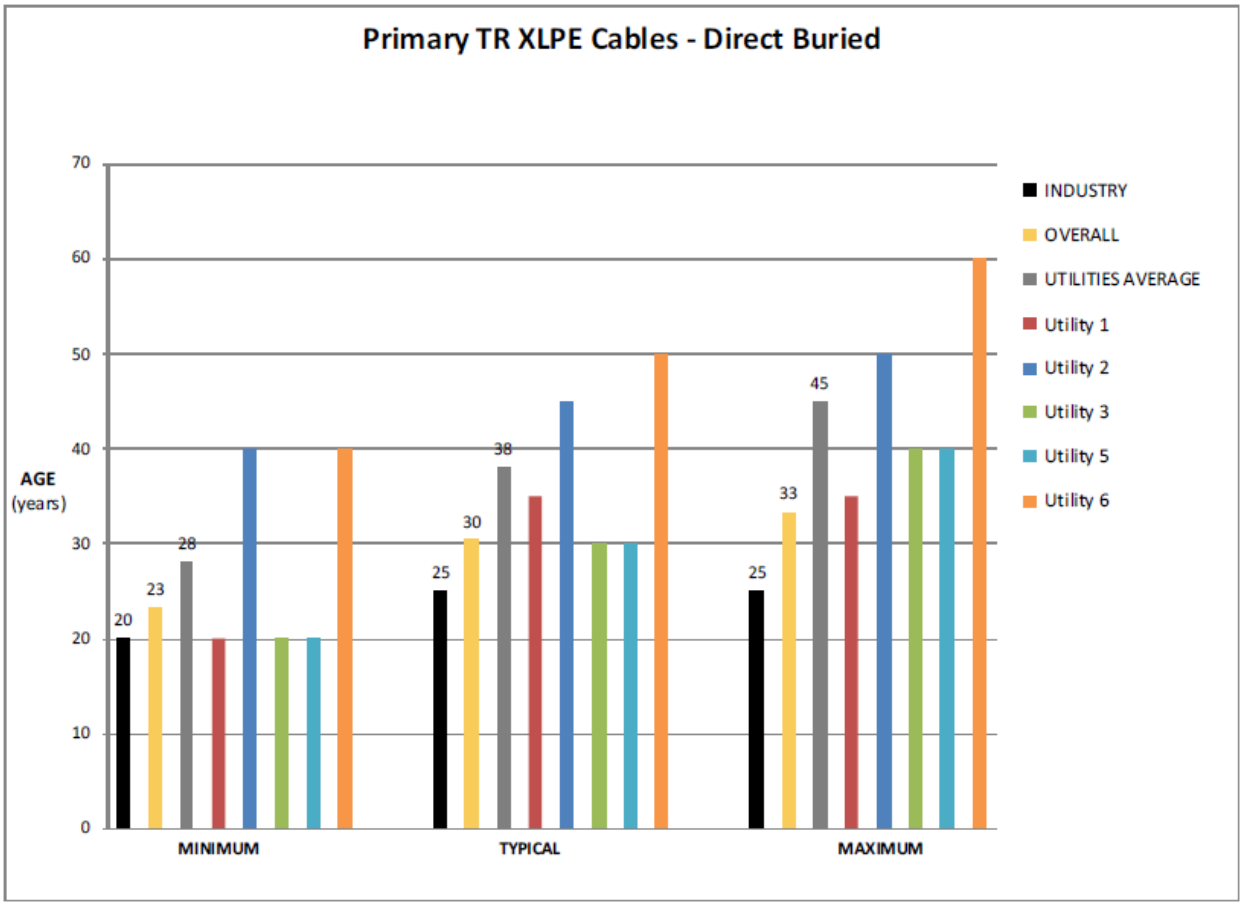

Exhibit 15: Typical Useful Life of Direct Buried Cables (Kinectrics Report)

As summarized in Exhibit 15, the Kinectrics report concludes 30 years to the typical useful life for this asset and we agree with their conclusion.

4.6. Primary Cable in Duct

This asset experiences the same degradation modes as described above for direct buried cables. The key difference is following an outage, the cable faults can be located and cables repairs with significantly greater speed, in relation to direct buried cables. The cost of repairs is also less because there is no resurfacing required after cable replacement. As a result primary cables in duct typically provide a longer service life in relation to direct buried cables.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Primary TR XLPE Cables - In Duct	35	40	55

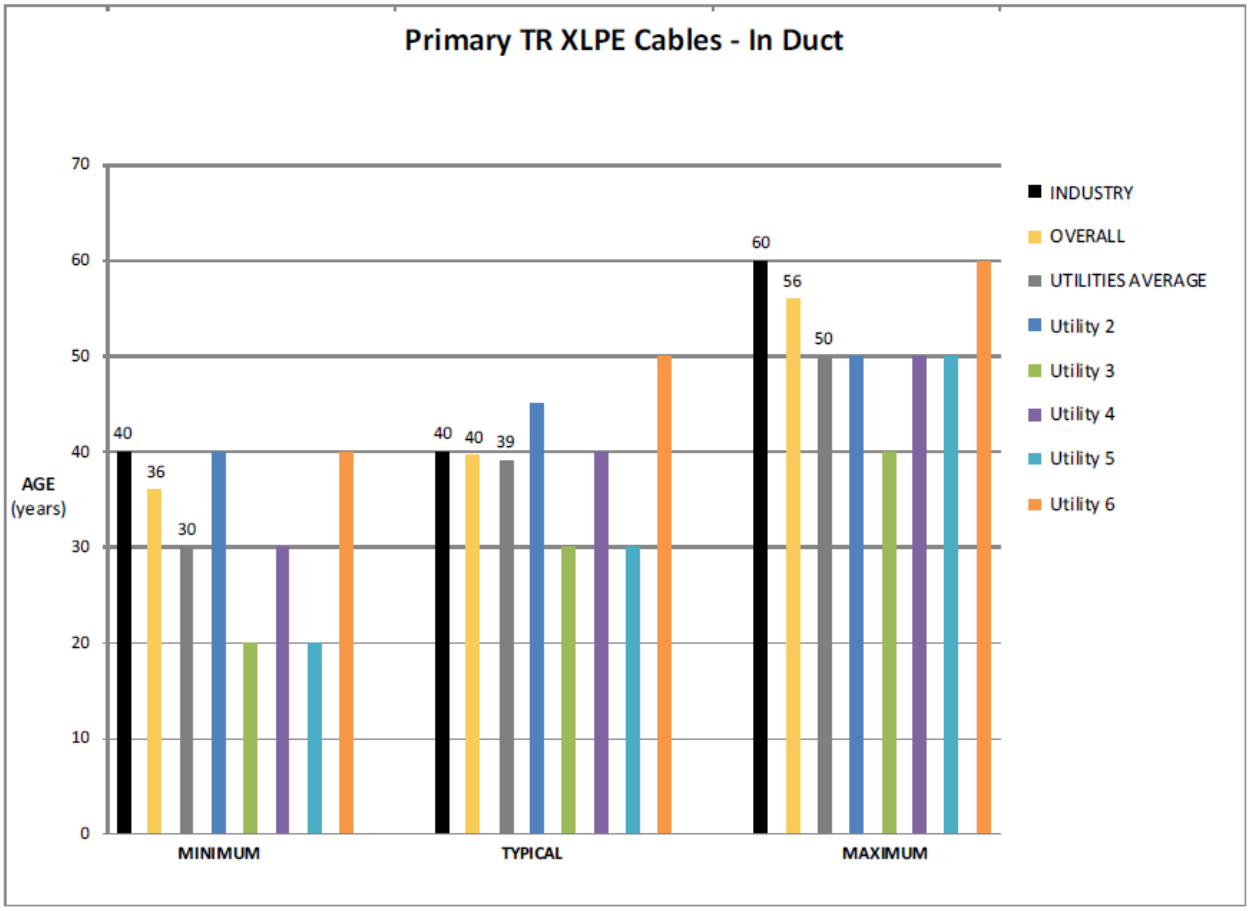

Exhibit 16: Typical Useful Life of Direct Buried Cables (Kinectrics Report)

As summarized in Exhibit 16, Kinectrics report concludes 40 years to the typical useful life for this asset and we agree with their conclusion.

4.7. Secondary Cable Direct Buried

Secondary cables or low voltage cables may employ either copper or aluminium conductors and often used cross linked polyethylene (XLPE) insulation. The minimum thickness of insulation in LV cables is dictated by the risk of mechanical damage during installation rather than by insulation degradation from electrical stress. The end of useful service life commonly occurs due to mechanical damage or overloading.

ASSET COMPONENTIZATION	USEFUL LIFE		
	MIN UL	TUL	MAX UL
Secondary Cables - Direct Buried	25	35	40

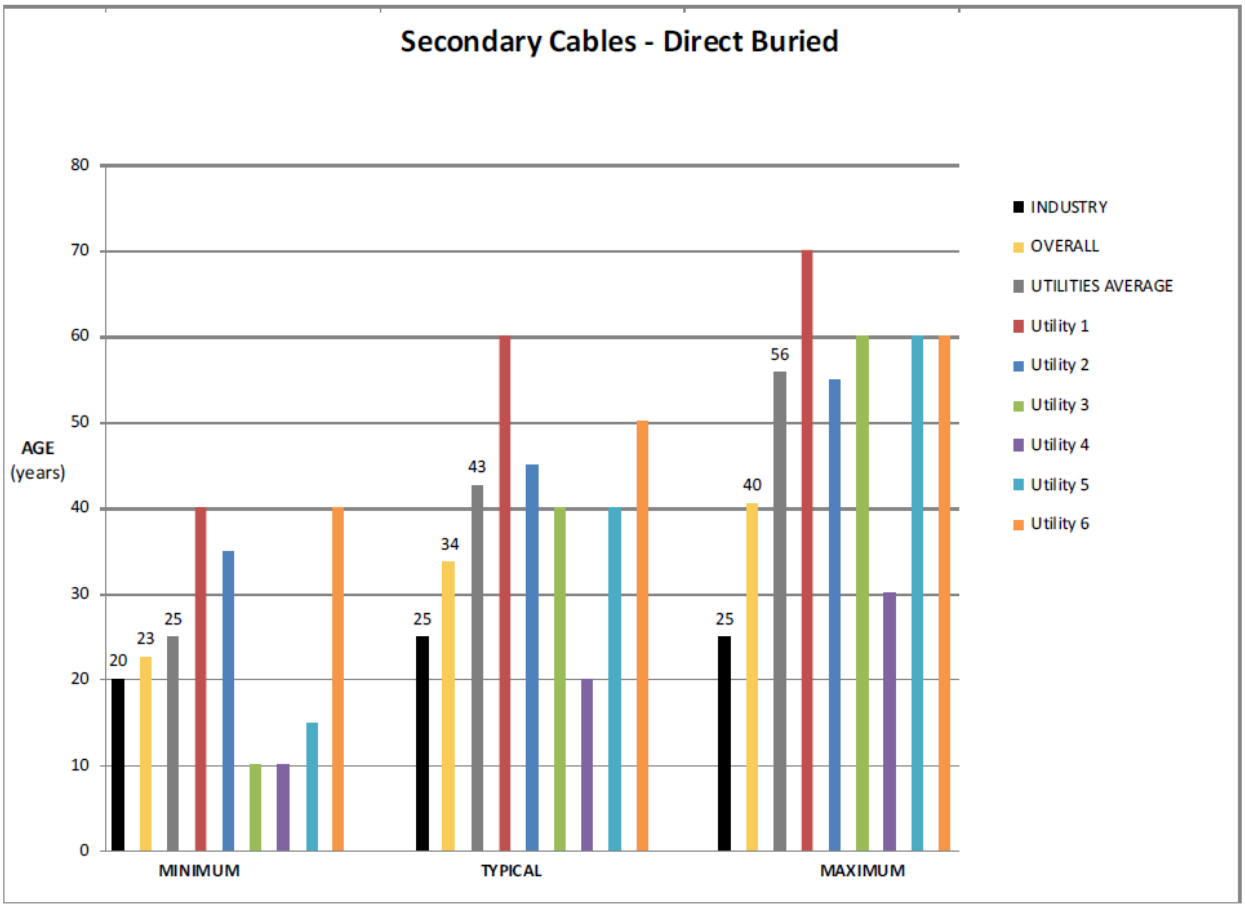

Exhibit 17: Typical Useful Life of Secondary Direct Buried Cables (Kinectrics Report)

Exhibit 17, reproduced above from the Kinectrics report, suggests typical useful life of 35 years for direct buried secondary cables. The six utilities surveyed by Kienctrics reported typical useful life for secondary cables of 20, 40, 40, 45, 50 and 60 years, which yields mean typical mean life of 42 years. Kinectrics report suggests typical service life of 20 years for direct buried secondary cables, based on the general industry experience. In our opinion there is no evidence to support the assumed industry wide service life of 20 years for low voltage cables.

We recommend based on the average of six utilities responding to Kinectrics survey, the typical useful life of this asset should be 42 years.

4.8. Other Assets Employed on Underground Distribution System

For all of the remaining assets employed on the underground distribution system, in our opinion the estimates of the typical useful life provided in the Kinectrics report accurately represent the typical useful life for each of those assets.

5 Auxiliary Assets

We have reviewed the methodology for determining the typical useful life as well as the recommended typical useful life of various auxiliary assets provided in the Kinectrics report, including buildings, office equipment, motor vehicles, computer hardware and software and concur with the findings and conclusions documented in the Kinectrics reports for each of the assets in this category.

Canada Revenue Agency / Agence du revenu du Canada

Code 1301

SCIENTIFIC RESEARCH AND EXPERIMENTAL DEVELOPMENT (SR&ED) EXPENDITURES CLAIM

Use this form:

- to provide technical information on your SR&ED projects;
- to calculate your SR&ED expenditures; and
- to calculate your qualified SR&ED expenditures for investment tax credits (ITC).

To claim an ITC, use either:

- Schedule T2SCH31, *Investment Tax Credit – Corporations*, or
- Form T2038(IND), *Investment Tax Credit (Individuals)*.

The information requested in this form and documents supporting your expenditures are prescribed information.

Your SR&ED claim must be filed within 12 months of the filing due date of your income tax return.

To help you fill out this form, use the T4088, *Guide to Form T661*, which is available on our Web site: **www.cra.gc.ca/sred**.

Part 1 – General information

010 Name of claimant Oshawa PUC Networks Inc.		Enter one of the following: 89172 5210 RC0001 Business number (BN)
Tax year From: 2013-01-01 (Year Month Day) To: 2013-12-31 (Year Month Day)		
050 Total number of projects you are claiming this tax year: 3		Social insurance number (SIN)
100 Contact person for the financial information DAVID SAVAGE	**105** Telephone number/extension (905) 743-5219	**110** Fax number (905) 723-3248
115 Contact person for the technical information DAVID SAVAGE	**120** Telephone number/extension (905) 743-5219	**125** Fax number

151 If this claim is filed for a partnership, was Form T5013 filed? . . . . . 1 ☐ Yes 2 ☐ No

If you answered **no** to line 151, complete lines 153, 156 and 157.

153 Names of the partners	**156** %	**157** BN or SIN
1		
2		
3		
4		
5		

Part 2 - Project information

CRA internal form identifier 060
Code 1301

Complete a separate Part 2 for each project claimed this year.

Section A - Project identification

200 Project title (and identification code if applicable)

See schedule

Part 3 – Calculation of SR&ED expenditures

What did you spend on your SR&ED projects?

Section A – Select the method to calculate the SR&ED expenditures

I elect (choose) to use the following method to calculate my SR&ED expenditures and related investment tax credits (ITC) for this tax year.
I understand that my election is irrevocable (cannot be changed) for this tax year.

160 [X] I elect to use the proxy method
(Enter "0" on line 360. Complete Part 5 and you do not need to track any expenditure incurred for overhead)

162 [ ] I choose to use the traditional method
(Enter "0" on line 355. Complete line 360, and track any expenditure incurred for overhead)

Section B – Calculation of allowable SR&ED expenditures (to the nearest dollar)

• SR&ED portion of salary or wages of employees directly engaged in the SR&ED:			
a) Employees other than specified employees for work performed in Canada	300	+	122,982
b) Specified employees for work performed in Canada	305	+	
Subtotal (add lines 300 and 305)	306	=	122,982
c) Employees other than specified employees for work performed outside Canada (subject to limitations – see guide)	307	+	
d) Specified employees for work performed outside Canada (subject to limitations – see guide)	309	+	
• Salary or wages identified on line 315 in prior years that were paid in this tax year	310	+	
• Salary or wages incurred in the year but not paid within 180 days of the tax year end (315)			
• Cost of materials consumed in performing SR&ED	320	+	10,131
• Cost of materials transformed in performing SR&ED	325	+	
• Contract expenditures for SR&ED performed on your behalf:			
a) Arm's length contracts (see note 1)	340	+	3,000
b) Non-arm's length contracts (see note 1)	345	+	
• Lease costs of equipment used before 2014:			
a) All or substantially all (90% of the time or more) for SR&ED	350	+	
b) Primarily (more than 50% of the time but less than 90%) for SR&ED. (Enter 50% of lease costs if you use the proxy method or enter "0" if you use the traditional method)	355	+	
• Overhead and other expenditures (enter "0" if you use the proxy method)	360	+	
• Third-party payments (see note 2) (complete Form T1263*)	370	+	
Total current SR&ED expenditures (add lines 306 to 370; do not add line 315) (Corporations need to adjust line 118 of schedule T2SCH1)	380	=	136,113
• Capital expenditures for depreciable property available for use before 2014 (Do not include these capital expenditures on schedule T2SCH8)	390	+	43,000
Total allowable SR&ED expenditures (add lines 380 and 390)	400	=	179,113

Section C – Calculation of pool of deductible SR&ED expenditures (to the nearest dollar)

Amount from line 400	420		179,113
Deduct			
• provincial government assistance for expenditures included on line 400	429	–	8,033
• other government assistance for expenditures included on line 400	431	–	
• non-government assistance for expenditures included on line 400	432	–	
• SR&ED ITCs applied and/or refunded in the prior year (see guide)	435	–	183,934
• sale of SR&ED capital assets and other deductions	440	–	
Subtotal (line 420 minus lines 429 to 440)	442	=	-12,854
Add			
• repayments of government and non-government assistance that previously reduced the SR&ED expenditure pool	445	+	
• prior year's pool balance of deductible SR&ED expenditures (from line 470 of prior year T661)	450	+	
• SR&ED expenditure pool transfer from amalgamation or wind-up	452	+	
• amount of SR&ED ITC recaptured in the prior year	453	+	
Amount available for deduction (add lines 442 to 453) (enter positive amount only, include negative amount in income)	455	=	
• Deduction claimed in the year (Corporations should enter this amount on line 411 of schedule T2SCH1)	460	–	
Pool balance of deductible SR&ED expenditures to be carried forward to future years (line 455 minus 460)	470	=	

* Form T1263, *Third-Party Payments for Scientific Research and Experimental Development (SR&ED)*

Note 1 – For contract expenditures made after 2013, no amounts for purchasing or leasing capital property can be included.

Note 2 – For third-party payments made after 2013, no amounts for purchasing or leasing capital property can be included.

Part 4 – Calculation of qualified SR&ED expenditures for investment tax credit (ITC) purposes

The resulting amount is used to calculate your refundable and/or non refundable ITC.

Enter the breakdown between current and capital expenditures (to the nearest dollar)

			Current Expenditures		Capital Expenditures
Total expenditures for SR&ED (from lines 380 and 390)	**492**		136,113	**496**	43,000
Add					
• payment of prior years' unpaid amounts (other than salary or wages)	**500**	+			
• prescribed proxy amount (complete Part 5) (Enter "0" if you use the traditional method)	**502**	+	72,264		
• expenditures on shared-use equipment for property acquired before 2014				**504**	+
• qualified expenditures transferred to you (see note 3) (complete Form T1146**)	**508**	+		**510**	+
Subtotal (add lines 492 to 508, and add lines 496 to 510)	**511**	=	208,377	**512**	= 43,000
Deduct (see note 4)					
• provincial government assistance	**513**	–	9,350	**514**	– 1,935
• other government assistance	**515**	–		**516**	–
• non-government assistance and contract payments	**517**	–		**518**	–
• current expenditures (other than salary or wages) not paid within 180 days of the tax year end	**520**	–			
• amounts paid in respect of an SR&ED contract to a person or partnership that is not a taxable supplier	**528**	–			
• 20% of expenditures included on lines 340 and 370 that were incurred after December 31, 2012	**529**	–	600		
• prescribed expenditures not allowed by regulations (see guide)	**530**	–		**532**	–
• other deductions (see guide)	**533**	–		**535**	–
• non-arm's length transactions					
– assistance allocated to you (complete Form T1145*)	**538**	–		**540**	–
– expenditures for non-arm's length SR&ED contracts (from line 345)	**541**	–			
– adjustments to purchases (limited to costs) of goods and services from non-arm's length suppliers (see guide)	**542**	–		**543**	–
– qualified expenditures you transferred (complete Form T1146**)	**544**	–		**546**	–
Subtotal (line 511 minus lines 513 to 544 and line 512 minus lines 514 to 546)	**557**	=	198,427	**558**	= 41,065
Qualified SR&ED expenditures (add lines 557 and 558)				**559**	= 239,492
Add					
• repayments of assistance and contract payments made in the year				**560**	+
Total qualified SR&ED expenditures for ITC purposes (add lines 559 and 560)				**570**	= 239,492

* Form T1145, *Agreement to Allocate Assistance for SR&ED Between Persons Not Dealing at Arm's Length*

** Form T1146, *Agreement to Transfer Qualified Expenditures Incurred in Respect of SR&ED Contracts Between Persons Not Dealing at Arm's Length*

Note 3 – On line 510 (capital) – Only include expenditures made before 2014 by the transferor (performer). Complete the latest version of Form T1146.

Note 4 – On lines 514, 516, 518, 532, 535, 540, 543 and 546 – Only include amounts related to expenditures of a capital nature made before 2014.

Part 5 – Calculation of prescribed proxy amount (PPA)

A notional amount representing your overhead and other expenditures.

This part calculates the PPA to enter on line 502 in Part 4. Do not complete this part if you have chosen to use the traditional method in Part 3 (line 162).
You can only claim a PPA if you elected to use the proxy method for the year in Part 3 (line 160).

Special rules apply for specified employees. Calculate your salary base in Section A and the PPA in Section B.

Section A – Salary base

Salary or wages of employees other than specified employees (from lines 300 and 307)	**810**	+	122,982
Deduct			
Bonuses, remuneration based on profits, and taxable benefits that were included on line 810	**812**	–	2,542
Subtotal (line 810 minus 812)	**814**	=	120,440

Salary or wages of specified employees

850	852	854	856	858	860
Column 1	**Column 2**	**Column 3**	**Column 4**	**Column 5**	**Column 6**
Name of specified employee	Total salary or wages for the year (SR&ED and non-SR&ED) excluding bonuses, remuneration based on profits, and taxable benefits (to the nearest dollar)	% of time spent on SR&ED (maximum 75%)	Amount in column 2 multiplied by percentage in column 3	2,5 x A x B/365 A = Year's maximum pensionable earnings B = Number of days employed in tax year	Amount in column 4 or 5, whichever amount is less

(Enter total of column 6 on line 816) **816** +

Salary base (total of lines 814 and 816) **818** = 120,440

Section B – Prescribed proxy amount (PPA)

Enter 65% of the salary base (line 818) less 5% of the salary base for the number of 2013 calendar days in the tax year, and less 10% of the salary base for number of days after 2013 in the tax year (use the formula in the guide-line 820) **820** = 72,264

Enter the amount from line 820 on line 502 in Part 4 unless the overall cap on PPA applies to you.

(See the guide for explanation and example of the overall cap on PPA)

Part 6 – Project costs

Information requested in this part must be provided for **all** SR&ED projects claimed in the year.
Expenditures should be recorded and allocated on a project basis.

750 Project title or identification code	752 Salary or wages in the tax year (Total of lines 306 to 309)	754 Cost of materials in the tax year (Total of lines 320 and 325)	756 Contract expenditures for SR&ED performed on your behalf in the tax year (Total of lines 340 and 345)
1. 13-01 High Availability in virtual Infrastructure	5,594		
2. 13-03 Advancing Distribution Automation Techniques	98,529	10,131	3,000
3. 13-04 Improving reliability of Critical Infrastructure	18,859		
Total	122,982	10,131	3,000

Part 7 – Additional information

Expenditures for SR&ED performed by you in Canada (line 400 minus lines 307, 309, 340, 345, and 370) **605** 176,113

From the total you entered on line 605, estimate the percentage of distribution of the sources of funds for SR&ED performed within your organization.

		Canadian (%)		Foreign (%)
Internal	600	100.000		
Parent companies, subsidiaries, and affiliated companies	602		604	
Federal grants (do not include funds or tax credits from SR&ED tax incentives)	606			
Federal contracts	608			
Provincial funding	610			
SR&ED contract work performed for other companies on their behalf	612		614	
Other funding (e.g., universities, foreign governments)	616		618	

For statistical purposes indicate whether the work you performed falls within the realm of Basic or Applied research (to advance scientific knowledge) or Experimental development (to achieve a technological advancement):

620 ☐ Basic or Applied research **622** ☒ Experimental development

Enter the number of SR&ED personnel in full-time equivalents (FTE):

Scientists and engineers	632	1
Technologists and technicians	634	
Managers and administrators	636	
Other technical supporting staff	638	

Part 8 – Claim checklist

To ensure your claim is complete, make sure you have:

1. used the current version of this form . . . . . ☒
2. entered the method you have chosen for reporting your SR&ED expenditures in Section A of Part 3 . . . . . ☒
3. completed Part 2 for each project . . . . . ☒
4. filed a completed Schedule T2SCH31 or Form T2038(IND) to claim ITCs on your qualified SR&ED expenditures . . . . . ☒
5. filed a completed Form T1145*, T1146**, T1174*** and/or T1263**** including any required attachments, if applicable . . . . . ☒

To expedite the processing of your claim, make sure you have:

1. completed Form T2, *Corporation Income Tax Return* or Form T1, *Income Tax and Benefit Return* . . . . . ☒
2. filed the appropriate provincial and/or territorial tax credit forms, if applicable . . . . . ☒
3. retained documents to support the SR&ED work performed and SR&ED expenditures you claimed . . . . . ☒
4. checked boxes 231 and 232 on page 2 of your T2 return to indicate attachment of Form T661 and Schedule T2SCH31 . . . . . ☒

* Form T1145, *Agreement to Allocate Assistance for SR&ED Between Persons Not Dealing at Arm's Length*

** Form T1146, *Agreement to Transfer Qualified Expenditures Incurred in Respect of SR&ED Contracts Between Persons Not Dealing at Arm's Length*

*** Form T1174, *Agreement Between Associated Corporations to Allocate Salary or Wages of Specified Employees for Scientific Research and Experimental Development (SR&ED)*

**** Form T1263, *Third-Party Payments for Scientific Research and Experimental Development (SR&ED)*

Part 9 – Claim preparer information

Information requested in this part must be provided for each claim preparer that has accepted consideration to prepare or assist in the preparation of this SR&ED claim. Certification is required on lines 935, 970, and 975.

A $1000 penalty may be assessed if the information requested below about the claim preparer(s) and billing arrangement(s), is missing, incomplete, or inaccurate. Where a claim preparer has prepared or assisted in the preparation of this SR&ED form, the claimant and the claim preparer will be jointly and severally, or solidarily, liable for the penalty.

935 **Was a claim preparer engaged in any aspect of the preparation of this SR&ED claim?**

1. ☐ Yes (complete the claim preparer information table and lines 970 and 975 below)

2. ☐ No (complete lines 970 and 975)

Claim preparer information table

940 Name of claim preparer (company or individual)	945 Business number	950 Billing arrangement code (see codes*)	955 Billing rate (percentage, hourly/daily rate or flat fee)	960 Other billing arrangement(s) (Maximum 10 words)	965 Total fee paid, payable, or expected to pay
1.					
				Total	

*** Billing arrangement codes**

Code	Type of billing arrangement
1	Contingency fee arrangement – where the fee is based on a percentage of the investment tax credit earned
2	Hourly rate
3	Daily rate
4	Flat fee arrangement (lump sum)
5	Other arrangements – describe the arrangement in box 960 in 10 words or less

970 I, PHIL MARTIN , certify that the information provided in this part is complete
Name of authorized signing officer of the corporation , or individual (print)
and accurate.

Signature

975 2014-06-26
Year Month Day

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Part 10 – Certification

I certify that I have examined the information provided on this form and on the attachments and it is true, correct, and complete.

165 PHIL MARTIN
Name of authorized signing officer of the corporation, or individual

Signature

170
Date

175
Name of person/firm who completed this form

Part 2 - Project information (continued)

Project number **1**

CRA internal form identifier 060

Complete a separate Part 2 for each project claimed this year. Code 1301

Section A – Project identification

200 Project title (and identification code if applicable)

13-01 High Availability in virtual Infrastructure

202 Project start date	**204** Completion or expected completion date	**206** Field of science or technology code (See guide for list of codes)
2013-01 (Year Month)	2013-12 (Year Month)	1.02.02 Information technology and bioinformatics (Software e

Project claim history

208 1 ☐ Continuation of a previously claimed project **210** 1 ☒ First claim for the project

218 Was any of the work done jointly or in collaboration with other businesses? . . . . . 1 ☐ Yes 2 ☒ No

If you answered **yes** to line 218, complete lines 220 and 221.

220 Names of the businesses	**221** BN
1	
2	
3	

Section B – Project descriptions

242 What scientific or technological uncertainties did you attempt to overcome – uncertainties that could not be removed using standard practice? (*Maximum 50 lines*)

In this project we attempted to improve the redundancy, security and high availability of our critical business and Power Utility operations infrastructure that was running on virtual machines built on the IBM blade chassis. Here, existing infrastructure hosted critical systems such as GIS, MS Dynamics, MAS Servers and were all required for critical utility specific operations. Here, the uncertainties were to establish untried techniques at Oshawa PUC of dynamic fail-over, fault-tolerance and load-balancing using hosting intelligence center (V-Center) and Virtual Motion (V-Motion) vshpere (hypervisor) utilities in VM virtual infrastructure and SAN and re-architecting the solution. Specifically,

1.) At the outset, it was not possible to establish the processing capacity of the CPU's in the blade chassis because it was not certain if new process intensive hosts could be added to the same ESX cluster. In VM Ware architecture, the hosts by system-design should be on the same ESX cluster for VMotion to take control of a failed virtual machine (host) and dynamically migrate. That is, we needed to overcome the existing limitations of our architecture and VM implementation through experimental development.

Additionally, as per our design and existing architecture, there was a limitation to store the active host instance of the VM server on the SAN. The limitation was with respect to vmotion being able to source the image from the SAN datastore in case of a failure of the active host and dynamically build a new instance of the same image. Furthermore, it was not unknown how to synchronize this process with the SAN Controllers

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

Since the hypothesized technique of delivering high availability and redundancy in virtual machines was new within Oshawa PUC, we worked with the vendor to establish the new architecture with respect to VM-ware specifics (Fault Tolerance, Distributed Resource Scheduler (DRS) configuration rules, and Host Profiles). We started the SR&ED project by first developing threshold profiles for the network and storage and capacity. Based on this, we began to scale the architecture and increased the processing power with 2 additional blades-servers so that they could be added to the same ESX cluster. Next, we integrated a redundant fiber module (Brocade). Based on our target

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

architecture, the failover and load-balancing was envisioned to be achieved using the Fiber module and connect the Blade chassis to the SAN. Using this method we addressed the single-point-of-failure issue that existed in our earlier architecture. System-wide testing (conducted toward the end of the experiment) showed additional benefits, such as the ability to increase performance of data communication between the blade and SAN. Simultaneously, we integrated a switching device (Cisco Switch) to expand the solution. Our hypothesis was that, we could subsequently leverage the switch to extend the hosting intelligence center (V-Center) and Virtual Motion (V-Motion) utilities within the virtualization technology to be fully aware of the layer 2 MAC addresses and extend VLANs outside the virtualization infrastructure (Corporate LAN). Next, we experimented with computing resource footprint and increased the RAM for each blade to 96(MB) so that the storage partition for the other blades could integrate with the SAN. This upgrade also enabled us to expand the SAN from the current 4 to 8 hosts and use the VMware ESXi5.1 for Vmotion and Fault-tolerance capabilities. During the same attempt, we expanded the number of SAN data-stores by optimizing SAN operating parameters. This development provided a method to synchronize the SAN with the VM infrastructure. Because our goal was to achieve high-availability and improve security of the leveraged active-directory and used a centralized password-management database. The database was an open-source implementation of password and key management vault. Through experimental testing, we configured Vmotion, DRS and Fault-Tolerance capabilities for optimal performance in a high-availability scenario. Next, the Vcenter was modified for managing the ESXi 5.1 enterprise hosts. Next we created 2 virtual cluster and added all the ESXi hosts to the virtual clusters (for context, the critical systems - GIS, MS Dynamics, MAS Servers are ESXi hosts based). Through analysis and testing, we developed a method to migrate the existing systems to SAN. Our method consisted of migrating the VM hosts from the local disk in the Blade chassis to the SAN datastore onto new instances of windows base operating system. However, being a virtual infrastructure, it was not possible to have application visibility and we devised an alternative method and consisted of leveraging a client-server based method by leveraging and integrating COTS software (LAN Guardian). Here, our goal was to passively capture the traffic flowing through the network switch and analyze packets which could lead us to profiling an application and its location in the virtual infrastructure.

246 What scientific or technological advancements did you achieve as a result of the work described in Line 244? (*Maximum 50 lines*)

The advancements being sought in this project are development of methods and know-how for redundancy, security and high availability of our critical business and Power Utility operations infrastructure that was running on virtual machines built on the IBM blade chassis. Here we overcame the limitations of our existing architecture that could not be made highly available for dynamic fail-over, fault-tolerance and load-balancing by leveraging Vmotion, Vcenter, Vshpere (hypervisor). Specifically, 1.) We gained know-how to increase the processing capacity and expand the capabilities of our architecture so that additional hosts can be made part of the same ESX cluster and facilitate VMotion to take control of a failed virtual machine (host) and migrate dynamically. In the same attempt, we gained knowledge to develop a method to store an active host instance of the VM server on the SAN so that; vmotion can source the image from the SAN datastore in case of a failure of the active host and dynamically build a new instance of the same image. Here we gained knowledge on how to synchronize the SAN Controllers, SAN datastore and VM host migration during failure by leveraging a Fiber module that connected the Blade chassis to the SAN. During development we devised a method so that the hosting intelligence center (V-Center) and Virtual Motion (V-Motion) utilities within the virtualization technology to be

20.	fully aware of the layer 2 MAC addresses and extend VLANs outside the
21.	virtualization infrastructure by integrating additional network switches

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☐ Employee directly involved in the project	**254** Name			
255 1 ☐ Other employee of the company	**256** Name			
257 1 ☒ External consultant	**258** Name KPMG LLP	**259** Firm KPMG LLP		

List the key individuals directly involved in the project and indicate their qualifications/experience.

260 Names	**261** Qualifications/experience and position title
1 Mo Bhuyan	BSc (Information & Decision Sys) 10+ yrs Systems Devlopment IT Manager at Oshawa PUC
2	
3	

265 Are you claiming any salary or wages for SR&ED performed outside Canada?	1 ☐ Yes	2 ☒ No		
266 Are you claiming expenditures for SR&ED carried out on behalf of another party?	1 ☐ Yes	2 ☒ No		
267 Are you claiming expenditures for SR&ED performed by people other than your employees?	1 ☐ Yes	2 ☒ No		

If you answered **yes** to line 267, complete lines 268 and 269.

268 Names of individuals or companies	**269** BN
1	

What evidence do you have to support your claim? (Check any that apply)
You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270 1 ☒ Project planning documents	**276** 1 ☐ Progress reports, minutes of project meetings				
271 1 ☐ Records of resources allocated to the project, time sheets	**277** 1 ☐ Test protocols, test data, analysis of test results, conclusions				
272 1 ☒ Design of experiments	**278** 1 ☐ Photographs and videos				
273 1 ☐ Project records, laboratory notebooks	**279** 1 ☐ Samples, prototypes, scrap or other artefacts				
274 1 ☒ Design, system architecture and source code	**280** 1 ☐ Contracts				
275 1 ☐ Records of trial runs	**281** 1 ☒ Others, specify	**282** Technical Emails			

Part 2 - Project information (continued)

Project number **2**

CRA internal form identifier 060

Complete a separate Part 2 for each project claimed this year. Code 1301

Section A – Project identification

200 Project title (and identification code if applicable)

13-03 Advancing Distribution Automation Techniques

202 Project start date	**204** Completion or expected completion date	**206** Field of science or technology code (See guide for list of codes)
2013-01 (Year Month)	2013-12 (Year Month)	2.02.05 Automation and control systems

Project claim history

208 1 [ ] Continuation of a previously claimed project **210** 1 [X] First claim for the project

218 Was any of the work done jointly or in collaboration with other businesses? . . . . . 1 [ ] Yes 2 [X] No

If you answered **yes** to line 218, complete lines 220 and 221.

220 Names of the businesses	**221** BN
1	
2	
3	

Section B – Project descriptions

242 What scientific or technological uncertainties did you attempt to overcome – uncertainties that could not be removed using standard practice? (*Maximum 50 lines*)

We attempted to develop Smart-Grid-Distribution-Automation capabilities with the goal of gaining power systems state visibility into 13.8 kV switches installed in downtown vaults from SCADA system and develop methods for automatic circuit reclosing in rural stretches of the distribution network. Here, the technological uncertainties were related to integration with SCADA for monitoring and control and there were no previous Oshawa PUC distribution network standards for such implementations. Specifically, 1.) 13.8 kV switches by electrical and mechanical design are large foot-print SF6 (6'X6') switches and weigh close to 1000 lbs. At the outset, it was unknown if additional electro-magnetically sensitive relays, Current-Transformers and Potential-Transformer measurement and Automation packages could be installed in the same vault without electromagnetic interference in an already space constraint vault. During development, it was not possible to extract the electrical measurement variables from the 13.8 kV directly and feed from the RTU and IED to SCADA System. The electrical measurement variables that could be extracted were already in use for the Protection System within the Switches. Furthermore, it was uncertain which of the possible ways could optimally convey context that was representative of the electrical state. Here, alternative methods to source these electrical variables and communicate with the SCADA using either DNP3-or-MODBUS had to be systematically evaluated. 2.) Reclosers in general are devices to overcome transient-and-random-faults in long-stretches of the distribution network. At Oshawa PUC, these reclosers were vintage oil filled devices without any remote communications and often located in rural areas. However, to improve the reliability of these sections of the distribution network, Oshawa PUC experimented with advanced recloser and automation to control the relays that could be extended to SCADA systems. Here, it was uncertain how to optimally control the Solid Dielectric Triple Option Reclosers and simultaneously develop the control algorithm so that it could be used in both 3-phase and single-phase lines rated through 38kV, 800A continuous current and 12.5kA symmetrical interrupting. The know-how on how to integrate such components effectively and reliably did not exist (at Oshawa Power)

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

1. 1.) The capability of controlling the switches remotely from the SCADA and
2. visibility into the switches did not exist and the data-points (electrical-
3. variables) could not be extracted from the CT's that existed in the switches.
4. The existing data points were used for electrical protection circuits and not
5. for the purpose of SCADA integration. We hypothesized of scaling the existing
6. 13.8kV switch by integrating with an auxiliary-external-Automation-Package
7. that is electromagnetically isolated in Stainless-Steel-Enclosure. Integration
8. components included eighteen split-core Current-Transformers (600:5) CT, two
9. motor-operators on the Load-Break Ways and two 50' motor cables short-circuit
10. terminal blocks for connecting the CT secondaries in the control module with
11. RS232 Communications. It was envisioned that these CT's and control-module
12. components could provide the electrical state visibility. Our method was a two
13. step process of fist enabling discoverability and then attempting to control.
14. To evaluate this, we developed a Proof-of-concept site on the existing field
15. switch and attempted to integrate the automation package as the conditions
16. could not be simulated in a lab. Concurrently, we developed new cabling schema
17. to route the fiber optic cable (LC) from the switches to the SCADA system.
18. Next, we attempted to establish what electrical variables could be extracted
19. from these 18 CT. Here, each CT had to tap into various points on the switch
20. to establish parameters such as position, current, voltage at specific data-
21. points. Next using the DNP3 protocol, we developed DNP3 addressing table
22. consisting of subset of the data-points to be built into the SCADA-master and
23. developed a polling-interval to report on the current state and the previous
24. state. We went through several iterations to determine DNP routing and the
25. data-points that formed the DNP objects. With this knowledge we attempted to
26. develop DNP Application layer message handling and control. As there was no
27. module within the SCADA-HMI for the presentation of these vault switches, we
28. developed a very specific HMI presentation that used SCADA programming
29. components and methods. Next, we attempted to tag the data-points from the DNP
30. mapping table onto the HMI presentation. Testing was partially successful.
31. Here, we could not integrate the TRIP modules from the 13.8 kV switch into the
32. SCADA. On analysis, we observed that the TRIP-module could not communicate to
33. the SCADA using DNP3. Here, we evaluated two options of using either a media-
34. conversion-device at the TRIP-module (MODBUS-to-DNP3) or using specific MODUS
35. module on the SCADA. Additional work will be carried out during the next
36. fiscal year. Next, we hypothesized and developed a method to extend the
37. communications capability of our SCADA system so that the local interface for
38. Oshawa PUC could communicate on DNP3 while the external interface communicated
39. on ICCP (Inter-Control Center Communications Protocol) for data transfer
40. between two or more SCADA/EMS master stations.
41. 2.) We attempted to integrate solid-dielectric-triple-option-recloser (G&W's
42. Viper-ST) to alleviate situations of transient and random faults in long-haul
43. stretches of the distribution network. The intent was to develop automation
44. methods of pre-defined opening and closing the circuits, bringing back to
45. steady-state and improve the reliability of delivering power. Here, the
46. process was 1 trip/1 lockout,1 trip/3 lockout and 3 trip/3lockout with
47. protection for systems through 38kV maximum, 800A continuous current
48. and 12.5kA symmetrical interrupting. The control for this solution was
49. provided by an auxiliary control module (Schweitzer) that integrated into the
50. recloser. Here, we setup a POC for both a single-phase as well as three-phase
51. scenarios. We experimented and developed the Trip and Target combinational
52. logic algorithms for Single-phase reclosers (Switch-Onto-Fault Trip Logic,
53. Three-Phase-Trip-Input Logic and Single-Phase-Trip Logic). Next, we developed
54. a different combinational logic (Three-phase reclosers i.e. Switch-Onto-Fault
55. Trip Logic, Three-Phase-Trip-Input-Logic and Three-Phase-Trip-Output-Logic).
56. Next we developed the Close and Reclose combinational logic. Here we
57. experimented with Three-phase reclosers or single-phase reclosers operating in
58. a three-phase mode and Single-phase reclosers operating in a single-phase

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

mode. Next, we worked with the Breaker-Status-Logic to evaluate how the
effective breaker status is derived for the required application, three-phase
or single-phase mode.

246 What scientific or technological advancements did you achieve as a result of the work described in Line 244? (*Maximum 50 lines*)

The advancements being sought in this project is the know-how and developing
techniques that will provide Smart Grid Distribution Automation capabilities
for gaining power systems state visibility and control from the SCADA system
into 13.8 kV switches installed in downtown vaults and develop methods for
automatic circuit reclosing in rural stretches of the distribution network. In
addition, these advancements will lead to the development of Oshawa PUC
specific distribution methods and standards. Specifically, the advancements
are
1.) Developing a technique to integrate auxiliary external Automation Package
with 18 CT's to extract electrical variable/data points from the 13.8kV
switches to provide the status/electrical state of the switches. Here, we
overcame electromagnetic interference and foot-print constraints through the
vertical design and steel casing. During the same pursuit, we leveraged DNP3
protocol and developed mapping and routing that was abstracted to a newly
developed SCADA HMI presentation and developed DNP3 control messaging for
remotely controlling the actuation of the switches. Additionally, we developed
a method to gain visibility and message to 3rd party system that utilized
ICCP. Here, we enabled local interface for Oshawa PUC SCADA to communicate on
DNP3 while the external interface communicated on ICCP (Inter-Control Center
Communications Protocol) for data transfer

2.) We developed know-how to automatically control the Solid Dielectric Triple
Option Reclosers that could be later integrated into the SCADA system. In this
year, we integrated the reclosers with the goal of achieving automation for
alleviating transient and random faults in long-haul stretches of the
distribution network. That is, 3-phase and single-phase lines rated through
38kV, 800A continuous current and 12.5kA symmetrical interrupting.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 [ ] Employee directly involved in the project — **254** Name

255 1 [ ] Other employee of the company — **256** Name

257 1 [X] External consultant — **258** Name: KPMG LLP — **259** Firm: KPMG LLP

List the key individuals directly involved in the project and indicate their qualifications/experience.

260 Names	**261** Qualifications/experience and position title
1 Jayesh Shah	M.Esc. /P.Eng/15 + yrs in Distribution sys dev/ Director Asset Mgmt & New initiatives OPUC
2 Eric Andres	B.Eng Elec Eng. / 4+ yrs in Distribution sys dev/ Distribution System EIT/ OPUC
3 Mo Bhuyan	BSc (Information & Decision Sys) 10+ yrs Systems Devlopment IT Manager at Oshawa PUC

265 Are you claiming any salary or wages for SR&ED performed outside Canada? . . . . . 1 [ ] Yes 2 [X] No

266 Are you claiming expenditures for SR&ED carried out on behalf of another party? . . . . . 1 [ ] Yes 2 [X] No

267 Are you claiming expenditures for SR&ED performed by people other than your employees? . . . . . 1 [X] Yes 2 [ ] No

If you answered **yes** to line 267, complete lines 268 and 269.

268 Names of individuals or companies	269 BN
1 Survalent Technology	13119 7386 RC0001
2	

What evidence do you have to support your claim? (Check any that apply)
You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270	1 ☐	Project planning documents	276	1 ☐	Progress reports, minutes of project meetings
271	1 ☐	Records of resources allocated to the project, time sheets	277	1 ☐	Test protocols, test data, analysis of test results, conclusions
272	1 ☐	Design of experiments	278	1 ☐	Photographs and videos
273	1 ☐	Project records, laboratory notebooks	279	1 ☒	Samples, prototypes, scrap or other artefacts
274	1 ☒	Design, system architecture and source code	280	1 ☐	Contracts
275	1 ☐	Records of trial runs	281	1 ☒	Others, specify 282 Technical Emails

Part 2 - Project information (continued)

Project number **3**

CRA internal form identifier 060

Complete a separate Part 2 for each project claimed this year. Code 1301

Section A – Project identification

200 Project title (and identification code if applicable)

13-04 Improving reliability of Critical Infrastructure

202 Project start date	**204** Completion or expected completion date	**206** Field of science or technology code (See guide for list of codes)
2013-01 (Year Month)	2015-01 (Year Month)	2.02.01 Electrical and electronic engineering

Project claim history

208 1 [ ] Continuation of a previously claimed project **210** 1 [X] First claim for the project

218 Was any of the work done jointly or in collaboration with other businesses? . . . . . 1 [ ] Yes 2 [X] No

If you answered **yes** to line 218, complete lines 220 and 221.

220 Names of the businesses	**221** BN
1	
2	
3	

Section B – Project descriptions

242 What scientific or technological uncertainties did you attempt to overcome – uncertainties that could not be removed using standard practice? (*Maximum 50 lines*)

In this project Oshawa PUC attempted to improve the reliable delivery of power through our Electrical-distribution network sub-divisions with multiple high-voltage conductor intersections and deliver reliable high voltage network with the constraints of meeting 600 Amperage capacity in a different section of our network. Here the challenges were with respect to designing and integrating advanced underground switching devices and design of high voltage cabling respectively and; developing non-existent Oshawa PUC specific distribution standards. Specifically, the technological uncertainties were:

1.) At the outset, it was uncertain if the concept of using junction box sectionalizing kiosk or bus-bar technology instead of the splice-tap for multipath power distribution could be applicable for our requirement of maximum voltage of 28kV, Basic impulse level (BIL) 125kV, withstand 45 kV AC one minute minimum with a continuous 200/600 Amperes. At the same time, it was uncertain if this sectionalizing kiosk could be integrated into a primary (13.8 kV) primary conductor and not negatively impact the reliability not only in terms of component level failure but also the reliability of entire solution because there were no established Oshawa PUC standards. Here, experimentation had to be conducted on live system to evaluate the reliability and formalize the standards.

2.) As we attempted to expand certain section of our grid, we were constrained by the physical possibilities (geography of the highway, length of cables, bends, thickness of cables, underground or above ground layout etc.) of developing a solution that could provide reliable high-voltage distribution level (13.8kV) infrastructure. Here, several possible alternative topologies and designs had to evaluated that would specifically work within the geographic and mechanical constraints and still deliver 600 Amperage. Therefore the ability to meet our technical goals under such constraints simultaneously was the key technological obstacle.

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

1.) Based on our due-diligence, we hypothesized of using the concept of junction box sectionalizing kiosk instead of the splice-tap or bus-bar for

244 What work did you perform **in the tax year** to overcome the scientific or technological uncertainties described in Line 242? (Summarize the systematic investigation or search) (*Maximum 100 lines*)

multipath power distribution to improve reliability during faults. Here, the premise was that the switching nature of sectionalizers and integrated load based (electrical fuse-tripping) could be leveraged to provide fault isolation and alleviate the current situation where upstream power distribution was impacted during faults. As this was a new implementation at Oshawa PUC, during the first iteration, we attempted to develop design specifications. Based on the ANSI/IEEE Standard C37.73" standard for Pad-Mounted fused switchgear and IEEE 386 standard for separable insulated connector system for power distribution systems above 600V we developed the design. The design consisted of load breaking interface and for a maximum voltage of 28 kV, Basic impulse level (BIL) 125kV, withstand 45 kV AC one minute minimum with a continuous 200/600 Amperes.. In order to evaluate the performance applicability of the sectionalizers and gain knowledge to deploy and integrate into our grid, we conducted a live proof-of-concept by testing the sectionalizers for performance and reliability over time. The results of this experiment showed positive results and we improved our mean-time-to-repair.

2.) Given the constraints of our target operating environment, we hypothesized of developing a solution that would be flexible enough for either underground or above ground, with solution design consisting of a combination of 500 MCM and 1000 MCM copper cables for delivering the 600 Amperage/13.8kV level primary conductors. However, our challenges during each design iteration was, to develop methods such that number of conductors could be bent around corners, can be easily accessible to solve future maintenance faults and would not mechanically destroy (pulling tension) the cables as they went through ducts in underground sections of the topology. Here, some of the mechanical design calculations for underground ducts were in-coming tension calculations feeding off reel horizontally or feeding off reel vertically, coefficients of friction measured as friction between a moving conductor and the conduit, Jam Ratio, weight correction factor, sidewall pressure and bend radius. These calculations were simultaneously applied to the electrical design specifications for determining number of conductors and size of conductor (500MCM and 1000MCM). With this knowledge gained, we developed crossing designs using the 500 MCM where the 407 crosses Thornton Rd. N. Ritson. Design specifications were developed for ducts (primary and for fiber), duct structure and environmental factors such as thermal soil resistivity etc. During the next design iteration, we worked with 1000 MCM cable because of the physical constraints of the geography of the crossing and to meet ampacity requirement. This work was carried out in the following fiscal year.

246 What scientific or technological advancements did you achieve as a result of the work described in Line 244? (*Maximum 50 lines*)

The advancements being sought in this project are to experimentally design and develop methods to improve the reliable delivery of power in sub-divisions with multiple conductor intersections and deliver reliable high voltage network with the constraints of meeting 600 Amperage capacity. Here we overcame challenges with respect to integrating advanced underground switching devices and design of high voltage cabling respectively and during the process we gained know-how on how to achieve our technical goals. Additionally, the advancements will enable the development of Oshawa PUC standards.

Specifically,

1.) We developed a method of integrating the junction box sectionalizing kiosk instead of the splice-tap or Bus-bar technology for multipath power distribution that could deliver maximum voltage of 28 kV, Basic impulse level (BIL) 125kV, withstand 45 kV AC one minute minimum with a continuous 200/600 Amperes. In this pursuit we gained knowledge in terms of developing distribution code specifications and method to physically and electrically

16. deploy the device on the grid and evaluate reliability.
17.
18. 2.) We developed a method to design and expand our distribution grid in a
19. geographically difficult terrain. Here the knowledge gained will improve the
20. state of designing distribution networks for long-haul underground highway
21. crossing and consisted of utilizing a combination of 500MCM and 1000MCM cables
22. and developing civil specifications that were driven by electrical cabling
23. specifications so that the cables could bend around corners, can be easily
24. accessible to solve future maintenance faults and could withstand mechanical
25. stress of maneuvering during installation.
26.

Section C – Additional project information

Who prepared the responses for Section B?

253 1 ☐ Employee directly involved in the project	**254** Name		
255 1 ☐ Other employee of the company	**256** Name		
257 1 ☒ External consultant	**258** Name KPMG LLP	**259** Firm KPMG LLP	

List the key individuals directly involved in the project and indicate their qualifications/experience.

260	Names	**261**	Qualifications/experience and position title
1	Lori Bootsma		BASC (Elec Eng.) / P.Eng /Manager, Design at Oshawa PUC Networks, Inc.
2	Jayesh Shah		M.Esc. /P.Eng/15 + yrs in Distribution sys dev/ Director Asset Mgmt & New initiatives OPUC
3	Eric Andres		B.Eng Elec Eng. / 4+ yrs in Distribution sys dev/ Distribution System EIT/ OPUC

265 Are you claiming any salary or wages for SR&ED performed outside Canada? . . . . . 1 ☐ Yes 2 ☒ No

266 Are you claiming expenditures for SR&ED carried out on behalf of another party? . . . . . 1 ☐ Yes 2 ☒ No

267 Are you claiming expenditures for SR&ED performed by people other than your employees? . . . . . 1 ☐ Yes 2 ☒ No

If you answered **yes** to line 267, complete lines 268 and 269.

268	Names of individuals or companies	**269**	BN
1			

What evidence do you have to support your claim? (Check any that apply)
You do not need to submit these items with the claim. However, you are required to retain them in the event of a review.

270 1 ☒ Project planning documents
271 1 ☐ Records of resources allocated to the project, time sheets
272 1 ☐ Design of experiments
273 1 ☐ Project records, laboratory notebooks
274 1 ☒ Design, system architecture and source code
275 1 ☐ Records of trial runs
276 1 ☐ Progress reports, minutes of project meetings
277 1 ☐ Test protocols, test data, analysis of test results, conclusions
278 1 ☐ Photographs and videos
279 1 ☐ Samples, prototypes, scrap or other artefacts
280 1 ☒ Contracts
281 1 ☒ Others, specify **282** Technical Emails

Federal Tax Instalments

Federal tax instalments

For the taxation year ended 2014-12-31

Business number 89172 5210 RC0001

The following is a list of federal instalments payable for the current taxation year. The last column indicates the instalments payable to Revenue Canada. The instalments are due no later than on the dates indicated, otherwise non-deductible interest will be charged. A cheque or money order should be made payable to the Receiver General. Payment may be made by cheque or money order payable to the Receiver General either to an authorized financial institution or filed with **the appropriate remittance voucher to the following address**:

Canada Revenue Agency
875 Heron Road
Ottawa ON K1A 1B1

Note that you may also be able to pay by telephone or Internet banking. For more information, consult the *Corporation Instalment Guide*.

Monthly instalment workchart

Date	Monthly tax instalments	Refund transferred to instalments	Instalments paid	Cumulative difference	Instalments payable
2014-01-31	12,449	12,449			
2014-02-28	12,449	12,449			
2014-03-31	12,449	12,449			
2014-04-30	12,449	12,449			
2014-05-31	12,449	12,449			
2014-06-30	12,449	12,449			
2014-07-31	12,449	12,449			
2014-08-31	12,449	3,478			8,971
2014-09-30	12,449				12,449
2014-10-31	12,449				12,449
2014-11-30	12,449				12,449
2014-12-31	12,440				12,440
Totals	149,379	90,621			58,758

Quarterly instalment workchart

Date	Quarterly tax instalments	Refund transferred to instalments	Instalments paid	Cumulative difference	Instalments payable
2014-03-31					
2014-06-30					
2014-09-30					
2014-12-31					
Totals					

Instalment method

Indicate instalment method chosen [1-3] 1

1st Instalment base method

If payment of instalments other than quarterly instalments is delayed, indicate the MONTH in which you want them to begin (1=January, 2=February, etc.). 1

Select this box if you want the instalments to be calculated without taking the applicable threshold into account ☐

Quarterly instalments calculation

The corporation must meet requirements 1 to 5 to be eligible for quarterly instalments for a tax year.

1 –	Is the corporation a Canadian-controlled private corporation (CCPC)?	[X] Yes	[ ] No
2 –	Did the corporation claim any deduction under the section 125, during either the current or previous year?	[ ] Yes	[X] No
3 –	Is the corporation's, or any of its associated corporations', taxable income for the current or previous year less than or equal to $500,000?	[ ] Yes	[ ] No
4 –	Is the corporation and any associated corporations' taxable capital employed in Canada for the current or previous year less than or equal to $10,000,000?	[ ] Yes	[ ] No
5 –	Does the corporation have a perfect compliance history in the last 12 months?	[ ] Yes	[ ] No

If you do not want to use the quarterly instalments option, select this box to go back to monthly instalments. [ ]

1 – 1st Instalment base method

1st Instalment base amount (amount N below)	149,379	÷	12	=	12,449	
	Monthly instalments required				12,449	
Quarterly tax instalments required	149,379	÷	4	=		

2 – Combined 1st and 2nd instalment base method

Select this box if you want the first 2 payments* to be calculated without taking the applicable threshold into account? [ ]

2nd Monthly instalment base amount

Indicate:	Part I tax	2,329						
	Part VI, VI.1 and XIII.1 tax	+						
	Federal adjustment for amalgamation, winding up or transfer	+						
	Provincial tax, other than Alberta, Québec and Ontario	+						
	Ontario tax	+	96,201					
	Provincial adjustment for amalgamation, winding up or transfer	+						
	Total	=	98,530	÷	12	=	8,211	A
1/12 of estimated current year credits (M below /12)						–	1,667	
	Each of the first two instalment payments					=	6,544	B
Total tax from N below	149,379							
Amount B above x 2	–	13,088						
	=	136,291	÷	10	=	13,630		
	Each of the remaining ten instalment payments					=	13,630	

2nd Quarterly instalment base amount

Indicate:	Part I tax	2,329						
	Part VI, VI.1 and XIII.1 tax	+						
	Federal adjustment for amalgamation, winding up or transfer	+						
	Provincial tax, other than Alberta, Québec and Ontario	+						
	Ontario tax	+	96,201					
	Provincial adjustment for amalgamation, winding up or transfer	+						
	Total	=	98,530	÷	4	=	24,633	A
1/4 of estimated current year credits (M below /4)						–	5,000	
	The first instalment payment					=		B
Total tax from N below	149,379							
Amount B above	–							
	=	149,379	÷	3	=	49,793		
	Each of the remaining three instalment payments					=		

* It is the first payment if the quarterly instalments are applicable.

3 – Estimated tax method

Instalment base amount (amount N below)		÷	12	=	
	Monthly instalments required				
Quarterly tax instalments required		÷	4	=	

Instalment base calculation

Federal tax		1st instalment base method		Estimated tax method	
Taxable income		923,482			
Calculation of tax payable					
Federal part I tax		350,923			
Recapture of investment tax credit	+		+		
Refundable tax on a CCPC's investment income	+		+		
Subtotal	=	350,923	=		A
Deduction					
Small business deduction					
Investment corporation deduction	+		+		
Federal tax abatement	+	92,348	+		
Manufacturing and processing profits deduction	+		+		
Non-business foreign tax credit	+		+		
Business foreign tax credit	+		+		
Tax reduction, general and accelerated	+	120,053	+		
Logging tax credit	+		+		
Investment tax credit per Schedule 31	+	51,898	+		
Qualifying environmental trust tax credit	+		+		
Subtotal	=	264,299	=		B
Federal tax summary					
Total part I tax payable (A minus B)		86,624			C
Part VI tax	+		+		D
Part VI.1 tax	+		+		E1
Part XIII.1 tax	+		+		E2
Parts I, VI, VI.1 and XIII.1 **Total**	=	86,624	=		F
Federal adjustments					
Adjustment for short taxation years multiplied by 365 and divided by the number of days in the year if less than 365	x	365 / 365	x	365 / 365	
Subtotal	=	86,624	=		
Federal adjustment for amalgamation, winding up or transfer	+		+	N/A	
Total federal tax after adjustments	=	86,624	=		G

Provincial tax						
Provincial/territorial tax other than Alberta, Québec and Ontario before provincial refundable tax credits			+		+	H
Ontario tax						
Income tax		59,915				
Corporate minimum tax paid (credited)	+	22,840				
Special additional tax on life insurance corporations	+		+			
Total Ontario tax	=	82,755 ▶		82,755	+	I
Harmonized provincial tax (H + I)						
Provincial/territorial tax other than Alberta and Québec before provincial refundable tax credits			=	82,755	=	J
Provincial adjustments						
Adjustment for short taxation years multiplied by 365 and divided by the number of days in the year if less than 365			x	365 / 365	x	365 / 365
Subtotal			=	82,755	=	
Provincial adjustment for amalgamation, winding up or transfer			+		+	N/A
Total provincial tax after adjustments			=	82,755	=	K
Total of tax before refundable credits**			=	169,379	=	L

Instalment base calculation (continued)

Estimated current year credits

Investment tax credit refund				
Dividend refund	+		+	
Federal capital gains refund	+		+	
Provincial and territorial capital gains refund	+		+	
NRO allowable refund per Schedule 26	+		+	
Tax withheld at source	+		+	
Other estimated credits	+		+	
Provincial/territorial refundable tax credits other than Alberta, Québec and Ontario*	+		+	
Ontario refundable tax credits*	+	20,000	+	
Total estimated current year credits	=	20,000	=	**M**
Instalment base amount (L – M)		149,379		**N**

* For more details with regards to the impact of the refundable tax credits in the instalment base calculation, consult the Help.

** For instalments payable, the amount on line G will only be included in the amount of line L when it exceeds $3,000. The same rule applies to line K.

Canada Revenue Agency / Agence du revenu du Canada

Information Return for Corporations Filing Electronically

- You have to complete this return for every initial and amended T2 Corporation Income Tax Return electronically filed to the Canada Revenue Agency (CRA) on your behalf.
- By completing Part 2 and signing Part 3, you acknowledge that, under the *Income Tax Act*, you have to keep all records used to prepare your corporation income tax return, and provide this information to us on request.
- Part 4 must be completed by either you or the electronic transmitter of your corporation income tax return.
- Give the signed original of this return to the transmitter and keep a copy in your own records for six years.
- **Do not submit** this form to the CRA unless we ask for it.
- We are responsible for ensuring the confidentiality of your electronically filed tax information only after we have accepted it.

This return is for your records. Do not send it to us unless we ask for it.

Part 1 – Identification

Name of corporation	Business Number
Oshawa PUC Networks Inc.	89172 5210 RC0001

Tax year ▶	From Y M D	To Y M D	Is this an amended return?	Yes	No
	2013-01-01	2013-12-31		☐	☒ X

Part 2 – Declaration

Enter the following amounts, if applicable, from your corporation income tax return for the tax year noted above:

Net income or (loss) for income tax purposes from Schedule 1, financial statements or GIFI (line 300)	933,280
Part I tax payable (line 700)	86,624
Part II surtax payable (line 708)	
Part III.1 tax payable (line 710)	
Part IV tax payable (line 712)	
Part IV.1 tax payable (line 716)	
Part VI tax payable (line 720)	
Part VI.1 tax payable (line 724)	
Part XIV tax payable (line 728)	
Net provincial and territorial tax payable (line 760)	62,755
Provincial tax on large corporations (line 765)	

Part 3 – Certification and authorization

I, MARTIN (Last name) PHIL (First name) VP FINANCE (Position, office, or rank),

am an authorized signing officer of the corporation. I certify that I have examined the corporation T2 income tax return, including accompanying schedules and statements, and that the information given on the T2 return and this T183 Corp information 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.

I authorize the transmitter identified in Part 4 to electronically file the corporation income tax return identified in Part 1. The transmitter can also modify the information originally filed in response to any errors Canada Revenue Agency identifies. This authorization expires when the Minister of National Revenue accepts the electronic return as filed.

Date (yyyy/mm/dd) _____ Signature of an authorized signing officer of the corporation _____ (905) 723-4626 Telephone number

Part 4 – Transmitter identification

The following transmitter has electronically filed the tax return of the corporation identified in Part 1.

Name of person or firm: Ernst & Young LLP Electronic filer number: D2915

Canada Revenue Agency / Agence du revenu du Canada

T2 Corporation Income Tax Return

200

055 Do not use this area

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*. 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*.

Identification

Business number (BN) 001 89172 5210 RC0001

Corporation's name
002 Oshawa PUC Networks Inc.

Address of head office
Has this address changed since the last time we were notified? 010 1 Yes [ ] 2 No [X]
(If **yes**, complete lines 011 to 018.)
011 100 Simcoe Street South
012
City: 015 Oshawa
Province, territory, or state: 016 ON
Country (other than Canada): 017
Postal code/Zip code: 018 L1H 7M7

Mailing address (if different from head office address)
Has this address changed since the last time we were notified? 020 1 Yes [ ] 2 No [X]
(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
Has the location of books and records changed since the last time we were notified? 030 1 Yes [ ] 2 No [X]
(If **yes**, complete lines 031 to 038.)
031 100 Simcoe Street South
032
City: 035 Oshawa
Province, territory, or state: 036 ON
Country (other than Canada): 037
Postal code/Zip code: 038 L1H 7M7

040 **Type of corporation at the end of the tax year**
1 [X] 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 2013-01-01 YYYY MM DD
Tax year-end 061 2013-12-31 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 [X]
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 [X]

Is the corporation a professional corporation that is a member of a partnership? 067 1 Yes [ ] 2 No [X]

Is this the first year of filing after:
Incorporation? 070 1 Yes [ ] 2 No [X]
Amalgamation? 071 1 Yes [ ] 2 No [X]
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 [X]
If **yes**, complete and attach Schedule 24.

Is this the final tax year before amalgamation? 076 1 Yes [ ] 2 No [X]

Is this the final return up to dissolution? 078 1 Yes [ ] 2 No [X]

If an election was made under section 261, state the functional currency used 079 ____

Is the corporation a resident of Canada?
080 1 Yes [X] 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 [X]
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	X	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	X	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 have any foreign affiliates during the 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
Has the corporation had any non-arm's length transactions with a non-resident?	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		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		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	X	T661
Is the total taxable capital employed in Canada of the corporation and its related corporations over $10,000,000?	233	X	———
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 that are not controlled foreign affiliates?	256		T1134
Did the corporation have any controlled foreign affiliates?	258		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? 418990 All other merchant wholesalers

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	Utility Distribution	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		933,280	A
Deduct: Charitable donations from Schedule 2	311	9,798		
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		9,798 ▶	9,798	B
Subtotal (amount A **minus** amount B) (if negative, enter "0")			923,482	C
Add: Section 110.5 additions or subparagraph 115(1)(a)(vii) additions	355			D
Taxable income (amount C **plus** amount D)	360		923,482	
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)			923,482	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	933,280	A
Taxable income from line 360 on page 3, **minus** 100/28 3.57143 of the amount on line 632* on page 7, **minus** 1/(0.38 - X**) 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	923,482	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 **** 203,346 / 11,250 D = 9,037,600 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 1 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.

** General rate reduction percentage for the tax year. It has to be pro-rated based on the number of days in the tax year that are in each calendar year. See page 5.

*** 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)		923,482	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
Total of amounts B to G	▶		H
Amount A **minus** amount H (if negative, enter "0")		923,482	I

Amount I 923,482 x (Number of days in the tax year after December 31, 2010, and before January 1, 2012 / Number of days in the tax year) 365 x 11.5 % = J

Amount I 923,482 x (Number of days in the tax year after December 31, 2011 / Number of days in the tax year) 365 / 365 x 13 % = 120,053 K

General tax reduction for Canadian-controlled private corporations – Amount J **plus** amount K . . . . . 120,053 L

Enter amount L 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)			M
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27			N
Amount QQ from Part 13 of Schedule 27			O
Personal service business income	434		P
Amount used to calculate the credit union deduction (amount F from Schedule 17)			Q
Total of amounts N to Q	▶		R
Amount M **minus** amount R (if negative, enter "0")			S

Amount S x (Number of days in the tax year after December 31, 2010, and before January 1, 2012 / Number of days in the tax year) 365 x 11.5 % = T

Amount S x (Number of days in the tax year after December 31, 2011 / Number of days in the tax year) 365 / 365 x 13 % = U

General tax reduction – Amount T **plus** amount U V

Enter amount V 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 . . . . . 923,482 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 1(0.38 – X*) / 4 = _____ I

Subtotal _____ ▶ _____ J

923,482 K

x 26 2 / 3 % = 246,262 L

Part I tax payable minus investment tax credit refund (line 700 **minus** line 780 from page 8) . . . . . 86,624 M

Refundable portion of Part I tax – Amount E, L, or M, whichever is the least . . . . . **450** _____ N

* General rate reduction percentage for the tax year. It has to be pro-rated based on the number of days in the tax year that are in each calendar year. See page 5.

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 . . . . . 1,700,000 x 1 / 3 = 566,667 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 (enter this amount 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** 350,923 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 i

Taxable income from line 360 on page 3 923,482

Deduct:
Amount from line 400, 405, 410, or 425 on page 4, whichever is the least . . . . . .

Net amount . . . . . 923,482 ▶ 923,482 ii

Refundable tax on CCPC's investment income – 6 2 / 3 % of whichever is less: amount i or ii . . . . . **604** C

Subtotal (**add** amounts A to C) 350,923 D

Deduct:

Small business deduction from line 430 on page 4		1	
Federal tax abatement	**608**	92,348	
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 L on page 5	**638**	120,053	
General tax reduction from amount V on page 5	**639**		
Federal logging tax credit from Schedule 21	**640**		
Federal qualifying environmental trust tax credit	**648**		
Investment tax credit from Schedule 31	**652**	51,898	
	Subtotal	264,299 ▶	264,299 E

Part I tax payable – Amount D **minus** amount E . . . . . 86,624 F

Enter amount F on line 700 on page 8.

Summary of tax and credits

Federal tax

Part I tax payable from page 7	700	86,624
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		86,624

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	62,755	
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		62,755 ▶	62,755
Total tax payable	770		149,379 A

Deduct other credits:

Investment tax credit refund from Schedule 31	780		
Dividend refund from 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	240,000	
Total credits	890	240,000 ▶	240,000 B

Refund code 894 2 Overpayment 90,621

Balance (amount A **minus** amount B) -90,621

If the result is negative, you have an **overpayment**.
If the result is positive, you have a **balance unpaid**.
Enter the amount on whichever line applies.

Generally, we do not charge or refund a difference of $2 or less.

Balance unpaid

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 D2915

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Certification

I, 950 MARTIN (Last name (print)) 951 PHIL (First name (print)) 954 VP FINANCE (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 Date (yyyy/mm/dd) Signature of the authorized signing officer of the corporation

956 (905) 723-4626 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 DAVID SAVAGE (Name (print))

959 (905) 743-5219 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

Schedule of Instalment Remittances

Name of corporation contact David Savage
Telephone number (905) 743-5219

Effective interest date	Description (instalment remittance, split payment, assessed credit)	Amount of credit
	Tax installments made during the year (PILS)	240,000

Total amount of instalments claimed (carry the result to line 840 of the T2 Return) 240,000 **A**

Total instalments credited to the taxation year per T9 240,000 **B**

Transfer

Account number	Taxation year end	Amount	Effective interest date	Description
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				

Canada Revenue Agency / Agence du revenu du Canada

SCHEDULE 100

Form identifier 100

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Name of corporation	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

Balance sheet information

Account	Description	GIFI		Current year	Prior year
Assets					
	Total current assets	1599	+	27,665,000	27,690,000
	Total tangible capital assets	2008	+	77,504,000	70,709,000
	Total accumulated amortization of tangible capital assets	2009	–		
	Total intangible capital assets	2178	+		
	Total accumulated amortization of intangible capital assets	2179	–		
	Total long-term assets	2589	+	8,554,000	9,681,000
	* Assets held in trust	2590	+		
	Total assets (mandatory field)	2599	=	113,723,000	108,080,000
Liabilities					
	Total current liabilities	3139	+	26,218,000	19,128,000
	Total long-term liabilities	3450	+	48,607,000	51,453,000
	* Subordinated debt	3460	+		
	* Amounts held in trust	3470	+		
	Total liabilities (mandatory field)	3499	=	74,825,000	70,581,000
Shareholder equity					
	Total shareholder equity (mandatory field)	3620	+	38,898,000	37,499,000
	Total liabilities and shareholder equity	3640	=	113,723,000	108,080,000
Retained earnings					
	Retained earnings/deficit – end (mandatory field)	3849	=	15,882,000	14,679,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Current Assets

SCHEDULE 100

Form identifier 1599

Account	Description	GIFI		Current year	Prior year
Cash and deposits					
	* Cash and deposits	1000		3,427,000	6,204,000
	Cash and deposits		+	3,427,000	6,204,000
Accounts receivable					
	* Accounts receivable	1060		9,972,000	7,615,000
	Accounts receivable		+	9,972,000	7,615,000
Inventories					
	* Inventories	1120		51,000	239,000
	Inventories		+	51,000	239,000
Due from/investment in related parties					
	* Due from/investment in related parties	1400			408,000
	Due from/investment in related parties		+		408,000
Other current assets					
	* Other current assets	1480		13,667,000	12,943,000
	Taxes recoverable/refundable	1483		451,000	145,000
	Prepaid expenses	1484		97,000	136,000
	Other current assets		+	14,215,000	13,224,000
	Total current assets	1599	=	27,665,000	27,690,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Tangible Capital Assets and Accumulated Amortization

SCHEDULE 100

Form identifier 2008/2009

Account	Description	GIFI	Tangible capital assets	Accumulated amortization	Prior year
Other tangible capital assets					
	* Other tangible capital assets	1900 +	77,504,000		70,709,000
	Total		77,504,000		
	Total tangible capital assets	2008 =	77,504,000		70,709,000
ZZZ	**Total accumulated amortization of tangible capital assets**	2009		=	

***** Generic item

Long-term Assets

SCHEDULE 100

Form identifier 2589

Account	Description	GIFI		Current year	Prior year
Other long-term assets					
	* Other long-term assets	2420		175,000	248,000
	Future (deferred) income taxes	2421		7,935,000	8,959,000
	Other deferred items/charges	2424		444,000	474,000
	Other long-term assets		+	8,554,000	9,681,000
	Total long-term assets	2589	=	8,554,000	9,681,000

***** Generic item

Current Liabilities

SCHEDULE 100

Form identifier 3139

Account	Description	GIFI		Current year	Prior year
Amounts payable and accrued liabilities					
	* Amounts payable and accrued liabilities	2620		18,254,000	13,327,000
	Amounts payable and accrued liabilities		+	18,254,000	13,327,000
Due to related parties					
	* Due to related parties	2860		2,554,000	
	Due to related parties		+	2,554,000	
	* Current portion of long-term liability	2920	+	2,899,000	2,989,000
Other current liabilities					
	* Other current liabilities	2960		2,511,000	2,812,000
	Other current liabilities		+	2,511,000	2,812,000
	Total current liabilities	3139	=	26,218,000	19,128,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Long-term Liabilities

SCHEDULE 100

Form identifier 3450

Account	Description	GIFI		Current year	Prior year
Long-term debt					
	* Long-term debt	3140		7,000,000	7,000,000
	Long-term debt		+	7,000,000	7,000,000
	* Deferred income	3220	+	1,664,000	1,689,000
Due to shareholder(s)/director(s)					
	* Due to shareholder(s)/director(s)	3260		23,064,000	23,064,000
	Due to shareholder(s)/director(s)		+	23,064,000	23,064,000
Other long-term liabilities					
	* Other long-term liabilities	3320		16,879,000	19,700,000
	Other long-term liabilities		+	16,879,000	19,700,000
	Total long-term liabilities	3450	=	48,607,000	51,453,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Shareholder Equity

SCHEDULE 100

Form identifier 3620

Account	Description	GIFI		Current year	Prior year
	* Common shares	3500	+	23,064,000	23,064,000
	* Accumulated other comprehensive income	3580	+	-48,000	-244,000
	* Retained earnings/deficit	3600	+	15,882,000	14,679,000
	Total shareholder equity	3620	=	38,898,000	37,499,000

***** Generic item

Retained Earnings/Deficit

SCHEDULE 100

Form identifier 3849

Account	Description	GIFI		Current year	Prior year
	* Retained earnings/deficit – start	3660	+	14,679,000	12,863,000
	* Net income/loss	3680	+	2,903,000	3,516,000
Dividends declared					
	* Dividends declared	3700		1,700,000	1,700,000
	Dividends declared		–	1,700,000	1,700,000
	Retained earnings/deficit – end	3849	=	15,882,000	14,679,000

***** Generic item

Canada Revenue Agency / Agence du revenu du Canada

SCHEDULE 125

Form identifier 125

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Name of corporation	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

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	+	120,085,000	114,136,000
	Cost of sales	8518	–	102,012,000	96,182,000
	Gross profit/loss	8519	=	18,073,000	17,954,000
	Cost of sales	8518	+	102,012,000	96,182,000
	Total operating expenses	9367	+	16,690,000	16,221,000
	Total expenses (mandatory field)	9368	=	118,702,000	112,403,000
	Total revenue (mandatory field)	8299	+	121,767,000	115,966,000
	Total expenses (mandatory field)	9368	–	118,702,000	112,403,000
	Net non-farming income	9369	=	3,065,000	3,563,000
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	=	3,065,000	3,563,000
	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	–	162,000	47,000
	Future (deferred) income tax provision	9995	–		
	Total – Other comprehensive income	9998	+		
	Net income/loss after taxes and extraordinary items (mandatory field)	9999	=	2,903,000	3,516,000

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Revenue

SCHEDULE 125

Form identifier 8299

Account	Description	GIFI		Current year	Prior year
	* Trade sales of goods and services	8000	+	120,085,000	114,136,000
	Total sales of goods and services	8089	=	120,085,000	114,136,000
Investment revenue					
	Interest from other Canadian sources	8094		48,000	102,000
	Investment revenue		+	48,000	102,000
Realized gains/losses on disposal of assets					
	* Realized gains/losses on disposal of assets	8210		-208,000	-75,000
	Realized gains/losses on disposal of assets		+	-208,000	-75,000
Other revenue					
	* Other revenue	8230		1,842,000	1,803,000
	Other revenue		+	1,842,000	1,803,000
	Total revenue	8299	=	121,767,000	115,966,000

***** Generic item

Cost of Sales

SCHEDULE 125

Form identifier 8518

Account	Description	GIFI		Current year	Prior year
	* Purchases/cost of materials	8320	+	102,012,000	96,182,000
	Cost of sales	8518	=	102,012,000	96,182,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Operating Expenses

SCHEDULE 125

Form identifier 9367

Account	Description	GIFI		Current year	Prior year
Advertising and promotion					
	Meals and entertainment	8523		20,169	12,863
	Advertising and promotion		+	20,169	12,863
	* Amortization of tangible assets	8670	+	3,653,000	3,036,000
Interest and bank charges					
	* Interest and bank charges	8710		1,802,000	1,920,000
	Interest and bank charges		+	1,802,000	1,920,000
Other expenses					
	* Other expenses	9270		11,048,718	11,222,137
	Research and development	9282		136,113	
	General and administrative expenses	9284		30,000	30,000
	Other expenses		+	11,214,831	11,252,137
	Total operating expenses	9367	=	16,690,000	16,221,000

***** Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

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Schedule 141

Notes checklist

Corporation's name	Business number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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	X
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		2 No	X
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 ☐ 2 No ☒

If **yes**, enter the amount recognized:		**In net income** Increase (decrease)		**In OCI** Increase (decrease)
Property, plant, and equipment	**210**		**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 ☒

Did the corporation apply hedge accounting during the tax year? . . . . . **255** 1 Yes ☒ 2 No ☐

Did the corporation discontinue hedge accounting during the tax year? . . . . . **260** 1 Yes ☐ 2 No ☒

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 ☒

If **yes**, you have to maintain a separate reconciliation.

T2 BAR CODE RETURN

Name: Oshawa PUC Networks Inc.

BN: 89172 5210 RC 0001

Tax Year Start: 2013-01-01

Tax Year End: 2013-12-31

Financial Statements and Notes to be attached seperately.

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Net Income (Loss) for Income Tax Purposes

SCHEDULE 1

Corporation's name	Business Number	Tax year end (Year Month Day)
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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				2,903,000 A
Add:				
Provision for income taxes – current	101	162,000		
Amortization of tangible assets	104	3,653,000		
Amortization of intangible assets	106	30,000		
Loss on disposal of assets	111	208,000		
Charitable donations and gifts from Schedule 2	112	9,798		
Scientific research expenditures deducted per financial statements	118	136,113		
Non-deductible club dues and fees	120	3,259		
Non-deductible meals and entertainment expenses	121	10,085		
Reserves from financial statements – balance at the end of the year	126	12,047,879		
Subtotal of additions		16,260,134 ▶		16,260,134
Other additions:				
Recapture of SR&ED expenditures – Form T661	231	12,854		
Miscellaneous other additions:				
603 Inducement - ITA 12(1)(x)		45,696		
Total		45,696	293	45,696
604				
Total			294	
Subtotal of other additions			199	58,550 ▶ 58,550
Total additions			500	16,318,684 ▶ 16,318,684 B
Amount A **plus** amount B				19,221,684
Deduct:				
Capital cost allowance from Schedule 8	403	6,437,003		
Reserves from financial statements – balance at the beginning of the year	414	11,632,961		
Subtotal of deductions		18,069,964 ▶		18,069,964
Other deductions:				
Miscellaneous other deductions:				
700 Interest Expense Capitalized for Accounting Purposes	390	107,078		
701 ITCs recorded for accounting	391	111,362		
704				
Total			394	
Subtotal of other deductions			499	218,440 ▶ 218,440
Total deductions			510	18,288,404 ▶ 18,288,404
Net income (loss) for income tax purposes – enter on line 300 of the T2 return				933,280

T2 SCH 1 E (12)

Canada

Inducement

This form is used to calculate inducements that a corporation must add to its income under paragraph 12(1)(x) of the ITA. If an amount reduces the capital cost of a property, this amount will be indicated in Part "Tax credits whose amount should reduce the capital cost of property."

If you want to transfer an amount to Schedule 1 and include it in the corporation's income for tax purposes, select the corresponding check box in column A. You can also select the option **Select this check box to add all the amounts to income calculated in Schedule 1** to transfer all the amounts to Schedule 1. In either case, the column A check box will be selected for that amount and it will therefore be updated to Schedule 1.

Tax credits whose amount should be added to income

Select this check box to add all the amounts to income calculated in Schedule 1. . . . . ☐

Federal

A		
X	Investment tax credit from apprenticeship job creation expenditures	4,000
X	Investment tax credit from child care spaces expenditures	
☐	Canadian film or video production tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Film or video production services tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
X	Investment tax credit claimed on contributions made to SR&ED farming organizations	

Ontario

A		
X	Portion of the Ontario research and development tax credit that relates to the prescribed proxy amount (PPA) and portion of the Ontario investment tax credit that relates to contributions made to SR&ED farming organizations	12,869
X	Ontario co-operative education tax credit	10,576
X	Ontario apprenticeship training tax credit	18,251
☐	Ontario computer animation and special effects tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario film and television tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario production services tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario interactive digital media tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario sound recording tax credit*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario book publishing tax credit	
X	Portion of the Ontario innovation tax credit that relates to the prescribed proxy amount (PPA) and portion of the Ontario investment tax credit that relates to contributions made to SR&ED farming organizations	
☐	Ontario business-research institute tax credit	
☐	Ontario public transit expense tax credit	
☐	Ontario tax credit for the purchase of vehicles that use natural gas as a fuel*	
	* Please verify if the credit amount relates to depreciable property. For more information, press F1 to consult the Help.	
☐	Ontario tax credit for educational success	

Tax credits whose amount should reduce the capital cost of property

Canada Revenue Agency | Agence du revenu du Canada

Schedule 2

Charitable Donations and Gifts

Corporation's name	Business number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- For use by corporations to claim any of the following:
  - charitable donations to qualified donees;
  - gifts to Canada, a province, or a territory;
  - gifts of certified cultural property;
  - gifts of certified ecologically sensitive land; or
  - additional deduction for gifts of medicine.
- The donations and gifts are eligible for a five-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*.
- For donations and gifts made after March 22, 2004, subsection 110.1(1.2) of the federal *Income Tax 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.
- The eligible amount of a charitable gift is the amount by which the fair market value of the gift exceeds the amount of an advantage, if any, for the gift.
- A gift of medicine made after March 18, 2007, to qualifying organizations for activities outside of Canada, may be eligible for an additional deduction if the gift is an eligible medical gift. This additional deduction is calculated 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)
Oshawa Community Health Centre	3,998
Blue Sea Philanthropy	250
The Dragon Flies	250
Our Youth at Work Association	5,000
Life Outreach International	250
Subtotal	9,748
Add: Total donations of less than $100 each	50
Total donations in current tax year	9,798

		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 tax year	240		B		
Add:					
Charitable donations transferred on an amalgamation or the wind-up of a subsidiary	250				
Total current-year charitable donations made (enter this amount on line 112 of Schedule 1)	210	9,798		9,798	9,798
Subtotal (line 250 **plus** line 210)		9,798	C	9,798	9,798
Subtotal (amount B **plus** amount C)		9,798	D	9,798	9,798
Deduct: Adjustment for an acquisition of control (for donations made after March 22, 2004)	255				
Total charitable donations available (amount D **minus** amount on line 255)		9,798	E	9,798	9,798
Deduct: Amount applied against taxable income (cannot be more than amount O in Part 2) (enter this amount on line 311 of the T2 return)	260	9,798		9,798	9,798
Charitable donations closing balance (amount E **minus** amount on line 260)	280				

* 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	2012-12-31			
2nd prior year	2011-12-31			
3rd prior year	2010-12-31			
4th prior year	2009-12-31			
5th prior year	2008-12-31			
6th prior year*	2007-12-31			
7th prior year	2006-12-31			
8th prior year	2005-12-31			
9th prior year	2004-12-31			
10th prior year	2003-12-31			
11th prior year	2002-12-31			
12th prior year	2001-12-31			
13th prior year	2001-09-30			
14th prior year	2000-09-30			
15th prior year	1999-09-30			
16th prior year	1998-09-30			
17th prior year	1997-09-30			
18th prior year	1996-09-30			
19th prior year	1995-09-30			
20th prior year	1994-09-30			
21st prior year*	1993-09-30			
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 % . . . . . 699,960 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) . . . . . **227** H

The amount of the recapture of capital cost allowance in respect of charitable gifts **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) 699,960 N

Maximum allowable deduction for charitable donations (enter amount E from Part 1, amount N, or net income for tax purposes, whichever is less) . . . . . 9,798 O

***** For credit unions, 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 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 current-year gifts made to Canada, a province, or a territory * 310

Subtotal (line 350 **plus** line 310) ▶ C

Subtotal (amount B **plus** amount C) D

Deduct:

Adjustment for an acquisition of control (for gifts made after March 22, 2004) 355

Amount applied 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 tax year	440		G		
Add:					
Gifts of certified cultural property transferred on an amalgamation or the windup of a subsidiary	450				
Total current-year gifts of certified cultural property	410				
Subtotal (line 450 **plus** line 410)			H		
Subtotal (amount G **plus** amount H)			I		
Deduct:					
Adjustment for an acquisition of control (for gifts made after March 22, 2004)	455				
Amount applied 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	2012-12-31			
2nd prior year	2011-12-31			
3rd prior year	2010-12-31			
4th prior year	2009-12-31			
5th prior year	2008-12-31			
6th prior year*	2007-12-31			
7th prior year	2006-12-31			
8th prior year	2005-12-31			
9th prior year	2004-12-31			
10th prior year	2003-12-31			
11th prior year	2002-12-31			
12th prior year	2001-12-31			
13th prior year	2001-09-30			
14th prior year	2000-09-30			
15th prior year	1999-09-30			
16th prior year	1998-09-30			
17th prior year	1997-09-30			
18th prior year	1996-09-30			
19th prior year	1995-09-30			
20th prior year	1994-09-30			
21st prior year*	1993-09-30			
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*	539				
Gifts of certified ecologically sensitive land at the beginning of the tax year	540		L		
Add:					
Gifts of certified ecologically sensitive land transferred on an amalgamation or the windup of a subsidiary	550				
Gifts of certified ecologically sensitive land made before February 11, 2014					
Gifts of certified ecologically sensitive land made after February 10, 2014	+			+	
Total current-year gifts of certified ecologically sensitive land	510				
Subtotal (line 550 **plus** line 510)			M		
Subtotal (amount L **plus** amount M)			N		
Deduct:					
Adjustment for an acquisition of control (for gifts made after March 22, 2004)	555				
Amount applied 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

Year of origin:		Federal	Québec	Alberta
1st prior year	2012-12-31			
2nd prior year	2011-12-31			
3rd prior year	2010-12-31			
4th prior year	2009-12-31			
5th prior year	2008-12-31			
6th prior year*	2007-12-31			
7th prior year	2006-12-31			
8th prior year	2005-12-31			
9th prior year	2004-12-31			
10th prior year	2003-12-31			
11th prior year*	2002-12-31			
12th prior year	2001-12-31			
13th prior year	2001-09-30			
14th prior year	2000-09-30			
15th prior year	1999-09-30			
16th prior year	1998-09-30			
17th prior year	1997-09-30			
18th prior year	1996-09-30			
19th prior year	1995-09-30			
20th prior year	1994-09-30			
21st prior year*	1993-09-30			
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 – Additional deduction for gifts of medicine

			Federal		Québec		Alberta	
Additional deduction for gifts of medicine at the end of the previous tax year				P				
Deduct: Additional deduction for gifts of medicine expired after five tax years	639							
Additional deduction for gifts of medicine at the beginning of the tax year	640			Q				
Add:								
Additional deduction for gifts of medicine transferred on an amalgamation or the wind-up of a subsidiary	650							
Additional 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) = Additional deduction for gifts of medicine for the current year 610 _____

Québec
a _____ x (b _____ / c) = Additional deduction for gifts of medicine for the current year . . . . . _____

Alberta
a _____ x (b _____ / c) = Additional 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 against taxable income (enter this amount on line 315 of the T2 return)	660					
Subtotal (line 655 **plus** line 660)				T		
Additional deduction for gifts of medicine closing balance (amount S **minus** amount T)	680					

Amounts carried forward – Additional deduction for gifts of medicine

Year of origin:	Federal	Québec	Alberta
1st prior year 2012-12-31			
2nd prior year 2011-12-31			
3rd prior year 2010-12-31			
4th prior year 2009-12-31			
5th prior year 2008-12-31			
6th prior year* 2007-12-31			
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	2012-12-31	
2nd prior year	2011-12-31	
3rd prior year	2010-12-31	
4th prior year	2009-12-31	
5th prior year	2008-12-31	
6th prior year*	2007-12-31	
7th prior year	2006-12-31	
8th prior year	2005-12-31	
9th prior year	2004-12-31	
10th prior year	2003-12-31	
11th prior year	2002-12-31	
12th prior year	2001-12-31	
13th prior year	2001-09-30	
14th prior year	2000-09-30	
15th prior year	1999-09-30	
16th prior year	1998-09-30	
17th prior year	1997-09-30	
18th prior year	1996-09-30	
19th prior year	1995-09-30	
20th prior year	1994-09-30	
21st prior year*	1993-09-30	
Total		

***** These gifts expired in the current year.

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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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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)	**A**	**B** Enter 1 if payer corporation is connected	**C** Business Number of connected corporation	**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)	**E** Non-taxable dividend under section 83
200		**205**	**210**	**220**	**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)*	**F1** Eligible dividends (included in column F)	**F2**	**F3**	**G** Total taxable dividends paid by connected payer corporation (for tax year in column D)	**H** Dividend refund of the connected payer corporation (for tax year in column D)**	**I** Part IV tax before deductions F x 1 / 3 ***
240				**250**	**260**	**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	Oshawa Power and Utilities Corporation	86486 7593 RC0001	2013-12-31	1,700,000	1,700,000

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 1,700,000

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** 1,700,000

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) 1,700,000

Other dividends paid in the tax year (total of 510 to 540) . . . . . _____

Total dividends paid in the tax year **500** 1,700,000

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 1,700,000

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Schedule 5

TAX CALCULATION SUPPLEMENTARY – CORPORATIONS

Corporation's name	Business Number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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
923,482		923,482	71,200

Ontario basic income tax (from Schedule 500) 270 106,200

Deduct: Ontario small business deduction (from Schedule 500) 402 35,000

Subtotal 71,200 ▶ 71,200 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) 71,200 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

Other Ontario non-refundable credits . . . . . .

Subtotal ▶ D6

Subtotal (amount C6 **minus** amount D6) (if negative, enter "0") 71,200 E6

Deduct: Ontario research and development tax credit (from Schedule 508) 416 11,285

Ontario corporate income tax payable before Ontario corporate minimum tax credit (amount E6 **minus** amount on line 416) (if negative, enter "0") 59,915 F6

Deduct: Ontario corporate minimum tax credit (from Schedule 510) 418

Ontario corporate income tax payable (amount F6 **minus** amount on line 418) (if negative, enter "0") 59,915 G6

Add:

Ontario corporate minimum tax (from Schedule 510) 278 22,840

Ontario special additional tax on life insurance corporations (from Schedule 512) 280

Subtotal 22,840 ▶ 22,840 H6

Total Ontario tax payable before refundable credits (amount G6 **plus** amount H6) 82,755 I6

Deduct:

Ontario qualifying environmental trust tax credit 450

Ontario co-operative education tax credit (from Schedule 550) 452

Ontario apprenticeship training tax credit (from Schedule 552) 454 20,000

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 20,000 ▶ 20,000 J6

Net Ontario tax payable or refundable credit (amount I6 **minus** amount J6) 290 62,755 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**	62,755

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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

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		40,197,091			0		40,197,091	4	0	0	1,607,884	38,589,207
2.	8		949,297	185,308		0	92,654	1,041,951	20	0	0	208,390	926,215
3.	10		1,737,600	49,342		0	24,671	1,762,271	30	0	0	528,681	1,258,261
4.	42		29,946			0		29,946	12	0	0	3,594	26,352
5.	13		440,758	18,265		0	9,133	449,890	NA	0	0	76,734	382,289
6.	45		6,310			0		6,310	45	0	0	2,840	3,470
7.	95		1,182,239		120,602	0		1,302,841	0	0	0		1,302,841
8.	47		38,485,354	9,622,688		0	4,811,344	43,296,698	8	0	0	3,463,736	44,644,306
9.	45		3,604			0		3,604	55	0	0	1,982	1,622
10.	50		95,794	242,213		0	121,107	216,900	55	0	0	119,295	218,712
11.	12		229,558	377,372		0	188,686	418,244	100	0	0	418,244	188,686
12.	10.1	Chevrolet Volt	18,742			N/A		18,742	30	N/A	N/A	5,623	13,119
		Totals	83,376,293	10,495,188	120,602		5,247,595	88,744,488				6,437,003	87,555,080

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:
- Amounts transferred under section 85, or transferred on amalgamation and winding-up of a subsidiary.

Items that **reduce** the undepreciated capital cost:
- 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 (13)

Fixed Assets Reconciliation

Reconciliation of change in fixed assets per financial statements to amounts used per tax return.

Tax return

Additions for tax purposes – Schedule 8 regular classes		10,476,923		
Additions for tax purposes – Schedule 8 leasehold improvements	+	18,265		
Operating leases capitalized for book purposes	+			
Capital gain deferred	+			
Recapture deferred	+			
Deductible expenses capitalized for book purposes – Schedule 1	+	107,078		
Other (specify):				
SR&ED assets	+	43,000		
Total additions per books	=	10,645,266 ▶		10,645,266
Proceeds up to original cost – Schedule 8 regular classes				
Proceeds up to original cost – Schedule 8 leasehold improvements	+			
Proceeds in excess of original cost – capital gain	+			
Recapture deferred – as above	+			
Capital gain deferred – as above	+			
Pre V-day appreciation	+			
Other (specify):				
Adjustment to CIP balance	+	-120,602		
ITC booked for accounting entry	+	115,907		
Total proceeds per books	=	-4,695 ▶	–	-4,695
Depreciation and amortization per accounts – Schedule 1			–	3,653,000
Loss on disposal of fixed assets per accounts			–	208,000
Gain on disposal of fixed assets per accounts			+	
Net change per tax return			=	6,788,961

Financial statements

Fixed assets (excluding land) per financial statements

Closing net book value			77,504,000
Opening net book value		–	70,709,000
Net change per financial statements		=	6,795,000

If the amounts from the tax return and the financial statements differ, explain why below.

Immaterial difference of $6,093

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SCHEDULE 9

RELATED AND ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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.	OSHAWA POWER AND UTILITIES C		86486 7593 RC0001	1					
2.	OSHAWA PUC ENERGY SERVICES II		85749 1336 RC0001	3					
3.	OSHAWA PUC SERVICES INC.		86579 9662 RC0001	3					
4.	2252112 Ontario Inc.		80068 6453 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

T2 SCH 9 (11)

Canada

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SCHEDULE 11

TRANSACTIONS WITH SHAREHOLDERS, OFFICERS, OR EMPLOYEES

Corporation's name	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

Provide the details of any transactions with shareholders, officers or employees that involve:

- payments the corporation made or amounts credited to the account of shareholders, officers, or employees, which were not part of their remuneration or reimbursement of expenses;
- assets the corporation sold to or purchased from shareholders, officers, or employees, including those for which an election was made under section 85; or
- loans or indebtedness to shareholders, officers, or employees, or persons connected with a shareholder, which were not repaid by the end of the taxation year.

	Relationship code (see note) 100	Payments $ 200	Reimbursement (Other than reimbursement of expenses) $ 300	Loans receivable from, or debts owing to $ 400	Assets sold or purchased $ 500	Does section 85 apply to assets sold or purchased? 550
1	1			23,064,000		Yes / No

Note: Enter the code number of the relationship that applies: (if more than one relationship exists, enter the lowest applicable number)

1 - Shareholder
2 - Officer
3 - Employee

T2 SCH 11 (00)

Canada

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	Employee future benefits	11,380,000		268,800		11,648,800
2	Employee sick leave benefits	25,988		3,185		29,173
3	Allowance for Doubtful Account	226,973		248,836	226,973	248,836
4	Accrued Labour			121,070		121,070
	Reserves from Part 2 of Schedule 13					
	Totals	11,632,961		641,891	226,973	12,047,879

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 14

MISCELLANEOUS PAYMENTS TO RESIDENTS

Name of corporation	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- This schedule must be completed by all corporations who made the following payments to residents of Canada: royalties for which the corporation has not filed a T5 slip; research and development fees; management fees; technical assistance fees; and similar payments.
- Please enter the name and address of the recipient and the amount of the payment in the applicable column. If several payments of the same type (i.e., management fees) were made to the same person, enter the total amount paid. If similar types of payments have been made, but do not fit into any of the categories, enter these amounts in the column entitled "Similar payments".

	Name of recipient 100	Address of recipient 200	Royalties 300	Research and development fees 400	Management fees 500	Technical assistance fees 600	Similar payments 700
1	Oshawa Power and Utilities C	100 Simcoe Street South Oshawa ON L1H 7M7			480,000		

T2 SCH 14 (99)

Canada

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Schedule 15

Deferred Income Plans

Corporation's name	Business number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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	664,790	0345983			

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	664,790	A
Less:		
Total of all amounts for deferred income plans deducted in your financial statements	664,790	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: 2013

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 Asso-ciation code 300	4 Business limit for the year (before the allocation) $	5 Percentage of the business limit % 350	6 Business limit allocated* $ 400	
1	Oshawa PUC Networks Inc.	89172 5210 RC0001	1	500,000	100.0000	500,000	
2	OSHAWA POWER AND UTILITIES CORPORATI(	86486 7593 RC0001	1	500,000			
3	OSHAWA PUC ENERGY SERVICES INC.	85749 1336 RC0001	1	500,000			
4	OSHAWA PUC SERVICES INC. PIL	86579 9662 RC0001	1	500,000			
5	2252112 Ontario Inc.	80068 6453 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)

Canada

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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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

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			
2nd previous tax year			
3rd previous tax year			

Credit to be applied 901

Credit to be applied 902

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) 198,427

Add:

Contributions to agricultural organizations for SR&ED* . . . . . 198,427 ▶ **350** 198,427

Current expenditures (line 557 on Form T661 **plus** line 103 from Part 3)* **360** 41,065

Capital expenditures incurred **before** 2014 (from line 558 on Form T661)** **370**

Repayments made in the year (from line 560 on Form T661) **380** 239,492

Qualified SR&ED expenditures (total of lines 350 to 370) **380** 239,492

* 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 [X] 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**

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 **398**

* 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 _____ x 10 = _____ 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 $\frac{\text{Number of days in the tax year}}{365}$ 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	198,427	x	20 %	=	39,685	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	41,065	x	20 %	=	8,213	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	20 %	=	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) 47,898 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	47,898		
Credit allocated from a partnership	550			
Subtotal (total of lines 530 to 550)		47,898	▶ 47,898	O

Total credit available (line 520 **plus** amount O) 47,898 P

Deduct:

Credit deducted from Part I tax (enter at amount E in Part 30)	560	47,898		
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)		47,898	▶ 47,898	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 [X]

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 [X] 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.	Tyler Duffin PC2664	Powerline Technician	90,978	9,098	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	
2.	Anthony Bianca PE3554	Instrumentation and Control Technician	61,518	6,152	2,000	
				Total current-year credit (enter at line 640 in Part 22)	4,000	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 4,000

Credit allocated from a partnership 655

Subtotal (total of lines 630 to 655) 4,000 ▶ 4,000 D

Total credit available (line 625 **plus** amount D) . . . . . 4,000 E

Deduct:

Credit deducted from Part I tax (enter at amount G in Part 30) 660 4,000

Credit carried back to the previous year(s) (amount G from Part 23) . . . . . a

Subtotal (line 660 **plus** amount a) 4,000 ▶ 4,000 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				Credit to be applied	931
2nd previous tax year				Credit to be applied	932
3rd previous tax year				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	2012-12-31		
2nd previous tax year	2011-12-31		
3rd previous tax year	2010-12-31		

Credit to be applied 941

Credit to be applied 942

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) . . . . . 47,898 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) . . . . . 4,000 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) . . . . . 51,898 I

Enter amount I at line 652 of the T2 return.

Privacy Act, Personal Information Bank number CRA PPU 047

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)
4,000	4,000			

Prior years

Taxation year	ITC beginning of year (E)	Adjustments (F)	Applied current year (G)	ITC end of year (E-F-G)
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				
1994-09-30				*
Total				

B+C+D+G **Total ITC utilized** 4,000

* 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 will only expire at the beginning of the subsequent fiscal period. Consequently, this amount will be posted on line 215, 515, 615, 770 or 845, as applicable, in Schedule 31 of the subsequent fiscal year.

Summary of Investment Tax Credit Carryovers

Continuity of investment tax credit carryovers

CCA class number 99 Cur. or cap. R&D for 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)
47,898	47,898			

Prior years

Taxation year	ITC beginning of year (E)	Adjustments (F)	Applied current year (G)	ITC end of year (E-F-G)	
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					
1994-09-30					*
Total					

B+C+D+G **Total ITC utilized** 47,898

* 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 will only expire at the beginning of the subsequent fiscal period. Consequently, this amount will be posted on line 215, 515, 615, 770 or 845, as applicable, in Schedule 31 of the subsequent fiscal year.

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SCHEDULE 50

SHAREHOLDER INFORMATION

Name of corporation	Business Number	Tax year end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

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	Oshawa Power and Utilities Corporation	86486 7593 RC0001			100.000	
2						
3						
4						
5						
6						
7						
8						
9						
10						

Canada Revenue Agency / Agence du revenu du Canada

SCHEDULE 53

GENERAL RATE INCOME POOL (GRIP) CALCULATION

Name of corporation	Business Number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

On: 2013-12-31

- 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	23,769,687	A
Taxable income for the year (DICs enter "0") *	110	923,482	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	923,482	
After-tax income (line 150 x general rate factor for the tax year ** 0.72)	190	664,907	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)		24,434,594	G
Eligible dividends paid in the previous tax year	300	1,700,000	
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)	1,700,000 ▶	1,700,000	H
GRIP before adjustment for specified future tax consequences (line G **minus** line H) (amount can be negative)	490	22,734,594	
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	22,734,594	

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 2012-12-31

Taxable income before specified future tax consequences from the current tax year	1,256,263	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")	1,256,263 ▶	1,256,263	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 2011-12-31

Taxable income before specified future tax consequences from the current tax year 6,818,171 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") 6,818,171 ▶ 6,818,171 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 2010-12-31

Taxable income before specified future tax consequences from the current tax year 5,948,336 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") 5,948,336 ▶ 5,948,336 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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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.

Do not use this area

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		1,700,000	
Total taxable dividends paid in the tax year	100	1,700,000	
Total eligible dividends paid in the tax year	150	1,700,000	A
GRIP at the end of the tax year (line 590 on Schedule 53) (if negative, enter "0")	160	22,734,594	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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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		365	x	12.00 %	=	% A1
Number of days in the tax year after June 30, 2011 / Number of days in the tax year	365	365	x	11.50 %	=	11.50000 % A2

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 *	923,482	B
Ontario basic income tax: amount B **multiplied** by Ontario basic rate of tax for the year (rate A3 from Part 1)	106,200	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)	933,280	1
Federal taxable income, less adjustment for foreign tax credit (amount from line 405 of the T2 return)	923,482	2
Federal business limit before the application of subsection 125(5.1) (amount from line 410 of the T2 return)	500,000	3
Enter the least of amounts 1, 2, and 3	500,000	D

Ontario domestic factor: Ontario taxable income * / Taxable income earned in all provinces and territories ** = 923,482.00 / 923,482 = 1.00000 E

Amount D x factor E	500,000	a
Ontario taxable income (amount B from Part 2)	923,482	b

Ontario small business income (lesser of amount a and amount b) . . . . . 500,000 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) . . . . . 35,000 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) . . . . . 500,000 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 508

ONTARIO RESEARCH AND DEVELOPMENT TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- Use this schedule to:
  - calculate an Ontario research and development tax credit (ORDTC);
  - claim an ORDTC earned in the tax year or carried forward from any of the 20 previous tax years that are a tax year ending after December 31, 2008, to reduce Ontario corporate income tax payable in the current tax year;
  - carry back an ORDTC to reduce Ontario corporate income tax payable in any of the three previous tax years, but not to a tax year that ends before January 1, 2009;
  - add an ORDTC that was allocated to the corporation by a partnership of which it was a member;
  - transfer an ORDTC after an amalgamation or windup; or
  - calculate a recapture of the ORDTC.
- The ORDTC is a 4.5% non-refundable tax credit on eligible expenditures incurred by a corporation in a tax year that ends after December 31, 2008.
- An eligible expenditure is an expenditure for a permanent establishment in Ontario of a corporation, that is a qualified expenditure for the purposes of section 127 of the federal *Income Tax Act* for scientific research and experimental development (SR&ED) carried on in Ontario.
- Only corporations that are not exempt from Ontario corporate income tax and none of whose income is exempt income can claim the ORDTC.
- Attach a completed copy of this schedule to the *T2 Corporation Income Tax Return.*

Part 1 – Ontario SR&ED expenditure pool

Total eligible expenditures incurred by the corporation in Ontario in the tax year	100	250,777	A	
Deduct: Government assistance, non-government assistance, or a contract payment for eligible expenditures	105		B	
Net eligible expenditures for the tax year (amount A **minus** amount B) (if negative, enter "0")		250,777	C	
Add: Eligible expenditures transferred to the corporation by another corporation	110		D	
Subtotal (amount C **plus** amount D)		250,777 ▶		250,777 E
Deduct: Eligible expenditures the corporation transferred to another corporation	115			F
Ontario SR&ED expenditure pool (amount E **minus** amount F) (if negative, enter "0")	120			250,777 G

Part 2 – Calculation of the current part of the ORDTC

Ontario SR&ED expenditure pool (amount G in Part 1)		250,777	x	4.50 %	= 200	11,285	H
ORDTC allocated to a corporation by a partnership of which it is a member (other than a specified member) for a fiscal period that ends in the corporation's tax year *	205						I
* If there is a disposal or change of use of eligible property, see Part 6							
Repayment made in the tax year of government or non-government assistance or a contract payment that reduced an eligible expenditure other than for first term or second term shared-use equipment	210		x	4.50 %	= 215		J
Repayment made in the tax year of government or non-government assistance or a contract payment that reduced an eligible expenditure for first term or second term shared-use equipment	220		x 1 / 4 =		x 4.50 %	= 225	K
Current part of the ORDTC (total of amounts H to K)	230					11,285	L

Part 3 – Calculation of ORDTC available for deduction and ORDTC balance

ORDTC balance at the end of the previous tax year				M
Deduct: ORDTC expired after 20 tax years	300			N
ORDTC at the beginning of the tax year (amount M **minus** amount N)	305			O
Add:				
ORDTC transferred on amalgamation or windup	310			P
Current part of ORDTC (amount L in Part 2)		11,285		Q
Are you waiving all or part of the current part of the ORDTC?	315	Yes 1 ☐	No 2 ☒	
If you answered **yes** at line 315, enter the amount of the tax credit waived on line 320.				
If you answered **no** at line 315, enter "0" on line 320.				
Deduct: Waiver of the current part of the ORDTC	320			R
Subtotal (amount Q **minus** amount R)		11,285 ▶	11,285	S
ORDTC available for deduction (total of amounts O, P and S)		11,285 ▶	11,285	T
Deduct:				
ORDTC claimed * (Enter amount U on line 416 of Schedule 5, *Tax Calculation Supplementary – Corporations*)		11,285		U
ORDTC carried back to a previous tax year (from Part 4)				V
Subtotal (amount U **plus** amount V)		11,285 ▶	11,285	W
ORDTC balance at the end of the tax year (amount T **minus** amount W)	325			X

* This amount cannot be more than the lesser of the following amounts:
- ORDTC available for deduction (amount T); or
- Ontario corporate income tax payable before the ORDTC and the Ontario corporate minimum tax credit (amount from line E6 of Schedule 5).

Part 4 – Request for carryback of tax credit

	Year	Month	Day			
1st previous tax year	2012-12-31			Credit to be applied	901	
2nd previous tax year	2011-12-31			Credit to be applied	902	
3rd previous tax year	2010-12-31			Credit to be applied	903	

Total (enter amount on line V in Part 3)

Part 5 – Analysis of tax credit available for carryforward by tax year of origin

You can complete this part to show all the credits from preceding tax years available for carryforward, by year of origin. This will help you determine the amount of credit that could expire in following years.

Tax year of origin (earliest tax year first) Year Month Day	Credit available
1994-09-30	
1995-09-30	
1996-09-30	
1997-09-30	
1998-09-30	
1999-09-30	
2000-09-30	
2001-09-30	
2001-12-31	
2002-12-31	

Tax year of origin (earliest tax year first) Year Month Day	Credit available
2003-12-31	
2004-12-31	
2005-12-31	
2006-12-31	
2007-12-31	
2008-12-31	
2009-12-31	
2010-12-31	
2011-12-31	
2012-12-31	
Current tax year 2013-12-31	

Total (equals line 325 in Part 3) _____

The amount available from the 20th preceding tax year will expire after this year. When you file your return for the next year, you will enter the expired amount on line 300 of Schedule 508 for that year.

Part 6 – Calculation of a recapture of ORDTC

You will have a recapture of ORDTC in a tax year when you meet **all** of the following conditions:

- you acquired a particular property in the current year or in any of the 20 previous tax years if the ORDTC was earned in a tax year ending after 2008;
- you claimed the cost of the property as an eligible expenditure for the ORDTC;
- the cost of the property was included in computing your ORDTC or was subject to an agreement made under subsection 127(13) of the federal Act to transfer qualified expenditures and section 42 of the *Taxation Act, 2007* (Ontario) applied; and
- you disposed of the property or converted it to commercial use in a tax year ending after December 31, 2008. You also meet this condition if you disposed of or converted to commercial use a property which 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 in Ontario. 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 federal investment tax credit (ITC) rate * of the original user in Calculation 1 below.

You have to report the recapture on Schedule 5 for the year in which you disposed of the property or converted it to commercial use. If the corporation is a member of a partnership, report its share of the recapture.

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.

* Federal ITC in calculations 1 and 2 should be determined without reference to paragraph (e) of the definition **investment tax credit** in subsection 127(9) of the federal Act.

Calculation 1 – If you meet all of the above conditions

	Y Amount of federal ITC you originally calculated for the property you acquired, or the original user's federal ITC where you acquired the property from a non-arm's length party, as described in the note above **700**	Z Amount calculated using the federal 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**	AA Amount from column 700 or 710, whichever is less
1.			

Subtotal (enter amount BB, on line KK in Part 7) _____ BB

Calculation 2 – If the corporation is deemed by subsection 42(1) of the *Taxation Act, 2007* (Ontario) to have transferred all or part of the eligible expenditure to another corporation as a consequence of an agreement described in subsection 127(13) of the federal Act complete Calculation 2. Otherwise, enter nil on line II.

	CC The rate percentage that the transferee used to determine its federal ITC for a qualified expenditure that was transferred under an agreement under subsection 127(13) of the federal Act **720**	DD The proceeds of disposition of the property if you dispose of it to a person at arm's length; or, in any other case, the fair market value of the property at conversion or disposition **730**	EE The 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 for an agreement under subsection 127(13) of the federal Act) **740**
1.			

	FF Amount determined by the formula (CC x DD) – EE (using the columns above)	GG The federal ITC earned by the transferee for the qualified expenditure that was transferred **750**	HH Amount from column FF or GG, whichever is less
1.			

Subtotal (enter amount II on line LL below) _____ II

Calculation 3

As a member of a partnership, you will report your share of the ORDTC of the partnership after the ORDTC has been reduced by the amount of the recapture. If this is a positive amount, you will report it on line 205 in Part 2. However, if the partnership does not have enough ORDTC otherwise available to offset the recapture, then the amount by which reductions to the ORDTC exceeds additions (the excess) will be determined and reported on line JJ.

Corporate partner's share of the excess of ORDTC (enter amount JJ at line NN below) . . . . . **760** _____ JJ

Part 7 – Total recapture of ORDTC

Recaptured federal ITC for Calculation 1 (amount from line BB) . . . . . _____ KK

Recaptured federal ITC for Calculation 2 (amount from line II above) . . . . . _____ LL

Amount KK **plus** amount LL . . . . . _____ x 23.56 % = _____ MM

Add: Corporate partner's share of the excess of ORDTC for Calculation 3 (amount from line JJ above) . . . . . _____ NN

Recapture of ORDTC (amount MM **plus** amount NN) (enter amount OO on line 277 of Schedule 5) . . . . . _____ OO

Schedule A - Worksheet for eligible expenditures incurred by the corporation in Ontario for the current taxation year

This worksheet allows you to report the amount of eligible expenditures entered on Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim* which represents eligible expenditures as defined in section 127 of the *Income Tax Act* (ITA) with regard to scientific research and experimental development (SR&ED) **carried on in Ontario and attributable to a permanent establishment in Ontario of a corporation**.

Data on the worksheet is calculated based on the amounts on Form T661, but will have to be adjusted according to the rules of Ontario, if applicable, in particular when the corporation has had a permanent establishment in more than one jurisdiction. This data will be used when calculating Schedule 508 and Schedule 566.

Enter the breakdown between current and capital expenditures

		Current Expenditures		Capital Expenditures	
Total expenditures for SR&ED		136,113		43,000	
Add					
• payment of prior years' unpaid expenses (other than salary or wages)	+				
• prescribed proxy amount (Enter "0" if you use the traditional method)	+	72,264			
• expenditures on shared-use equipment			+		
• other additions	+		+		
Subtotal	=	208,377	=	43,000	
Less					
• current expenditures (other than salary or wages) not paid within 180 days of the tax year end	–				
• amounts paid in respect of an SR&ED contract to a person or partnership that is not taxable supplier	–				
• 20% of contract expenditures for SR&ED performed on your behalf	–	600			
• prescribed expenditures not allowed by regulations	–		–		
• other deductions	–		–		
• non-arm's length transactions					
– expenditures for non-arm's length SR&ED contracts	–				
– purchases (limited to costs) of goods and services from non-arm's length suppliers	–		–		
Subtotal	=	207,777 I	=	43,000 II	
Total eligible expenditures incurred by the corporation in Ontario in the tax year (add amount I and II)			=	250,777 III	

Enter amount III on line 100 of Schedule 508.

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Schedule 510

Ontario Corporate Minimum Tax

Corporation's name	Business number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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	113,723,000
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	64,135,011
Total assets (total of lines 112 to 116)		177,858,011
Total revenue of the corporation for the tax year **	142	121,767,000
Share of total revenue from partnership(s) and joint venture(s) **	144	
Total revenue of associated corporations (amount from line 550 on Schedule 511)	146	4,850,449
Total revenue (total of lines 142 to 146)		126,617,449

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		2,903,000
Add (to the extent reflected in income/loss):			
Provision for current income taxes/cost of current income taxes	220	162,000	
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		162,000 ▶	162,000 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		3,065,000

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	3,065,000	
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	3,065,000	
Amount from line 520	3,065,000	x Number of days in the tax year before July 1, 2010 / Number of days in the tax year		x 4 % =			1
Amount from line 520	3,065,000	x Number of days in the tax year after June 30, 2010 / Number of days in the tax year	365 / 365	x 2.7 % =		82,755	2
				Subtotal (amount 1 **plus** amount 2)		82,755	3
Gross CMT: amount on line 3 above x OAF **					540	82,755	
Deduct:							
Foreign tax credit for CMT purposes ***					550		
CMT after foreign tax credit deduction (line 540 **minus** line 550) (if negative, enter "0")						82,755	D
Deduct:							
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)						59,915	
Net CMT payable (if negative, enter "0")						22,840	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 *		30,066 G		
Deduct:				
CMT credit expired *	600			
CMT credit carryforward at the beginning of the current tax year * (see note below)		30,066 ▶	620	30,066
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)				30,066 H
Deduct:				
CMT credit deducted in the current tax year (amount P from Part 5)				I
Subtotal (amount H **minus** amount I)				30,066 J
Add:				
Net CMT payable (amount E from Part 3)		22,840		
SAT payable (amount O from Part 6 of Schedule 512)				
Subtotal		22,840 ▶		22,840 K
CMT credit carryforward at the end of the tax year (amount J **plus** amount K)	670			52,906 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)			30,066 M
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	59,915 1		
For a corporation that is not a life insurance corporation:			
CMT after foreign tax credit deduction (amount D from Part 3)	82,755 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:	82,755 6		
Subtotal (if negative, enter "0")		▶	N
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	59,915		
Deduct:			
Total refundable tax credits excluding Ontario qualifying environmental trust tax credit (amount J6 **minus** line 450 from Schedule 5)	20,000		
Subtotal (if negative, enter "0")	39,915 ▶		39,915 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
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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	OSHAWA POWER AND UTILITIES CORPORATION	86486 7593 RC0001	50,566,467	2,164,065
2	OSHAWA PUC ENERGY SERVICES INC.	85749 1336 RC0001	7,846,000	1,169,000
3	OSHAWA PUC SERVICES INC. PILS	86579 9662 RC0001	5,722,544	1,207,288
4	2252112 Ontario Inc.	80068 6453 RC0001	0	310,096
		Total	450 64,135,011	550 4,850,449

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.

Canada Revenue Agency / Agence du revenu du Canada

SCHEDULE 552

ONTARIO APPRENTICESHIP TRAINING TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
Oshawa PUC Networks Inc.	89172 5210 RC0001	2013-12-31

- 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
DAVID SAVAGE	(905) 743-5219

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** 6,537,877

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:

Specified percentage = 30 % − [5 % x (amount on line 300 **minus** 400,000) / 200,000]

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:

Specified percentage = 45 % − [10 % x (amount on line 300 **minus** 400,000) / 200,000]

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	Tyler Duffin
2.	447a	Instrumentation and Control Technician	Anthony Bianca

	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.	PC2664	2012-01-01	2013-01-01	2013-12-31
2.	PE3554	2012-03-05	2013-01-01	2013-12-31

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

	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.		90,978	90,978	31,842
2.		61,518	61,518	21,531

	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

Ontario apprenticeship training tax credit (total of amounts in column N) **500** 20,000 **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.