2.10 EXHIBIT 7: COST ALLOCATION

INDEX

Exhibit 7 Filing Requirements: Cross Reference List

OEB Chapter 2 Filing Requirements- Heading/Sub-heading		Guelph Hydro Application Heading/Sub-heading	
2.10	**Exhibit 7: Cost Allocation**	**2.10**	**Exhibit 7: Cost Allocation**
2.10.1	Cost Allocation Study Requirements	2.10.1	Cost Allocation Study Requirements
2.10.2	Class Revenue Requirements	2.10.2	Class Revenue Requirements
2.10.3	Revenue-to-Cost Ratios	2.10.3	Revenue-to-Cost Ratios

2.10 EXHIBIT 7: COST ALLOCATION

2.10.1 COST ALLOCATION STUDY REQUIREMENTS

COST ALLOCATION OVERVIEW:

Guelph Hydro's Cost Allocation filing follows the cost allocation policies outlined in the Board's report of March 31, 2011 *Review of Electricity Distribution Cost Allocation Policy* (EB-2010-0219) (the "Cost Allocation Review").

A completed cost allocation study using the Board-approved model has been filed in MS Excel format (Guelph_Detailed_CA_model_RUN1_20150424).

Guelph Hydro has used the load profiles provided by Hydro One scaled to match the load forecast as it relates to the respective rate classes.

Guelph Hydro has been encouraging commercial customers to have sentinel lights connected behind the main load meter. The majority of these customers had the sentinel lights removed. Therefore the number of sentinel lighting connections dropped to six (6) at the end of 2014. Guelph Hydro has changed the forecast number of sentinel lighting connections to reflect the actual number.

In accordance with Chapter 2 of the Filing Requirements, Guelph Hydro has updated the 2012 cost allocation filing to reflect the 2016 Test Year load forecast and financial data; Guelph Hydro has used the OEB's cost allocation model available for 2015 Cost of Service applicants.

The 2016 weather-normalized load forecast has been modeled based upon the Hydro One load profiles by rate classification provided for the initial cost allocation study and the coincident and non-coincident peaks for each classification have been recalculated. The financial data is consistent with the 2016 rate application.

The results of the updated Model for the 2016 Test Year, along with the proposed ratios are presented in this Exhibit, in Appendix 7-A: Cost Allocation - Appendix 2-P, and Appendix 7-B.

On August 1, 2014, the Board released a revised Cost Allocation model version 3.2 to be used by 2015 Cost of Service filers in their applications. The 2016 Cost of Service filers with January 1 effective rates date were also directed to use this version of the model.

For the purposes of this Application, Guelph Hydro has followed the cost allocation policies as outlined in the March 31, 2011 Cost Allocation Report and used the 2015 version of the Cost Allocation Model. Guelph Hydro's cost allocation study is based on 2016 test year costs, customer numbers, and demand values. The 2016 demand values are based on the weather-normalized load forecast used to design rates.

Cost Allocation Model Inputs/Weighting Factors

On September 2, 2010, the Board began proceeding EB-2010-0219 with the mandate to review and revise the existing Cost Allocation policy as needed. On March 31, 2011, the Report of the Board called the *Review of Electricity Distribution Cost Allocation Policy* (the "March 31, 2011 Cost Allocation Report") was released in relation to EB-2010-0219. In the March 31, 2011 Cost Allocation Report, the Board stated that "default weighting factors should now be utilized only in exceptional circumstances". Distributors are therefore now expected to develop their own weighting factors as part of their cost allocation study.

Weighting Factors for Services and Billing and Collecting (Sheet I5.2)

Weighting Factor for Services (Account 1855)

Guelph Hydro has analyzed the internal process regarding the installation and cost recovery for Services. Guelph Hydro charges customers for all new or upgraded services unless the change to the servicing falls under an internal capital project and involves correcting non-standard or outdated servicing.

As per the suggested methodology on the Cost Allocation instruction sheet the Residential class was given a weighting factor of 1.0.

General Service (GS) < 50 kW servicing is typically more complex than Residential servicing as it may include the creation of a unique work order, a dedicated construction crew to install. Due to these considerations, the weighting factor for GS< 50 kW was set at 2.0.

GS above 50 kW, including Large Use servicing, involves significantly more work than Residential servicing from both a design and construction perspective. However, due to the ownership rules for these services, Guelph Hydro does not own the assets that would be charged against the Services account and therefore these customer classes have been assigned a weighting factor of 0.0.

Guelph Hydro has been encouraging commercial customers to have sentinel lights connected behind the main load meter. The majority of these customers had the sentinel lights removed. Therefore the number of sentinel lighting connections dropped to 6 at the end of 2014. Guelph Hydro does not estimate any new Sentinel Lighting installations and therefore, a factor of 0.0 was assigned.

Street Lighting assets do not fall under Guelph Hydro's ownership, however, the street lights are connected to Guelph Hydro's secondary buss and as such costs are captured outside of Account 1855. A weighting factor of 0.0 has been set for this class.

Guelph Hydro does not own Unmetered Scattered Load assets that would be charged against the 1855 account and therefore Guelph Hydro has assigned a factor of 0.0 to this class.

Table 7-1 summarizes the assigned service weighting factors for each rate class.

Table 7 -1 Weighting Factors for Services

Rate Class	Weighting Factors for Services
Residential	1.0
General Service < 50 kW	2.0
General Service 50 to 999 kW	0.0
General Service 1000 to 4999 kW	0.0
Large Use	0.0
Street Lighting	0.0
Sentinel Lighting	0.0
Unmetered Scattered Load	0.0

Weighting Factors for Billing and Collection

In determining the weighting factors for Billing and Collecting, an analysis was conducted and the weighting factors were estimated based on the billing frequency, the complexity of the bill and billing set-up, the complexity of the re-classification process (e.g. General Service above 50 kW requires annual reclassification based on the previous 12 months of consumption), the complexity and the duration of customer inquiries, and the duration of the editing process (e.g. General Service above 1000 kW requires a longer editing process). The weighting factors were determined relative to the Residential factor of 1. Table 7-2 summarizes the assigned weighting factors for billing and collecting for each rate class.

Table 7-2 Weighting Factors for Billing and Collecting

Rate Class	Weighting Factors for Billing & Collecting
Residential	1.0
General Service < 50 kW	1.0
General Service 50 to 999 kW	4.0
General Service 1000 to 4999 kW	5.0
Large Use	5.0
Street Lighting	0.5
Sentinel Lighting	0.1
Unmetered Scattered Load	1.0

Meter Capital (Sheet I7.1)

The purpose of this input is to derive the weighting factors of each customer class for the allocator CWMC (Cost Weighted Meter Capital), which is used to allocate accounts 1860 Meters, 5065 Meter Expenses, and 5175 Maintenance of Meters.

Guelph Hydro has assessed the costs of meters. The costs are derived from internal records. The costs are presented below in Table 7-3:

Table 7-3 Meter Capital Costs

Meter Type	Cost per Meter
Smart Meters	$200.00
Central Meter	$800.00
Network Meter	$240.00
Three-phase - No demand	$430.00
Demand without IT (usually three-phase)	$310.00
Demand with IT	$2,600.00
Demand with IT and Interval Capability - Secondary	$3,000.00
Demand with IT and Interval Capability - Primary	$2,300.00

Weighting Factors - Meter Reading (Sheet I7.2)

The purpose of this input is to derive the weighting factors for the allocator CWMR (Cost Weighted Meter Reading), which is used only to allocate costs that are recorded in Account 5310 Meter Reading Expenses.

Meter reading costs for Residential and General Service below 50 kW have been assigned a weighting factor of 1. Other weighting factors were derived from internal records (i.e. contractor's meter reading prices). All residential customers have smart meters and therefore there is no difference between outside and inside meter reading costs. The weighting factors were determined relative to the Residential factor of 1.

The results are presented below in Table 7-4.

Table 7-4 Meter Reading Weighting Factor

Meter Type	Factor
Residential - Urban - Outside	1.00
Residential - Urban - Outside with other services	1.00
Residential - Urban - Inside	1.00
Residential - Urban - Inside - with other services	1.00
Residential - Rural - Outside	1.00
Residential - Rural - Outside with other services	1.00
Smart Meter	1.00
Smart Meter with Demand	1.00
GS - Walking	4.14
GS - Walking - with other services	8.45
GS - Vehicle with other services --- IM Read	12.41
GS - Vehicle with other services	12.41
Interval	12.41

Direct Allocation (Sheet I9)

Guelph Hydro has directly allocated LEAP Funding costs to the Residential class.

Table 7-5

Direct Allocation of Costs			
Account	**Description**	**Amount**	**Class**
6205	Sub-account LEAP Funding	$41,000	Residential

Embedded Distributor Class

Guelph Hydro is not a host to any distributor.

Unmetered Loads (Unmetered Scattered Load, Sentinel Lighting, and Street Lighting)

In accordance with the Report of the Board: *Review of the Board's Cost Allocation Policy for Unmetered Loads* (EB-2012-0383) issued on December 19, 2013, and with the Distribution System Code amendment issued on May 15, 2014, Guelph Hydro has reviewed and updated its Conditions of Service in December 2014 to include the following items in relation to unmetered loads:

- The rights and obligations of unmetered load customers and Guelph Hydro in relation to each other.
- The process by which unmetered load customers are to file updated data and evidence necessary to validate the data.
- The process by which unmetered load customer billing updates will take place.

- Communication and engagement with unmetered load customers in relation to the preparation of cost allocation studies, load profile studies or other rate-related materials which may materially affect unmetered load customers.

On February 17, 2015, Guelph Hydro sent an invitation letter soliciting the unmetered load customers' interest on getting more information on this matter (please see Appendix 7-C).

Two customers of seven contacted (Street Lighting and Unmetered Scattered Load classes), responded and required additional rate and load profile information. Guelph Hydro reviewed the process by which unmetered load customer billing updates takes place. The customers will contact Guelph Hydro when changes in their equipment take place so Guelph Hydro can update the consumption records and the load profiles. Historically, this process has never changed and the customers acknowledged that it works well.

MicroFIT class

In accordance with the Chapter 2 Filing Requirements updated on July 18, 2014, the microFIT class has not been included as a separate class in the cost allocation model. The model produced the calculation of unit costs for the Board to use to update the uniform microFIT rate at a future date (please see the Cost Allocation Model, Tab O3.6 MicroFIT Charge).

Guelph Hydro is requesting to maintain the uniform Board approved rate of $5.40 until the Board will update the uniform microFIT rate at a future date.

New Customer Class(es)

Guelph Hydro is not requesting new customer classes in this Application, nor to eliminate existing customer classes.

Eliminated Customer Class(es)

Guelph Hydro is not proposing to eliminate or combine existing classes.

SUMMARY OF RESULTS AND PROPOSED CHANGES

Guelph Hydro is filing a completed cost allocation study using the Board approved methodology. This filing reflects 2016 Test Year loads and costs.

The data used in the updated cost allocation study is consistent with Guelph Hydro's cost data that supports the proposed 2016 revenue requirement outlined in this Application. Consistent with the Guidelines, Guelph Hydro's assets were broken out into primary and secondary distribution functions using breakout percentages consistent with the original cost allocation informational filing. The breakout of assets, capital contributions, depreciation, accumulated depreciation, customer data and load data by primary, line transformer and secondary categories were developed from the best data available to Guelph Hydro, its engineering records, and its customer and financial information systems.

Capital contributions, depreciation and accumulated depreciation by USoA are consistent with the information provided in the 2016 Continuity Statement shown in Exhibit 2. The rate class customer data used in the updated cost allocation study is consistent with the 2016 customer forecast outlined in Exhibit 3.

The load profiles of the classes are the same as those used in the 2012 Cost Allocation Informational Filing, scaled to match the load forecast as it relates to the respective rate classes (see Exhibit 3, Tab 2, 2.6.2 Accuracy of Load Forecast and Variance Analysis) . The following Table 7- 6 outlines the scaling factors used by rate class:

Table 7- 6 Load Profiling Scaling Factors

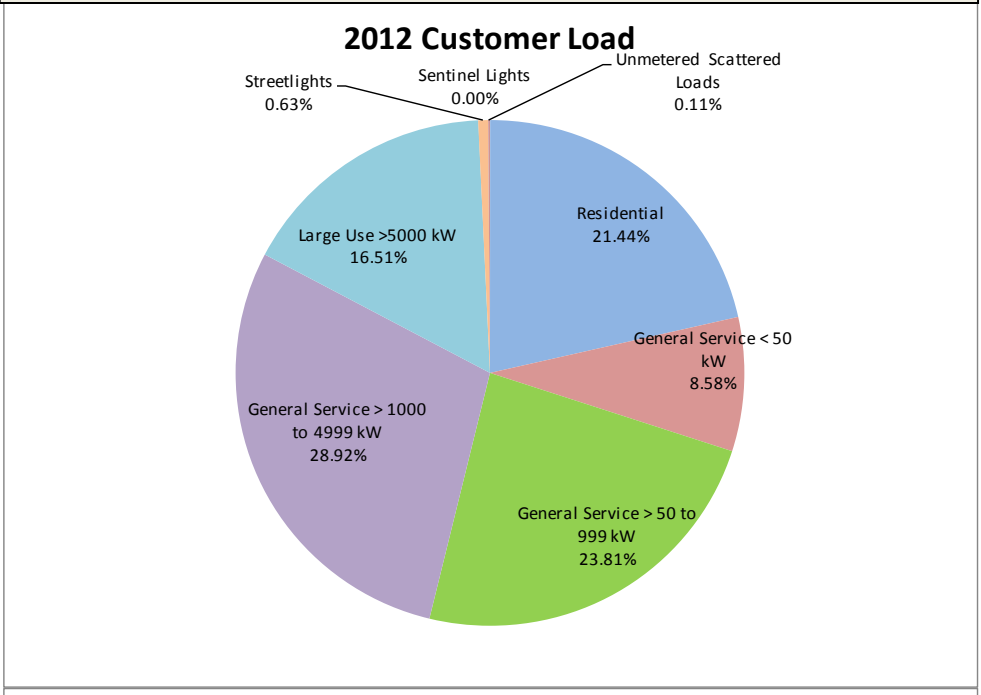
Rate Class	2004 Weather Normal Values used in Information Filling (kWh)	2016 Weather Normal Values (kWh)	Scaling Factor
Residential	354,393,218	381,586,775	107.67%
General Service Less than 50 kW	138,080,050	150,174,015	108.76%
General Service 50 to 999 kW	420,351,285	397,678,750	94.61%
General Service 1,000 to 4,999 kW	402,172,629	563,100,354	140.01%
Large User	261,301,881	276,633,108	105.87%
Street Lighting	8,632,715	9,628,070	111.53%
Sentinel Lighting	131,981	21,457	16.26%
Unmetered Scattered Load	3,264,188	1,700,939	52.11%
Total	**1,588,327,946**	**1,780,523,469**	**112.10%**

Guelph Hydro has adapted its 2016 Cost Allocation study to reflect 2016 future load and cost responsibility; with one exception (i.e. Sentinel Lighting), there has been no significant change in the customer classes' mixes (see the charts below), the pattern of consumption and the load profiles, the service territory and the nature of Guelph Hydro's service. Guelph Hydro has been encouraging commercial customers to have sentinel lights connected behind the main load meter. The majority of these customers had the sentinel lights removed. Therefore the number of sentinel lighting connections dropped from 25 in 2012 to six (6) at the end of 2014.

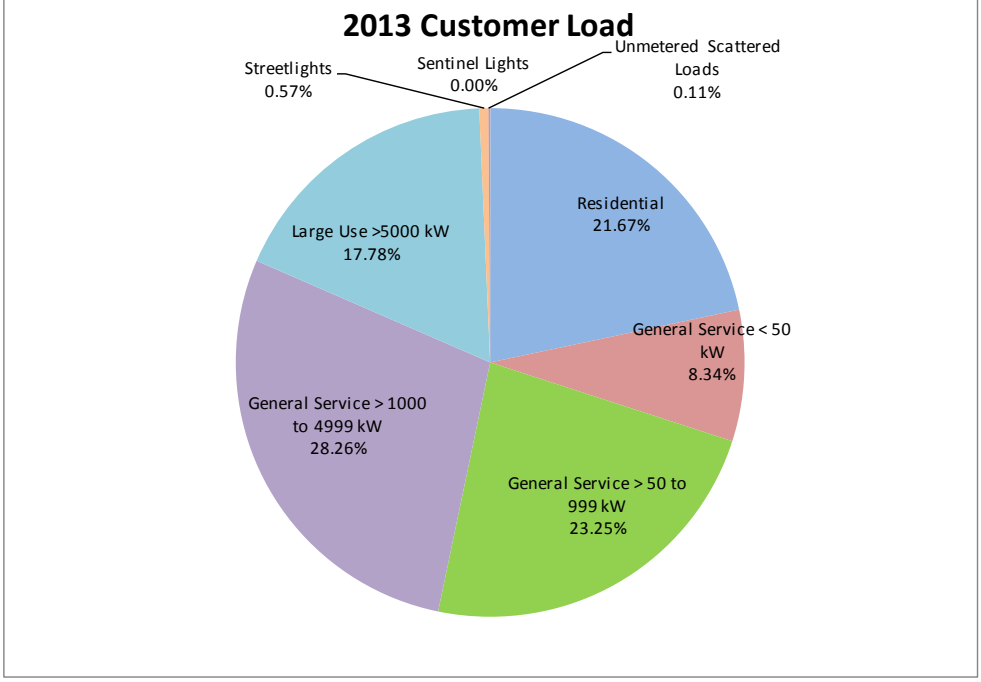
Guelph Hydro is not proposing to change its customer classifications.

The charts below present Guelph Hydro's customer class mixes for 2012 to 2014.

Historical Customer Classes Mix (based on annual consumption)

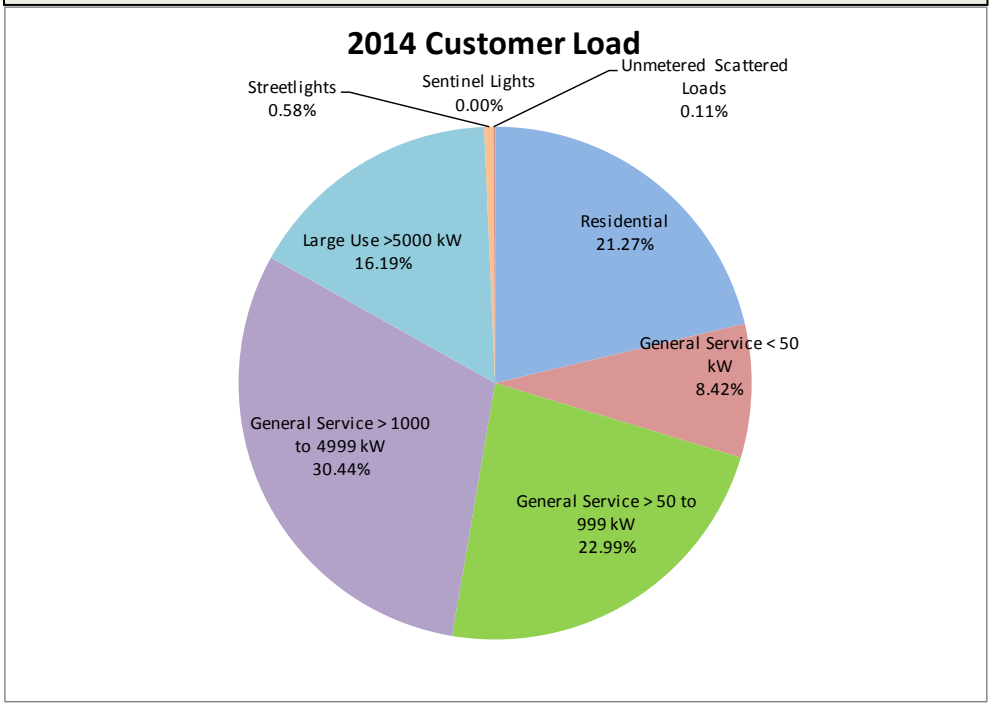


1



2

Historical Customer Classes Mix (based on annual consumption) – continued



1

2

2.10.2 CLASS REVENUE REQUIREMENTS

Guelph Hydro has summarized the forecast by USoA accounts together into defined functionalized costs in the cost allocation model for the purposes of cost allocation and comparative analysis.

Chapter 2 Appendix 2-P, in Appendix 7-A, illustrates the test year class revenue requirements, which is produced in output sheet O-1 of the Board model, including a comparison with the 2012 approved Cost Allocation study. The Appendix 2-P also shows three scenarios, by rate class. The scenarios are, respectively, the forecast quantities multiplied by: a) existing rates, b) prorated existing rates that would yield the test year Base Revenue requirement, and c) proposed class revenue. The table shows the allocation of Miscellaneous Revenue to the rate classes, which is an output from the cost allocation model.

Guelph Hydro does not have 2012 approved phase-in allocated costs.

In addition, Guelph Hydro has filed a copy of input sheets I-6 and I-8, and output sheets O-1 and O-2 (please see Appendix 7-B of this Exhibit 7).

Miscellaneous Revenue

The Board's Report on the Review of Electricity Distribution Cost Allocation Policy (EB-2010-0219) issued on March 31, 2011, states that in order to ensure that customers are treated fairly, the allocation of revenues to customer classes for the provision of services should be the same as the allocation of the underlying costs. The Board expects distributors to allocate the major components of miscellaneous revenues to customer classes in the same proportion as the corresponding cost drivers are allocated to customer classes, to the extent that the distributor has the relevant information.

The major components are: late payment charges, account set up & changes, collection charges, and access to poles.

Guelph Hydro has identified the Late Payment Charges (Account 4225, allocator LPHA), Account Set-up Charges and Collection Charges (Account 4235-1, allocator CWNB), Access to Poles (Account 4210- Rent from Electric Property, allocator POLE), where:

CWNB means Weighted Bills allocator, LPHA means Late Payment 3 year Historical Average, and POLE means Access to Poles allocator.

The rest of the miscellaneous revenues have been allocated using the OM&A (Operating, Maintenance and Administration) allocator.

Direct Allocation of Costs

Guelph Hydro has allocated directly the cost with Low income Electricity Assistance Program (LEAP) – sub-account 6205-1 to the residential class (please see the Cost Allocation model tab I9- Direct Allocation).

Revenue-to-Cost Ratios

Guelph Hydro has followed the cost allocation policies reflected in the Board's Report issued on November 28, 2007, *Application of Cost Allocation for Electricity Distributors* (EB-2007-0667), the Board's *Review of Electricity Distribution Cost Allocation Policy (*EB-2010-0219) issued on March 31, 2011, and the Staff Report to the Board on *Implementation of the Revisions to the Board's Electricity Distributor Cost Allocation Policy.*

Guelph Hydro has filed Appendix 2-P showing the revenue-to-cost ratios for each customer class in three scenarios:

1. The test year class revenue requirements, which is produced in output sheet O-1 of the Board model, and a comparison to the most recent study (2012) previously filed with the Board (EB-2011-0123);

2. The forecast quantities multiplied by: existing rates, prorated existing rates that would yield the test year Base Revenue Requirement, and proposed class revenue, beside the allocation of Miscellaneous Revenue to the rate classes;

3. The previously approved ratios most recently implemented by Guelph Hydro (in 2012; there are no phase-in adjustments to the approved ratios); the ratios that would result from the 2015 approved distribution rates and Guelph Hydro's forecast of billing quantities in the 2016 test year, prorated to match the revenue requirement, expressed as a ratio with the class revenue requirements derived in the updated cost allocation model; and the ratios that are proposed for the 2016 test year, which are the proposed class revenues, together with the updated cost allocation model;

4. The Proposed Revenue-to-Cost Ratios phase-in adjustments: Guelph Hydro has not proposed any phase-in adjustments to the proposed revenue-to-cost ratios.

The rate re-balancing is the process of changing rates by different percentage amounts for different customer rate classes, and in order to support a proposal to re-balance rates, Guelph Hydro has provided information on the revenue by class that would pertain if all rates were changed by a uniform percentage (please see Appendix 7-A of this Exhibit). These ratios have been compared with the ratios that will result from the rates being proposed by Guelph Hydro.

2.10.3 REVENUE-TO-COST RATIOS

On November 28, 2007, the OEB issued its "Report on Application of Cost Allocation for Electricity Distributors" (the "Cost Allocation Report"). In the Cost Allocation Report, the OEB established what it considered to be the appropriate ranges of revenue-to-cost ratios.

Subsequently, on March 31, 2011, the OEB issued its Review of Electricity Distribution Cost Allocation Policy (EB-2010-0219) amending the revenue-to-cost ratios for the General Service 50 to 4,999 kW and Sentinel Lighting classes.

The ranges of revenue-to-cost ratios are summarized in Appendix 7-A of this Exhibit.

In addition, Guelph Hydro has presented the 2012 approved ratios along with the results for Guelph Hydro from the 2016 updated Cost Allocation Model, and the proposed 2016 revenue-to cost ratios.

In its Cost Allocation Report, the Board also states that "*distributors should endeavor to move their revenue-to-cost ratios closer to one if this is supported by improved cost allocations"* and that distributors should not move their revenue-to-cost ratios further away from one.

Guelph Hydro is proposing the revenue-to-cost ratios in this application as shown in Table 7-8 below:

Table 7-7: 2012 Board Approved Revenue-to-Cost Ratios

Rate Class	2012 Cost Allocation Study Results	2012 Board-Approved Revenue-to-Cost Allocation	Target range
Residential	97.83%	97.83%	85 - 115
General Service Less Than 50 kW	139.29%	120.00%	80 - 120
General Service 50 to 999 kW	150.66%	120.00%	80 - 120
General Service 1000 to 4999 kW	57.15%	83.70%	80 - 120
Large Use	110.73%	110.73%	85 - 115
Street Lighting	55.88%	83.70%	70 - 120
Unmetered Scattered Load	110.03%	110.03%	80 - 120
Sentinel Lighting	103.02%	103.02%	80 - 120
Total			

Table 7-8: 2016 Cost Allocation Results and the Proposed Revenue-to-Cost Ratios

Rate Class	2016 Cost Allocation results	Proposed Adjustment to revenue-to-Cost Allocation ratios	2016 Proposed Revenue-to-Cost Ratios	Target range
Residential	97.77%	0.00%	97.77%	85 - 115
General Service Less Than 50 kW	127.38%	-7.38%	120.00%	80 - 120
General Service 50 to 999 kW	135.84%	-15.84%	120.00%	80 - 120
General Service 1000 to 4999 kW	78.79%	10.38%	89.17%	80 - 120
Large Use	103.24%	0.00%	103.24%	85 - 115
Street Lighting	84.53%	4.64%	89.17%	70 - 120
Unmetered Scattered Load	157.02%	-37.02%	120.00%	80 - 120
Sentinel Lighting	122.01%	-2.01%	120.00%	80 - 120

In order to bring the ratios in the target ranges and match the revenue requirement, Guelph Hydro has prorated the ratios for four classes downwards to 120.00% (General Service Less Than 50 kW, General Service 50 to 999 kW, Unmetered Scattered Load, and Sentinel Lighting classes), and upwards to 89.17% for two classes (General

Service 1000 to 4999 kW and Street Lighting). The ratios for Residential and Large Use classes have been kept at the 2016 Cost Allocation results: 97.78% and 103.19%, respectively.

Guelph Hydro applied the following principles when developing its cost allocation proposal:

1. Consistency with the last practice used in the previous Cost of Service application (please see Table 7-7 above).
2. Rate stability;
3. The avoidance of rate shock;

Using a cost allocation model other than the Board model

Guelph Hydro has used the Board model in this application.

APPENDIX 7-A: Cost Allocation – Appendix 2-P

Appendix 2-P
Cost Allocation

Please complete the following four tables.

A) Allocated Costs

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	$ 16,277,687	58.19%	$ 19,587,729	57.07%
GS < 50 kW	$ 2,292,434	8.20%	$ 2,593,154	7.56%
GS > 50 kW to 999 kW	$ 3,048,979	10.90%	$ 3,293,839	9.60%
GS 1000 kW to 4,999 kW	$ 4,744,238	16.96%	$ 6,889,244	20.07%
Large User	$ 1,085,777	3.88%	$ 1,405,361	4.09%
Street Lighting	$ 421,421	1.51%	$ 483,906	1.41%
Sentinel Lighting	$ 4,231	0.02%	$ 980	0.00%
Unmetered Scattered Load (USL)	$ 97,545	0.35%	$ 65,214	0.19%
Other class, if applicable		0.00%		0.00%
		0.00%		0.00%
Embedded distributor class		0.00%		0.00%
Total	$ 27,972,312	100.00%	$ 34,319,428	100.00%

Notes

1 Customer Classification - If proposed rate classes differ from those in place in the previous Cost Allocation study, modify the rate classes to match the current application as closely as possible.

2 Host Distributors - Provide information on embedded distributor(s) as a separate class, if applicable. If embedded distributor(s) are billed as customers in a General Service class, include the allocated cost and revenue of the embedded distributor(s) in the applicable class. Also complete Appendix 2-Q.

3 Class Revenue Requirements - If using the Board-issued model, in column 7A enter the results from Worksheet O-1, Revenue Requirement (row 40 in the 2013 model). This excludes costs in deferral and variance accounts. Note to Embedded Distributor(s), it also does not include Account 4750 - Low Voltage (LV) Costs.

B) Calculated Class Revenues

Classes (same as previous table)	Column 7B Load Forecast (LF) X current approved rates	Column 7C L.F. X current approved rates X (1 + d)	Column 7D LF X proposed rates	Column 7E Miscellaneous Revenue
Residential	$ 15,451,974	$ 17,704,059	$ 17,704,120	$ 1,446,277
GS < 50 kW	$ 2,733,486	$ 3,131,884	$ 2,940,631	$ 171,153
GS > 50 kW to 999 kW	$ 3,778,315	$ 4,328,995	$ 3,807,092	$ 145,515
GS 1000 kW to 4,999 kW	$ 4,433,940	$ 5,080,175	$ 5,794,986	$ 347,878
Large User	$ 1,220,558	$ 1,398,451	$ 1,398,451	$ 52,410
Street Lighting	$ 323,419	$ 370,555	$ 393,001	$ 38,480
Sentinel Lighting	$ 977	$ 1,120	$ 1,100	$ 76
Unmetered Scattered Load (USL)	$ 84,650	$ 96,988	$ 72,846	$ 5,411
Other class, if applicable				
Embedded distributor class				
Total	$ 28,027,320	$ 32,112,227	$ 32,112,227	$ 2,207,201

Notes:

1 Columns 7B to 7D - LF means Load Forecast of Annual Billing Quantities (i.e. customers or connections X 12, (kWh or kW, as applicable). Revenue Quantities should be net of Transfomrer Ownership Allowance. Exclude revenue from rate adders and rate

2 Columns 7C and 7D - Column total in each column should equal the Base Revenue Requirement

3 Columns 7C - The Board cost allocation model calculates "1+d" in worksheet O-1, cell C21. "d" is defined as Revenue Deficiency/ Revenue at Current Rates.

4 Columns 7E - If using the Board-issued Cost Allocation model, enter Miscellaneous Revenue as it appears in Worksheet O-1, row 19.

C) Rebalancing Revenue-to-Cost (R/C) Ratios

Class	Previously Approved Ratios Most Recent Year: 2012	Status Quo Ratios (7C + 7E) / (7A)	Proposed Ratios (7D + 7E) / (7A)	Policy Range
	%	%	%	%
Residential	97.83%	97.77	97.77	85 - 115
GS < 50 kW	120.00%	127.38	120.00	80 - 120
GS > 50 kW to 999 kW	120.00%	135.84	120.00	80 - 120
GS 1000 kW to 4,999 kW	83.70%	78.79	89.17	80 - 120
Large User	110.73%	103.24	103.24	85 - 115
Street Lighting	83.70%	84.53	89.17	70 - 120
Sentinel Lighting	103.02%	122.01	120.00	80 - 120
Unmetered Scattered Load (USL)	110.03%	157.02	120.00	80 - 120
Other class, if applicable				
Embedded distributor class				

Notes

1 Previously Approved Revenue-to-Cost Ratios - For most applicants, Most Recent Year would be the third year of the IRM 3 period, e.g. if the applicant rebased in 2009 with further adjustments over 2 years, the Most recent year is 2011. For applicants whose most recent rebasing year is 2006, the applicant should enter the ratios from their Informational Filing.

2 Status Quo Ratios - The Board's updated Cost Allocation Model yields the Status Quo Ratios in Worksheet O-1. Status Quo means "Before Rebalancing".

D) Proposed Revenue-to-Cost Ratios

Class	Proposed Revenue-to-Cost Ratios			Policy Range
	2016	2017	2018	
	%	%	%	%
Residential	97.77			85 - 115
GS < 50 kW	120.00			80 - 120
GS > 50 kW to 999 kW	120.00			80 - 120
GS 1000 kW to 4,999 kW	89.17			80 - 120
Large User	103.24			85 - 115
Street Lighting	89.17			70 - 120
Sentinel Lighting	120.00			80 - 120
Unmetered Scattered Load (USL)	120.00			80 - 120
Other class, if applicable				0
				0
Embedded distributor class				

Note

1 The applicant should complete Table D if it is applying for approval of a revenue to cost ratio in 2014 that is outside the Board's policy range for any customer class. Table (d) will show the information that the distributor would likely enter in the IRM model) in 2014. In 2015 Table (d), enter the planned ratios for the classes that will be 'Change' and 'No Change' in 2014 (in the current Revenue Cost Ratio Adjustment Workform, Worksheet C1.1 'Decision – Cost Revenue Adjustment', column d), and enter TBD for class(es) that will be entered as 'Rebalance'.

APPENDIX 7-B: 2016 Cost Allocation Information Filing

EB-2015-0073

Sheet I6.1 Revenue Worksheet - Run 1 - Application

Total kWhs from Load Forecast	1,780,523,469

Total kWs from Load Forecast	2,754,592

Deficiency/sufficiency (RRWF 8. cell F52)	- 4,084,908

Miscellaneous Revenue (RRWF 5. cell F48)	2,207,201

			1	2	3	4	6	7	8	9
	ID	**Total**	**Residential**	**GS <50**	**GS 50 to 999 kW**	**GS 1000 to 4999 kW**	**Large Use >5MW**	**Street Light**	**Sentinel**	**Unmetered Scattered Load**
Billing Data										
Forecast kWh	**CEN**	1,780,523,469	381,586,775	150,174,015	397,678,750	563,100,354	276,633,108	9,628,070	21,457	1,700,939
Forecast kW	**CDEM**	2,754,592			1,037,307	1,194,282	496,250	26,693	60	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		58,522			58,522					
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-								
KWh excluding KWh from Wholesale Market Participants	**CEN EWMP**	1,773,322,234	381,586,775	150,174,015	397,678,750	555,899,119	276,633,108	9,628,070	21,457	1,700,939
Existing Monthly Charge			$14.49	$15.57	$168.83	$643.80	$942.35	$0.40	$7.05	$5.92
Existing Distribution kWh Rate			$0.0176	$0.0131						$0.0270
Existing Distribution kW Rate					$2.5750	$3.4422	$2.3548	$9.5678	$7.8039	
Existing TOA Rate					$0.72					
Additional Charges										
Distribution Revenue from Rates		$28,069,454	$15,451,974	$2,733,486	$3,820,451	$4,433,940	$1,220,558	$323,418	$977	$84,650
Transformer Ownership Allowance		$42,136	$0	$0	$42,136	$0	$0	$0	$0	$0
Net Class Revenue	**CREV**	$28,027,318	$15,451,974	$2,733,486	$3,778,315	$4,433,940	$1,220,558	$323,418	$977	$84,650

EB-2015-0073

Sheet I6.2 Customer Data Worksheet - Run 1 - Application

			1	2	3	4	6	7	8	9
	ID	Total	Residential	GS <50	GS 50 to 999 kW	GS 1000 to 4999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load
Billing Data										
Bad Debt 3 Year Historical Average	BDHA	$103,565	$78,243	$10,944	$14,378	$0	$0	$0	$0	$0
Late Payment 3 Year Historical Average	LPHA	$120,897	$87,046	$29,015	$4,836					
Number of Bills	CNB	659,993	602,902	49,210	6,808	502	55	24	72	420
Number of Devices								14,172	6	545
Number of Connections (Unmetered)	CCON	4,094						3,543	6	545
Total Number of Customers	CCA	54,999	50,242	4,101	567	42	5	2	6	35
Bulk Customer Base	CCB	-	-	-	-	-	-	-	-	-
Primary Customer Base	CCP	54,999	50,242	4,101	567	42	5	2	6	35
Line Transformer Customer Base	CCLT	54,878	50,242	4,101	527	-	-	2	6	-
Secondary Customer Base	CCS	51,068	50,242	820	-	-	-	1	6	-
Weighted - Services	CWCS	51,881	50,242	1,639	-	-	-	-	-	-
Weighted Meter -Capital	CWMC	14,284,940	10,228,190	2,536,340	1,370,910	112,700	36,800	-	-	-
Weighted Meter Reading	CWMR	408,933	301,449	24,607	75,964	6,228	685	-	-	-
Weighted Bills	CWNB	682,567	602,902	49,210	27,232	2,508	276	12	7	420
		SM	54,343							
Bad Debt Data										
Historic Year:	2012	60,709	46,440	5,890	8,380					
Historic Year:	2013	156,634	117,976	16,881	21,777					
Historic Year:	2014	93,351	70,312	10,061	12,979					
Three-year average		**103,565**	**78,243**	**10,944**	**14,378**	**-**	**-**	**-**	**-**	**-**

EB-2015-0073

Sheet I8 Demand Data Worksheet - Run 1 - Application

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	1 NCP

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

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

Customer Classes		Total	1 Residential	2 GS <50	3 GS 50 to 999 kW	4 GS 1000 to 4999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load
CO-INCIDENT PEAK										
1 CP										
Transformation CP	TCP1	279,202	77,507	17,307	61,561	80,131	42,502	-	-	195
Bulk Delivery CP	BCP1	279,202	77,507	17,307	61,561	80,131	42,502	-	-	195
Total Sytem CP	DCP1	279,202	77,507	17,307	61,561	80,131	42,502	-	-	195
4 CP										
Transformation CP	TCP4	1,098,561	321,873	80,356	225,508	318,672	147,093	4,284	9	766
Bulk Delivery CP	BCP4	1,098,561	321,873	80,356	225,508	318,672	147,093	4,284	9	766
Total Sytem CP	DCP4	1,098,561	321,873	80,356	225,508	318,672	147,093	4,284	9	766
12 CP										
Transformation CP	TCP12	3,138,152	876,021	225,090	655,891	920,833	438,724	19,225	43	2,325
Bulk Delivery CP	BCP12	3,138,152	876,021	225,090	655,891	920,833	438,724	19,225	43	2,325
Total Sytem CP	DCP12	3,138,152	876,021	225,090	655,891	920,833	438,724	19,225	43	2,325

NON CO_INCIDENT PEAK										
1 NCP										
Classification NCP from Load Data Provider	DNCP1	599,040	97,619	32,939	67,178	354,899	43,924	2,268	5	207
Primary NCP	PNCP1	599,040	97,619	32,939	67,178	354,899	43,924	2,268	5	207
Line Transformer NCP	LTNCP1	195,494	97,619	32,939	62,455			2,268	5	207
Secondary NCP	SNCP1	106,682	97,619	6,583				2,268	5	207
4 NCP										
Classification NCP from Load Data Provider	DNCP4	1,237,251	347,993	118,187	261,831	330,829	168,559	9,033	21	799
Primary NCP	PNCP4	1,237,251	347,993	118,187	261,831	330,829	168,559	9,033	21	799
Line Transformer NCP	LTNCP4	719,457	347,993	118,187	243,425			9,033	21	799
Secondary NCP	SNCP4	381,464	347,993	23,619				9,033	21	799
12 NCP										
Classification NCP from Load Data Provider	DNCP12	3,516,107	935,510	317,143	757,632	1,006,043	470,534	26,860	60	2,325
Primary NCP	PNCP12	3,516,107	935,510	317,143	757,632	1,006,043	470,534	26,860	60	2,325
Line Transformer NCP	LTNCP12	1,986,269	935,510	317,143	704,372			26,860	60	2,325
Secondary NCP	SNCP12	1,028,133	935,510	63,378				26,860	60	2,325

EB-2015-0073

Sheet O1 Revenue to Cost Summary Worksheet - Run 1 - Application

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

Class Revenue, Cost Analysis, and Return on Rate Base

Rate Base Assets		Total	1 Residential	2 GS <50	3 GS 50 to 999 kW	4 GS 1000 to 4999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load
crev	Distribution Revenue at Existing Rates	$28,027,318	$15,451,974	$2,733,486	$3,778,315	$4,433,940	$1,220,558	$323,418	$977	$84,650
mi	Miscellaneous Revenue (mi)	$2,207,201	$1,446,277	$171,153	$145,515	$347,878	$52,410	$38,480	$76	$5,411
		Miscellaneous Revenue Input equals Output								
	Total Revenue at Existing Rates	**$30,234,519**	**$16,898,251**	**$2,904,639**	**$3,923,831**	**$4,781,817**	**$1,272,968**	**$361,898**	**$1,054**	**$90,061**
	Factor required to recover deficiency (1 + D)	1.1457								
	Distribution Revenue at Status Quo Rates	$32,112,227	$17,704,059	$3,131,884	$4,328,995	$5,080,175	$1,398,451	$370,555	$1,120	$96,988
	Miscellaneous Revenue (mi)	$2,207,201	$1,446,277	$171,153	$145,515	$347,878	$52,410	$38,480	$76	$5,411
	Total Revenue at Status Quo Rates	**$34,319,428**	**$19,150,337**	**$3,303,038**	**$4,474,510**	**$5,428,053**	**$1,450,861**	**$409,035**	**$1,196**	**$102,398**
	Expenses									
di	Distribution Costs (di)	$7,068,972	$3,980,374	$464,806	$590,784	$1,630,222	$259,823	$126,161	$246	$16,557
cu	Customer Related Costs (cu)	$2,356,042	$1,983,402	$199,700	$158,128	$11,952	$1,762	$30	$18	$1,050
ad	General and Administration (ad)	$7,273,921	$4,538,741	$516,251	$593,958	$1,297,323	$215,469	$98,321	$205	$13,653
dep	Depreciation and Amortization (dep)	$5,751,746	$3,158,389	$483,166	$584,900	$1,176,316	$252,874	$84,853	$167	$11,080
INPUT	PILs (INPUT)	$901,253	$448,489	$70,806	$104,092	$211,330	$51,467	$13,300	$26	$1,743
INT	Interest	$4,864,378	$2,420,653	$382,164	$561,821	$1,140,624	$277,784	$71,783	$141	$9,408
	Total Expenses	**$28,216,312**	**$16,530,048**	**$2,116,892**	**$2,593,683**	**$5,467,769**	**$1,059,179**	**$394,448**	**$804**	**$53,490**
	Direct Allocation	**$41,000**	**$41,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
NI	Allocated Net Income (NI)	$6,062,116	$3,016,681	$476,262	$700,157	$1,421,476	$346,182	$89,458	$176	$11,724
	Revenue Requirement (includes NI)	**$34,319,428**	$19,587,729	$2,593,154	$3,293,839	$6,889,244	$1,405,361	$483,906	$980	$65,214
	$0	Revenue Requirement Input equals Output								
	Rate Base Calculation									
	Net Assets									
dp	Distribution Plant - Gross	$203,831,755	$107,541,219	$15,630,099	$20,885,163	$46,158,757	$9,946,791	$3,239,776	$6,373	$423,578
gp	General Plant - Gross	$12,723,243	$6,639,112	$950,579	$1,306,300	$2,956,327	$637,425	$206,135	$405	$26,959
accum dep	Accumulated Depreciation	($35,695,380)	($19,319,151)	($3,145,848)	($3,880,798)	($7,134,048)	($1,664,350)	($486,630)	($959)	($63,597)
co	Capital Contribution	($47,002,738)	($28,114,791)	($2,940,108)	($2,922,414)	($10,605,512)	($1,315,091)	($975,883)	($1,913)	($127,027)
	Total Net Plant	**$133,856,880**	**$66,746,389**	**$10,494,722**	**$15,388,251**	**$31,375,524**	**$7,604,775**	**$1,983,399**	**$3,906**	**$259,913**

	Directly Allocated Net Fixed Assets	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
COP	Cost of Power (COP)	**$207,131,005**	$44,910,252	$17,497,464	$46,315,108	$64,830,330	$32,217,694	$1,154,413	$2,555	$203,189
	OM&A Expenses	**$16,698,935**	$10,502,517	$1,180,756	$1,342,869	$2,939,497	$477,054	$224,513	$469	$31,259
	Directly Allocated Expenses	**$41,000**	$41,000	$0	$0	$0	$0	$0	$0	$0
	Subtotal	***$223,870,940***	***$55,453,769***	***$18,678,221***	***$47,657,977***	***$67,769,827***	***$32,694,748***	***$1,378,925***	***$3,024***	***$234,448***
	Working Capital	**$29,103,222**	**$7,208,990**	**$2,428,169**	**$6,195,537**	**$8,810,078**	**$4,250,317**	**$179,260**	**$393**	**$30,478**
	Total Rate Base	**$162,960,102**	**$73,955,379**	**$12,922,891**	**$21,583,788**	**$40,185,602**	**$11,855,093**	**$2,162,659**	**$4,299**	**$290,391**
		Rate Base Input equals Output								
	Equity Component of Rate Base	**$65,184,041**	**$29,582,152**	**$5,169,156**	**$8,633,515**	**$16,074,241**	**$4,742,037**	**$865,064**	**$1,720**	**$116,156**
	Net Income on Allocated Assets	**$6,062,116**	**$2,579,288**	**$1,186,146**	**$1,880,828**	**($39,716)**	**$391,682**	**$14,587**	**$392**	**$48,908**
	Net Income on Direct Allocation Assets	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
	Net Income	**$6,062,116**	**$2,579,288**	**$1,186,146**	**$1,880,828**	**($39,716)**	**$391,682**	**$14,587**	**$392**	**$48,908**
	RATIOS ANALYSIS									
	REVENUE TO EXPENSES STATUS QUO%	**100.00%**	**97.77%**	**127.38%**	**135.84%**	**78.79%**	**103.24%**	**84.53%**	**122.01%**	**157.02%**
	EXISTING REVENUE MINUS ALLOCATED COSTS	**($4,084,909)**	($2,689,478)	$311,485	$629,991	($2,107,427)	($132,393)	($122,008)	$73	$24,846
$1		**Deficiency Input equals Output**								
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	**($0)**	($437,392)	$709,884	$1,180,671	($1,461,192)	$45,500	($74,871)	$216	$37,184
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.30%	8.72%	22.95%	21.79%	-0.25%	8.26%	1.69%	22.79%	42.11%

EB-2015-0073

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet - Run 1 - Application

Output sheet showing minimum and maximum level for Monthly Fixed Charge

Summary

	1	2	3	4	6	7	8	9
	Residential	GS <50	GS 50 to 999 kW	GS 1000 to 4999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load
Customer Unit Cost per month - Avoided Cost	$4.92	$9.37	$43.15	$15.90	$62.04	-$0.03	$0.21	$0.13
Customer Unit Cost per month - Directly Related	$7.43	$12.69	$60.69	$36.64	$93.57	-$0.03	$0.40	$0.25
Customer Unit Cost per month - Minimum System with PLCC Adjustment	$17.79	$19.32	$72.31	$48.81	$131.92	$6.34	$7.06	$9.34
Existing Approved Fixed Charge	$14.49	$15.57	$168.83	$643.80	$942.35	$0.40	$7.05	$5.92

Information to be Used to Allocate PILs, ROD, ROE and A&G

	Total	1 Residential	2 GS <50	3 GS 50 to 999 kW	4 GS 1000 to 4999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load
General Plant - Gross Assets	$11,540,623	$6,022,009	$862,223	$1,184,880	$2,681,538	$578,177	$186,975	$368	$24,453
General Plant - Accumulated Depreciation	($7,123,565)	($3,717,145)	($532,216)	($731,379)	($1,655,206)	($356,886)	($115,412)	($227)	($15,094)
General Plant - Net Fixed Assets	$4,417,058	$2,304,864	$330,007	$453,501	$1,026,332	$221,291	$71,563	$141	$9,359
General Plant - Depreciation	$1,089,210	$568,360	$81,377	$111,830	$253,085	$54,569	$17,647	$35	$2,308
Total Net Fixed Assets Excluding General Plant	$128,257,202	$63,824,423	$10,076,359	$14,813,330	$30,074,403	$7,324,235	$1,892,676	$3,727	$248,048
Total Administration and General Expense	$7,273,921	$4,538,741	$516,251	$593,958	$1,297,323	$215,469	$98,321	$205	$13,653
Total O&M	$9,425,014	$5,963,776	$664,505	$748,911	$1,642,174	$261,585	$126,191	$264	$17,607

APPENDIX 7-C: Unmetered Load Customer's Letter

395 Southgate Drive
Guelph, ON
N1G 4Y1

February 17, 2015

<<NAME>>
<<COMPANY>>
<<ADDRESS>>
<<ADDRESS>>
<<ADDRESS>>

Dear <<NAME>>:

Guelph Hydro recently revised its Conditions of Service to reflect amendments made to the Ontario Energy Board's Distribution System Code and regulatory requirements for unmetered load customers. These revisions impact:

- The rights and obligations of unmetered load customers and Guelph Hydro;
- The process for filing updated data with Guelph Hydro and the evidence required for Guelph Hydro to validate the data;
- The process Guelph Hydro will follow to update the bills for an unmetered load customer; and
- The ways in which Guelph Hydro will communicate with unmetered load customers regarding the preparation of cost allocation studies, load profile studies or other rate-related materials that may materially impact those customers.

In accordance with these revisions, Guelph Hydro will begin monitoring the consumption of some unmetered load connections and may make some adjustments to billing arrangements where necessary. We welcome your input and comments regarding the preparation of any studies we may undertake regarding cost allocation, load profiles, and other rate-related materials.

If you would like to participate in a meeting to discuss these processes, please contact Christina Koren at 519.837.4731 no later than February 27, 2015.

Details regarding the revisions are provided in the attached document. For the full revision summary, please refer to Section 3.7.1, General Conditions for Unmetered Load Connections in Guelph Hydro's Conditions of Service, Revised November 2014.

Sincerely,

_____

Guelph Hydro Electric Systems Inc.