



## **Exhibit 7:**

# **COST ALLOCATION**



## OVERVIEW OF COST ALLOCATION

### 7.1 Overview

For the purposes of this Application, ETPL has followed the cost allocation policies outlined in the Board's March 31, 2011 Cost Allocation Report, the Board's letter dated June 12, 2015 with regard to the treatment of Street Lighting connections, and the 2016 Cost Allocation Model version 3.3 ("CA Model") issued on July 16, 2015.

### 7.2 Rate Classes

#### 7.2.1 CHANGES TO RATE CLASSES

##### NEW CUSTOMER CLASSES

ETPL is not proposing any additional new rate classes.

#### 7.2.2 UNMETERED LOADS

ETPL communicates with unmetered load customers, including Street Lighting customers, to assist them in understanding the regulator context in which distributors operate and how it affects unmetered load customers. This communication takes place on an on-going basis and is not driven by the rate application process but rather regular business practice.

#### 7.2.3 STANDBY RATES

Currently, ETPL does not employ a Standby Rate Class in its Tariff sheet. As part of this application ETPL wishes to include the rate charge in order to ensure that it is kept whole with respect to its transmission network and connection fees that will be charged to ETPL by Hydro One for all embedded generation (Gross Load Billing). ETPL currently has one customer to whom this situation applies however we believe that as the generation technology advances and reduces in cost it will become more and more prevalent throughout the province. ETPL



1 has had several meetings with the customer to whom this situation applies. The customer is  
2 fully aware of the financial implications of Gross Load billing and understands its requirements  
3 to pay ETPL for these additional costs. Copies of the correspondence and presentation  
4 material have been attached in Attachment 7 of this Exhibit.

5 ETPL has reviewed the information provided by the Board's Load Displacement Generation  
6 Working Group, and understands that the associated consultation on developing a standby  
7 rate policy (EB-2013-0004) remains ongoing.

8 For this Application, ETPL proposes that it is appropriate to set a standby charge that is equal  
9 to the variable charge proposed for the GS>1,000 to 4,999 kW rate class (the rate class where  
10 the single customer with generation will reside). This treatment is consistent with a recent  
11 decision under similar circumstances in Horizon Utility's 2015 Cost of Service filing (EB-2014-  
12 0002) and Entegrus' 2016 Cost of Service Filing (EB-2015-0061). ETPL similarly believes this  
13 treatment is appropriate as it allows for further promotion of generation in the scope of the  
14 Green Energy initiatives, without causing a rate disincentive to the customer, and ensuring  
15 that remaining customers do not pick up the cost incurred for Gross Load Billing through  
16 Deferral and Variance accounts.

17 ETPL has not included the Standby rate class in the CA Model but rather aimed to include  
18 the costs of standby in the GS>1,000 to 4,999 rate class. ETPL requests the proposed  
19 Standby rate be approved on a final basis.

20 Although ETPL is currently unaware of any further approved load displacement generation  
21 investments (beyond the aforementioned customer) in its service territory, the opportunity  
22 exists for additional such technologies to be developed and implemented in upcoming years. As  
23 proposed in Exhibit 8, ETPL seeks to also establish a Standby rate for the Large Use rate class.  
24 Consistent with the Standby rate proposed above for the GS>1,000 to 4,999 kW rate class, ETPL  
25 proposes that the Standby rate for the Large Use rate class be equal to the variable charge  
26 proposed for the same class.



1

#### 2 7.2.4 HOST DISTRIBUTOR

3 ETPL became a Host Distributor on January 1, 2007 when Hydro One Networks Inc. ("HONI")  
4 became virtually embedded to Erie Thames Distribution system at various points throughout  
5 its service territory. Hydro One deregistered multiple wholesale points in ETPL's service  
6 territory causing Hydro One to become Embedded within 4 of the communities which ETPL  
7 services. ETPL began billing these situations through a retail point of supply and ETPL maintains  
8 the metering and billing of the usage that flow into Hydro One's service territory through  
9 ETPL's assets.

10 ETPL does have some capital costs invested in its Embedded Distributor rate class, specifically  
11 metering in order to accurately measure and bill its embedded distributor customers. Also it is  
12 important to note that in each situation where HONI is embedded within ETPL, ETPL's assets  
13 are utilized to deliver electricity to HONI's customer base. Accordingly, ETPL has treated its  
14 Embedded Distributor class in the same manner as any other rate class.

#### 15 7.2.5 MICROFIT

16 ETPL is not proposing to include MicroFIT as a separate class in the cost allocation model in  
17 2016. ETPL understands that the CA Model will produce a calculation of unit costs which the  
18 Board will use to update the uniform MicroFIT rate at a future date.

### 19 7.3 Cost Allocation Study

#### 20 7.3.1 OVERVIEW

21 For the purposes of this Application, ETPL has followed the cost allocation policies outlined in  
22 the March 31, 2011 Cost Allocation Report and used the 2017 Cost Allocation Model version 3.5  
23 ("CA Model") issued on July 14, 2017.

24 A completed copy of the CA Model has been filed in Live Excel format.



1 A PDF copy of Tabs I2, I6.1, I6.2, O1 and O2 have been included in Attachment 7-A  
2 of this Exhibit. Each input tab is discussed in detail below.

### 3 7.3.2 TAB I2: LDC CLASS

4 As noted above, ETPL proposes the following rate classes in this Application:

- 5 • Residential
- 6 • General Service < 50 kW to 999 kW ("GS<50")
- 7 • General Service > 1,000 kW to 4,999 kW ("GS>1,000")
- 8 • Large Use > 5MW
- 9 • Street Light
- 10 • Sentinel
- 11 • Unmetered Scattered Load ("USL")
- 12 • Embedded Distributor

13 For more information about these rate classes and potential bill impacts, please see Exhibit 8.

### 14 7.3.3 TAB I3: TB DATA

15 ETPL utilized its Service Revenue Requirement as calculated in Exhibit 6 and its Rate Base as  
16 calculated in Exhibit 2.

17 Table 7-1 and Table 7-2 below summarize ETPL's 2016 proposed Rate Base and 2016 Proposed  
18 Revenue Requirement included in the CA Model.

#### 19 **TABLE 7-1: ETPL 2018 PROPOSED RATE BASE**



## Rate Base

Particulars	Initial Application
Gross Fixed Assets (average) <sup>(2)</sup>	\$57,798,956
Accumulated Depreciation (average) <sup>(2)</sup>	(\$22,656,141)
Net Fixed Assets (average) <sup>(2)</sup>	\$35,142,814
Allowance for Working Capital <sup>(1)</sup>	\$5,153,240
<b>1 Total Rate Base</b>	<b>\$40,296,054</b>

2 TABLE 7-2: ETPL 2018 Proposed Revenue Requirement

Particulars	Application
OM&A Expenses	\$6,468,593
Amortization/Depreciation	\$1,842,780
Property Taxes	\$ -
Income Taxes (Grossed up)	\$190,777
Other Expenses	\$ -
Return	
Deemed Interest Expense	\$867,816
Return on Deemed Equity	\$1,415,197
<b>Service Revenue Requirement (before Revenues)</b>	<b>\$10,785,163</b>
Revenue Offsets	\$494,448
<b>Base Revenue Requirement (excluding Tranformer Ownership Allowance credit adjustment)</b>	<b>\$10,290,716</b>
Distribution revenue	\$10,290,716
Other revenue	\$494,448
<b>3 Total revenue</b>	<b>\$10,785,164</b>



1     **7.3.4 TAB I4: BO ASSETS**

2     For the 2016 CA Model, ETPL followed a consistent approach with its previous cost allocation  
3     filing from COS Application (EB-2012-0121), in terms of breaking out assets, capital  
4     contributions, depreciation, accumulated depreciation and primary and secondary assets.  
5     These inputs were based on the best data available to ETPL, including engineering records, and  
6     data from ETPL's customer and financial information systems.

7     ETPL does not own any assets used for the transmission or distribution of voltages > 50 kV,  
8     therefore ETPL has not allocated any assets to these classes.

9     ETPL has ensured all detailed input items are balanced within the model.

10    **7.3.5 TAB I5.1 MISC. DATA**

11    ETPL's Geographic Information System (GIS) records assess the combined ETPL service territory  
12    as having 345 kms of road that have distribution assets associated with them. ETPL confirms  
13    that the 345 km utilized in this Application is the best representation of this input (as per cell  
14    D15 of this Tab).

15    Consistent with Exhibit 6 and the calculation of ETPL's Revenue Requirement, ETPL has utilized  
16    the Board directed 40% for the "Deemed Equity Component of Rate Base" in cell D17 of this  
17    Tab.

18    ETPL has utilized a Working Capital Allowance factor of 7.5% in cell D19 of this Tab, which is  
19    consistent with the deemed amount for utilities that have not undertaken a lead lag study.

20    To determine the allocator for "Portion of pole leasing revenue from Secondary", ETPL  
21    identified the number of poles carrying only secondary services and the total number of  
22    distribution poles. ETPL then divided the secondary only poles by the total to determine the



1 allocation factor. ETPL has 2,809 poles carrying only secondary services, of a total of 8,511  
2 distribution poles. This results in a 33% factor, as entered into cell D21 of this Tab.

### 3 7.3.6 TAB I5.2 WEIGHTING FACTORS

#### 4 SERVICES

5 To calculate the Services weighting factors, ETPL calculated the average cost to service a typical  
6 customer for each rate class. This cost included only amounts that would be recorded in  
7 Account 1855 and excludes transformers and metering. Once these average costs were  
8 calculated, ETPL assigned the value of 1 to the Residential class and then calculated the  
9 associated weighting factor for each rate class based on comparative effort level. The results  
10 of this analysis are presented in Table 7-3 below and have been input into Line 12 of this Tab.

11





1 **TABLE 7-3: SERVICE WEIGHTING FACTORS**

2

	Residential	GS <50	GS >50 to 999 kW	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor
Insert Weighting Factor for Services Account 1855	1.0	2.0	10.0	10.0	30.0	1.0	0.1	1.0	1.0

3 **BILLING AND COLLECTING**

4 To calculate the billing and collecting weighting factors, ETPL calculated the estimated cost  
 5 related to each rate class. To do this, ETPL first allocated the billing and collecting costs to one  
 6 of two groups, 1) low volume (Residential and GS<50 kW) and 2) high volume (GS>50-4,999  
 7 kW and Large Use). ETPL then used these allocated costs divided by the number of bills issued  
 8 to determine a total cost per bill. ETPL then assigned a weighting factor of 1 to the  
 9 Residential/GS<50 classes and determined the associated relative weighting factors for the  
 10 larger rate classes. ETPL assigned a weighting factor of 1 to the Street Lighting, Sentinel  
 11 Lighting, USL and Embedded Distributor rate classes based on the rational that they do not  
 12 require any more or any less work than the Residential or GS<50 rate classes. The results of  
 13 this analysis are presented in Table 7-4 below and input in Line 15 of this Tab.

14 **TABLE 7-4: BILLING & COLLECTING WEIGHTING FACTORS**

		Customers, 2018 Forecast								
		Res	GS<50	GS>50	GS > 1000	Large Use	Strt Lgt	Sent Lgt	USL	Embedded
		17,119	2,018	155	4	1	8	238	130	4
		2018 Budget								
		Relative Cost (weight) Per Customer								
Utilismart	133,609	1.0	1.0	3.0	3.0	3.0				
Canada Post Corp	163,575	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Billing Department	666,714	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Collections Department	186,805	1.0	1.0	1.0	1.0	1.0	1.0			1.0
Totals	1,150,703									
		Allocated Cost								
Total Weighted Customers		Res	GS<50	GS>50	GS > 1000	Large Use	Strt Lgt	Sent Lgt	USL	Embedded
19,617	6.81	6.81	20.43	20.43	20.43	20.43	-	-	-	-
19,439	8.41	8.41	8.41	8.41	8.41	8.41	8.41	-	8.41	8.41
19,677	33.88	33.88	33.88	33.88	33.88	33.88	33.88	33.88	33.88	33.88
19,301	9.68	9.68	9.68	9.68	9.68	9.68	-	-	-	9.68
	-	-	-	-	-	-	-	-	-	-
Identified Cost per Customer		58.79	58.79	72.41	72.41	72.41	42.30	33.88	42.30	51.98
WEIGHTING FACTORS		1.00	1.00	1.23	1.23	1.23	0.72	0.58	0.72	0.88
The total Billing and Collecting budget reflects costs which are functionalized and classified above as well as costs which are more general in nature. These more general costs will be allocated in the Cost Allocation model using the weighting factor set out here.										
The budgets here reflect the best available information, not the test year.										

### 7.3.7 TAB I6.1 REVENUE

#### LOAD FORECAST

Consistent with Exhibit 3, ETPL has entered its weather normalized 2018 Load Forecast in lines 25 and 26. This load forecast includes all estimated CDM savings as discussed in Exhibit 3. Table 7-5 below summarized the results included in the CA Model.

**TABLE 7-5: ADJUSTED 2018 LOAD FORECAST**



Customer Class		Initial Application		
Input the name of each customer class.		<b>Customer / Connections</b>	<b>kWh</b>	<b>kW/kVA <sup>(1)</sup></b>
		Test Year average or mid-year	Annual	Annual
Residential		17,119	132,507,178	-
General Service < 50 kW		2,018	48,252,843	-
General Service > 50 to 999 kW		153	86,975,191	262,052
General Service > 1,000 to 4,999 kW		6	74,898,209	160,936
Large Use		1	96,934,403	168,201
Unmetered Scattered Load		130	517,597	-
Sentinel Lighting		238	221,514	574
Street Lighting		6,070	1,985,669	5,449
Embedded Distributor		4	16,296,711	34,856

To forecast the applicable 2016 demand (kW) associated with customers receiving the Transformer Ownership Allowance ("TA") credit, ETPL utilized the associated 2016 demand (kW) as a basis. ETPL calculated the demand (kW) in 2016 that received a TA credit as a percentage of the total 2016 kW by rate class, and then applied this percentage to the 2018 Load Forecast. The results of this calculation have been entered into Line 27 of this Tab. ETPL notes that it does not have any customers who receive the TA on a consumption (kWh) basis, and therefore Line 28 of this Tab is left blank.

TABLE 7-6: PERCENTAGE OF 2016 kW WITH TA

Rate Class	2016 kW	2016 kW/ TA	Percentage	2018 Load Forecast	2018 kW/TA
GS>50 to 999 kW	308,209	49,313	16%	262,052	41,928
GS>1,000 to 4,999 kW	114,163	114,163	100%	160,936	160,936
Large Use	166,236	166,236	100%	168,201	168,201

As of August 2017, ETPL has no Wholesale Market Participants and therefore the results entered in Line 29 of this Tab remain unchanged from Line 25.



1 **EXISTING RATES**

2 ETPL has input its existing fixed and variable rates in lines 33 through 36 of tab I6.1 Revenue.  
 3 There are no additional charges required to be input into line 37. Table 7-7 below details the  
 4 rates by class entered into the cost allocation model.

5 **TABLE 7-7: Current Distribution Rates**

	<b>Fixed Charge</b>	<b>Variable Charge</b>	<b>Transformer Allowance</b>
Residential	\$ 23.22	\$ 0.0094	
GS<50 kW	\$ 22.29	\$ 0.1450	
GS>50 to 999 kW	\$ 127.91	\$ 3.1024	\$ 0.60
GS>1,000 to 4,999 kW	\$ 2,537.23	\$ 4.2161	\$ 0.60
Large Use	\$ 10,362.66	\$ 1.9046	\$ 0.60
Street Light	\$ 4.04	23..5048	
Sentinel	\$ 5.59	\$ 15.6727	
Unmetered Load	\$ 3.20	\$ 0.1142	
Embedded Distributor	\$ 2,361.50	\$ 4.0623	

6  
 7 ETPL's approved TA is \$0.60/kW, which is consistent across all applicable rate zones. ETPL has  
 8 entered this rate in Line 36 of this Tab for the applicable rate classes.

9 ETPL does not have any additional charges to include in Line 37, accordingly this line has been  
 10 left blank.

11 **7.3.8 TAB I6.2: CUSTOMER DATA**

12 **BAD DEBT AND LATE PAYMENT AVERAGES**

13 ETPL has populated the historical bad debt for 2014 to 2016 by rate class in Lines 38 to 40 of  
 14 this Tab. ETPL has calculated the historical late payment average for the same period by rate  
 15 class and entered the result in Line 15 of this Tab.



1     **NUMBER OF BILLS & CONNECTIONS**

2

3     ETPL calculated the total number of bills issued for 2016 by rate class based on data from  
4     ETPL's customer information system, and has included the results in Line 17.

5     ETPL has entered the 2018 forecasted number of devices and number of connections for  
6     Street Lighting, Sentinel Lighting and USL rate classes in Line 18 and 19 of this Tab

7     **CUSTOMER BASE**

8     ETPL has entered the forecasted number of customers in Line 21 based on the 2018 Load  
9     Forecast for the Residential, GS<50 to 999 kW, GS>1,000-4,999 kW and Large Use rate classes.

10    ETPL currently maintains 9 municipal street lighting customers and has entered this value in cell  
11    J21 of this Tab. ETPL has not entered any customers for Sentinel Lighting or USL, since these  
12    connections usually form part of another metered account above. ETPL has entered 4  
13    customers in the Embedded Distributor rate class which coincide with each individual account  
14    that must be maintained on behalf of HONI.

15    ETPL does not have any bulk customers and therefore has left Line 22 of this Tab blank.

16    All of ETPL's customers are considered to be Primary customers and therefore Line 23 of this Tab  
17    has the same result as Line 21 except for Street Lighting rate class.

18    To calculate the number of line transformer customers, ETPL utilized the 2018 Load Forecast by  
19    rate class less the number of 2016 customers receiving the TA by rate class. As of 2016, ETPL had  
20    25 GS>50-999 kW customers, 4 GS>1,000 to 4,999 kW customers and 1 Large Use customer  
21    receiving the TA. ETPL does not expect the number of customers receiving TA to change  
22    significantly from the 2016 Actual to the 2018 forecast.

23    Similar to above, to calculate the number of Secondary customers, ETPL utilized the 2018 load  
24    forecast by rate class less the number of 2016 customers who utilized the Secondary system.

25    ETPL does not expect the number of customers to change significantly from the 2016 Actual to  
26    the 2018 forecast.



1     **7.3.9 TAB I7.1 METER CAPITAL**

2     The purpose of this tab is to determine a weighting factor of Account 1860, Account 5065 and  
 3     Account 5175. ETPL has entered the estimated installed cost per meter for each meter type  
 4     utilized by ETPL in column D of the CA Model. ETPL has entered the customer meters installed  
 5     for each rate class based on the 2018 Forecasted customer counts.

6     **7.3.10 TAB I7.2 METER READING**

7     The purpose of this tab is to derive the weighting factors for Account 5310 – Meter Reading  
 8     Expense. ETPL has forecasted the 2018 meter reading expense at approximately \$26k. This  
 9     relates to a third party service that provides meter reads and rereads as necessary. This cost,  
 10    which is less than half of the materiality threshold, has been allocated to the Residential,  
 11    GS<50 and GS>50 customers equally since it cannot be specifically identified.

12    **7.3.11 TAB I8 DEMAND**

13    Pursuant to the updated filing requirements specifically the OEB letter dated June 12,  
 14    2015 ETPL has updated its load profiles in order to ensure that they are more relevant  
 15    and not based upon 2004 data and consumption patterns. In order to accomplish the  
 16    ETPL utilized the services of Elenchus, a third party independent consultant. The  
 17    description of the methodology undertaken and a synopsis of the results that underpin  
 18    the demand data input into the cost allocation model are included as Attachment 7-F.

19

20

<u>Customer Classes</u>		Total	Residential	GS <50	GS >50 to 999 kW	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor
<b>CO-INCIDENT PEAK</b>											
<b>1 CP</b>											
Transformation CP	TCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955
Bulk Delivery CP	BCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955
Total System CP	DCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955
<b>4 CP</b>											
Transformation CP	TCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068
Bulk Delivery CP	BCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068
Total System CP	DCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068
<b>12 CP</b>											
Transformation CP	TCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034
Bulk Delivery CP	BCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034
Total System CP	DCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034



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NON CO. INCIDENT PEAK										
<b>1 NCP</b>										
Classification NCP from										
Load Data Provider DNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273
Primary NCP PNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273
Line Transformer NCP LTNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273
Secondary NCP SNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273
<b>4 NCP</b>										
Classification NCP from										
Load Data Provider DNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284
Primary NCP PNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284
Line Transformer NCP LTNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284
Secondary NCP SNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284
<b>12 NCP</b>										
Classification NCP from										
Load Data Provider DNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252
Primary NCP PNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252
Line Transformer NCP LTNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252
Secondary NCP SNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252

2

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#### 4 7.3.12 TAB I9 DIRECTION ALLOCATION

5 ETPL has not directly allocated any costs to specific rate classes due to the fact that there are no  
 6 costs that could or should only be borne by specific rate classes.



## REVENUE TO COST RATIOS

The following section details the steps taken to allocate revenue requirement for ETPL in order to determine rate design. Table 7-12 details the difference between allocated costs from the last approved COS application to the results on Tab O1 Revenue to Cost/RR row 40.

**TABLE 7-12: 2012 VS 2018 ALLOCATED COSTS**

Name of Customer Class <sup>(3)</sup>	Costs Allocated from Previous Study <sup>(1)</sup>	%	Allocated Class Revenue Requirement <sup>(1)</sup>	%
From Sheet 10. Load Forecast				
(7A)				
Residential	\$ 5,636,524	62.03%	\$ 7,517,832	69.71%
General Service < 50 kW	\$ 1,142,520	12.57%	\$ 1,306,422	12.11%
General Service > 50 to 999 kW	\$ 862,571	9.49%	\$ 646,436	5.99%
General Service > 1,000 to 4,999 kW	\$ 526,241	5.79%	\$ 440,338	4.08%
Large Use	\$ 307,549	3.38%	\$ 448,198	4.16%
Unmetered Scattered Load	\$ 70,762	0.78%	\$ 37,264	0.35%
Sentinel Lighting	\$ 30,337	0.33%	\$ 50,323	0.47%
Street Lighting	\$ 344,523	3.79%	\$ 234,510	2.17%
Embedded Distributor	\$ 166,009	1.83%	\$ 103,839	0.96%





Table 7-13 below provides information on calculated rate class revenue, consistent with Tab 11 Cost Allocation from the RRWF. Column 7B represents the proposed 2018 Load Forecast multiplied by the 2017 Approved Rates. Column 7C represents the amounts from Column 7B adjusted to reflect ETPL's revenue deficiency by using the factor from the CA Model in Tab O1 cell C 22. ETPL's factor from the proposed cost allocation is 1.016885. Column 7D represents the revenue by class using the proposed 2018 revenue to cost ratios discussed in Section 7.4. Column 7E represents the Other Revenue allocated to each rate class per the CA Model.

TABLE 7-13: CALCULATED CLASS REVENUE

Name of Customer Class	Load Forecast (LF) X current approved rates (7B)	LF X current approved rates X (1+d) (7C)	LF X Proposed Rates (7D)	Miscellaneous Revenues (7E)
Residential	\$ 6,015,606	\$ 6,117,179	\$ 6,737,029	\$ 374,708
General Service < 50 kW	\$ 1,239,441	\$ 1,260,369	\$ 1,498,920	\$ 50,595
General Service > 50 to 999 kW	\$ 1,050,903	\$ 1,068,647	\$ 667,782	\$ 20,875
General Service > 1,000 to 4,999 kW	\$ 703,748	\$ 715,630	\$ 492,800	\$ 14,642
Large Use	\$ 343,787	\$ 349,592	\$ 455,979	\$ 14,725
Unmetered Scattered Load	\$ 64,102	\$ 65,184	\$ 42,039	\$ 814
Sentinel Lighting	\$ 24,961	\$ 25,383	\$ 54,862	\$ 1,339
Street Lighting	\$ 422,351	\$ 429,483	\$ 235,684	\$ 13,420
Embedded Distributor	\$ 254,948	\$ 259,252	\$ 105,621	\$ 3,330

The results of a cost allocation study are typically presented in the form of Revenue to Cost ("RTC") ratios. The ratio is shown by rate classification and is the percentage of Distribution Revenue collected by rate class, as compared to the costs allocated to the class. The percentage identifies which rate classes are being subsidized and those that are over-contributing. A percentage of less than 100% means the rate classification is under-contributing and is being subsidized by other classes of customers. A percentage of greater than 100% indicates that the rate classification is over-contributing and is subsidizing other classes of customers.

The range of acceptable ratios was published in the Board's letter dated March 31, 2011. Further to this, the Board's letter dated June 12, 2015 with regard to the treatment of Street



1 Lighting connections narrowed the RTC ratio for the street lighting rate class from 70% - 120%  
 2 to 80% - 120%, as consistent with the views expressed in the Report of the Board: Review of  
 3 Cost Allocation for Unmetered Loads. The RTC ranges proposed by ETPL are within these  
 4 ranges.

5 Table 7-14 below is consistent Tab 11 Cost Allocation in the RRWF and shows the previously  
 6 approved RTC ratios, the Status Quo RTC ratios and the proposed RTC ratios entered by ETPL.  
 7 The RTC ratios reflected in the "Status Quo" column represent the ratios calculated by the CA  
 8 Model based on the current rate structure and assigned costs. The RTC ratios reflected in the  
 9 "Proposed" column reflect the ratios ETPL has calculated in order to ensure all rate classes are  
 10 within the Board Approved ranges and while balancing ETPL's distribution Revenue  
 11 Requirement.

12 **TABLE 7-14: REVENUE TO COST RATIOS**

Name of Customer Class	Previously Approved Ratios Most Recent Year: 2012 %	Status Quo Ratios (7C + 7E) / (7A) %	Proposed Ratios (7D + 7E) / (7A) %	Policy Range %
Residential	62.03%	86.35%	94.60%	85 - 115
General Service < 50 kW	12.57%	100.35%	118.61%	80 - 120
General Service > 50 to 999 kW	9.49%	168.54%	106.53%	80 - 120
General Service > 1,000 to 4,999 kW	5.79%	165.84%	115.24%	80 - 120
Large Use	3.38%	81.28%	105.02%	85 - 115
Unmetered Scattered Load	0.78%	177.11%	115.00%	80 - 120
Sentinel Lighting	0.33%	53.10%	111.68%	80 - 120
Street Lighting	3.79%	188.86%	106.22%	80 - 120
Embedded Distributor	1.83%	252.87%	104.92%	80 - 120

13  
 14 To determine the proposed RTC ratios, ETPL used the industry common methodology by first  
 15 moving all rate classes outside the Board approved range to the upper or lower limit. ETPL  
 16 moved Street Lighting down to its 120% limit, Unmetered Scattered Load down to its 120% limit  
 17 and moved Embedded Distribution to 100%. ETPL then moved Large Use up to its minimum of  
 18 85%. As such, ETPL then moved its highest RTC ratio down until it resulted in revenue  
 19 neutrality. This resulted in General Service < 50 kW, Unmetered Scattered Load and Street  
 20 Lighting having the same RTC ratio at 105.1%



1 Consistent with Board Appendix 2-P, Table 7-16 below shows the proposed annual RTC ratios  
 2 by rate class.

3 **TABLE 7-16: PROPOSED 2018-2020 RTC**  
 4

Name of Customer Class	Proposed Revenue-to-Cost Ratio			Policy Range
	Test Year	Price Cap IR Period		
	2018	2019	2020	
Residential	94.60%	94.60%	94.60%	85 - 115
General Service < 50 kW	118.61%	118.61%	118.61%	80 - 120
General Service > 50 to 999 kW	106.53%	106.53%	106.53%	80 - 120
General Service > 1,000 to 4,999 kW	115.24%	115.24%	115.24%	80 - 120
Large Use	105.02%	105.02%	105.02%	85 - 115
Unmetered Scattered Load	115.00%	115.00%	115.00%	80 - 120
Sentinel Lighting	111.68%	111.68%	111.68%	80 - 120
Street Lighting	106.22%	106.22%	106.22%	80 - 120
Embedded Distributor	104.92%	104.92%	104.92%	80 - 120

5



Exhibit 7: Cost Allocation

---

**Tab 3 (of 3): Exhibit 7 Appendices**



Erie Thames Powerlines  
Filed: 15 September, 2017  
EB-2017-0038  
Exhibit 7  
Tab 3  
Schedule 1  
Attachment 1  
Page 1 of 1

***Attachment 1 (of 7):***

***7-A Cost Allocation Model***



Ontario Energy Board

# 2018 Cost Allocation Model

## Sheet I1 Utility Information Sheet

Version

Name of LDC: Erie Thame Power

Application EB Number: EB-2017-0038

Date of Application:

Contact Information:

Name: Graig Pettit

Title: Director - Regulatory Finance and Customer Relations

Phone Number: 519-485-1820

E-Mail Address: [gpettit@eriehampower.com](mailto:gpettit@eriehampower.com)

### Copyright

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Energy Board

# 2018 Cost Allocation Model

**EB-2017-0038**

## **Sheet 12 Class Selection -**

Put identification of this Run in C15 and C17  
Put your proposed rate classes.  
If classes have been entered, Click the "Update" button in cell E41

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

Please provide summary identification of this Run

	Utility's Class Definition	Current
Residential		YES
GS <50		YES
GS>50-Regular	GS >50 to 999 kW	YES
GS> 50-TOU		NO
GS >50-Intermediate	GS > 1,000 to 4,999 kW	YES
Large Use >5MW		YES
Street Light		YES
Sentinel		YES
Unmetered Scattered Load		YES
Embedded Distributor		YES
Back-up/Standby Power		NO
Rate Class 1		NO
Rate class 2		NO
Rate class 3		NO
Rate class 4		NO
Rate class 5		NO
Rate class 6		NO
Rate class 7		NO
Rate class 8		NO
Rate class 9		NO



Ontario Energy Board

# 2018 Cost Allocation Model

EB-2017-0038

Sheet I3 Trial Balance Data

Comparisons with RRWF

RRWF Reference:

9. cell F23

9. cell F19

9. cell F22

9. cell F25

4. cell G19

Return on Deemed Equity	\$1,415,197
Income Taxes (Grossed up)	\$190,777
Deemed Interest Expense	\$867,816
Service Revenue Requirement	\$10,785,163
Revenue Requirement to be Used in this model (\$)	\$10,785,163
Rate Base (\$)	\$40,296,054
Rate Base to be Used in this model (\$)	\$40,296,054

From this Sheet

\$10,785,163

\$40,296,054

Uniform System of Accounts - Detail Accounts

USoA Account #	Accounts	Forecast Financial Statement	Model Adjustments	Reclassify accounts	Direct Allocation
1005	Cash				
1010	Cash Advances and Working Funds				
1020	Interest Special Deposits				
1030	Dividend Special Deposits				
1040	Other Special Deposits				
1060	Term Deposits				
1070	Current Investments				
1100	Customer Accounts Receivable				
1102	Accounts Receivable - Services				
1104	Accounts Receivable - Recoverable Work				
1105	Accounts Receivable - Merchandise, Jobbing, etc.				
1110	Other Accounts Receivable				
1120	Accrued Utility Revenues				
1130	Accumulated Provision for Uncollectible Accounts-- Credit				
1140	Interest and Dividends Receivable				
1150	Rents Receivable				
1170	Notes Receivable				
1180	Prepayments				
1190	Miscellaneous Current and Accrued Assets				
1200	Accounts Receivable from Associated Companies				
1210	Notes Receivable from Associated Companies				
1305	Fuel Stock				



# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet L4 Break Out Worksheet -**
**Instructions:**

This is an input sheet for the Break Out of Distribution Assets, Contributed Capital, Amortization, and Amortization Expenses.

*\*\*\*Please see Instructions tab for detailed instructions\*\*\**

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	\$35,142,814
--	--------------

RATE BASE AND DISTRIBUTION ASSETS		BALANCE SHEET ITEMS									EXPENSE ITEMS			
Account	Description	Break out Functions	BREAK OUT (%)	BREAK OUT (\$)	After BO	Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Asset net of Accumulated Depreciation and Contributed Capital	5705 Amortization Expense - Property, Plant, and Equipment	5710 Amortization of Limited Term Electric Plant	5715 Amortization of Intangibles and Other Electric Plant	5720 Amortization of Electric Plant Acquisition Adjustments
1565	Conservation and Demand Management	\$0		-	-	\$0		\$ -		-	\$0			
1805	Land	\$178,544		(\$178,544)	-	\$0		\$ -		-	\$0			
1805-1	Land Station >50 kV			\$0	-	\$0		\$ -		-	\$0			
1805-2	Land Station <50 kV		100.00%	\$178,544	178,544	\$0		\$ -		178,544	\$0			
1806	Land Rights	\$45,679		(\$45,679)	-	\$0		\$ -		-	\$0			
1806-1	Land Rights Station >50 kV			\$0	-	\$0		\$ -		-	\$0			
1806-2	Land Rights Station <50 kV		100.00%	\$45,679	45,679	\$0		\$ -		45,679	\$0			
1808	Buildings and Fixtures	\$1,008,806		(\$1,008,806)	-	\$0		\$ -		-	\$0			
1808-1	Buildings and Fixtures > 50 kV			\$0	-	\$0		\$ -		-				
1808-2	Buildings and Fixtures < 50 kV		100.00%	\$1,008,806	1,008,806	\$0		\$ (104,863)		903,943	\$11,391			
1810	Leasehold Improvements	\$0		\$0	-	\$0		\$ -		-	\$0			
1810-1	Leasehold Improvements >50 kV			\$0	-	\$0		\$ -		-	\$0			
1810-2	Leasehold Improvements <50 kV		100.00%	\$0	-	\$0		\$ -		-	\$0			
1815	Transformer Station Equipment - Normally Primary above 50 kV	\$0		\$0	-	\$0		\$ -		-	\$0			
1820	Distribution Station Equipment - Normally Primary below 50 kV	\$566,197		(\$566,197)	-	\$0		\$ -		-	\$0			
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)			\$0	-	\$0		\$ -		-	\$0			
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)			\$0	-	\$0		\$ -		-				
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		100.00%	\$566,197	566,197	\$0		\$ (226,145)		340,052	\$9,728			
1825	Storage Battery Equipment	\$0		\$0	-	\$0		\$ -		-	\$0			
1825-1	Storage Battery Equipment > 50 kV			\$0	-	\$0		\$ -		-	\$0			
1825-2	Storage Battery Equipment <50 kV		100.00%	\$0	-	\$0		\$ -		-	\$0			
1830	Poles, Towers and Fixtures	\$9,460,163		(\$9,460,163)	-	\$0								
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery			\$0	-	\$0		\$ -		-	\$0			
1830-4	Poles, Towers and Fixtures - Primary		67.00%	\$6,338,309	6,338,309	\$0		\$ (2,082,012)		4,256,296	\$121,714			
1830-5	Poles, Towers and Fixtures - Secondary		33.00%	\$3,121,854	3,121,854	\$0		\$ (1,025,469)		2,096,385	\$59,949			
1835	Overhead Conductors and Devices	\$15,878,256		(\$15,878,256)	-	\$0								
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery			\$0	-	\$0		\$ -		-	\$0			
1835-4	Overhead Conductors and Devices - Primary		69.00%	\$10,955,997	10,955,997	\$0		\$ (5,475,152)		5,480,845	\$177,935			
1835-5	Overhead Conductors and Devices - Secondary		31.00%	\$4,922,259	4,922,259	\$0		\$ (2,402,933)		2,519,327	\$79,942			
1840	Underground Conduit	\$3,307,522		(\$3,307,522)	-	\$0								
1840-3	Underground Conduit - Bulk Delivery			\$0	-	\$0		\$ -		-	\$0			
1840-4	Underground Conduit - Primary		22.00%	\$727,655	727,655	(\$614,119)	\$105,244	\$ (148,180)		70,600	\$7,536			
1840-5	Underground Conduit - Secondary		78.00%	\$2,579,867	2,579,867	(\$1,535,165)	\$263,087	\$ (625,366)		782,423	\$36,169			
1845	Underground Conductors and Devices	\$7,921,861		(\$7,921,861)	-	\$0		\$0						
1845-3	Underground Conductors and Devices - Bulk Delivery			\$0	-	\$0	\$0	\$ -		-	\$0			
1845-4	Underground Conductors and Devices - Primary		34.00%	\$2,693,433	2,693,433	(\$2,369,093)	\$406,001	\$ (506,057)		224,284	\$29,686			
1845-5	Underground Conductors and Devices - Secondary		66.00%	\$5,228,429	5,228,429	(\$5,922,223)	\$1,014,914	\$ (982,345)		661,225	\$38,147			
1850	Line Transformers	\$9,871,406		\$0	9,871,406	\$0		\$ (1,883,068)		7,988,338	\$240,079			
1855	Services	\$7,563,825		\$0	7,563,825	\$0		\$ (1,897,798)		5,666,027	\$112,071			
1860	Meters	\$5,745,100		\$0	5,745,100	\$0		\$ (2,656,936)		3,088,164	\$361,164			

# 2018 Cost Allocation Model

EB-2017-0038

## Sheet L4 Break Out Worksheet -

**Instructions:**

This is an input sheet for the Break Out of Distribution Assets, Contributed Capital, Amortization, and Amortization Expenses.

**\*\*Please see Instructions tab for detailed instructions\*\***

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	\$35,142,814
--	--------------

RATE BASE AND DISTRIBUTION ASSETS		BALANCE SHEET ITEMS									EXPENSE ITEMS			
		Break out Functions	BREAK OUT (%)	BREAK OUT (\$)	After BO	Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Asset net of Accumulated Depreciation and Contributed Capital	5705	5710	5715	5720
Account	Description										Amortization Expense - Property, Plant, and Equipment	Amortization of Limited Term Electric Plant	Amortization of Intangibles and Other Electric Plant	Amortization of Electric Plant Acquisition Adjustments
	Total	\$61,547,360		\$0	\$61,547,360	(\$10,440,600)	\$1,789,246	(\$19,916,324)	\$0	32,979,681	\$1,285,511	\$0	\$0	\$0
	SUB TOTAL from I3	\$61,547,360												
											5705	5710	5715	5720

# 2018 Cost Allocation Model

EB-2017-0038

## Sheet I4 Break Out Worksheet -

### Instructions:

This is an input sheet for the Break Out of Distribution Assets, Contributed Capital, Amortization, and Amortization Expenses.

**\*\*Please see Instructions tab for detailed instructions\*\***

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	\$35,142,814
--	--------------

RATE BASE AND DISTRIBUTION ASSETS		BALANCE SHEET ITEMS									EXPENSE ITEMS				
Account	Description	Break out Functions	BREAK OUT (%)	BREAK OUT (\$)	After BO	Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Asset net of Accumulated Depreciation and Contributed Capital	5705	5710	5715	5720	
											Amortization Expense - Property, Plant, and Equipment	Amortization of Limited Term Electric Plant	Amortization of Intangibles and Other Electric Plant	Amortization of Electric Plant Acquisition Adjustments	
General Plant		Break out Functions				Contributed Capital - 1995	Accumulated Depreciation - 2105 Capital Contribution	Accumulated Depreciation - 2105 Fixed Assets Only	Accumulated Depreciation - 2120	Net Asset	Amortization Expense - Property, Plant, and Equipment	Amortization of Limited Term Electric Plant	Amortization of Intangibles and Other Electric Plant	Amortization of Electric Plant Acquisition Adjustments	
1905	Land	\$0			-					\$ -	\$0				
1906	Land Rights	\$0			-					\$ -	\$0				
1908	Buildings and Fixtures	\$0			-					\$ -	\$0				
1910	Leasehold Improvements	\$523,146			523,146			\$ (48,917)		\$ 474,230	\$8,686				
1915	Office Furniture and Equipment	\$97,709			97,709			\$ (85,131)		\$ 12,579	\$4,111				
1920	Computer Equipment - Hardware	\$327,815			327,815			\$ (261,432)		\$ 66,384	\$38,501				
1925	Computer Software	\$1,525,552			1,525,552			\$ (1,328,048)		\$ 197,504	\$150,721				
1930	Transportation Equipment	\$3,198,163			3,198,163			\$ (2,144,315)		\$ 1,053,848	\$202,671				
1935	Stores Equipment	\$0			-					\$ -	\$0				
1940	Tools, Shop and Garage Equipment	\$288,783			288,783			\$ (200,898)		\$ 87,887	\$20,180				
1945	Measurement and Testing Equipment	\$31,082			31,082			\$ (19,636)		\$ 11,446	\$3,885				
1950	Power Operated Equipment	\$224,659			224,659			\$ (95,423)		\$ 129,236	\$27,665				
1955	Communication Equipment	\$31,915			31,915			\$ (7,979)		\$ 23,937	\$3,192				
1960	Miscellaneous Equipment	\$0			-					\$ -	\$0				
1970	Load Management Controls - Customer Premises	\$0			-					\$ -	\$0				
1975	Load Management Controls - Utility Premises	\$0			-					\$ -	\$0				
1980	System Supervisory Equipment	\$607,299			607,299			\$ (337,285)		\$ 270,014	\$97,657				
1990	Other Tangible Property	\$0			-					\$ -	\$0				
2005	Property Under Capital Leases	\$0			-					\$ -	\$0				
2010	Electric Plant Purchased or Sold	(\$163,929)			163,929			\$ -		\$ 163,929	\$0				
Total		\$6,692,196		\$0	\$6,692,196	\$0	\$0	(\$4,529,062)	\$0	\$2,163,134	\$557,268	\$0	\$0	\$0	
SUB TOTAL from I3		\$6,692,196													
I3 Directly Allocated		\$0													
Grand Total		\$68,239,556		\$0	\$68,239,556	(\$10,440,600)	\$1,789,246	(\$24,445,387)	\$0	\$35,142,815	\$1,842,780	\$0	\$0	\$0	

 Ontario Energy Board

# 2018 Cost Allocation Model

EB-2017-0038  
Sheet I4 Break Out Worksheet -

EB-2017-0038  
Sheet I4 Break Out Worksheet -

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

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

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

Enter Net Fixed Assets from the Revenue Requirement Work Form, Rate Base sheet, cell G15	\$35,142,814
--	--------------

[illegible]



Ontario Energy Board

# 2018 Cost Allocation

**EB-2017-0038**

**Sheet I5.1 Miscellaneous Data Worksheet -**

---

Structure KM (kMs of Roads in Service Area that have distribution line)	345
Deemed Equity Component of Rate Base (ref: RRWF 7. cell F24)	40%
Working Capital Allowance to be included in Rate Base (%)	7.5%
Portion of pole leasing revenue from Secondary - Remainder assumed to be Primary (%)	33%



Ontario Energy Board

## 2018 Cost Allocation Model

EB-2017-0038

### Sheet 15.2 Weighting Factors Worksheet -

1	2	3	5	6	7	8	9	10	11
Residential	GS <50	GS >50 to 999 kW	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power

Insert Weighting Factor for Services Account 1855

1.0	2.0	10.0	10.0	30.0	1.0	0.1	1.0	1.0	
-----	-----	------	------	------	-----	-----	-----	-----	--

Insert Weighting Factor for Billing and Collecting

1.0	1.0	1.2	1.2	1.2	0.7	0.6	0.7	0.9	
-----	-----	-----	-----	-----	-----	-----	-----	-----	--

**Sheet I6.1 Revenue Worksheet -**[illegible]

# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet 16.2 Customer Data Worksheet -**

			1	2	3	4	5	6	7	8	9	10	11
	ID	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
<b>Billing Data</b>													
Bad Debt 3 Year Historical Average	BDHA	\$28,289	\$25,164	\$2,853	\$272	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$121,698	\$108,254	\$12,273	\$1,170								
Number of Bills	CNB	236,124	205,428	24,216	1,860		48	12	96	2,856	1,560	48	
Number of Devices	CDEV		17,119	2,018	155		4	1	6,070	238	130	4	
Number of Connections (Unmetered)	CCON	3,909							3,541	238	130		
Total Number of Customers	CCA	19,677	17,119	2,018	155		4	1	8	238	130	4	
Bulk Customer Base	CCB	-											
Primary Customer Base	CCP	19,884	17,119	2,018	155		4	1	215	238	130	4	
Line Transformer Customer Base	CCLT	19,854	17,119	2,018	130				215	238	130	4	
Secondary Customer Base	CCS	19,668	17,119	2,018	155		4			238	130	4	
Weighted - Services	CWCS	26,444	17,119	4,036	1,550	-	40	-	3,541	24	130	4	-
Weighted Meter -Capital	CWMC	3,948,905	2,875,992	970,658	74,555	-	8,400	2,100	-	-	-	17,200	-
Weighted Meter Reading	CWMR	326,076	205,428	24,216	91,140	-	2,352	588	-	-	-	2,352	-
Weighted Bills	CWNB	234,889	205,428	24,216	2,291	-	59	15	69	1,646	1,122	42	-

**Bad Debt Data**

Historic Year:	2014	27,450	24,418	2,768	264								
Historic Year:	2015	28,280	25,156	2,852	272								
Historic Year:	2016	29,136	25,917	2,938	281								
Three-year average		28,289	25,164	2,853	272	-	-	-	-	-	-	-	-



2018 Cost Allocation Model

EOB-2017-0038

Sheet 17.x Meter Capital Worksheet -

	Residential									GS <45									GS >45 to 999 kW									GS > 1,000 to 4,999 kW									Large Use >500kW									Street Light									Sanitary									Unmetered Scattered Load									Embedded Distribution									Back-up/Standby Power									TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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[illegible]

## 2018 Cost Allocation Model

**EB-2017-0038**

**Sheet 18 Demand Data Worksheet -**

**This is an input sheet for demand allocators.**

<b>CP TEST RESULTS</b>	<b>12 CP</b>
<b>NCP TEST RESULTS</b>	<b>4 NCP</b>
<b>Co-incident Peak</b>	<b>Indicator</b>
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12
<b>Non-co-incident Peak</b>	<b>Indicator</b>
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

Customer Classes		2023																			
		1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Total		Residential	GS <50	GS >50 to 999 kW	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Rate Class 1	Rate class 2	Rate class 3	Rate class 4	Rate class 5	Rate class 6	Rate class 7	Rate class 8	Rate class 9	
CP																					
Sanity Check		Check 4 CP	Check 4CP	Pass	Pass	Check 4CP	Check 4CP and 12CP	Check 4CP and 12CP	Check 4CP and 12CP	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
CO-INCIDENT PEAK																					
1 CP																					
Transformation CP	TCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
Bulk Delivery CP	BCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
Total Sytem CP	DCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
4 CP																					
Transformation CP	TCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
Bulk Delivery CP	BCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
Total Sytem CP	DCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
12 CP																					
Transformation CP	TCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
Bulk Delivery CP	BCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
Total Sytem CP	DCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
NON CO-INCIDENT PEAK																					
NCP																					
Sanity Check		Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
1 NCP																					
Classification NCP from Load Data Provider	DNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Primary NCP	PNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Line Transformer NCP	LTNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Secondary NCP	SNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
4 NCP																					
Classification NCP from Load Data Provider	DNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Primary NCP	PNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Line Transformer NCP	LTNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Secondary NCP	SNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
12 NCP																					
Classification NCP from Load Data Provider	DNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Primary NCP	PNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Line Transformer NCP	LTNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Secondary NCP	SNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										

**Sheet 01 Revenue to Cost Summary Worksheet -**

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

### Class Revenue, Cost Analysis, and Return on Rate Base

Rate Base Assets		Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
			Residential	GS <50	GS >50 to 999 KW	GS>50-TOU	GS > 1,000 to 4,999 KW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Rate Class 1	Rate class 2	Rate class 3	Rate class 4	Rate class 5	Rate class 6	Rate class 7	Rate class 8	Rate class 9
crev mi	Distribution Revenue at Existing Rates	\$10,119,845	\$6,015,606	\$1,239,441	\$1,050,903	\$0	\$703,748	\$343,787	\$422,351	\$24,961	\$64,102	\$254,948	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Miscellaneous Revenue (mi)	\$494,448	\$377,708	\$50,936	\$20,870	\$0	\$14,615	\$14,699	\$10,077	\$1,381	\$837	\$3,325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		Miscellaneous Revenue Input equals Output																				
Total Revenue at Existing Rates		\$10,614,293	\$6,393,314	\$1,290,377	\$1,071,773	\$0	\$718,363	\$358,486	\$432,428	\$26,342	\$64,938	\$258,272	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Factor required to recover deficiency (1 + D)		1.016885																				
Distribution Revenue at Status Quo Rates		\$10,290,716	\$6,117,177	\$1,260,368	\$1,068,647	\$0	\$715,630	\$349,592	\$429,483	\$25,383	\$65,184	\$259,252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Revenue (mi)		\$494,448	\$377,708	\$50,936	\$20,870	\$0	\$14,615	\$14,699	\$10,077	\$1,381	\$837	\$3,325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Revenue at Status Quo Rates		\$10,785,163	\$6,494,885	\$1,311,304	\$1,089,517	\$0	\$730,245	\$364,291	\$439,559	\$26,764	\$66,021	\$262,577	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expenses																						
di cu	Distribution Costs (di)	\$354,837	\$190,409	\$43,255	\$38,454	\$0	\$26,732	\$27,562	\$20,243	\$997	\$1,088	\$6,097	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Customer Related Costs (cu)	\$1,093,659	\$949,674	\$119,734	\$11,114	\$0	\$361	\$90	\$299	\$7,128	\$4,860	\$399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ad dep	General and Administration (ad)	\$5,020,098	\$3,944,106	\$565,186	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Depreciation and Amortization (dep)	\$1,842,780	\$1,057,620	\$261,488	\$170,440	\$0	\$128,968	\$130,447	\$53,447	\$5,739	\$4,089	\$30,736	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
INPUT INT	Pills (INP)UT	\$190,777	\$106,400	\$24,428	\$19,510	\$0	\$14,562	\$14,875	\$6,840	\$644	\$513	\$3,373	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Interest	\$967,816	\$482,360	\$111,122	\$88,705	\$0	\$66,242	\$67,663	\$31,116	\$2,930	\$2,333	\$15,345	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Expenses		\$9,369,966	\$6,730,209	\$1,125,212	\$502,097	\$0	\$332,600	\$338,144	\$183,834	\$45,537	\$33,454	\$78,879	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Direct Allocation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NI	Allocated Net Income (NI)	\$1,415,197	\$786,613	\$181,212	\$144,656	\$0	\$108,025	\$110,342	\$50,743	\$4,777	\$3,805	\$25,024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Revenue Requirement (Includes NI)	\$10,785,163	\$7,516,822	\$1,306,424	\$646,754	\$0	\$440,624	\$448,486	\$234,577	\$60,315	\$37,258	\$103,903	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		Revenue Requirement Input equals Output																				
Rate Base Calculation		\$10,290,716																				
Net Assets																						
dp gp accu co	Distribution Plant - Gross	\$61,547,360	\$33,700,631	\$7,711,076	\$6,416,632	\$0	\$4,958,809	\$5,031,406	\$2,207,275	\$218,951	\$157,909	\$1,144,670	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	General Plant - Gross	\$6,692,196	\$3,640,991	\$624,404	\$707,707	\$0	\$544,661	\$553,967	\$255,597	\$23,874	\$17,623	\$125,363	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
dp accu co	Accumulated Depreciation	(\$22,656,141)	(\$12,631,251)	(\$2,276,732)	(\$2,276,732)	\$0	(\$1,769,076)	(\$1,779,673)	(\$719,673)	(\$78,904)	(\$55,869)	(\$408,972)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Capital Contribution	(\$10,440,600)	(\$5,212,019)	(\$1,092,793)	(\$1,244,787)	\$0	(\$1,050,946)	(\$1,055,792)	(\$476,716)	(\$44,872)	(\$25,305)	(\$237,370)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Net Plant		\$35,142,815	\$19,508,066	\$4,489,436	\$3,599,818	\$0	\$2,693,453	\$2,750,469	\$1,264,474	\$119,049	\$94,359	\$623,691	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Directly Allocated Net Fixed Assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP	Cost of Power (COP)	\$62,241,271	\$17,984,316	\$6,549,037	\$11,804,563	\$0	\$10,165,435	\$13,156,260	\$269,502	\$30,065	\$70,250	\$2,211,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	OM&A Expenses	\$6,468,593	\$5,084,188	\$728,174	\$223,451	\$0	\$122,827	\$125,354	\$92,431	\$36,224	\$26,519	\$29,424	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Directly Allocated Expenses		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal		\$68,709,864	\$23,068,504	\$7,277,211	\$12,028,014	\$0	\$10,288,262	\$13,281,615	\$361,932	\$66,289	\$96,769	\$2,241,268	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Working Capital		\$5,153,240	\$1,730,138	\$545,791	\$902,101	\$0	\$771,620	\$996,121	\$27,145	\$4,972	\$7,258	\$168,095	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Rate Base		\$40,296,055	\$21,238,204	\$5,035,227	\$4,501,919	\$0	\$3,465,073	\$3,746,590	\$1,291,619	\$124,021	\$101,616	\$791,786	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rate Base Input equals Output																						
Equity Component of Rate Base		\$16,118,422	\$8,495,282	\$2,014,091	\$1,800,768	\$0	\$1,386,029	\$1,498,636	\$516,648	\$49,608	\$40,646	\$316,714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income on Allocated Assets		\$1,415,197	(\$235,323)	\$186,092	\$587,420	\$0	\$397,646	\$26,146	\$255,725	(\$18,774)	\$32,567	\$183,698	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income on Direct Allocation Assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income		\$1,415,197	(\$235,323)	\$186,092	\$587,420	\$0	\$397,646	\$26,146	\$255,725	(\$18,774)	\$32,567	\$183,698	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RATIOS ANALYSIS																						
REVENUE TO EXPENSES STATUS QUO%		100.00%	86.40%	100.37%	168.46%	0.00%	165.73%	81.23%	187.38%	53.19%	177.20%	252.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EXISTING REVENUE MINUS ALLOCATED COSTS		(\$170,870)	(\$1,123,508)	(\$16,047)	\$425,019	\$0	\$277,738	(\$90,000)	\$197,851	(\$23,972)	\$27,680	\$154,369	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Deficiency Input equals Output																						
STATUS QUO REVENUE MINUS ALLOCATED COSTS		\$0	(\$1,021,936)	\$4,880	\$442,763	\$0	\$289,621	(\$84,196)	\$204,982	(\$23,551)	\$28,762	\$158,674	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RETURN ON EQUITY COMPONENT OF RATE BASE		8.76%	-2.77%	9.24%	32.62%	0.00%	28.69%	1.74%	49.50%	-37.84%	80.12%	58.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -**

## Summary

Customer Unit Cost per month - Avoided Cost	\$5.80	\$9.96	\$10.49	0	\$24.66	-\$1.41	\$0.00	\$2.45	\$3.06	\$58.71	0
Customer Unit Cost per month - Directly Related	\$21.62	\$27.37	\$31.67	0	\$54.39	\$28.30	\$0.02	\$11.09	\$13.84	\$94.43	0
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$30.47	\$39.89	\$74.58	0	\$142.95	\$281.00	\$5.26	\$17.55	\$21.52	\$67.63	0
Existing Approved Fixed Charge	\$23.22	\$22.29	\$127.91	\$0.00	\$2,537.23	\$10,362.66	\$4.04	\$5.59	\$3.20	\$2,361.50	\$0.00

	1	2	3	4	5	6	7	8	9	10	11
Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
\$6,692,196 (\$4,529,062)	\$3,640,991 (\$2,464,105)	\$824,404 (\$557,930)	\$707,707 (\$478,953)	\$0	\$544,661 (\$368,609)	\$553,987 (\$374,920)	\$253,587 (\$171,620)	\$23,874 (\$16,157)	\$17,623 (\$11,927)	\$125,363 (\$84,641)	\$0
\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
\$32,979,681	\$18,331,180	\$4,222,963	\$3,371,064	\$0	\$2,517,401	\$2,571,403	\$1,182,506	\$111,332	\$88,662	\$583,169	\$0
\$5,020,098	\$3,944,106	\$565,186	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0
\$1,447,654	\$1,139,421	\$162,894	\$49,539	\$0	\$27,078	\$27,637	\$20,530	\$8,120	\$5,945	\$6,492	\$0

**Accounts included in Avoided Costs Plus General Administration Allocation**

[illegible]

# 2018 Cost Allocation Model

**EB-2017-0038**

**Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -**

4082	Retail Services Revenues	(\$14,727)	(\$11,575)	(\$1,658)	(\$509)	\$0	(\$280)	(\$285)	(\$210)	(\$82)	(\$60)	(\$67)	\$0
4084	Service Transaction Requests (STR) Revenues	(\$6,252)	(\$4,914)	(\$704)	(\$216)	\$0	(\$119)	(\$121)	(\$89)	(\$35)	(\$26)	(\$28)	\$0
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4220	Other Electric Revenues	(\$406)	(\$319)	(\$46)	(\$14)	\$0	(\$8)	(\$8)	(\$6)	(\$2)	(\$2)	(\$2)	\$0
4225	Late Payment Charges	(\$156,628)	(\$139,324)	(\$15,796)	(\$1,508)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sub-total</b>		<b>(\$178,013)</b>	<b>(\$156,132)</b>	<b>(\$18,203)</b>	<b>(\$2,247)</b>	<b>\$0</b>	<b>(\$406)</b>	<b>(\$414)</b>	<b>(\$306)</b>	<b>(\$120)</b>	<b>(\$88)</b>	<b>(\$97)</b>	<b>\$0</b>
<b>Operation</b>													
5065	Meter Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sub-total</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Maintenance</b>													
5175	Maintenance of Meters	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
<b>Billing and Collection</b>													
5310	Meter Reading Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5315	Customer Billing	\$830,289	\$726,150	\$85,599	\$8,098	\$0	\$209	\$52	\$244	\$5,819	\$3,968	\$150	\$0
5320	Collecting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5330	Collection Charges	\$186,805	\$163,375	\$19,259	\$1,822	\$0	\$47	\$12	\$55	\$1,309	\$893	\$34	\$0
<b>Sub-total</b>		<b>\$1,017,095</b>	<b>\$889,526</b>	<b>\$104,858</b>	<b>\$9,920</b>	<b>\$0</b>	<b>\$256</b>	<b>\$64</b>	<b>\$299</b>	<b>\$7,128</b>	<b>\$4,860</b>	<b>\$184</b>	<b>\$0</b>
<b>Total Operation, Maintenance and Billing</b>		<b>\$1,066,449</b>	<b>\$925,471</b>	<b>\$116,989</b>	<b>\$10,852</b>	<b>\$0</b>	<b>\$361</b>	<b>\$90</b>	<b>\$299</b>	<b>\$7,128</b>	<b>\$4,860</b>	<b>\$399</b>	<b>\$0</b>
<b>Amortization Expense - Meters</b>													
<b>Allocated PILs</b>		<b>\$361,164</b>	<b>\$263,036</b>	<b>\$88,776</b>	<b>\$6,819</b>	<b>\$0</b>	<b>\$768</b>	<b>\$192</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,573</b>	<b>\$0</b>
<b>Allocated Debt Return</b>		<b>\$16,789</b>	<b>\$12,226</b>	<b>\$4,130</b>	<b>\$316</b>	<b>\$0</b>	<b>\$36</b>	<b>\$9</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$73</b>	<b>\$0</b>
<b>Allocated Equity Return</b>		<b>\$76,370</b>	<b>\$55,612</b>	<b>\$18,789</b>	<b>\$1,437</b>	<b>\$0</b>	<b>\$162</b>	<b>\$40</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$331</b>	<b>\$0</b>
<b>Allocated Equity Return</b>		<b>\$124,541</b>	<b>\$90,690</b>	<b>\$30,640</b>	<b>\$2,343</b>	<b>\$0</b>	<b>\$263</b>	<b>\$66</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$540</b>	<b>\$0</b>
<b>Total</b>		<b>\$1,467,301</b>	<b>\$1,190,902</b>	<b>\$241,121</b>	<b>\$19,519</b>	<b>\$0</b>	<b>\$1,184</b>	<b>(\$17)</b>	<b>(\$6)</b>	<b>\$7,008</b>	<b>\$4,773</b>	<b>\$2,818</b>	<b>\$0</b>



# 2018 Cost Allocation Model

EB-2017-0038

## Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -

### Scenario 2

Accounts included in Directly Related Customer Costs Plus General Administration Allocation

USoA Account #	Accounts	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back-up/Standby Power
1860	<b>Distribution Plant</b>												
	Meters	\$5,745,100	\$4,184,163	\$1,412,171	\$108,467	\$0	\$12,221	\$3,055	\$0	\$0	\$0	\$25,024	\$0
	<b>Accumulated Amortization</b>												
	Accum. Amortization of Electric Utility Plant - Meters only	(\$2,656,936)	(\$1,935,049)	(\$653,086)	(\$50,163)	\$0	(\$5,652)	(\$1,413)	\$0	\$0	\$0	(\$11,573)	\$0
	Meter Net Fixed Assets	\$3,088,164	\$2,249,113	\$759,084	\$58,304	\$0	\$6,569	\$1,642	\$0	\$0	\$0	\$13,451	\$0
	Allocated General Plant Net Fixed Assets	\$197,760	\$144,396	\$47,899	\$3,956	\$0	\$459	\$114	\$0	\$0	\$0	\$935	\$0
	Meter Net Fixed Assets Including General Plant	\$3,285,924	\$2,393,510	\$806,983	\$62,261	\$0	\$7,028	\$1,757	\$0	\$0	\$0	\$14,386	\$0
	<b>Misc Revenue</b>												
4082	Retail Services Revenues	(\$14,727)	(\$11,575)	(\$1,658)	(\$509)	\$0	(\$280)	(\$285)	(\$210)	(\$82)	(\$60)	(\$67)	\$0
4084	Service Transaction Requests (STR) Revenues	(\$6,252)	(\$4,914)	(\$704)	(\$216)	\$0	(\$119)	(\$121)	(\$89)	(\$35)	(\$26)	(\$28)	\$0
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4220	Other Electric Revenues	(\$406)	(\$319)	(\$46)	(\$14)	\$0	(\$8)	(\$8)	(\$6)	(\$2)	(\$2)	(\$2)	\$0
4225	Late Payment Charges	(\$156,628)	(\$139,324)	(\$15,796)	(\$1,508)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	<b>Sub-total</b>	<b>(\$178,013)</b>	<b>(\$156,132)</b>	<b>(\$18,203)</b>	<b>(\$2,247)</b>	<b>\$0</b>	<b>(\$406)</b>	<b>(\$414)</b>	<b>(\$306)</b>	<b>(\$120)</b>	<b>(\$88)</b>	<b>(\$97)</b>	<b>\$0</b>
	<b>Operation</b>												
5065	Meter Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	<b>Sub-total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
5175	<b>Maintenance</b>												
	Maintenance of Meters	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
	<b>Billing and Collection</b>												
5310	Meter Reading Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5315	Customer Billing	\$830,289	\$726,150	\$85,599	\$8,098	\$0	\$209	\$52	\$244	\$5,819	\$3,968	\$150	\$0
5320	Collecting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5330	Collection Charges	\$186,805	\$163,375	\$19,259	\$1,822	\$0	\$47	\$12	\$55	\$1,309	\$893	\$34	\$0
	<b>Sub-total</b>	<b>\$1,017,095</b>	<b>\$889,526</b>	<b>\$104,858</b>	<b>\$9,920</b>	<b>\$0</b>	<b>\$256</b>	<b>\$64</b>	<b>\$299</b>	<b>\$7,128</b>	<b>\$4,860</b>	<b>\$184</b>	<b>\$0</b>
	<b>Total Operation, Maintenance and Billing</b>	<b>\$1,066,449</b>	<b>\$925,471</b>	<b>\$116,989</b>	<b>\$10,852</b>	<b>\$0</b>	<b>\$361</b>	<b>\$90</b>	<b>\$299</b>	<b>\$7,128</b>	<b>\$4,860</b>	<b>\$399</b>	<b>\$0</b>
	<b>Amortization Expense - Meters</b>	<b>\$361,164</b>	<b>\$263,036</b>	<b>\$88,776</b>	<b>\$6,819</b>	<b>\$0</b>	<b>\$768</b>	<b>\$192</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,573</b>	<b>\$0</b>
	<b>Amortization Expense - General Plant assigned to Meters</b>	<b>\$50,947</b>	<b>\$37,199</b>	<b>\$12,340</b>	<b>\$1,019</b>	<b>\$0</b>	<b>\$118</b>	<b>\$29</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$241</b>	<b>\$0</b>
	<b>Admin and General</b>	<b>\$3,693,057</b>	<b>\$3,203,518</b>	<b>\$405,914</b>	<b>\$38,091</b>	<b>\$0</b>	<b>\$1,276</b>	<b>\$319</b>	<b>\$1,047</b>	<b>\$24,665</b>	<b>\$16,819</b>	<b>\$1,408</b>	<b>\$0</b>
	Allocated PILs	\$17,864	\$13,010	\$4,391	\$337	\$0	\$38	\$9	\$0	\$0	\$0	\$78	\$0
	Allocated Debt Return	\$81,261	\$59,182	\$19,974	\$1,534	\$0	\$173	\$43	\$0	\$0	\$0	\$354	\$0
	Allocated Equity Return	\$132,517	\$96,512	\$32,573	\$2,502	\$0	\$282	\$70	\$0	\$0	\$0	\$577	\$0
	<b>Total</b>	<b>\$5,225,246</b>	<b>\$4,441,796</b>	<b>\$662,754</b>	<b>\$58,907</b>	<b>\$0</b>	<b>\$2,611</b>	<b>\$340</b>	<b>\$1,041</b>	<b>\$31,673</b>	<b>\$21,591</b>	<b>\$4,533</b>	<b>\$0</b>

# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -**
**Scenario 3**
*Minimum System Customer Costs Adjusted for PLCC - High Limit Fixed Customer Charge*

USoA Account #	Accounts	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back- up/Standby Power
<b>Distribution Plant</b>													
1565	Conservation and Demand Management												
	Expenditures and Recoveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830	Poles, Towers and Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Poles, Towers and Fixtures - Subtransmission Bulk												
1830-3	Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830-4	Poles, Towers and Fixtures - Primary	\$2,535,324	\$2,182,785	\$257,308	\$19,764	\$0	\$510	\$128	\$27,396	\$30,347	\$16,576	\$510	\$0
1830-5	Poles, Towers and Fixtures - Secondary	\$1,248,741	\$921,081	\$108,578	\$8,340	\$0	\$215	\$0	\$190,513	\$12,805	\$6,995	\$215	\$0
1835	Overhead Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Overhead Conductors and Devices -												
1835-3	Subtransmission Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1835-4	Overhead Conductors and Devices - Primary	\$4,382,399	\$3,773,024	\$444,767	\$34,162	\$0	\$882	\$220	\$47,356	\$52,455	\$28,652	\$882	\$0
1835-5	Overhead Conductors and Devices - Secondary	\$1,968,904	\$1,452,277	\$171,195	\$13,149	\$0	\$339	\$0	\$300,384	\$20,191	\$11,028	\$339	\$0
1840	Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1840-3	Underground Conduit - Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1840-4	Underground Conduit - Primary	\$291,062	\$250,590	\$29,540	\$2,269	\$0	\$59	\$15	\$3,145	\$3,484	\$1,903	\$59	\$0
1840-5	Underground Conduit - Secondary	\$1,031,947	\$761,171	\$89,727	\$6,892	\$0	\$178	\$0	\$157,438	\$10,582	\$5,780	\$178	\$0
1845	Underground Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Underground Conductors and Devices - Bulk												
1845-3	Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1845-4	Underground Conductors and Devices - Primary	\$1,077,373	\$927,564	\$109,342	\$8,398	\$0	\$217	\$54	\$11,642	\$12,896	\$7,044	\$217	\$0
1845-5	Underground Conductors and Devices - Secondary	\$2,091,371	\$1,542,610	\$181,844	\$13,967	\$0	\$360	\$0	\$319,068	\$21,446	\$11,714	\$360	\$0
1850	Line Transformers	\$3,948,562	\$3,404,649	\$401,342	\$25,855	\$0	\$0	\$0	\$42,732	\$47,334	\$25,855	\$796	\$0
1855	Services	\$7,563,825	\$4,896,646	\$1,154,440	\$443,355	\$0	\$11,441	\$0	\$1,012,805	\$6,808	\$37,185	\$1,144	\$0
1860	Meters	\$5,721,220	\$4,184,163	\$1,412,171	\$108,467	\$0	\$12,221	\$3,055	\$0	\$0	\$0	\$1,144	\$0
<b>Sub-total</b>													
		\$31,860,729	\$24,296,560	\$4,360,254	\$684,618	\$0	\$26,422	\$3,472	\$2,112,480	\$218,347	\$152,732	\$5,844	\$0
<b>Accumulated Amortization</b>													
	Accum. Amortization of Electric Utility Plant -Line												
	Transformers, Services and Meters	(\$14,027,508)	(\$10,771,795)	(\$1,839,595)	(\$229,340)	\$0	(\$10,148)	(\$1,628)	(\$986,777)	(\$107,482)	(\$67,105)	(\$13,637)	\$0
	<b>Customer Related Net Fixed Assets</b>	<b>\$17,833,220</b>	<b>\$13,524,765</b>	<b>\$2,520,659</b>	<b>\$455,277</b>	<b>\$0</b>	<b>\$16,274</b>	<b>\$1,844</b>	<b>\$1,125,703</b>	<b>\$110,866</b>	<b>\$85,626</b>	<b>(\$7,794)</b>	<b>\$0</b>
	<b>Allocated General Plant Net Fixed Assets</b>	<b>\$1,150,199</b>	<b>\$868,308</b>	<b>\$159,057</b>	<b>\$30,894</b>	<b>\$0</b>	<b>\$1,138</b>	<b>\$128</b>	<b>\$78,030</b>	<b>\$7,684</b>	<b>\$5,501</b>	<b>(\$542)</b>	<b>\$0</b>
	<b>Customer Related NFA Including General Plant</b>	<b>\$18,983,420</b>	<b>\$14,393,073</b>	<b>\$2,679,716</b>	<b>\$486,172</b>	<b>\$0</b>	<b>\$17,412</b>	<b>\$1,972</b>	<b>\$1,203,733</b>	<b>\$118,550</b>	<b>\$91,127</b>	<b>(\$8,335)</b>	<b>\$0</b>
<b>Misc Revenue</b>													
4082	Retail Services Revenues	(\$14,727)	(\$11,575)	(\$1,658)	(\$509)	\$0	(\$280)	(\$285)	(\$210)	(\$82)	(\$60)	(\$67)	\$0
4084	Service Transaction Requests (STR) Revenues	(\$6,252)	(\$4,914)	(\$704)	(\$216)	\$0	(\$119)	(\$121)	(\$89)	(\$35)	(\$26)	(\$28)	\$0
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4220	Other Electric Revenues	(\$406)	(\$319)	(\$46)	(\$14)	\$0	(\$8)	(\$8)	(\$6)	(\$2)	(\$2)	(\$2)	\$0
4225	Late Payment Charges	(\$156,628)	(\$139,324)	(\$15,796)	(\$1,508)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4235	Miscellaneous Service Revenues	(\$98,162)	(\$87,317)	(\$9,900)	(\$945)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sub-total</b>													
		(\$276,175)	(\$243,449)	(\$28,103)	(\$3,192)	\$0	(\$406)	(\$414)	(\$306)	(\$120)	(\$88)	(\$97)	\$0



# 2018 Cost Allocation Model

EB-2017-0038

## Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -

Operating and Maintenance													
5005	Operation Supervision and Engineering	\$8,670	\$6,583	\$976	\$222	\$0	\$35	\$39	\$687	\$71	\$50	\$8	\$0
5010	Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5020	Overhead Distribution Lines and Feeders - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5035	Overhead Distribution Transformers- Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5040	Underground Distribution Lines and Feeders - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5055	Underground Distribution Transformers - Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5065	Meter Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5085	Miscellaneous Distribution Expense	\$38,007	\$28,857	\$4,280	\$973	\$0	\$152	\$171	\$3,010	\$311	\$218	\$35	\$0
5090	Underground Distribution Lines and Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5095	Overhead Distribution Lines and Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5096	Other Rent	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5105	Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5120	Maintenance of Poles, Towers and Fixtures	\$6,883	\$5,646	\$666	\$51	\$0	\$1	\$0	\$396	\$78	\$43	\$1	\$0
5125	Maintenance of Overhead Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5130	Maintenance of Overhead Services	\$34,475	\$22,319	\$5,262	\$2,021	\$0	\$52	\$0	\$4,616	\$31	\$169	\$5	\$0
5135	Overhead Distribution Lines and Feeders - Right of Way	\$29,819	\$24,505	\$2,889	\$222	\$0	\$6	\$1	\$1,664	\$341	\$186	\$6	\$0
5145	Maintenance of Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5150	Maintenance of Underground Conductors and Devices	\$2,935	\$2,288	\$270	\$21	\$0	\$1	\$0	\$306	\$32	\$17	\$1	\$0
5155	Maintenance of Underground Services	\$67,129	\$43,458	\$10,246	\$3,935	\$0	\$102	\$0	\$8,989	\$60	\$330	\$10	\$0
5160	Maintenance of Line Transformers	\$5,137	\$4,429	\$522	\$34	\$0	\$0	\$0	\$56	\$62	\$34	\$1	\$0
5175	Maintenance of Meters	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
Sub-total		\$242,411	\$174,029	\$37,242	\$8,409	\$0	\$453	\$237	\$19,724	\$986	\$1,048	\$282	\$0
Billing and Collection													
5305	Supervision	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5310	Meter Reading Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5315	Customer Billing	\$830,289	\$726,150	\$85,599	\$8,098	\$0	\$209	\$52	\$244	\$5,819	\$3,968	\$150	\$0
5320	Collecting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5330	Collection Charges	\$186,805	\$163,375	\$19,259	\$1,822	\$0	\$47	\$12	\$55	\$1,309	\$893	\$34	\$0
5335	Bad Debt Expense	\$27,209	\$24,203	\$2,744	\$262	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5340	Miscellaneous Customer Accounts Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sub-total		\$1,044,304	\$913,729	\$107,602	\$10,182	\$0	\$256	\$64	\$299	\$7,128	\$4,860	\$184	\$0
Sub Total Operating, Maintenance and Billing		\$1,286,715	\$1,087,758	\$144,844	\$18,592	\$0	\$709	\$301	\$20,023	\$8,114	\$5,908	\$466	\$0
Amortization Expense - Customer Related		\$799,426	\$600,414	\$137,791	\$17,484	\$0	\$2,568	\$2,255	\$30,616	\$3,748	\$2,552	\$1,997	\$0
Amortization Expense - General Plant assigned to Meters		\$296,315	\$223,694	\$40,976	\$7,959	\$0	\$293	\$33	\$20,102	\$1,980	\$1,417	(\$140)	\$0

# 2018 Cost Allocation Model

**EB-2017-0038**

**Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -**

Admin and General	\$4,456,945	\$3,765,276	\$502,560	\$65,257	\$0	\$2,506	\$1,066	\$70,112	\$28,077	\$20,444	\$1,646	\$0
Allocated PILs	\$103,159	\$78,236	\$14,581	\$2,634	\$0	\$94	\$11	\$6,512	\$641	\$495	(\$45)	\$0
Allocated Debt Return	\$469,257	\$355,886	\$66,328	\$11,980	\$0	\$428	\$49	\$29,621	\$2,917	\$2,253	(\$205)	\$0
Allocated Equity Return	\$765,245	\$580,364	\$108,164	\$19,536	\$0	\$698	\$79	\$48,305	\$4,757	\$3,674	(\$334)	\$0
PLCC Adjustment for Line Transformer	\$60,811	\$53,073	\$6,243	\$406	\$0	\$0	\$0	\$673	\$0	\$403	\$13	\$0
PLCC Adjustment for Primary Costs	\$90,095	\$78,483	\$9,238	\$716	\$0	\$19	\$5	\$1,020	\$0	\$596	\$19	\$0
PLCC Adjustment for Secondary Costs	\$64,849	\$56,626	\$5,711	\$408	\$0	\$11	\$3	\$0	\$0	\$2,081	\$11	\$0
<b>Total</b>	<b>\$7,685,133</b>	<b>\$6,259,999</b>	<b>\$965,951</b>	<b>\$138,720</b>	<b>\$0</b>	<b>\$6,862</b>	<b>\$3,372</b>	<b>\$223,293</b>	<b>\$50,115</b>	<b>\$33,575</b>	<b>\$3,246</b>	<b>\$0</b>



# 2018 Cost Allocation Model

## Sheet Oz.1 Line Transformer Worksheet -

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

Description	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back- up/Standby Power
Depreciation on Acct 1850 Line Transformers	\$144,047	\$45,465	\$16,320	\$27,868	\$0	\$24,064	\$24,188	\$702	\$0	\$18	\$5,421	\$0
Depreciation on General Plant Assigned to Line Transformers	\$82,580	\$25,021	\$8,828	\$16,210	\$0	\$14,426	\$14,439	\$417	\$0	\$10	\$3,229	\$0
Acct 5035 - Overhead Distribution Transformers- Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5055 - Underground Distribution Transformers - Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5160 - Maintenance of Line Transformers	\$7,705	\$2,432	\$873	\$1,491	\$0	\$1,287	\$1,294	\$38	\$0	\$1	\$290	\$0
Allocation of General Expenses	\$14,883	\$4,698	\$1,686	\$2,879	\$0	\$2,486	\$2,499	\$73	\$0	\$2	\$560	\$0
Admin and General Assigned to Line Transformers	\$26,965	\$8,419	\$3,029	\$5,232	\$0	\$4,551	\$4,574	\$132	\$0	\$3	\$1,024	\$0
PLs on Line Transformers	\$27,726	\$8,751	\$3,141	\$5,364	\$0	\$4,632	\$4,656	\$135	\$0	\$4	\$1,043	\$0
Debt Return on Line Transformers	\$126,121	\$39,807	\$14,289	\$24,400	\$0	\$21,069	\$21,178	\$615	\$0	\$16	\$4,747	\$0
Equity Return on Line Transformers	\$205,673	\$64,916	\$23,302	\$39,790	\$0	\$34,359	\$34,537	\$1,003	\$0	\$26	\$7,740	\$0
<b>Total</b>	<b>\$635,701</b>	<b>\$199,509</b>	<b>\$71,469</b>	<b>\$123,234</b>	<b>\$0</b>	<b>\$106,875</b>	<b>\$107,365</b>	<b>\$3,115</b>	<b>\$0</b>	<b>\$80</b>	<b>\$24,055</b>	<b>\$0</b>
Line Tranformer NCP	326,225	102,966	36,960	63,112	0	54,498	54,779	1,591	0	41	12,277	0
PLCC Amount	31,601	27,390	3,229	208	0	0	0	344	215	208	6	0
Adjustment to Customer Related Cost for PLCC	\$60,811	\$53,073	\$6,243	\$406	\$0	\$0	\$0	\$673	\$0	\$403	\$13	\$0
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,661	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$557,930)	(\$478,953)	\$0	(\$368,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,927)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$32,979,681</b>	<b>\$18,331,180</b>	<b>\$4,222,963</b>	<b>\$3,371,064</b>	<b>\$0</b>	<b>\$2,517,401</b>	<b>\$2,571,403</b>	<b>\$1,182,506</b>	<b>\$111,332</b>	<b>\$88,662</b>	<b>\$583,169</b>	<b>\$0</b>
<b>Total Administration and General Expense</b>	<b>\$5,020,098</b>	<b>\$3,944,106</b>	<b>\$565,186</b>	<b>\$173,883</b>	<b>\$0</b>	<b>\$95,734</b>	<b>\$97,701</b>	<b>\$71,888</b>	<b>\$28,099</b>	<b>\$20,571</b>	<b>\$22,928</b>	<b>\$0</b>
<b>Total O&amp;M</b>	<b>\$1,447,654</b>	<b>\$1,139,421</b>	<b>\$162,894</b>	<b>\$49,539</b>	<b>\$0</b>	<b>\$27,078</b>	<b>\$27,637</b>	<b>\$20,530</b>	<b>\$8,120</b>	<b>\$5,945</b>	<b>\$6,492</b>	<b>\$0</b>
<b>Line Transformer Rate Base</b>												
Acct 1850 - Line Transformers - Gross Assets	\$5,922,843	\$1,869,414	\$671,040	\$1,145,847	\$0	\$989,449	\$994,560	\$28,881	\$0	\$749	\$222,904	\$0
Line Transformers - Accumulated Depreciation	(\$1,129,841)	(\$356,609)	(\$128,008)	(\$218,582)	\$0	(\$188,747)	(\$189,722)	(\$5,509)	\$0	(\$143)	(\$42,521)	\$0
Line Transformers - Net Fixed Assets	\$4,793,003	\$1,512,805	\$543,033	\$927,265	\$0	\$800,702	\$804,838	\$23,372	\$0	\$606	\$180,383	\$0
General Plant Assigned to Line Transformers - NFA	\$320,549	\$97,124	\$34,266	\$62,922	\$0	\$55,996	\$56,047	\$1,620	\$0	\$39	\$12,534	\$0
Line Transformer Net Fixed Assets Including General Plant	\$5,113,551	\$1,609,929	\$577,299	\$990,188	\$0	\$856,698	\$860,885	\$24,992	\$0	\$645	\$192,917	\$0
<b>General Expenses</b>												
Acct 5005 - Operation Supervision and Engineering	\$13,005	\$4,112	\$1,476	\$2,519	\$0	\$2,176	\$2,188	\$42	\$0	\$2	\$490	\$0
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$57,011	\$18,026	\$6,471	\$11,044	\$0	\$9,540	\$9,590	\$183	\$0	\$7	\$2,149	\$0
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$70,016</b>	<b>\$22,139</b>	<b>\$7,947</b>	<b>\$13,563</b>	<b>\$0</b>	<b>\$11,716</b>	<b>\$11,778</b>	<b>\$225</b>	<b>\$0</b>	<b>\$9</b>	<b>\$2,640</b>	<b>\$0</b>
Acct 1850 - Line Transformers - Gross Assets	\$5,922,843	\$1,869,414	\$671,040	\$1,145,847	\$0	\$989,449	\$994,560	\$28,881	\$0	\$749	\$222,904	\$0
Acct 1815 - 1855	\$27,863,525	\$8,810,223	\$3,162,497	\$5,397,479	\$0	\$4,662,668	\$4,687,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0

## 2018 Cost Allocation Model

### Sheet 02.2 Primary Cost PLCC Adjustment Worksheet -

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

Allocation by Rate Classification

Description	Total	1	2	3	4	5	6	7	8	9	10	11
		Residential	GS <50	GS >50 to 999 kW	GS> 90-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
Depreciation on Acct 1830-4 Primary Poles, Towers & Fixtures	\$73,028	\$23,053	\$8,275	\$14,121	\$0	\$12,200	\$12,284	\$356	\$0	\$9	\$2,749	\$0
Depreciation on Acct 1835-4 Primary Overhead Conductors	\$106,761	\$33,702	\$12,098	\$20,644	\$0	\$17,836	\$17,929	\$521	\$0	\$13	\$4,019	\$0
Depreciation on Acct 1840-4 Primary Underground Conduit	\$4,522	\$1,427	\$512	\$874	\$0	\$755	\$759	\$22	\$0	\$1	\$170	\$0
Depreciation on Acct 1845-4 Primary Underground Conductors	\$17,812	\$5,623	\$2,018	\$3,444	\$0	\$2,976	\$2,991	\$87	\$0	\$2	\$670	\$0
Depreciation on General Plant Assigned to Primary C&P	\$103,706	\$31,427	\$11,088	\$20,347	\$0	\$18,117	\$18,135	\$524	\$0	\$13	\$4,056	\$0
Primary C&P Operations and Maintenance	\$33,993	\$10,628	\$3,815	\$6,510	\$0	\$5,624	\$5,654	\$190	\$0	\$4	\$1,267	\$0
Allocation of General Expenses	\$31,232	\$9,859	\$3,539	\$6,039	\$0	\$5,218	\$5,245	\$152	\$0	\$4	\$1,176	\$0
Admin and General Assigned to Primary C&P	\$117,904	\$36,788	\$13,237	\$22,851	\$0	\$19,885	\$19,988	\$665	\$0	\$15	\$4,476	\$0
PLs on Primary C&P	\$34,819	\$10,992	\$3,945	\$6,733	\$0	\$5,817	\$5,848	\$170	\$0	\$4	\$1,311	\$0
Debt Return on Primary C&P	\$158,388	\$49,999	\$17,947	\$33,627	\$0	\$26,400	\$26,599	\$772	\$0	\$20	\$5,982	\$0
Equity Return on Primary C&P	\$258,292	\$81,536	\$29,268	\$49,945	\$0	\$43,151	\$43,377	\$1,260	\$0	\$33	\$9,722	\$0
<b>Total</b>	<b>\$940,157</b>	<b>\$295,034</b>	<b>\$105,742</b>	<b>\$182,137</b>	<b>\$0</b>	<b>\$158,039</b>	<b>\$158,791</b>	<b>\$4,719</b>	<b>\$0</b>	<b>\$118</b>	<b>\$35,577</b>	<b>\$0</b>
Primary NCP	326,177	102,966	36,960	63,072	0	54,492	54,778	1,591	0	41	12,277	0
PLCC Amount	\$1,649	27,390	\$3,229	248	0	6	2	344	215	208	6	0
Adjustment to Customer Related Cost for PLCC	<b>\$90,095</b>	<b>\$78,483</b>	<b>\$9,238</b>	<b>\$716</b>	<b>\$0</b>	<b>\$19</b>	<b>\$5</b>	<b>\$1,020</b>	<b>\$0</b>	<b>\$596</b>	<b>\$19</b>	<b>\$0</b>
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,661	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	<del>(\$4,528,062)</del>	<del>(\$2,464,105)</del>	<del>(\$557,930)</del>	<del>(\$478,953)</del>	\$0	<del>(\$309,009)</del>	<del>(\$374,920)</del>	<del>(\$171,620)</del>	<del>(\$16,157)</del>	<del>(\$11,527)</del>	<del>(\$84,241)</del>	\$0
General Plant - Net Fixed Assets	<b>\$2,164,134</b>	<b>\$1,176,886</b>	<b>\$266,474</b>	<b>\$228,754</b>	\$0	<b>\$175,652</b>	<b>\$179,066</b>	<b>\$81,966</b>	<b>\$7,717</b>	<b>\$6,096</b>	<b>\$40,521</b>	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$32,975,681</b>	<b>\$18,331,180</b>	<b>\$4,222,963</b>	<b>\$3,371,064</b>	<b>\$0</b>	<b>\$2,517,401</b>	<b>\$2,571,403</b>	<b>\$1,182,506</b>	<b>\$111,332</b>	<b>\$88,662</b>	<b>\$583,169</b>	<b>\$0</b>
<b>Total Administration and General Expense</b>	<b>\$4,028,094</b>	<b>\$3,844,106</b>	<b>\$565,166</b>	<b>\$173,883</b>	<b>\$0</b>	<b>\$95,734</b>	<b>\$97,701</b>	<b>\$71,888</b>	<b>\$28,099</b>	<b>\$20,871</b>	<b>\$22,928</b>	<b>\$0</b>
<b>Total O&amp;M</b>	<b>\$1,447,654</b>	<b>\$1,139,421</b>	<b>\$162,894</b>	<b>\$49,539</b>	<b>\$0</b>	<b>\$27,078</b>	<b>\$27,637</b>	<b>\$20,530</b>	<b>\$8,120</b>	<b>\$5,945</b>	<b>\$6,492</b>	<b>\$0</b>
<b>Primary Conductors and Poles Gross Assets</b>												
Acct 1830-4 Primary Poles, Towers & Fixtures	\$3,802,985	\$1,200,505	\$430,930	\$735,376	\$0	\$635,332	\$638,670	\$18,547	\$0	\$481	\$143,145	\$0
Acct 1835-4 Primary Overhead Conductors	\$6,573,598	\$2,075,116	\$744,879	\$1,271,124	\$0	\$1,098,194	\$1,103,964	\$32,059	\$0	\$831	\$247,431	\$0
Acct 1840-4 Primary Underground Conduit	\$436,593	\$137,921	\$49,472	\$84,423	\$0	\$72,938	\$73,321	\$2,129	\$0	\$55	\$16,433	\$0
Acct 1845-4 Primary Underground Conductors	\$1,618,060	\$510,148	\$183,122	\$312,494	\$0	\$269,981	\$271,400	\$7,881	\$0	\$204	\$60,829	\$0
<b>Subtotal</b>	<b>\$12,429,236</b>	<b>\$3,923,590</b>	<b>\$1,408,403</b>	<b>\$2,403,418</b>	<b>\$0</b>	<b>\$2,076,445</b>	<b>\$2,087,355</b>	<b>\$60,616</b>	<b>\$0</b>	<b>\$1,572</b>	<b>\$467,838</b>	<b>\$0</b>
<b>Primary Conductors and Poles Accumulated Depreciation</b>												
Acct 1830-4 Primary Poles, Towers & Fixtures	<del>(\$1,249,207)</del>	<del>(\$394,343)</del>	<del>(\$141,552)</del>	<del>(\$241,557)</del>	\$0	<del>(\$208,694)</del>	<del>(\$209,791)</del>	<del>(\$6,092)</del>	\$0	<del>(\$158)</del>	<del>(\$47,020)</del>	\$0
Acct 1835-4 Primary Overhead Conductors	<del>(\$3,285,091)</del>	<del>(\$1,037,019)</del>	<del>(\$372,246)</del>	<del>(\$635,232)</del>	\$0	<del>(\$548,812)</del>	<del>(\$551,695)</del>	<del>(\$16,021)</del>	\$0	<del>(\$415)</del>	<del>(\$123,651)</del>	\$0
Acct 1840-4 Primary Underground Conduit	<del>(\$394,233)</del>	<del>(\$124,440)</del>	<del>(\$44,672)</del>	<del>(\$75,232)</del>	\$0	<del>(\$65,961)</del>	<del>(\$66,207)</del>	<del>(\$1,925)</del>	\$0	<del>(\$50)</del>	<del>(\$14,839)</del>	\$0
Acct 1845-4 Primary Underground Conductors	<del>(\$1,481,489)</del>	<del>(\$467,668)</del>	<del>(\$167,873)</del>	<del>(\$286,473)</del>	\$0	<del>(\$247,500)</del>	<del>(\$248,800)</del>	<del>(\$7,225)</del>	\$0	<del>(\$187)</del>	<del>(\$55,763)</del>	\$0
<b>Subtotal</b>	<b><del>(\$6,410,021)</del></b>	<b><del>(\$2,023,479)</del></b>	<b><del>(\$726,343)</del></b>	<b><del>(\$1,238,494)</del></b>	<b>\$0</b>	<b><del>(\$1,070,067)</del></b>	<b><del>(\$1,076,493)</del></b>	<b><del>(\$31,261)</del></b>	<b>\$0</b>	<b><del>(\$811)</del></b>	<b><del>(\$241,274)</del></b>	<b>\$0</b>
Primary Conductor & Poles - Net Fixed Assets	\$6,019,215	\$1,000,111	\$682,059	\$1,163,924	\$0	\$1,005,578	\$1,010,862	\$29,355	\$0	\$761	\$226,564	\$0
General Plant Assigned to Primary C&P - NFA	\$402,554	\$121,990	\$43,039	\$78,982	\$0	\$70,324	\$70,394	\$2,035	\$0	\$49	\$15,743	\$0
Primary C&P Net Fixed Assets Including General Plant	<b>\$6,421,769</b>	<b>\$2,022,101</b>	<b>\$725,098</b>	<b>\$1,242,906</b>	<b>\$0</b>	<b>\$1,075,902</b>	<b>\$1,081,256</b>	<b>\$31,390</b>	<b>\$0</b>	<b>\$810</b>	<b>\$242,307</b>	<b>\$0</b>
Acct 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1840-3 Bulk Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1845-3 Bulk Underground Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Acct 1830-5 Secondary Poles, Towers & Fixtures	\$1,873,112	\$594,188	\$213,288	\$363,973	\$0	\$314,457	\$316,118	\$0	\$0	\$238	\$70,849	\$0
Acct 1835-5 Secondary Overhead Conductors	\$2,953,356	\$936,863	\$336,294	\$573,881	\$0	\$495,807	\$498,427	\$0	\$0	\$375	\$111,709	\$0
Acct 1840-5 Secondary Underground Conduit	\$1,547,920	\$491,031	\$176,259	\$300,784	\$0	\$259,864	\$261,237	\$0	\$0	\$197	\$58,549	\$0
Acct 1845-5 Secondary Underground Conductors	\$3,137,057	\$995,137	\$357,212	\$609,577	\$0	\$526,847	\$529,429	\$0	\$0	\$399	\$118,057	\$0
<b>Subtotal</b>	<b>\$9,511,445</b>	<b>\$3,017,219</b>	<b>\$1,083,054</b>	<b>\$1,848,215</b>	<b>\$0</b>	<b>\$1,596,774</b>	<b>\$1,605,211</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,209</b>	<b>\$359,765</b>	<b>\$0</b>
<b>Operations and Maintenance</b>												
Acct 5020 Overhead Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5040 Underground Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5045 Underground Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5080 Underground Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 Overhead Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	\$10,325	\$3,265	\$1,172	\$2,000	\$0	\$1,728	\$1,737	\$34	\$0	\$1	\$389	\$0
Acct 5125 Maintenance of Overhead Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5135 Overhead Distribution Lines & Feeders - Right of Way	\$44,729	\$14,142	\$5,076	\$8,663	\$0	\$7,484	\$7,523	\$149	\$0	\$6	\$1,686	\$0
Acct 5145 Maintenance of Undergrounds Conduit	\$4,402	\$1,394	\$500	\$854	\$0	\$738	\$742	\$7	\$0	\$1	\$106	\$0
Acct 5150 Maintenance of Underground Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$59,456</b>	<b>\$18,801</b>	<b>\$6,749</b>	<b>\$11,516</b>	<b>\$0</b>	<b>\$9,950</b>	<b>\$10,002</b>	<b>\$190</b>	<b>\$0</b>	<b>\$8</b>	<b>\$2,242</b>	<b>\$0</b>
<b>General Expenses</b>												
Acct 5005 - Operation Supervision and Engineering	\$13,005	\$4,112	\$1,476	\$2,519	\$0	\$2,176	\$2,188	\$42	\$0	\$2	\$490	\$0
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$57,011	\$18,026	\$6,471	\$11,044	\$0	\$9,540	\$9,590	\$163	\$0	\$7	\$2,149	\$0
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$70,016</b>	<b>\$22,139</b>	<b>\$7,947</b>	<b>\$13,563</b>	<b>\$0</b>	<b>\$11,716</b>	<b>\$11,778</b>	<b>\$225</b>	<b>\$0</b>	<b>\$9</b>	<b>\$2,640</b>	<b>\$0</b>
<b>Primary Conductors and Poles Gross Assets</b>	<b>\$12,429,236</b>	<b>\$3,923,590</b>	<b>\$1,408,403</b>	<b>\$2,403,418</b>	<b>\$0</b>	<b>\$2,076,445</b>	<b>\$2,087,355</b>	<b>\$60,616</b>	<b>\$0</b>	<b>\$1,572</b>	<b>\$467,838</b>	<b>\$0</b>
<b>Acct 1815 - 1855</b>	<b>\$27,863,525</b>	<b>\$8,810,223</b>	<b>\$3,162,497</b>	<b>\$5,397,479</b>	<b>\$0</b>	<b>\$4,662,668</b>	<b>\$4,687,125</b>	<b>\$89,497</b>	<b>\$0</b>	<b>\$3,529</b>	<b>\$1,050,507</b>	<b>\$0</b>

# 2018 Cost Allocation Model

## Sheet 02.3 Secondary Cost PLCC Adjustment Work sheet -

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

Allocation by Rate Classification

Description	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back- up/Standby Power
Depreciation on Acct 1830-5 Secondary Poles, Towers & Fixtures	\$35,969	\$11,410	\$4,096	\$6,969	\$0	\$6,038	\$6,070	\$0	\$0	\$6	\$1,361	\$0
Depreciation on Acct 1830-5 Secondary Overhead Conductors	\$79,942	\$38,902	\$9,342	\$9,554	\$0	\$6,058	\$6,095	\$4,879	\$328	\$165	\$1,820	\$0
Depreciation on Acct 1840-5 Secondary Underground Conduit	\$36,169	\$17,556	\$3,729	\$4,314	\$0	\$3,646	\$3,662	\$2,207	\$148	\$84	\$823	\$0
Depreciation on Acct 1845-5 Secondary Underground Conductors	\$38,147	\$18,516	\$3,303	\$4,549	\$0	\$3,845	\$3,863	\$2,328	\$156	\$88	\$868	\$0
Depreciation on General Plant Assigned to Secondary C&P	\$48,559	\$14,912	\$5,261	\$9,656	\$0	\$6,096	\$6,055	\$0	\$0	\$6	\$1,024	\$0
Secondary C&P Operations and Maintenance	\$25,764	\$8,173	\$2,934	\$5,006	\$0	\$4,325	\$4,348	\$0	\$0	\$3	\$974	\$0
Allocation of General Expenses	\$23,961	\$7,982	\$2,722	\$4,644	\$0	\$4,012	\$4,034	\$0	\$0	\$0	\$954	\$0
Admin and General Assigned to Primary C&P	\$90,157	\$28,290	\$10,179	\$17,572	\$0	\$15,262	\$15,371	\$0	\$0	\$11	\$3,442	\$0
PLs on Secondary C&P	\$16,441	\$5,215	\$1,672	\$3,165	\$0	\$2,760	\$2,775	\$0	\$0	\$2	\$622	\$0
Debt Return on Secondary C&P	\$74,787	\$23,724	\$8,196	\$14,532	\$0	\$12,055	\$12,022	\$0	\$0	\$10	\$2,829	\$0
Equity Return on Secondary C&P	\$121,960	\$38,688	\$13,887	\$23,699	\$0	\$20,475	\$20,563	\$0	\$0	\$15	\$4,613	\$0
<b>Total</b>	<b>Error - Please Rev</b>	<b>\$212,867</b>	<b>\$68,376</b>	<b>\$103,689</b>	<b>\$0</b>	<b>\$89,603</b>	<b>\$90,027</b>	<b>\$9,414</b>	<b>\$633</b>	<b>\$413</b>	<b>\$20,180</b>	<b>\$0</b>
Secondary NCP	\$24,588	102,966	36,960	63,072	0	54,492	54,779	0	0	41	12,277	0
PLCC Amount	\$1,649	27,350	5,229	248	0	6	2	344	215	208	6	0
Adjustment to Customer Related Cost for PLCC	<b>\$64,849</b>	<b>\$66,626</b>	<b>\$5,711</b>	<b>\$489</b>	<b>\$0</b>	<b>\$11</b>	<b>\$3</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,081</b>	<b>\$11</b>	<b>\$0</b>
General Plant - Gross Assets	\$6,052,196	\$3,640,091	\$824,404	\$707,707	\$0	\$544,961	\$553,987	\$253,987	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$557,930)	(\$476,953)	\$0	(\$368,039)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,527)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,922	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,588	\$1,468	\$10,439	\$0
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$32,979,681</b>	<b>\$18,331,180</b>	<b>\$4,222,963</b>	<b>\$3,371,064</b>	<b>\$0</b>	<b>\$2,517,401</b>	<b>\$2,571,403</b>	<b>\$1,182,506</b>	<b>\$111,332</b>	<b>\$88,662</b>	<b>\$583,169</b>	<b>\$0</b>
Total Administration and General Expense	\$5,020,098	\$3,344,106	\$565,186	\$173,863	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0
<b>Total O&amp;M</b>	<b>\$1,447,854</b>	<b>\$1,139,421</b>	<b>\$162,894</b>	<b>\$49,539</b>	<b>\$0</b>	<b>\$27,078</b>	<b>\$27,637</b>	<b>\$26,530</b>	<b>\$8,120</b>	<b>\$5,945</b>	<b>\$6,492</b>	<b>\$0</b>
<b>Secondary Conductors and Poles Gross Plant</b>												
Acct 1830-5 Secondary Poles, Towers & Fixtures	\$1,873,112	\$684,188	\$213,288	\$363,973	\$0	\$314,457	\$316,118	\$0	\$0	\$238	\$70,849	\$0
Acct 1835-5 Secondary Overhead Conductors	\$2,953,266	\$936,863	\$336,294	\$573,881	\$0	\$499,807	\$498,427	\$0	\$0	\$375	\$111,709	\$0
Acct 1840-5 Secondary Underground Conduit	\$1,547,400	\$491,031	\$176,269	\$300,784	\$0	\$259,864	\$261,237	\$0	\$0	\$197	\$58,549	\$0
Acct 1845-5 Secondary Underground Conductors	\$3,137,057	\$995,137	\$357,212	\$609,577	\$0	\$526,647	\$529,429	\$0	\$0	\$399	\$118,657	\$0
<b>Subtotal</b>	<b>\$8,811,445</b>	<b>\$3,017,219</b>	<b>\$1,083,054</b>	<b>\$1,848,215</b>	<b>\$0</b>	<b>\$1,596,774</b>	<b>\$1,605,211</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,209</b>	<b>\$359,765</b>	<b>\$0</b>
<b>Secondary Conductors and Poles Accumulated Depreciation</b>												
Acct 1830-5 Secondary Poles, Towers & Fixtures	(\$915,281)	(\$195,179)	(\$70,061)	(\$119,508)	\$0	(\$103,293)	(\$103,836)	\$0	\$0	(\$78)	(\$23,273)	\$0
Acct 1835-5 Secondary Overhead Conductors	(\$1,441,760)	(\$457,255)	(\$164,171)	(\$280,155)	\$0	(\$242,042)	(\$243,320)	\$0	\$0	(\$193)	(\$54,534)	\$0
Acct 1840-5 Secondary Underground Conduit	(\$1,076,467)	(\$342,111)	(\$122,803)	(\$206,362)	\$0	(\$181,052)	(\$182,009)	\$0	\$0	(\$137)	(\$40,762)	\$0
Acct 1845-5 Secondary Underground Conductors	(\$3,533,792)	(\$1,120,949)	(\$402,307)	(\$686,666)	\$0	(\$653,250)	(\$656,365)	\$0	\$0	(\$449)	(\$133,694)	\$0
<b>Subtotal</b>	<b>(\$6,668,309)</b>	<b>(\$2,115,634)</b>	<b>(\$769,423)</b>	<b>(\$1,295,844)</b>	<b>\$0</b>	<b>(\$1,118,637)</b>	<b>(\$1,125,553)</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$847)</b>	<b>(\$202,262)</b>	<b>\$0</b>
Secondary Conductor & Poles - Net Fixed Assets	\$2,842,146	\$901,585	\$323,631	\$552,271	\$0	\$477,137	\$479,658	\$0	\$0	\$361	\$107,503	\$0
General Plant Assigned to Secondary C&P - NFA	\$190,044	\$57,883	\$20,421	\$37,476	\$0	\$33,368	\$33,402	\$0	\$0	\$23	\$7,470	\$0
Secondary C&P Net Fixed Assets Including General Plant	\$3,032,189	\$959,468	\$344,052	\$589,747	\$0	\$510,505	\$513,060	\$0	\$0	\$384	\$114,972	\$0
Acct 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1840-3 Bulk Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1845-3 Bulk Underground Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Acct 1830-4 Primary Poles, Towers & Fixtures	\$3,802,985	\$1,200,505	\$430,930	\$735,376	\$0	\$635,332	\$638,670	\$18,547	\$0	\$481	\$143,145	\$0
Acct 1835-4 Primary Overhead Conductors	\$6,573,068	\$2,075,116	\$744,879	\$1,271,124	\$0	\$1,098,194	\$1,103,964	\$32,059	\$0	\$831	\$247,431	\$0
Acct 1840-4 Primary Underground Conduit	\$636,563	\$197,821	\$49,472	\$84,423	\$0	\$72,598	\$73,321	\$2,129	\$0	\$55	\$16,433	\$0
Acct 1845-4 Primary Underground Conductors	\$1,816,060	\$510,148	\$183,122	\$312,494	\$0	\$265,981	\$271,400	\$7,881	\$0	\$204	\$60,829	\$0
<b>Subtotal</b>	<b>\$12,428,236</b>	<b>\$3,923,590</b>	<b>\$1,408,403</b>	<b>\$2,403,418</b>	<b>\$0</b>	<b>\$2,076,445</b>	<b>\$2,087,355</b>	<b>\$60,616</b>	<b>\$0</b>	<b>\$1,572</b>	<b>\$467,838</b>	<b>\$0</b>
<b>Operations and Maintenance</b>												
Acct 6020 Overhead Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 6025 Overhead Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5040 Underground Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5045 Underground Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5080 Underground Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 Overhead Distribution Lines & Feeders - Rental Paid	\$10,305	\$3,265	\$1,172	\$2,000	\$0	\$1,728	\$1,737	\$34	\$0	\$1	\$389	\$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5125 Maintenance of Overhead Conductors & Devices	\$44,729	\$14,142	\$5,076	\$8,663	\$0	\$7,484	\$7,522	\$149	\$0	\$6	\$1,886	\$0
Acct 5130 Overhead Distribution Lines & Feeders - Right of Way	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5145 Maintenance of Underground Conduit	\$4,402	\$1,394	\$500	\$854	\$0	\$738	\$742	\$7	\$0	\$1	\$166	\$0
Acct 5150 Maintenance of Underground Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$59,466</b>	<b>\$18,891</b>	<b>\$6,749</b>	<b>\$11,816</b>	<b>\$0</b>	<b>\$8,959</b>	<b>\$10,002</b>	<b>\$190</b>	<b>\$0</b>	<b>\$8</b>	<b>\$2,242</b>	<b>\$0</b>
<b>General Expenses</b>												
Acct 5085 - Operation Supervision and Engineering	\$13,005	\$4,112	\$1,476	\$2,519	\$0	\$2,178	\$2,188	\$42	\$0	\$2	\$400	\$0
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$57,011	\$18,026	\$6,471	\$11,044	\$0	\$9,540	\$9,590	\$183	\$0	\$7	\$2,149	\$0
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$70,016</b>	<b>\$22,139</b>	<b>\$7,947</b>	<b>\$13,563</b>	<b>\$0</b>	<b>\$11,716</b>	<b>\$11,778</b>	<b>\$225</b>	<b>\$0</b>	<b>\$9</b>	<b>\$2,640</b>	<b>\$0</b>
<b>Secondary Conductors and Poles Gross Assets</b>	<b>\$9,511,445</b>	<b>\$3,017,219</b>	<b>\$1,083,054</b>	<b>\$1,848,215</b>	<b>\$0</b>	<b>\$1,596,774</b>	<b>\$1,605,211</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,209</b>	<b>\$359,765</b>	<b>\$0</b>
Acct 1815 - 1855	\$27,863,525	\$8,810,223	\$3,162,487	\$5,397,479	\$0	\$4,862,868	\$4,887,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0

# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet O3.1 Line Transformers Unit Cost Worksheet -**
**ALLOCATION BY RATE CLASSIFICATION**

		1	2	3	4	5	6	7	8	9	10	11
Description	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
Depreciation on Acct 1850 Line Transformers	\$240,079	\$128,269	\$26,081	\$28,497	\$0	\$24,064	\$24,188	\$1,742	\$1,151	\$647	\$5,441	\$0
Depreciation on General Plant Assigned to Line Transformers	\$135,454	\$70,591	\$14,107	\$16,576	\$0	\$14,426	\$14,439	\$1,035	\$684	\$356	\$3,240	\$0
Acct 5035 - Overhead Distribution Transformers- Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5055 - Underground Distribution Transformers - Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5160 - Maintenance of Line Transformers	\$12,842	\$6,861	\$1,395	\$1,524	\$0	\$1,287	\$1,294	\$93	\$62	\$35	\$291	\$0
Allocation of General Expenses	\$21,343	\$10,440	\$2,295	\$2,844	\$0	\$2,469	\$2,480	\$127	\$83	\$47	\$558	\$0
Admin and General Assigned to Line Transformers	\$44,754	\$23,751	\$4,841	\$5,351	\$0	\$4,551	\$4,574	\$326	\$213	\$120	\$1,028	\$0
PILs on Line Transformers	\$46,210	\$24,689	\$5,020	\$5,485	\$0	\$4,632	\$4,656	\$335	\$222	\$125	\$1,047	\$0
Debt Return on Line Transformers	\$210,202	\$112,306	\$22,835	\$24,950	\$0	\$21,069	\$21,178	\$1,525	\$1,008	\$566	\$4,763	\$0
Equity Return on Line Transformers	\$342,789	\$183,144	\$37,239	\$40,688	\$0	\$34,359	\$34,537	\$2,487	\$1,644	\$924	\$7,768	\$0
Total	\$1,053,675	\$560,051	\$113,813	\$125,914	\$0	\$106,858	\$107,346	\$7,670	\$5,066	\$2,820	\$24,137	\$0
Billed kW without Line Transformer Allowance		0	0	220,124	0	0	0	5,449	574	0	34,856	0
Billed kWh without Line Transformer Allowance		132,507,178	48,252,843	86,975,191	0	74,898,209	96,934,403	1,985,669	221,514	517,597	16,296,711	0
Line Transformation Unit Cost (\$/kW)		\$0.0000	\$0.0000	\$0.5720	\$0.0000	\$0.0000	\$0.0000	\$1.4077	\$8.8254	\$0.0000	\$0.6925	\$0.0000
Line Transformation Unit Cost (\$/kWh)		\$0.0042	\$0.0024	\$0.0014	\$0.0000	\$0.0014	\$0.0011	\$0.0039	\$0.0229	\$0.0054	\$0.0015	\$0.0000
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,661	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$557,930)	(\$478,953)	\$0	(\$368,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,927)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
Total Net Fixed Assets Excluding General Plant	\$32,979,681	\$18,331,180	\$4,222,963	\$3,371,064	\$0	\$2,517,401	\$2,571,403	\$1,182,506	\$111,332	\$88,662	\$583,169	\$0
Total Administration and General Expense	\$5,020,098	\$3,944,106	\$565,186	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0
Total O&M	\$1,447,654	\$1,139,421	\$162,894	\$49,539	\$0	\$27,078	\$27,637	\$20,530	\$8,120	\$5,945	\$6,492	\$0
Line Transformer Rate Base												
Acct 1850 - Line Transformers - Gross Assets	\$9,871,406	\$5,274,063	\$1,072,383	\$1,171,701	\$0	\$989,449	\$994,560	\$71,613	\$47,334	\$26,603	\$223,699	\$0
Line Transformers - Accumulated Depreciation	(\$1,883,068)	(\$1,006,080)	(\$204,568)	(\$223,514)	\$0	(\$188,747)	(\$189,722)	(\$13,661)	(\$9,029)	(\$5,075)	(\$42,673)	\$0
Line Transformers - Net Fixed Assets	\$7,988,338	\$4,267,984	\$867,815	\$948,188	\$0	\$800,702	\$804,838	\$57,952	\$38,304	\$21,529	\$181,026	\$0
General Plant Assigned to Line Transformers - NFA	\$525,789	\$274,010	\$54,760	\$64,342	\$0	\$55,996	\$56,047	\$4,017	\$2,655	\$1,383	\$12,579	\$0
Line Transformer Net Fixed Assets Including General Plant	\$8,514,127	\$4,541,994	\$922,575	\$1,012,530	\$0	\$856,698	\$860,885	\$61,969	\$40,959	\$22,912	\$193,605	\$0
General Expenses												
Acct 5005 - Operation Supervision and Engineering	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498	\$0
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185	\$0
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$116,694	\$57,578	\$13,204	\$14,758	\$0	\$11,903	\$11,988	\$3,921	\$382	\$277	\$2,683	\$0
Acct 1850 - Line Transformers - Gross Assets	\$9,871,406	\$5,274,063	\$1,072,383	\$1,171,701	\$0	\$989,449	\$994,560	\$71,613	\$47,334	\$26,603	\$223,699	\$0
Acct 1815 - 1855	\$54,569,230	\$29,086,220	\$6,170,156	\$6,081,014	\$0	\$4,769,342	\$4,807,222	\$2,204,429	\$218,621	\$156,900	\$1,075,327	\$0

# 2018 Cost Allocation Model

## Sheet O3.3 Substation Transformers Unit Cost Worksheet -

### ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back- up/Standby Power
Depreciation on Acct 1820-2 Distribution Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation on Acct 1825-2 Storage Battery Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation on Acct 1805-2 Land Station <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation on Acct 1806-2 Land Rights Station <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation on Acct 1808-2 Buildings and Fixtures < 50 KV	\$11,391	\$3,975	\$1,189	\$2,099	\$0	\$1,638	\$2,043	\$26	\$3	\$9	\$409	\$0
Depreciation on Acct 1810-2 Leasehold Improvements <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation on General Plant Assigned to Substation Transformers	\$10,404	\$6,511	\$1,915	\$3,633	\$0	\$2,922	\$3,630	\$46	\$5	\$15	\$726	\$0
Acct 5012 - Station Buildings and Fixtures Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5016 - Distribution Station Equipment - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5017 - Distribution Station Equipment - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5114 - Maintenance of Distribution Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocation of General Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Admin and General Assigned to Substation Transformers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PIs on Substation Transformers	\$6,526	\$2,277	\$681	\$1,202	\$0	\$938	\$1,170	\$15	\$2	\$5	\$235	\$0
Debt Return on Substation Transformers	\$29,686	\$10,359	\$3,100	\$5,469	\$0	\$4,267	\$5,324	\$69	\$8	\$24	\$1,067	\$0
Equity Return on Substation Transformers	\$48,411	\$16,892	\$5,055	\$8,918	\$0	\$6,959	\$8,682	\$112	\$13	\$40	\$1,740	\$0
<b>Total</b>	<b>\$115,418</b>	<b>\$40,014</b>	<b>\$11,941</b>	<b>\$21,321</b>	<b>\$0</b>	<b>\$16,724</b>	<b>\$20,849</b>	<b>\$268</b>	<b>\$31</b>	<b>\$94</b>	<b>\$4,177</b>	<b>\$0</b>
Billed kW without Substation Transformer Allowance		0	0	262,052	0	160,936	168,201	5,449	574	0	34,856	0
Billed kWh without Substation Transformer Allowance		132,507,178	48,252,843	86,975,191	0	74,898,209	96,934,403	1,985,669	221,514	517,597	16,296,711	0
Substation Transformation Unit Cost (\$/kW)	\$0.0000	\$0.0000	\$0.0000	\$0.0814	\$0.0000	\$0.1240	\$0.0492	\$0.0542	\$0.0000	\$0.0000	\$0.1198	\$0.0000
Substation Transformation Unit Cost (\$/kWh)	\$0.0003	\$0.0002	\$0.0002	\$0.0000	\$0.0000	\$0.0002	\$0.0002	\$0.0001	\$0.0001	\$0.0002	\$0.0003	\$0.0000
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,661	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$557,930)	(\$479,953)	\$0	(\$368,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,927)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$32,979,681</b>	<b>\$18,331,180</b>	<b>\$4,222,963</b>	<b>\$3,371,064</b>	<b>\$0</b>	<b>\$2,517,401</b>	<b>\$2,571,403</b>	<b>\$1,182,506</b>	<b>\$111,332</b>	<b>\$88,662</b>	<b>\$583,169</b>	<b>\$0</b>
<b>Total Administration and General Expense</b>	<b>\$5,020,098</b>	<b>\$3,944,106</b>	<b>\$565,186</b>	<b>\$173,883</b>	<b>\$0</b>	<b>\$95,734</b>	<b>\$97,701</b>	<b>\$71,888</b>	<b>\$28,099</b>	<b>\$20,571</b>	<b>\$22,928</b>	<b>\$0</b>
<b>Total O&amp;M</b>	<b>\$1,447,654</b>	<b>\$1,139,421</b>	<b>\$162,894</b>	<b>\$49,539</b>	<b>\$0</b>	<b>\$27,078</b>	<b>\$27,637</b>	<b>\$20,530</b>	<b>\$8,120</b>	<b>\$5,945</b>	<b>\$6,492</b>	<b>\$0</b>
Substation Transformer Rate Base Gross Plant												
Acct 1820-2 Distribution Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1825-2 Storage Battery Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1805-2 Land Station <50 kV	\$178,544	\$62,300	\$18,643	\$32,892	\$0	\$25,665	\$32,020	\$412	\$48	\$146	\$6,418	\$0
Acct 1806-2 Land Rights Station <50 kV	\$45,679	\$15,939	\$4,770	\$8,415	\$0	\$6,566	\$8,192	\$105	\$12	\$37	\$1,642	\$0
Acct 1808-2 Buildings and Fixtures < 50 KV	\$1,006,806	\$352,009	\$105,337	\$185,844	\$0	\$145,014	\$180,917	\$2,328	\$270	\$826	\$36,260	\$0
Acct 1810-2 Leasehold Improvements <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$1,233,029</b>	<b>\$430,248</b>	<b>\$128,750</b>	<b>\$227,151</b>	<b>\$0</b>	<b>\$177,246</b>	<b>\$221,129</b>	<b>\$2,846</b>	<b>\$330</b>	<b>\$1,010</b>	<b>\$44,319</b>	<b>\$0</b>
Substation Transformers - Accumulated Depreciation												
Acct 1820-2 Distribution Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1825-2 Storage Battery Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1805-2 Land Station <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1806-2 Land Rights Station <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1808-2 Buildings and Fixtures < 50 KV	(\$104,863)	(\$36,591)	(\$10,950)	(\$19,318)	\$0	(\$15,074)	(\$18,806)	(\$242)	(\$28)	(\$96)	(\$3,769)	\$0
Acct 1810-2 Leasehold Improvements <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>(\$104,863)</b>	<b>(\$36,591)</b>	<b>(\$10,950)</b>	<b>(\$19,318)</b>	<b>\$0</b>	<b>(\$15,074)</b>	<b>(\$18,806)</b>	<b>(\$242)</b>	<b>(\$28)</b>	<b>(\$96)</b>	<b>(\$3,769)</b>	<b>\$0</b>
Substation Transformers - Net Fixed Assets	\$1,128,166	\$393,658	\$117,800	\$207,833	\$0	\$162,172	\$202,323	\$2,604	\$302	\$904	\$40,550	\$0
General Plant Assigned to Substation Transformers - NFA	\$75,319	\$25,273	\$7,433	\$14,103	\$0	\$11,341	\$14,089	\$180	\$21	\$59	\$2,818	\$0
Substation Transformer NFA Including General Plant	\$1,203,485	\$418,931	\$125,233	\$221,936	\$0	\$173,514	\$216,412	\$2,784	\$323	\$963	\$43,368	\$0
General Expenses												
Acct 5005 - Operation Supervision and Engineering	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498	\$0
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185	\$0
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$116,694</b>	<b>\$57,578</b>	<b>\$13,204</b>	<b>\$14,758</b>	<b>\$0</b>	<b>\$11,903</b>	<b>\$11,988</b>	<b>\$3,921</b>	<b>\$382</b>	<b>\$277</b>	<b>\$2,683</b>	<b>\$0</b>
Acct 1820-2 Distribution Station Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1825-2 Storage Battery Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Acct 1815 - 1855</b>	<b>\$54,569,230</b>	<b>\$29,086,220</b>	<b>\$6,170,156</b>	<b>\$6,081,014</b>	<b>\$0</b>	<b>\$4,769,342</b>	<b>\$4,807,222</b>	<b>\$2,204,429</b>	<b>\$218,621</b>	<b>\$156,900</b>	<b>\$1,075,327</b>	<b>\$0</b>



# 2018 Cost Allocation Model

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

### ALLOCATION BY RATE CLASSIFICATION

Description	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back-up/Standby Power
Depreciation on Acct 1830-4 Primary Poles, Towers & Fixtures	\$121,714	\$64,969	\$13,216	\$14,501	\$0	\$12,210	\$12,207	\$882	\$583	\$328	\$2,759	\$0
Depreciation on Acct 1835-4 Primary Overhead Conductors	\$177,935	\$94,979	\$19,321	\$21,169	\$0	\$17,850	\$17,933	\$1,290	\$852	\$479	\$4,033	\$0
Depreciation on Acct 1840-4 Primary Underground Conduct	\$37,230	\$4,023	\$918	\$888	\$0	\$756	\$750	\$55	\$38	\$20	\$171	\$0
Depreciation on Acct 1845-4 Primary Underground Conductors	\$20,680	\$15,646	\$3,223	\$3,537	\$0	\$2,978	\$2,992	\$215	\$142	\$80	\$973	\$0
Depreciation on General Plant Assigned to Primary C&P	\$170,114	\$88,568	\$17,708	\$20,894	\$0	\$18,131	\$18,139	\$1,299	\$858	\$447	\$4,070	\$0
Primary C&P Operations and Maintenance	\$56,360	\$30,215	\$6,123	\$6,687	\$0	\$5,029	\$5,655	\$344	\$272	\$153	\$1,272	\$0
Allocation of General Expenses	\$44,795	\$21,889	\$4,813	\$5,989	\$0	\$5,186	\$5,206	\$267	\$173	\$98	\$1,171	\$0
Admin and General Assigned to Primary C&P	\$196,368	\$104,599	\$21,246	\$23,473	\$0	\$19,902	\$19,892	\$1,203	\$943	\$530	\$4,492	\$0
P&L on Primary C&P	\$54,032	\$30,977	\$6,301	\$6,814	\$0	\$5,822	\$5,849	\$421	\$278	\$156	\$1,315	\$0
Debt Return on Primary C&P	\$263,979	\$140,908	\$28,664	\$31,450	\$0	\$26,482	\$26,605	\$1,913	\$1,264	\$710	\$5,983	\$0
Equity Return on Primary C&P	\$430,486	\$229,737	\$46,744	\$51,288	\$0	\$41,185	\$41,396	\$3,120	\$2,061	\$1,159	\$9,757	\$0
<b>Total</b>	<b>\$1,556,987</b>	<b>\$826,749</b>	<b>\$168,179</b>	<b>\$188,830</b>	<b>\$0</b>	<b>\$158,131</b>	<b>\$158,783</b>	<b>\$11,008</b>	<b>\$7,462</b>	<b>\$4,199</b>	<b>\$35,695</b>	<b>\$0</b>
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,061	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,520,062)	(\$2,464,100)	(\$557,830)	(\$475,653)	\$0	(\$388,039)	(\$374,800)	(\$171,620)	(\$16,157)	(\$11,507)	(\$84,941)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,896	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,488	\$10,439	\$0
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$32,979,681</b>	<b>\$18,331,190</b>	<b>\$4,222,963</b>	<b>\$3,371,064</b>	<b>\$0</b>	<b>\$2,517,401</b>	<b>\$2,571,403</b>	<b>\$1,182,506</b>	<b>\$111,332</b>	<b>\$88,662</b>	<b>\$583,168</b>	<b>\$0</b>
<b>Total Administration and General Expense</b>	<b>\$5,020,098</b>	<b>\$3,944,106</b>	<b>\$585,186</b>	<b>\$173,883</b>	<b>\$0</b>	<b>\$95,734</b>	<b>\$97,701</b>	<b>\$71,888</b>	<b>\$28,099</b>	<b>\$20,571</b>	<b>\$22,928</b>	<b>\$0</b>
<b>Total O&amp;M</b>	<b>\$1,447,854</b>	<b>\$1,139,421</b>	<b>\$162,894</b>	<b>\$49,539</b>	<b>\$0</b>	<b>\$27,078</b>	<b>\$27,637</b>	<b>\$20,530</b>	<b>\$8,120</b>	<b>\$5,945</b>	<b>\$6,492</b>	<b>\$0</b>
Primary Conductors and Poles Gross Assets	\$6,338,309	\$3,383,290	\$688,239	\$755,140	\$0	\$635,842	\$638,797	\$45,943	\$30,347	\$17,057	\$143,655	\$0
Acct 1830-4 Primary Poles, Towers & Fixtures	\$10,965,997	\$5,848,139	\$1,180,645	\$1,305,286	\$0	\$1,099,076	\$1,104,185	\$79,415	\$52,465	\$29,433	\$243,313	\$0
Acct 1840-4 Primary Underground Conduct	\$727,655	\$388,411	\$79,012	\$86,692	\$0	\$72,966	\$73,336	\$5,274	\$3,484	\$1,968	\$16,462	\$0
Acct 1845-4 Primary Underground Conductors	\$2,693,433	\$1,437,712	\$292,454	\$320,893	\$0	\$270,199	\$271,454	\$17,523	\$12,896	\$7,190	\$61,045	\$0
<b>Subtotal</b>	<b>\$20,715,394</b>	<b>\$11,067,652</b>	<b>\$2,249,359</b>	<b>\$2,466,911</b>	<b>\$0</b>	<b>\$2,078,112</b>	<b>\$2,087,771</b>	<b>\$150,156</b>	<b>\$99,181</b>	<b>\$55,746</b>	<b>\$469,505</b>	<b>\$0</b>
Primary Conductors and Poles Accumulated Depreciation	(\$2,082,012)	(\$1,111,346)	(\$226,073)	(\$248,049)	\$0	(\$208,862)	(\$209,833)	(\$15,092)	(\$9,968)	(\$5,603)	(\$47,188)	\$0
Acct 1830-4 Primary Poles, Towers & Fixtures	(\$5,475,152)	(\$2,922,550)	(\$594,514)	(\$652,304)	\$0	(\$549,252)	(\$551,805)	(\$39,687)	(\$26,214)	(\$14,734)	(\$124,092)	\$0
Acct 1840-4 Primary Underground Conduct	(\$697,055)	(\$350,726)	(\$71,346)	(\$78,291)	\$0	(\$65,145)	(\$66,200)	(\$4,763)	(\$3,145)	(\$1,650)	(\$14,652)	\$0
Acct 1845-4 Primary Underground Conductors	(\$2,468,149)	(\$1,317,993)	(\$268,110)	(\$294,172)	\$0	(\$247,698)	(\$248,850)	(\$17,898)	(\$11,822)	(\$6,645)	(\$55,962)	\$0
<b>Subtotal</b>	<b>(\$10,633,369)</b>	<b>(\$5,702,616)</b>	<b>(\$1,085,442)</b>	<b>(\$1,272,806)</b>	<b>\$0</b>	<b>(\$1,071,726)</b>	<b>(\$1,076,708)</b>	<b>(\$77,439)</b>	<b>(\$51,190)</b>	<b>(\$28,786)</b>	<b>(\$242,134)</b>	<b>\$0</b>
Primary Conductor & Pools - Net Fixed Assets	\$10,032,025	\$5,354,938	\$1,099,317	\$1,195,205	\$0	\$1,006,385	\$1,011,063	\$72,717	\$48,031	\$26,997	\$227,371	\$0
General Plant Assigned to Primary C&P - MF&A	\$690,327	\$343,734	\$68,104	\$68,737	\$0	\$70,381	\$70,608	\$5,041	\$3,329	\$1,734	\$15,769	\$0
Primary C&P Net Fixed Assets Including General Plant	\$10,692,352	\$5,698,732	\$1,158,054	\$1,276,309	\$0	\$1,076,766	\$1,081,471	\$77,758	\$51,361	\$28,731	\$243,170	\$0
Acct 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1840-3 Bulk Underground Conduct	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1845-3 Bulk Underground Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Acct 1830-5 Secondary Poles, Towers & Fixtures	\$3,121,854	\$1,515,269	\$321,866	\$372,313	\$0	\$314,672	\$316,118	\$190,513	\$12,805	\$7,333	\$71,065	\$0
Acct 1835-5 Secondary Overhead Conductors	\$4,922,259	\$2,389,140	\$507,490	\$587,030	\$0	\$498,146	\$498,427	\$300,384	\$20,191	\$11,404	\$112,048	\$0
Acct 1840-5 Secondary Underground Conduct	\$2,579,867	\$1,252,022	\$265,997	\$307,676	\$0	\$260,042	\$261,237	\$157,438	\$10,582	\$5,977	\$56,727	\$0
Acct 1845-5 Secondary Underground Conductors	\$5,228,429	\$2,537,747	\$530,056	\$623,544	\$0	\$527,007	\$529,429	\$319,068	\$21,446	\$12,113	\$119,018	\$0
<b>Subtotal</b>	<b>\$15,852,409</b>	<b>\$7,694,358</b>	<b>\$1,634,398</b>	<b>\$1,890,563</b>	<b>\$0</b>	<b>\$1,597,867</b>	<b>\$1,605,211</b>	<b>\$967,403</b>	<b>\$65,025</b>	<b>\$36,726</b>	<b>\$360,858</b>	<b>\$0</b>
Operations and Maintenance												
Acct 8020 Overhead Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8025 Overhead Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8040 Underground Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8045 Underground Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8080 Underground Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8085 Overhead Distribution Lines & Feeders - Rental Paid	\$17,200	\$8,911	\$1,837	\$2,051	\$0	\$1,729	\$1,737	\$430	\$78	\$44	\$391	\$0
Acct 8120 Maintenance of Poles, Towers & Fixtures	\$74,548	\$38,647	\$7,965	\$9,884	\$0	\$7,490	\$7,524	\$1,813	\$341	\$192	\$1,692	\$0
Acct 8125 Maintenance of Overhead Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8135 Overhead Distribution Lines & Feeders - Right of Way	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8145 Maintenance of Underground Conduct	\$7,337	\$3,682	\$770	\$875	\$0	\$738	\$742	\$314	\$32	\$18	\$167	\$0
Acct 8160 Maintenance of Underground Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$95,094</b>	<b>\$51,240</b>	<b>\$10,673</b>	<b>\$11,810</b>	<b>\$0</b>	<b>\$9,967</b>	<b>\$10,003</b>	<b>\$2,687</b>	<b>\$491</b>	<b>\$254</b>	<b>\$2,249</b>	<b>\$0</b>
General Expenses												
Acct 8005 - Operation Supervision and Engineering	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498	\$0
Acct 8010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8085 - Miscellaneous Distribution Expense	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185	\$0
Acct 8105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$116,694</b>	<b>\$67,678</b>	<b>\$13,204</b>	<b>\$14,758</b>	<b>\$0</b>	<b>\$11,903</b>	<b>\$11,968</b>	<b>\$3,921</b>	<b>\$392</b>	<b>\$277</b>	<b>\$2,683</b>	<b>\$0</b>
Primary Conductors and Poles Gross Assets	\$20,715,394	\$11,067,652	\$2,249,359	\$2,466,911	\$0	\$2,078,112	\$2,087,771	\$150,156	\$99,181	\$55,746	\$469,505	\$0
Acct 1815 - 1855	\$54,999,290	\$29,086,220	\$6,170,156	\$6,081,014	\$0	\$4,769,342	\$4,807,222	\$2,204,429	\$218,621	\$156,900	\$1,075,327	\$0

Grouping of Operation and Maintenance	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
1830	\$ 17,200	\$ 8,911	\$ 1,837	\$ 2,051	\$ -	\$ 1,729	\$ 1,737	\$ 430	\$ 78	\$ 44	\$ 391	\$ -
1835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1845	\$ 7,337	\$ 3,682	\$ 770	\$ 875	\$ -	\$ 738	\$ 742	\$ 314	\$ 32	\$ 18	\$ 167	\$ -
1830 & 1835	\$ 74,548	\$ 38,647	\$ 7,965	\$ 9,884	\$ -	\$ 7,490	\$ 7,524	\$ 1,813	\$ 341	\$ 192	\$ 1,692	\$ -
1840 & 1845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 95,094</b>	<b>\$ 51,240</b>	<b>\$ 10,673</b>	<b>\$ 11,810</b>	<b>\$ -</b>	<b>\$ 9,967</b>	<b>\$ 10,003</b>	<b>\$ 2,687</b>	<b>\$ 491</b>	<b>\$ 254</b>	<b>\$ 2,249</b>	<b>\$ -</b>

## 2018 Cost Allocation Model

**Sheet 03.4 Secondary Cost Pool Worksheet -**

### ALLOCATION BY RATE CLASSIFICATION

		1	2	3	4	5	6	7	8	9	10	11
Description	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
Depreciation on Acct 1830-5 Secondary Poles, Towers & Fixtures	\$59,949	\$29,098	\$6,181	\$7,150	\$0	\$6,043	\$6,070	\$3,658	\$246	\$139	\$1,365	\$0
Depreciation on Acct 1835-5 Secondary Overhead Conductors	\$79,942	\$38,802	\$8,242	\$9,534	\$0	\$8,058	\$8,095	\$4,879	\$328	\$185	\$1,820	\$0
Depreciation on Acct 1840-5 Secondary Underground Conduit	\$36,169	\$17,556	\$3,729	\$4,314	\$0	\$3,646	\$3,662	\$2,207	\$148	\$84	\$823	\$0
Depreciation on Acct 1845-5 Secondary Underground Conductors	\$38,147	\$18,516	\$3,933	\$4,549	\$0	\$3,845	\$3,863	\$2,328	\$156	\$88	\$868	\$0
Depreciation on General Plant Assigned to Secondary C&P	\$80,671	\$38,027	\$7,939	\$9,876	\$0	\$8,602	\$8,605	\$5,162	\$347	\$182	\$1,930	\$0
Secondary C&P Operations and Maintenance	\$42,743	\$21,025	\$4,449	\$5,123	\$0	\$4,328	\$4,348	\$2,213	\$179	\$101	\$977	\$0
Allocation of General Expenses	\$34,108	\$15,231	\$3,498	\$4,588	\$0	\$3,988	\$4,003	\$1,721	\$114	\$65	\$900	\$0
Admin and General Assigned to Primary C&P	\$149,039	\$72,778	\$15,437	\$17,981	\$0	\$15,302	\$15,371	\$7,750	\$618	\$349	\$3,453	\$0
PILs on Secondary C&P	\$27,402	\$13,300	\$2,825	\$3,268	\$0	\$2,762	\$2,775	\$1,672	\$112	\$63	\$624	\$0
Debt Return on Secondary C&P	\$124,645	\$60,500	\$12,851	\$14,865	\$0	\$12,564	\$12,622	\$7,607	\$511	\$289	\$2,837	\$0
Equity Return on Secondary C&P	\$203,266	\$98,660	\$20,957	\$24,242	\$0	\$20,489	\$20,583	\$12,404	\$934	\$471	\$4,627	\$0
Total	\$876,080	\$423,492	\$90,041	\$105,489	\$0	\$89,626	\$89,997	\$51,602	\$3,593	\$2,016	\$20,225	\$0
General Plant - Gross Assets	\$6,692,196	\$3,640,991	\$824,404	\$707,707	\$0	\$544,661	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$557,930)	(\$478,953)	\$0	(\$368,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,927)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
Total Net Fixed Assets Excluding General Plant	\$32,979,681	\$18,331,180	\$4,222,963	\$3,371,064	\$0	\$2,517,401	\$2,571,403	\$1,182,506	\$111,332	\$88,662	\$583,169	\$0
Total Administration and General Expense	\$5,020,098	\$3,944,106	\$565,186	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0
Total O&M	\$1,447,654	\$1,139,421	\$162,894	\$49,539	\$0	\$27,078	\$27,637	\$20,530	\$8,120	\$5,945	\$6,492	\$0
Secondary Conductors and Poles Gross Plant												
Acct 1830-5 Secondary Poles, Towers & Fixtures	\$3,121,854	\$1,515,269	\$321,866	\$372,313	\$0	\$314,672	\$316,118	\$190,513	\$12,805	\$7,233	\$71,065	\$0
Acct 1835-5 Secondary Overhead Conductors	\$4,922,259	\$2,389,140	\$507,490	\$587,030	\$0	\$496,146	\$498,427	\$300,384	\$20,191	\$11,404	\$112,048	\$0
Acct 1840-5 Secondary Underground Conduit	\$2,579,867	\$1,252,202	\$265,987	\$307,676	\$0	\$260,042	\$261,237	\$157,438	\$10,582	\$5,977	\$58,727	\$0
Acct 1845-5 Secondary Underground Conductors	\$5,228,429	\$2,537,747	\$539,056	\$623,544	\$0	\$527,007	\$529,429	\$319,068	\$21,446	\$12,113	\$119,018	\$0
Subtotal	\$15,852,409	\$7,694,358	\$1,634,398	\$1,890,563	\$0	\$1,597,867	\$1,605,211	\$967,403	\$65,025	\$36,726	\$360,858	\$0
Secondary Conductors and Poles Accumulated Depreciation												
Acct 1830-5 Secondary Poles, Towers & Fixtures	(\$1,025,469)	(\$497,737)	(\$105,727)	(\$122,298)	\$0	(\$103,364)	(\$103,839)	(\$62,580)	(\$4,206)	(\$2,376)	(\$23,343)	\$0
Acct 1835-5 Secondary Overhead Conductors	(\$2,402,933)	(\$1,166,323)	(\$247,745)	(\$286,574)	\$0	(\$242,207)	(\$243,320)	(\$146,640)	(\$9,857)	(\$5,567)	(\$54,699)	\$0
Acct 1840-5 Secondary Underground Conduit	(\$1,797,444)	(\$872,434)	(\$185,318)	(\$214,364)	\$0	(\$181,176)	(\$182,009)	(\$109,690)	(\$7,373)	(\$4,164)	(\$40,916)	\$0
Acct 1845-5 Secondary Underground Conductors	(\$5,689,654)	(\$2,858,689)	(\$607,229)	(\$702,402)	\$0	(\$593,656)	(\$596,385)	(\$359,420)	(\$24,159)	(\$13,645)	(\$134,070)	\$0
Subtotal	(\$11,115,500)	(\$5,395,182)	(\$1,146,018)	(\$1,325,638)	\$0	(\$1,120,403)	(\$1,125,553)	(\$678,330)	(\$45,595)	(\$25,752)	(\$253,029)	\$0
Secondary Conductor & Pools - Net Fixed Assets	\$4,736,909	\$2,299,176	\$488,380	\$564,925	\$0	\$477,464	\$479,658	\$289,073	\$19,430	\$10,974	\$107,829	\$0
General Plant Assigned to Secondary C&P - NFA	\$313,137	\$147,610	\$30,817	\$38,335	\$0	\$33,391	\$33,402	\$20,038	\$1,347	\$705	\$7,492	\$0
Secondary C&P Net Fixed Assets Including General Plant	\$5,050,047	\$2,446,786	\$519,197	\$603,260	\$0	\$510,855	\$513,060	\$309,110	\$20,777	\$11,679	\$115,322	\$0
Acct 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1840-3 Bulk Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1845-3 Bulk Underground Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1830-4 Primary Poles, Towers & Fixtures	\$6,338,309	\$3,383,290	\$688,239	\$755,140	\$0	\$635,842	\$638,797	\$45,943	\$30,347	\$17,057	\$143,655	\$0
Acct 1835-4 Primary Overhead Conductors	\$10,955,997	\$5,848,139	\$1,189,645	\$1,305,286	\$0	\$1,099,076	\$1,104,185	\$79,415	\$52,455	\$29,483	\$248,313	\$0
Acct 1840-4 Primary Underground Conduit	\$727,655	\$388,411	\$79,012	\$86,692	\$0	\$72,996	\$73,302	\$5,274	\$3,484	\$1,958	\$16,432	\$0
Acct 1845-4 Primary Underground Conductors	\$2,693,433	\$1,437,712	\$292,464	\$320,893	\$0	\$270,198	\$271,454	\$19,523	\$12,896	\$7,248	\$61,045	\$0
Subtotal	\$20,715,394	\$11,057,552	\$2,249,359	\$2,468,011	\$0	\$2,078,112	\$2,087,771	\$150,156	\$99,181	\$55,746	\$469,505	\$0
Operations and Maintenance												
Acct 5020 Overhead Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5025 Overhead Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# 2018 Cost Allocation Model

## Sheet 03.4 Secondary Cost Pool Worksheet -

### ALLOCATION BY RATE CLASSIFICATION

Description	1	2	3	4	5	6	7	8	9	10	11
Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
Acct 5040 Underground Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5045 Underground Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5090 Underground Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5095 Overhead Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	\$17,208	\$8,911	\$1,837	\$2,051	\$0	\$1,729	\$1,737	\$430	\$78	\$44	\$391
Acct 5125 Maintenance of Overhead Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5135 Overhead Distribution Lines & Feeders - Right of Way	\$74,548	\$38,647	\$7,965	\$8,884	\$0	\$7,490	\$7,524	\$1,813	\$341	\$192	\$1,692
Acct 5145 Maintenance of Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5150 Maintenance of Underground Conductors & Devices	\$7,337	\$3,682	\$770	\$875	\$0	\$738	\$742	\$314	\$32	\$18	\$167
<b>Total</b>	<b>\$99,094</b>	<b>\$51,240</b>	<b>\$10,573</b>	<b>\$11,810</b>	<b>\$0</b>	<b>\$9,957</b>	<b>\$10,003</b>	<b>\$2,557</b>	<b>\$451</b>	<b>\$254</b>	<b>\$2,249</b>
<b>General Expenses</b>											
Acct 5005 - Operation Supervision and Engineering	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498
Acct 5010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5085 - Miscellaneous Distribution Expense	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185
Acct 5105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$116,694</b>	<b>\$57,578</b>	<b>\$13,204</b>	<b>\$14,758</b>	<b>\$0</b>	<b>\$11,903</b>	<b>\$11,988</b>	<b>\$3,921</b>	<b>\$382</b>	<b>\$277</b>	<b>\$2,683</b>
<b>Secondary Conductors and Poles Gross Assets</b>	<b>\$15,852,409</b>	<b>\$7,694,358</b>	<b>\$1,634,398</b>	<b>\$1,890,563</b>	<b>\$0</b>	<b>\$1,597,867</b>	<b>\$1,605,211</b>	<b>\$967,403</b>	<b>\$65,025</b>	<b>\$36,726</b>	<b>\$360,858</b>
<b>Acct 1815 - 1855</b>	<b>\$54,569,230</b>	<b>\$29,086,220</b>	<b>\$6,170,156</b>	<b>\$6,081,014</b>	<b>\$0</b>	<b>\$4,769,342</b>	<b>\$4,807,222</b>	<b>\$2,204,429</b>	<b>\$218,621</b>	<b>\$156,900</b>	<b>\$1,075,327</b>

### Grouping of Operation and Maintenance

	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
1830	\$ 17,208	\$ 8,911	\$ 1,837	\$ 2,051	\$ -	\$ 1,729	\$ 1,737	\$ 430	\$ 78	\$ 44	\$ 391	\$ -
1835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1845	\$ 7,337	\$ 3,682	\$ 770	\$ 875	\$ -	\$ 738	\$ 742	\$ 314	\$ 32	\$ 18	\$ 167	\$ -
1830 & 1835	\$ 74,548	\$ 38,647	\$ 7,965	\$ 8,884	\$ -	\$ 7,490	\$ 7,524	\$ 1,813	\$ 341	\$ 192	\$ 1,692	\$ -
1840 & 1845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<b>\$ 99,094</b>	<b>\$ 51,240</b>	<b>\$ 10,573</b>	<b>\$ 11,810</b>	<b>\$ -</b>	<b>\$ 9,957</b>	<b>\$ 10,003</b>	<b>\$ 2,557</b>	<b>\$ 451</b>	<b>\$ 254</b>	<b>\$ 2,249</b>	<b>\$ -</b>



Ontario Energy Board

# 2018 Cost Allocation Model

## Sheet 03.5 USL Metering Credit Worksheet -

### ALLOCATION BY RATE CLASSIFICATION

<u>Description</u>	GS <50
Depreciation on Acct 1860 Metering	\$88,776
Depreciation on General Plant Assigned to Metering	\$12,340
Acct 5065 - Meter expense	\$0
Acct 5070 & 5075 - Customer Premises	\$0
Acct 5175 - Meter Maintenance	\$12,132
Acct 5310 - Meter Reading	\$0
Admin and General Assigned to Metering	\$42,093
PILs on Metering	\$4,391
Debt Return on Metering	\$19,974
Equity Return on Metering	\$32,573
<b>Total</b>	<b>\$212,278</b>
 Number of Customers	 2,018
 Metering Unit Cost (\$/Customer/Month)	 <b>\$8.77</b>
 General Plant - Gross Assets	 \$824,404
General Plant - Accumulated Depreciation	(\$557,930)
General Plant - Net Fixed Assets	\$266,474
 General Plant - Depreciation	 \$68,649
<b>Total Net Fixed Assets Excluding General Plant</b>	<b>\$4,222,963</b>
<b>Total Administration and General Expense</b>	<b>\$565,186</b>
<b>Total O&amp;M</b>	<b>\$162,894</b>
 Metering Rate Base	 
Acct 1860 - Metering - Gross Assets	\$1,412,171
Metering - Accumulated Depreciation	(\$653,086)
Metering - Net Fixed Assets	\$759,084
General Plant Assigned to Metering - NFA	\$47,899
Metering Net Fixed Assets Including General Plant	\$806,983



# 2018 Cost Allocation Model

**EB-2017-0038**

**Sheet O3.6 MicroFIT Charge Worksheet -**

**Instructions:**

More Instructions provided on the first tab in this workbook.

**ALLOCATION BY RATE CLASSIFICATION**

<b><u>Description</u></b>	<b>Residential</b>	<b>Monthly Unit Cost</b>
Customer Premises - Operations Labour (5070)	\$ -	\$ -
Customer Premises - Materials and Expenses (5075)	\$ -	\$ -
Meter Expenses (5065)	\$ -	\$ -
Maintenance of Meters (5175)	\$ 35,945.04	\$ 0.17
Meter Reading Expenses (5310)	\$ -	\$ -
Customer Billing (5315)	\$ 726,150.26	\$ 3.53
Amortization Expense - General Plant Assigned to Meters	\$ 37,199.43	\$ 0.18
Admin and General Expenses allocated to O&M expenses for meters	\$ 482,665.62	\$ 2.35
Allocated PILS (general plant assigned to meters)	\$ 784.89	\$ 0.00
Interest Expense	\$ 3,570.36	\$ 0.02
Income Expenses	\$ 5,822.40	\$ 0.03
<b>Total Cost</b>	<b>\$ 1,292,138.00</b>	<b>\$ 6.29</b>
<b>Number of Residential Customers</b>	<b>17119</b>	

## 2018 Cost Allocation Model

**EB-2017-0038**

### Sheet 04 Summary of Allocators by Class & Accounts -

### ALLOCATION BY RATE CLASSIFICATION

				1	2	3	4	5	6	7	8	9	10	11
USoA Account #	Accounts	O1 Grouping	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
1565	Conservation and Demand Management Expenditures and Recoveries	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1608	Franchises and Consents	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1805	Land	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1805-1	Land Station >50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1805-2	Land Station <50 kV	dp	\$178,544	\$62,300	\$18,643	\$32,892	\$0	\$25,665	\$32,000	\$412	\$48	\$146	\$6,418	\$0
1806	Land Rights	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1806-1	Land Rights Station >50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1806-2	Land Rights Station <50 kV	dp	\$45,679	\$15,939	\$4,770	\$8,415	\$0	\$6,566	\$8,192	\$105	\$12	\$37	\$1,642	\$0
1808	Buildings and Fixtures	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1808-1	Buildings and Fixtures > 50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1808-2	Buildings and Fixtures < 50 kV	dp	\$1,008,806	\$352,009	\$105,337	\$185,844	\$0	\$145,014	\$180,917	\$2,328	\$270	\$826	\$36,260	\$0
1810	Leasehold Improvements	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1810-1	Leasehold Improvements >50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1810-2	Leasehold Improvements <50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1815	Transformer Station Equipment - Normally Primary above 50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1820	Distribution Station Equipment - Normally Primary below 50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)	dp	\$566,197	\$163,600	\$59,575	\$107,384	\$0	\$92,473	\$119,680	\$2,452	\$273	\$639	\$20,121	\$0
1825	Storage Battery Equipment	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1825-1	Storage Battery Equipment > 50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1825-2	Storage Battery Equipment <50 kV	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830	Poles, Towers and Fixtures	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830-3	Poles, Towers and Fixtures - Subtransmission Bulk Delivery	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830-4	Poles, Towers and Fixtures - Primary	dp	\$6,338,309	\$3,383,220	\$688,239	\$755,140	\$0	\$635,842	\$638,797	\$45,943	\$30,347	\$17,057	\$143,655	\$0
1830-5	Poles, Towers and Fixtures - Secondary	dp	\$3,121,854	\$1,515,269	\$321,866	\$372,313	\$0	\$314,672	\$316,118	\$190,513	\$12,805	\$7,233	\$71,065	\$0
1835	Overhead Conductors and Devices	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1835-3	Overhead Conductors and Devices - Subtransmission Bulk Delivery	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1835-4	Overhead Conductors and Devices - Primary	dp	\$10,955,997	\$5,848,139	\$1,189,645	\$1,305,286	\$0	\$1,099,076	\$1,104,185	\$79,415	\$52,455	\$29,483	\$248,313	\$0
1835-5	Overhead Conductors and Devices - Secondary	dp	\$4,922,259	\$2,389,140	\$507,490	\$587,030	\$0	\$496,146	\$498,427	\$300,384	\$20,191	\$11,404	\$112,048	\$0
1840	Underground Conduit	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1840-3	Underground Conduit - Bulk Delivery	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1840-4	Underground Conduit - Primary	dp	\$727,655	\$388,411	\$79,012	\$86,692	\$0	\$72,996	\$73,336	\$5,274	\$3,484	\$1,958	\$16,492	\$0
1840-5	Underground Conduit - Secondary	dp	\$2,579,867	\$1,252,202	\$265,987	\$307,676	\$0	\$260,042	\$261,237	\$157,438	\$10,582	\$5,977	\$58,727	\$0
1845	Underground Conductors and Devices	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1845-3	Underground Conductors and Devices - Bulk Delivery	dp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1845-4	Underground Conductors and Devices - Primary	dp	\$2,693,433	\$1,437,712	\$292,464	\$320,893	\$0	\$270,198	\$271,454	\$19,523	\$12,896	\$7,248	\$61,045	\$0
1845-5	Underground Conductors and Devices - Secondary	dp	\$5,228,429	\$2,537,747	\$539,056	\$623,544	\$0	\$527,007	\$529,429	\$319,068	\$21,446	\$12,113	\$119,018	\$0
1850	Line Transformers	dp	\$9,871,406	\$5,274,063	\$1,072,383	\$1,171,701	\$0	\$989,449	\$994,560	\$71,613	\$47,334	\$26,603	\$223,699	\$0
1855	Services	dp	\$7,563,825	\$4,896,646	\$1,154,440	\$443,355	\$0	\$11,441	\$0	\$1,012,805	\$6,808	\$37,185	\$1,144	\$0
1860	Meters	dp	\$5,745,100	\$4,184,163	\$1,412,171	\$108,467	\$0	\$12,221	\$3,055	\$0	\$0	\$0	\$25,024	\$0
1905	Land	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1906	Land Rights	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1908	Buildings and Fixtures	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1910	Leasehold Improvements	gp	\$523,146	\$284,626	\$64,446	\$55,323	\$0	\$42,578	\$43,307	\$19,824	\$1,866	\$1,378	\$9,800	\$0
1915	Office Furniture and Equipment	gp	\$97,709	\$53,160	\$12,037	\$10,333	\$0	\$7,952	\$9,088	\$3,703	\$349	\$257	\$1,630	\$0
1920	Computer Equipment - Hardware	gp	\$327,815	\$176,353	\$40,383	\$34,667	\$0	\$26,680	\$27,137	\$12,422	\$1,169	\$863	\$6,141	\$0
1925	Computer Software	gp	\$1,525,552	\$830,000	\$187,931	\$161,329	\$0	\$124,161	\$126,287	\$57,808	\$5,442	\$4,017	\$28,578	\$0
1930	Transportation Equipment	gp	\$3,198,163	\$1,740,009	\$393,978	\$338,209	\$0	\$260,290	\$264,747	\$121,188	\$11,409	\$8,422	\$59,910	\$0
1935	Stores Equipment	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1940	Tools, Shop and Garage Equipment	gp	\$288,783	\$157,117	\$35,575	\$30,539	\$0	\$23,503	\$23,906	\$10,943	\$1,030	\$760	\$5,410	\$0
1945	Measurement and Testing Equipment	gp	\$31,082	\$16,911	\$3,829	\$3,287	\$0	\$2,530	\$2,573	\$1,178	\$111	\$82	\$582	\$0
1950	Power Operated Equipment	gp	\$224,659	\$122,229	\$27,676	\$23,758	\$0	\$18,284	\$18,598	\$8,513	\$801	\$592	\$4,208	\$0
1955	Communication Equipment	gp	\$31,915	\$17,364	\$3,932	\$3,375	\$0	\$2,598	\$2,642	\$1,209	\$114	\$84	\$598	\$0
1960	Miscellaneous Equipment	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet 04 Summary of Allocators by Class & Accounts -**
**ALLOCATION BY RATE CLASSIFICATION**

USoA Account #	Accounts	O1 Grouping	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back-up/Standby Power
1970	Load Management Controls - Customer Premises	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1975	Load Management Controls - Utility Premises	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1980	System Supervisory Equipment	gp	\$607,299	\$330,410	\$74,813	\$64,223	\$0	\$49,427	\$50,273	\$23,012	\$2,166	\$1,599	\$11,376	\$0
1990	Other Tangible Property	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1995	Contributions and Grants - Credit	co	(\$10,440,600)	(\$5,212,019)	(\$1,092,793)	(\$1,244,787)	\$0	(\$1,050,946)	(\$1,055,792)	(\$476,716)	(\$44,872)	(\$25,305)	(\$237,370)	\$0
2005	Property Under Capital Leases	gp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2010	Electric Plant Purchased or Sold	gp	(\$163,929)	(\$89,188)	(\$20,194)	(\$17,336)	\$0	(\$13,342)	(\$13,570)	(\$6,212)	(\$585)	(\$432)	(\$3,071)	\$0
2105	Accum. Amortization of Electric Utility Plant - Property, Plant, & Equipment	accum dep	(\$22,856,141)	(\$12,621,536)	(\$2,953,251)	(\$2,279,734)	\$0	(\$1,759,070)	(\$1,779,132)	(\$719,673)	(\$78,904)	(\$55,869)	(\$408,972)	\$0
2120	Accumulated Amortization of Electric Utility Plant - Intangibles	accum dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3046	Balance Transferred From Income	NI	(\$1,415,197)	(\$786,613)	(\$181,212)	(\$144,656)	\$0	(\$108,025)	(\$110,342)	(\$50,743)	(\$4,777)	(\$3,805)	(\$25,024)	\$0
	blank row													
4080	Distribution Services Revenue	CREV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4082	Retail Services Revenues	mi	(\$14,727)	(\$11,575)	(\$1,658)	(\$509)	\$0	(\$280)	(\$285)	(\$210)	(\$82)	(\$60)	(\$67)	\$0
4084	Service Transaction Requests (STR) Revenues	mi	(\$6,252)	(\$4,914)	(\$704)	(\$216)	\$0	(\$119)	(\$121)	(\$89)	(\$35)	(\$26)	(\$28)	\$0
4086	SSS Admin Charge	mi	(\$37,876)	(\$27,936)	(\$3,293)	(\$253)	\$0	(\$7)	(\$2)	(\$5,778)	(\$388)	(\$212)	(\$7)	\$0
4090	Electric Services Incidental to Energy Sales	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4205	Interdepartmental Rents	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4210	Rent from Electric Property	mi	(\$132,289)	(\$68,501)	(\$14,125)	(\$15,766)	\$0	(\$13,292)	(\$13,353)	(\$3,307)	(\$603)	(\$340)	(\$3,003)	\$0
4215	Other Utility Operating Income	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4220	Other Electric Revenues	mi	(\$406)	(\$319)	(\$46)	(\$14)	\$0	(\$8)	(\$8)	(\$6)	(\$2)	(\$2)	(\$2)	\$0
4225	Late Payment Charges	mi	(\$156,628)	(\$139,324)	(\$15,796)	(\$1,508)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4235	Miscellaneous Service Revenues	mi	(\$98,162)	(\$87,317)	(\$9,900)	(\$945)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4235-1	Account Set Up Charges	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4235-90	Miscellaneous Service Revenues - Residual	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4240	Provision for Rate Refunds	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4245	Government Assistance Directly Credited to Income	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4305	Regulatory Debits	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4310	Regulatory Credits	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4315	Revenues from Electric Plant Leased to Others	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4320	Expenses of Electric Plant Leased to Others	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4325	Revenues from Merchandise, Jobbing, Etc.	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4330	Costs and Expenses of Merchandising, Jobbing, Etc.	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4335	Profits and Losses from Financial Instrument Hedges	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4340	Profits and Losses from Financial Instrument Investments	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4345	Gains from Disposition of Future Use Utility Plant	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4350	Losses from Disposition of Future Use Utility Plant	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4355	Gain on Disposition of Utility and Other Property	mi	(\$9,905)	(\$7,796)	(\$1,115)	(\$339)	\$0	(\$185)	(\$189)	(\$140)	(\$56)	(\$41)	(\$44)	\$0
4360	Loss on Disposition of Utility and Other Property	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4365	Gains from Disposition of Allowances for Emission	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4370	Losses from Disposition of Allowances for Emission	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4375	Revenues from Non-Utility Operations	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4380	Expenses of Non-Utility Operations	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4390	Miscellaneous Non-Operating Income	mi	(\$38,203)	(\$30,026)	(\$4,300)	(\$1,320)	\$0	(\$725)	(\$740)	(\$546)	(\$214)	(\$157)	(\$174)	\$0
4395	Rate-Payer Benefit Including Interest	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4398	Foreign Exchange Gains and Losses, Including Amortization	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4405	Interest and Dividend Income	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4415	Equity in Earnings of Subsidiary Companies	mi	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4705	Power Purchased	cop	\$62,241,271	\$17,984,316	\$6,549,037	\$11,804,563	\$0	\$10,165,435	\$13,156,260	\$269,502	\$30,065	\$70,250	\$2,211,844	\$0

 Ontario Energy Board

# 2018 Cost Allocation Model

EB-2017-0038

**Sheet 04 Summary of Allocators by Class & Accounts -**

EB-2017-0038

**Sheet 04 Summary of Allocators by Class & Accounts -**

### ALLOCATION BY RATE CLASSIFICATION

				1	2	3	4	5	6	7	8	9	10	11
USoA Account #	Accounts	O1 Grouping	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
4708	Charges-WMS	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4710	Cost of Power Adjustments	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4712	Charges-One-Time	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4714	Charges-NW	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4715	System Control and Load Dispatching	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4716	Charges-CN	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4730	Rural Rate Assistance Expense	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4750	Charges-LV	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4751	Charges-Smart Metering Entity	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5005	Operation Supervision and Engineering	di	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498	\$0
5010	Load Dispatching	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5012	Station Buildings and Fixtures Expense	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5014	Transformer Station Equipment - Operation Labour	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5015	Transformer Station Equipment - Operation Supplies and Expenses	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5016	Distribution Station Equipment - Operation Labour	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5017	Distribution Station Equipment - Operation Supplies and Expenses	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5020	Overhead Distribution Lines and Feeders - Operation Labour	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5030	Overhead Subtransmission Feeders - Operation	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5035	Overhead Distribution Transformers- Operation	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5040	Underground Distribution Lines and Feeders - Operation Labour	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5050	Underground Subtransmission Feeders - Operation	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5055	Underground Distribution Transformers - Operation	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5065	Meter Expense	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5070	Customer Premises - Operation Labour	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5075	Customer Premises - Materials and Expenses	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5085	Miscellaneous Distribution Expense	di	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185	\$0
5090	Underground Distribution Lines and Feeders - Rental Paid	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5095	Overhead Distribution Lines and Feeders - Rental Paid	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5096	Other Rent	di	\$841	\$662	\$95	\$29	\$0	\$16	\$16	\$12	\$5	\$3	\$4	\$0
5105	Maintenance Supervision and Engineering	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5110	Maintenance of Buildings and Fixtures - Distribution Stations	di	\$23,761	\$8,291	\$2,481	\$4,377	\$0	\$3,416	\$4,261	\$55	\$6	\$19	\$854	\$0
5112	Maintenance of Transformer Station Equipment	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5114	Maintenance of Distribution Station Equipment	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5120	Maintenance of Poles, Towers and Fixtures	di	\$17,208	\$8,911	\$1,837	\$2,051	\$0	\$1,729	\$1,737	\$430	\$78	\$44	\$391	\$0
5125	Maintenance of Overhead Conductors and Devices	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5130	Maintenance of Overhead Services	di	\$34,475	\$22,319	\$5,262	\$2,021	\$0	\$52	\$0	\$4,616	\$31	\$169	\$5	\$0
5135	Overhead Distribution Lines and Feeders - Right of Way	di	\$74,548	\$38,647	\$7,965	\$8,884	\$0	\$7,490	\$7,524	\$1,813	\$341	\$192	\$1,692	\$0
5145	Maintenance of Underground Conduit	di	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5150	Maintenance of Underground Conductors and Devices	di	\$7,337	\$3,682	\$770	\$875	\$0	\$738	\$742	\$314	\$32	\$18	\$167	\$0
5155	Maintenance of Underground Services	di	\$67,129	\$43,458	\$10,246	\$3,935	\$0	\$102	\$0	\$8,989	\$60	\$330	\$10	\$0
5160	Maintenance of Line Transformers	di	\$12,842	\$6,861	\$1,395	\$1,524	\$0	\$1,287	\$1,294	\$93	\$62	\$35	\$291	\$0
5175	Maintenance of Meters	cu	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
5305	Supervision	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5310	Meter Reading Expense	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0



# 2018 Cost Allocation Model

**EB-2017-0038**
**Sheet 04 Summary of Allocators by Class & Accounts -**
**ALLOCATION BY RATE CLASSIFICATION**

USoA Account #	Accounts	O1 Grouping	Total	1 Residential	2 GS <50	3 GS >50 to 999 kW	4 GS> 50-TOU	5 GS > 1,000 to 4,999 kW	6 Large Use >5MW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load	10 Embedded Distributor	11 Back-up/Standby Power
5315	Customer Billing	cu	\$830,289	\$726,150	\$85,599	\$8,098	\$0	\$209	\$52	\$244	\$5,819	\$3,968	\$150	\$0
5320	Collecting	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5325	Collecting- Cash Over and Short	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5330	Collection Charges	cu	\$186,805	\$163,375	\$19,259	\$1,822	\$0	\$47	\$12	\$55	\$1,309	\$893	\$34	\$0
5335	Bad Debt Expense	cu	\$27,209	\$24,203	\$2,744	\$262	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5340	Miscellaneous Customer Accounts Expenses	cu	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5405	Supervision	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5410	Community Relations - Sundry	ad	\$25,527	\$20,092	\$2,872	\$874	\$0	\$477	\$487	\$362	\$143	\$105	\$114	\$0
5415	Energy Conservation	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5420	Community Safety Program	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5425	Miscellaneous Customer Service and Informational Expenses	ad	\$15,410	\$12,129	\$1,734	\$527	\$0	\$288	\$294	\$219	\$86	\$63	\$69	\$0
5505	Supervision	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5510	Demonstrating and Selling Expense	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5515	Advertising Expense	ad	\$6,198	\$4,878	\$697	\$212	\$0	\$116	\$118	\$88	\$35	\$25	\$28	\$0
5520	Miscellaneous Sales Expense	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5605	Executive Salaries and Expenses	ad	\$334,637	\$263,386	\$37,654	\$11,451	\$0	\$6,259	\$6,388	\$4,746	\$1,877	\$1,374	\$1,501	\$0
5610	Management Salaries and Expenses	ad	\$1,314,514	\$1,034,629	\$147,912	\$44,983	\$0	\$24,587	\$25,095	\$18,642	\$7,373	\$5,398	\$5,895	\$0
5615	General Administrative Salaries and Expenses	ad	\$146,993	\$115,695	\$16,540	\$5,030	\$0	\$2,749	\$2,806	\$2,085	\$825	\$604	\$659	\$0
5620	Office Supplies and Expenses	ad	\$145,306	\$114,367	\$16,350	\$4,972	\$0	\$2,718	\$2,774	\$2,061	\$815	\$597	\$652	\$0
5625	Administrative Expense Transferred Credit	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5630	Outside Services Employed	ad	\$327,443	\$257,724	\$36,845	\$11,205	\$0	\$6,125	\$6,251	\$4,644	\$1,837	\$1,345	\$1,468	\$0
5635	Property Insurance	ad	\$29,279	\$15,930	\$3,607	\$3,096	\$0	\$2,383	\$2,424	\$1,109	\$104	\$77	\$548	\$0
5640	Injuries and Damages	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5645	Employee Pensions and Benefits	ad	\$1,101,444	\$866,925	\$123,937	\$37,692	\$0	\$20,602	\$21,027	\$15,620	\$6,178	\$4,523	\$4,939	\$0
5650	Franchise Requirements	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5655	Regulatory Expenses	ad	\$283,161	\$222,871	\$31,862	\$9,690	\$0	\$5,296	\$5,406	\$4,016	\$1,588	\$1,163	\$1,270	\$0
5660	General Advertising Expenses	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5665	Miscellaneous General Expenses	ad	\$719,551	\$566,345	\$80,966	\$24,623	\$0	\$13,459	\$13,737	\$10,205	\$4,036	\$2,955	\$3,227	\$0
5670	Rent	ad	\$247,675	\$194,940	\$27,869	\$8,476	\$0	\$4,633	\$4,728	\$3,512	\$1,389	\$1,017	\$1,111	\$0
5675	Maintenance of General Plant	ad	\$310,017	\$244,008	\$34,884	\$10,609	\$0	\$5,799	\$5,918	\$4,397	\$1,739	\$1,273	\$1,390	\$0
5680	Electrical Safety Authority Fees	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5685	Independent Market Operator Fees and Penalties	cop	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5705	Amortization Expense - Property, Plant, and Equipment	dep	\$1,842,780	\$1,057,620	\$261,488	\$170,440	\$0	\$128,968	\$130,252	\$53,447	\$5,739	\$4,089	\$30,736	\$0
5710	Amortization of Limited Term Electric Plant	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5715	Amortization of Intangibles and Other Electric Plant	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5720	Amortization of Electric Plant Acquisition Adjustments	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5730	Amortization of Unrecovered Plant and Regulatory Study Costs	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5735	Amortization of Deferred Development Costs	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5740	Amortization of Deferred Charges	dep	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6005	Interest on Long Term Debt	INT	\$867,816	\$482,360	\$111,122	\$88,705	\$0	\$66,242	\$67,663	\$31,116	\$2,930	\$2,333	\$15,345	\$0
6105	Taxes Other Than Income Taxes	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6110	Income Taxes	Input	\$190,777	\$106,040	\$24,428	\$19,501	\$0	\$14,562	\$14,875	\$6,840	\$644	\$513	\$3,373	\$0
6205-1	Sub-account LEAP Funding	ad	\$12,942	\$10,187	\$1,456	\$443	\$0	\$242	\$247	\$184	\$73	\$53	\$58	\$0
6210	Life Insurance	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6215	Penalties	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6225	Other Deductions	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			<b>\$104,844,407</b>	<b>\$43,058,270</b>	<b>\$11,931,537</b>	<b>\$15,740,952</b>	<b>\$0</b>	<b>\$13,068,848</b>	<b>\$16,119,833</b>	<b>\$1,656,990</b>	<b>\$188,492</b>	<b>\$193,421</b>	<b>\$2,886,064</b>	<b>\$0</b>

**Sheet 04 Summary of Allocators by Class & Accounts -**

				1	2	3	4	5	6	7	8	9	10	11
USoA Account #	Accounts	O1 Grouping	Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power

Grouping by Allocator	Total	Residential	GS <50	GS >50 to 999 kW	GS >50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power
1808	\$ 23,761	\$ 8,291	\$ 2,481	\$ 4,377	\$ -	\$ 3,416	\$ 4,261	\$ 55	\$ 6	\$ 19	\$ 854	\$ -
1815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1820	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1830	\$ 17,208	\$ 8,911	\$ 1,837	\$ 2,051	\$ -	\$ 1,729	\$ 1,737	\$ 430	\$ 78	\$ 44	\$ 391	\$ -
1835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1845	\$ 7,337	\$ 3,682	\$ 770	\$ 875	\$ -	\$ 738	\$ 742	\$ 314	\$ 32	\$ 18	\$ 167	\$ -
1850	\$ 12,842	\$ 6,861	\$ 1,395	\$ 1,524	\$ -	\$ 1,287	\$ 1,294	\$ 93	\$ 62	\$ 35	\$ 291	\$ -
1855	\$ 101,605	\$ 65,776	\$ 15,508	\$ 5,956	\$ -	\$ 154	\$ -	\$ 13,605	\$ 91	\$ 500	\$ 15	\$ -
1860	\$ 49,355	\$ 35,945	\$ 12,132	\$ 932	\$ -	\$ 105	\$ 26	\$ -	\$ -	\$ -	\$ 215	\$ -
1815-1855	\$ 116,694	\$ 57,578	\$ 13,204	\$ 14,758	\$ -	\$ 11,903	\$ 11,988	\$ 3,921	\$ 382	\$ 277	\$ 2,683	\$ -
1830 & 1835	\$ 74,548	\$ 38,647	\$ 7,965	\$ 8,884	\$ -	\$ 7,490	\$ 7,524	\$ 1,813	\$ 341	\$ 192	\$ 1,692	\$ -
1840 & 1845	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BCP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BDHA	\$ 27,209	\$ 24,203	\$ 2,744	\$ 262	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Break Out	-\$ 31,253,961	-\$ 16,775,935	-\$ 3,784,556	-\$ 3,354,081	-\$ -	-\$ 2,681,049	-\$ 2,704,671	-\$ 1,142,941	-\$ 118,037	-\$ 77,085	-\$ 615,606	-\$ -
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CDMPP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CEN	\$ 566,197	\$ 163,600	\$ 59,575	\$ 107,384	\$ -	\$ 92,473	\$ 119,680	\$ 2,452	\$ 273	\$ 639	\$ 20,121	\$ -
CEN EWMP	\$ 62,241,271	\$ 17,984,316	\$ 6,549,037	\$ 11,804,563	\$ -	\$ 10,165,435	\$ 13,156,260	\$ 269,502	\$ 30,065	\$ 70,250	\$ 2,211,844	\$ -
CREV	-\$ 37,876	-\$ 27,936	-\$ 3,293	-\$ 253	-\$ -	-\$ 7	-\$ 2	-\$ 5,778	-\$ 388	-\$ 212	-\$ 7	\$ -
CWCS	\$ 7,563,825	\$ 4,896,646	\$ 1,154,440	\$ 443,355	\$ -	\$ 11,441	\$ -	\$ 1,012,805	\$ 6,808	\$ 37,185	\$ 1,144	\$ -
CWMC	\$ 5,745,100	\$ 4,184,163	\$ 1,412,171	\$ 108,467	\$ -	\$ 12,221	\$ 3,055	\$ -	\$ -	\$ -	\$ 25,024	\$ -
CWMR	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CWNB	\$ 897,954	\$ 785,720	\$ 92,597	\$ 8,250	\$ -	\$ 142	-\$ 343	\$ 1	\$ 7,010	\$ 4,774	\$ 88	\$ -
DCP	\$ 1,233,029	\$ 430,248	\$ 128,750	\$ 227,151	\$ -	\$ 177,246	\$ 221,129	\$ 2,846	\$ 330	\$ 1,010	\$ 44,319	\$ -
LPHA	-\$ 156,628	-\$ 139,324	-\$ 15,796	-\$ 1,508	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LTNCP	\$ 9,871,406	\$ 5,274,063	\$ 1,072,383	\$ 1,171,701	\$ -	\$ 989,449	\$ 994,560	\$ 71,613	\$ 47,334	\$ 26,603	\$ 223,699	\$ -
NFA	-\$ 537,408	-\$ 304,855	-\$ 65,248	-\$ 53,890	\$ -	-\$ 41,431	-\$ 42,095	-\$ 16,785	-\$ 2,079	-\$ 1,497	-\$ 9,528	\$ -
NFA ECC	\$ 6,721,475	\$ 3,656,921	\$ 828,011	\$ 710,803	\$ -	\$ 547,044	\$ 556,411	\$ 254,697	\$ 23,978	\$ 17,700	\$ 125,911	\$ -
O&M	\$ 4,991,660	\$ 3,928,838	\$ 561,674	\$ 170,816	\$ -	\$ 93,367	\$ 95,294	\$ 70,791	\$ 28,000	\$ 20,498	\$ 22,384	\$ -
PNCP	\$ 20,715,394	\$ 11,057,552	\$ 2,249,359	\$ 2,468,011	\$ -	\$ 2,078,112	\$ 2,087,771	\$ 150,156	\$ 99,181	\$ 55,746	\$ 469,505	\$ -
SNCP	\$ 15,852,409	\$ 7,694,358	\$ 1,634,398	\$ 1,890,563	\$ -	\$ 1,597,867	\$ 1,605,211	\$ 967,403	\$ 65,025	\$ 36,726	\$ 360,858	\$ -
TCP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 104,844,407	\$ 43,058,270	\$ 11,931,537	\$ 15,740,952	\$ -	\$ 13,068,848	\$ 16,119,833	\$ 1,656,990	\$ 188,492	\$ 193,421	\$ 2,886,064	\$ -

## 2018 Cost Allocation Model

## Sheet 06 Composite Allocator Detail Worksheet -

Details:  
Output Sheet Details How Various Composite Allocators are Derived  
Demand Allocator can be found in columns C to AG  
Customer Allocator can be found in columns AJ to BM

Demand Allocators													Customer Allocators												
Demand Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Customer Total	Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Total	
Composite allocators																									
Rate Base																									
1805 Conservation and Demand Management																									
1805-1 Land Station >50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1805-2 Land Station <50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1805 Total	\$178,544	\$92,300	\$18,643	\$32,892	\$0	\$25,665	\$32,020	\$412	\$48	\$146	\$6,418	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1806 Land Rights Station <50 kW																									
1806-1 Land Rights Station <50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1806-2 Land Rights Station <50 kW	\$0	\$15,939	\$4,770	\$8,415	\$0	\$6,566	\$8,192	\$105	\$12	\$37	\$1,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1806 Total	\$45,679	\$15,939	\$4,770	\$8,415	\$0	\$6,566	\$8,192	\$105	\$12	\$37	\$1,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1808 Buildings and Features >50 kW																									
1808-1 Buildings and Features >50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1808-2 Buildings and Features <50 kW	\$0	\$332,009	\$105,337	\$185,844	\$0	\$143,014	\$180,917	\$2,328	\$270	\$626	\$36,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1808 Total	\$1,008,806	\$332,009	\$105,337	\$185,844	\$0	\$143,014	\$180,917	\$2,328	\$270	\$626	\$36,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1810 Leasehold Improvements >50 kW																									
1810-1 Leasehold Improvements >50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1810-2 Leasehold Improvements <50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1810 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1815 Transformer Station Equipment - Normally Primary above 50 kW																									
1815-1 Transformer Station Equipment - Normally Primary above 50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1820 Distribution Station Equipment - Normally Primary below 50 kW (Bulk)																									
1820-1 Distribution Station Equipment - Normally Primary below 50 kW (Bulk)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1820-2 Distribution Station Equipment - Normally Primary below 50 kW (Primary)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1820-3 Distribution Station Equipment - Normally Primary below 50 kW (Wholesale Motors)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$566,197	\$163,600	\$59,575	\$107,384	\$0	\$92,473	\$119,680	\$2,452	\$273	\$639	\$20,121	\$0	\$566,197	
1820 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$566,197	\$163,600	\$59,575	\$107,384	\$0	\$92,473	\$119,680	\$2,452	\$273	\$639	\$20,121	\$0	\$566,197	
1815 & 1820 Total																									
1815 & 1820 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$566,197	\$163,600	\$59,575	\$107,384	\$0	\$92,473	\$119,680	\$2,452	\$273	\$639	\$20,121	\$0	\$566,197	
1825 Storage Battery Equipment >50 kW																									
1825-1 Storage Battery Equipment >50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1825-2 Storage Battery Equipment <50 kW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1825 Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1830 Poles, Towers and Features - Subtransmission Bulk Delivery																									
1830-1 Poles, Towers and Features - Subtransmission Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1830-2 Poles, Towers and Features - Primary	\$0	\$1,200,535	\$430,930	\$735,376	\$0	\$603,332	\$638,670	\$18,547	\$0	\$481	\$143,149	\$0	\$2,336,324	\$2,182,785	\$257,308	\$19,764	\$0	\$510	\$128	\$27,386	\$30,347	\$16,576	\$510	\$0	
1830-3 Poles, Towers and Features - Secondary	\$0	\$304,188	\$213,088	\$303,973	\$0	\$314,457	\$316,118	\$0	\$0	\$238	\$70,840	\$0	\$1,248,741	\$921,081	\$108,578	\$8,340	\$0	\$215	\$0	\$180,513	\$12,805	\$6,965	\$215	\$0	
1830 Total	\$5,676,066	\$1,794,693	\$644,219	\$1,099,350	\$0	\$849,788	\$954,788	\$18,547	\$0	\$719	\$213,994	\$0	\$3,784,065	\$3,103,866	\$365,886	\$26,103	\$0	\$725	\$128	\$217,910	\$43,152	\$23,570	\$725	\$0	
1835 Overhead Conductors and Devices - Subtransmission Bulk Delivery																									
1835-1 Overhead Conductors and Devices - Subtransmission Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1835-2 Overhead Conductors and Devices - Primary	\$0	\$2,073,116	\$744,879	\$1,271,134	\$0	\$1,098,194	\$1,103,964	\$32,059	\$0	\$511	\$247,431	\$0	\$4,382,399	\$3,773,024	\$444,767	\$34,162	\$0	\$852	\$220	\$47,356	\$52,455	\$28,632	\$852	\$0	
1835-3 Overhead Conductors and Devices - Secondary	\$0	\$9,926,954	\$396,963	\$336,294	\$573,861	\$0	\$495,907	\$498,427	\$0	\$0	\$376	\$111,709	\$0	\$1,968,904	\$1,462,277	\$171,195	\$13,149	\$0	\$339	\$0	\$300,384	\$20,101	\$11,026	\$339	\$0
1835 Total	\$9,926,954	\$3,011,979	\$1,081,173	\$1,845,005	\$0	\$1,584,001	\$1,602,391	\$32,059	\$0	\$1,206	\$359,140	\$0	\$6,351,303	\$5,225,301	\$615,962	\$47,311	\$0	\$1,221	\$220	\$347,740	\$72,646	\$39,680	\$1,221	\$0	
1830 & 1835 Total																									
1830 & 1835 Total	\$19,203,051	\$4,806,671	\$1,725,391	\$2,944,355	\$0	\$2,543,790	\$2,557,179	\$60,066	\$0	\$1,923	\$673,134	\$0	\$10,136,398	\$8,325,167	\$981,848	\$75,415	\$0	\$1,946	\$246	\$655,649	\$115,798	\$63,251	\$1,946	\$0	
1840 Underground Conduit - Bulk Delivery																									
1840-1 Underground Conduit - Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1840-2 Underground Conduit - Primary	\$0	\$137,821	\$49,472	\$84,423	\$0	\$72,038	\$73,321	\$2,129	\$0	\$55	\$16,433	\$0	\$291,062	\$250,950	\$29,640	\$2,269	\$0	\$59	\$15	\$3,145	\$3,484	\$1,903	\$59	\$0	
1840-3 Underground Conduit - Secondary	\$0	\$491,031	\$176,259	\$300,784	\$0	\$259,864	\$261,237	\$0	\$0	\$197	\$58,549	\$0	\$1,031,947	\$761,171	\$89,727	\$6,892	\$0	\$178	\$0	\$157,438	\$10,582	\$5,780	\$178	\$0	
1840 Total	\$1,984,513	\$625,632	\$225,731	\$385,207	\$0	\$332,802	\$334,558	\$2,129	\$0	\$252	\$74,983	\$0	\$1,323,009	\$1,011,781	\$119,267	\$9,161	\$0	\$236	\$15	\$160,583	\$14,066	\$7,683	\$236	\$0	
1845 Underground Conductors and Devices - Bulk Delivery																									
1845-1 Underground Conductors and Devices - Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1845-2 Underground Conductors and Devices - Primary	\$0	\$515,148	\$183,122	\$312,494	\$0	\$269,981	\$271,400	\$7,881	\$0	\$254	\$60,829	\$0	\$1,077,373	\$927,564	\$109,342	\$8,398	\$0	\$217	\$54	\$11,642	\$12,896	\$7,044	\$217	\$0	
1845-3 Underground Conductors and Devices - Secondary	\$0	\$996,137	\$337,212	\$609,577	\$0	\$503,647	\$529,429	\$0	\$0	\$399	\$118,657	\$0	\$2,091,371	\$1,542,610	\$181,844	\$13,367	\$0	\$360	\$0	\$319,068	\$21,446	\$11,714	\$360	\$0	
1845 Total	\$4,763,117	\$1,505,285	\$540,334	\$922,071	\$0	\$776,628	\$800,829	\$7,881	\$0	\$653	\$179,486	\$0	\$3,168,745	\$2,475,174	\$291,186	\$22,366	\$0	\$677	\$64	\$330,710	\$34,342	\$18,758	\$677	\$0	
1840 & 1845 Total																									
1840 & 1845 Total	\$6,737,630	\$2,134,137	\$766,065	\$1,307,278	\$0	\$1,129,429	\$1,135,387	\$10,011	\$0	\$855	\$254,469	\$0	\$4,491,753	\$3,481,935	\$410,433	\$31,526	\$0	\$814	\$69	\$491,293	\$48,408	\$26,441	\$814	\$0	
1850 Line Transformers																									
1850-1 Line Transformers	\$5,922,943	\$1,869,414	\$671,840	\$1,145,847	\$0	\$989,449	\$994,580	\$28,861	\$0	\$749	\$222,304	\$0	\$3,949,562	\$3,494,649	\$461,342	\$25,855	\$0	\$0	\$42,732	\$47,334	\$25,855	\$796	\$0		
1815-1850 Total	\$27,863,525	\$8,810,223	\$3,162,497	\$5,397,479	\$0	\$4,662,668	\$4,687,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0	\$19,141,881	\$15,379,351	\$1,853,219	\$240,179	\$0	\$95,233	\$120,097	\$1,102,126	\$211,813	\$116,186	\$23,676	\$0	
1855 Services																									
1855-1 Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1815-1855 Total	\$27,863,525	\$8,810,223	\$3,162,497	\$5,397,479	\$0	\$4,662,668	\$4,687,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0	\$19,141,881	\$15,379,351	\$1,853,219	\$240,179	\$0	\$95,233	\$120,097	\$1,102,126	\$211,813	\$116,186	\$23,676	\$0	
1860 Motors																									
1860-1 Motors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1815-1860 Total	\$27,863,525	\$8,810,223	\$3,162,497	\$5,397,479	\$0	\$4,662,668	\$4,687,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0	\$19,141,881	\$15,379,351	\$1,853,219	\$240,179	\$0	\$95,233	\$120,097	\$1,102,126	\$211,813	\$116,186	\$23,676	\$0	
1905-1950 Total																									
1905-1950 Total	\$29,096,954	\$9,245,471	\$3,391,246	\$5,624,630	\$0	\$4,839,914	\$4,908,254	\$92,343	\$330	\$4,539	\$1,094,826	\$0	\$32,450,805	\$24,465,195	\$4,419,830	\$792,002	\$0	\$118,895	\$123,152	\$2,114,931	\$218,621	\$153,371	\$49,844	\$0	
Distribution Plant																									
GFA - Distribution plant (credit to contributed capital)	\$51,106,760	\$28,486,612	\$6,618,283	\$5,171,845	\$0	\$3,907,863	\$3,975,614	\$1,730,559	\$174,079	\$132,604	\$907,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
GFA - Distribution plant (exclude credit for contributed capital)	\$61,547,360	\$33,705,631	\$7,711,076	\$6,416,632	\$0	\$4,968,809	\$5,031,406	\$2,207,275	\$218,951	\$157,909	\$1,444,670	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accum																									

**Details:**  
Output Sheet Details How Various Composite Allocators are Derived

Allocate all the costs to the O and M expenses before using it as a composite allocator.

## 2018 Cost Allocation Model

## Sheet 06 Composite Allocator Detail Worksheet -

Details:  
Output Sheet Details How Various Composite Allocators are Derived

Demand Allocator can be found in columns C to AG  
Customer Allocator can be found in columns AJ to BN

Demand Allocators													Customer Allocators													Total
	1	2	3	4	5	6	7	8	9	10	11		1	2	3	4	5	6	7	8	9	10	11			
	Demand Total	Residential	GS <50	GS >50 to 999 kW	GS >1000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Customer Total	Residential	GS <50	GS >50 to 999 kW	GS >1000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power				
Accounts																										
4705	\$62,241,271	\$17,984,316	\$6,549,037	\$11,804,963	\$0	\$10,165,435	\$13,156,260	\$269,502	\$30,065	\$70,250	\$2,211,844	\$0	\$62,241,271													
4706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4712	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4714	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4716	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4730	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4732	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5685	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
4751	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
CCP	\$62,241,271	\$17,984,316	\$6,549,037	\$11,804,963	\$0	\$10,165,435	\$13,156,260	\$269,502	\$30,065	\$70,250	\$2,211,844	\$0	\$62,241,271													
Cost of Power																										
Accounts																										
5005	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498	\$0	\$21,675													
5010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5014	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5015	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5016	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5017	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5035	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5040	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5045	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5055	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5065	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5075	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5085	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,692	\$9,761	\$3,193	\$311	\$225	\$2,185	\$0	\$95,019													
5090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5095	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5096	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5098	\$841	\$652	\$95	\$29	\$0	\$16	\$16	\$12	\$5	\$3	\$4	\$0	\$841													
5105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5110	\$23,761	\$8,291	\$2,461	\$4,377	\$0	\$3,416	\$4,261	\$55	\$6	\$19	\$854	\$0	\$23,761													
5112	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5114	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5120	\$17,208	\$8,911	\$1,837	\$2,051	\$0	\$1,729	\$1,737	\$430	\$78	\$44	\$391	\$0	\$17,208													
5125	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5130	\$34,475	\$22,319	\$5,262	\$2,021	\$0	\$52	\$0	\$4,616	\$31	\$169	\$5	\$0	\$34,475													
5135	\$74,548	\$38,647	\$7,065	\$8,884	\$0	\$7,490	\$7,524	\$1,813	\$341	\$192	\$1,692	\$0	\$74,548													
5145	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5155	\$7,337	\$3,652	\$770	\$875	\$0	\$78	\$742	\$314	\$32	\$18	\$167	\$0	\$7,337													
5160	\$67,129	\$43,458	\$10,246	\$3,335	\$0	\$102	\$0	\$8,869	\$60	\$330	\$10	\$0	\$67,129													
5165	\$12,842	\$6,861	\$1,395	\$1,524	\$0	\$1,287	\$1,294	\$93	\$62	\$35	\$291	\$0	\$12,842													
5175	\$46,955	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0	\$46,955													
5305	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5315	\$630,299	\$726,150	\$85,099	\$8,098	\$0	\$209	\$52	\$244	\$5,619	\$3,955	\$150	\$0	\$630,299													
5320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5325	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5330	\$186,805	\$163,375	\$19,259	\$1,822	\$0	\$47	\$12	\$55	\$1,309	\$933	\$34	\$0	\$186,805													
5335	\$27,209	\$24,203	\$2,744	\$262	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,209													
5340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5405	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5410	\$25,527	\$20,002	\$2,872	\$874	\$0	\$477	\$487	\$362	\$143	\$105	\$114	\$0	\$25,527													
5415	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5420	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5425	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5426	\$15,410	\$12,129	\$1,734	\$527	\$0	\$288	\$294	\$219	\$86	\$63	\$69	\$0	\$15,410													
5505	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5510	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5515	\$6,198	\$4,878	\$997	\$212	\$0	\$116	\$118	\$88	\$35	\$25	\$28	\$0	\$6,198													
5520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0											\$0		
5605	\$334,637	\$263,386	\$37,654	\$11,451	\$0	\$6,259	\$6,388	\$4,746	\$1,877	\$1,374	\$1,501	\$0	\$334,637													
56																										

[illegible]



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***7-B I6 Revenue and Customer Data***

## 2018 Cost Allocation Model

**Sheet 16.1 Revenue Worksheet -****Sheet 16.1 Revenue Worksheet -**

Total kWhs from Load Forecast	458,589,315
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Total kW from Load Forecast	632,068
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Deficiency/sufficiency (RRWF 8. cell F51)	170,871
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Miscellaneous Revenue (RRWF 5. cell F48)	494,448
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[illegible]



**Sheet 16.2 Customer Data Worksheet -**[illegible]



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***7-C I8 Demand Data***

**Sheet 18 Demand Data Worksheet -**

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

		1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Customer Classes		Total	Residential	GS <50	GS >50 to 999 kW	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Rate Class 1	Rate class 2	Rate class 3	Rate class 4	Rate class 5	Rate class 6	Rate class 7	Rate class 8	Rate class 9
		CP																			
		Sanity Check	Check 4 CP	Check 4CP	Pass	Pass	Check 4CP	Check 4CP and 12CP	Check 4CP and 12CP	Check 4CP and 12CP	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
CO-INCIDENT PEAK																					
1 CP																					
Transformation CP	TCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
Bulk Delivery CP	BCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
Total System CP	DCP1	79,969	29,072	8,204	13,692	13,043	12,945			58	2,955										
4 CP																					
Transformation CP	TCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
Bulk Delivery CP	BCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
Total System CP	DCP4	315,047	119,712	32,954	53,880	44,241	52,419	484	54	235	11,068										
12 CP																					
Transformation CP	TCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
Bulk Delivery CP	BCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
Total System CP	DCP12	863,410	301,275	90,155	159,059	124,114	154,842	1,993	231	707	31,034										
NON CO-INCIDENT PEAK																					
		NCP																			
		Sanity Check	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
1 NCP																					
Classification NCP from Load Data Provider	DNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Primary NCP	PNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Line Transformer NCP	L1NCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
Secondary NCP	SNCP1	94,027	34,863	10,510	16,785	14,163	13,831	484	54	65	3,273										
4 NCP																					
Classification NCP from Load Data Provider	DNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Primary NCP	PNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Line Transformer NCP	L1NCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
Secondary NCP	SNCP4	357,825	130,356	40,189	63,320	54,498	54,779	1,935	215	249	12,284										
12 NCP																					
Classification NCP from Load Data Provider	DNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Primary NCP	PNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Line Transformer NCP	L1NCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										
Secondary NCP	SNCP12	970,510	330,289	106,090	179,435	152,948	160,739	5,448	602	707	34,252										



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***7-D O1 Revenue to cost RR***

**Sheet 01 Revenue to Cost Summary Worksheet -**

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

## Class Revenue, Cost Analysis, and Return on Rate Base

[illegible]



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***7-E O2 Fixed Change Floor Ceiling***

## 2018 Cost Allocation Model

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### Sheet 02 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for Monthly Fixed Charge

#### Summary

Customer Unit Cost per month - Avoided Cost

Customer Unit Cost per month - Directly Related

Customer Unit Cost per month - Minimum System with PLCC Adjustment

Existing Approved Fixed Charge

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Residential	GS <50	GS >50 to 999 kW	GS> 50-TOU	GS > 1,000 to 4,999 kW	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor	Back-up/Standby Power	Rate Class 1	Rate class 2	Rate class 3	Rate class 4	Rate class 5	Rate class 6	Rate class 7	Rate class 8	Rate class 9
\$5.80	\$9.96	\$10.49	0	\$24.66	-\$1.41	\$0.00	\$2.45	\$3.06	\$58.71	0	0	0	0	0	0	0	0	0	0
\$21.62	\$27.37	\$31.67	0	\$54.39	\$28.30	\$0.02	\$11.09	\$13.84	\$94.43	0	0	0	0	0	0	0	0	0	0
\$30.47	\$39.89	\$74.58	0	\$142.95	\$281.00	\$5.26	\$17.55	\$21.52	\$67.63	0	0	0	0	0	0	0	0	0	0
\$23.22	\$22.29	\$127.91	\$0.00	\$2,537.23	\$10,362.66	\$4.04	\$5.59	\$3.20	\$2,361.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



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***Attachment 6 (of 7):***

***7-F 2018 Load Profile Methodology Report***





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Toronto, Ontario, M5C 2X8  
elenchus.ca

## **2018 Load Profile and Demand Allocator Methodology**

**Prepared by:  
Andrew Blair  
Elenchus Research Associates Inc.**

**Prepared for:  
Erie Thames Powerlines**

**8 August 2017**

This report outlines the methodology used to derive Erie Thames Powerlines' ("Erie Thames") 2018 hourly load profiles and demand allocators.

Erie Thames provided Elenchus with data for 2016 actual hourly kWh by rate class. The 12 monthly coincident and non-coincident peaks for the rate classes were then determined. The allocators were then derived as follows.

- The 1, 4 and 12 NCP values for each class were calculated by selecting the peak hour in the year (1 NCP), summing the four highest monthly peaks (4 NCP) and summing the 12 monthly peaks for each class (12 NCP), respectively.
- The total 1, 4 and 12 NCP values are the totals of the corresponding class NCP values.
- The 1, 4 and 12 CP values for each class were derived by identifying the hour in each month when the coincident peak occurred and then selecting the peak in the year (1 CP), adding the demands during the four highest coincident peak hours (4 CP) and summing the demand for each class during the 12 monthly coincident peak hours (12 CP), respectively.
- The total 1, 4 and 12 CP values are the totals of the corresponding class CP values, which are the values used to identify the relevant coincident peak hours.

The preliminary allocators based on the 2016 data absent any weather normalization of load forecast adjustment are presented in the following table.

	Residential	GS < 50	GS > 50	Inter-mediate	Large User	Embedded	Street Light	Sentinel Light	USL	Total
1CP	36,499	5,309	11,408	12,368	14,422	2,930	-	-	69	83,006
4CP	145,386	20,297	46,698	50,326	56,713	10,199	-	-	277	329,896
12CP	364,025	53,934	135,247	146,635	167,209	31,272	4,435	299	837	903,894
1NCP	40,830	6,298	14,421	16,966	15,062	3,264	866	56	76	97,839
4NCP	150,089	24,428	54,403	65,280	59,653	12,249	3,465	226	295	370,088
12NCP	387,404	63,297	154,165	183,208	175,041	34,155	9,757	631	837	1,008,496

### WEATHER NORMALIZATION

Data for the Residential and General Service < 50 kW classes were weather normalized to reflect load profiles in a year of typical weather. The weather normalization process to determine Erie Thames' weather sensitive load uses daily heating degree days and

cooling degree days as measured at Environment Canada's London Airport weather station to take into account temperature sensitivity. This location is central to the communities in Erie Thames's service territory, and has strong historical weather data. Environment Canada defines heating degree days and cooling degree days as the difference between the average daily temperature and 18°C for each day (below for heating, above for cooling). For example, a single day with a temperature of 20°C is considered to have two cooling degree days.

The typical weather of a given day was determined with a heating degree day and cooling degree day ranking process. Instead of looking at the typical weather of particular date, heating and cooling degree days were ranked within each month from highest to lowest. The equivalently ranked days within a given month over the past 10 years were used to determine the average heating and cooling degree days for that ranked day. For example, the highest heating degree day in each of the past 10 Januarys are averaged to determine the normal highest heating degree day for January. This process maintains the shape of the load profiles by determining typical monthly peaks for the Residential and General Service < 50 kW classes without smoothing out those peaks.

The normal ranked heating and cooling degree days were then matched with the corresponding ranked days in 2016. The differences between actual heating and cooling degree days and their corresponding normal heating and cooling degree days were calculated to be used with the regression results to adjust 2016 hourly loads to normal hourly loads.

The weather normalization regression calculated the impact of heating and cooling degree days at each hour of the day on the hourly load (see Appendix). This method considers that weather may impact electricity use differently at various hours of the day. The results reflect the impact of a single heating or cooling degree day at a given hour of the day on the load for that hour. The hourly results were combined with the actual-normal heating and cooling degree day differences, as described in the above paragraph, to determine the weather normalization adjustment required for each hour in 2016. The weather normalization adjustments were then applied to the initial load profiles, resulting in the weather normalized allocators in the following table.

	Residential	GS < 50	GS > 50	Inter-mediate	Large User	Embedded	Street Light	Sentinel Light	USL	Total
1CP	30,484	9,992	14,547	11,090	13,294	2,901	-	-	61	82,369
4CP	121,088	36,603	56,178	46,293	53,021	11,254	-	-	231	324,668
12CP	321,686	94,053	160,592	123,611	153,964	31,494	1,993	231	707	888,331
1NCP	36,801	10,636	16,785	14,163	13,831	3,273	484	54	65	96,092
4NCP	135,281	41,256	63,320	54,498	54,779	12,284	1,935	215	249	363,817
12NCP	349,180	106,903	179,435	152,948	160,739	34,252	5,448	602	707	990,214

### LOAD PROFILE ADJUSTMENT

The hourly loads for each class were revised to reflect changes in the relative loads for the classes from 2016 to 2018. This was done by scaling the hourly loads of each class to levels consistent with the 2018 load forecast while maintaining the hourly load shapes. The table below shows the final demand allocators with the scaling adjustment.

	Residential	GS < 50	GS > 50	Inter-mediate	Large User	Embedded	Street Light	Sentinel Light	USL	Total
1CP	38,002	7,274	12,840	9,084	12,208	1,759	-	-	60	81,226
4CP	124,954	33,138	54,471	44,286	51,935	10,113	-	-	230	319,127
12CP	313,953	90,155	159,059	124,114	154,842	31,034	1,993	231	707	876,088
1NCP	38,002	10,510	16,785	14,163	13,831	3,273	484	54	65	97,166
4NCP	137,914	40,189	63,320	54,498	54,779	12,284	1,935	215	249	365,383
12NCP	342,962	106,090	179,435	152,948	160,739	34,252	5,448	602	707	983,183

Note that the hours that represent the coincident peaks may have changed between tables so a direct comparison of the figures may not reflect the weather normalization or scaling adjustments made to each class.

## APPENDIX

### Residential Weather Normalization Regression Results

	coefficient	std. error	t-ratio	p-value
HDD1	224.718664	14.52598096	15.47011969	2.81E-53
HDD2	216.0647872	14.52598096	14.87436806	1.95E-49
HDD3	207.8769194	14.52598096	14.3106975	6.21E-46
HDD4	205.4569267	14.52598096	14.14409996	6.37E-45
HDD5	196.8622089	14.52598096	13.55242096	2.01E-41
HDD6	192.5403956	14.52598096	13.25489797	1.02E-39
HDD7	201.3014337	14.52598096	13.85802682	3.26E-43
HDD8	251.8722743	14.52598096	17.33943305	3.04E-66
HDD9	267.6126816	14.52598096	18.42303679	2.20E-74
HDD10	246.4414018	14.52598096	16.96556002	1.54E-63
HDD11	224.6716535	14.52598096	15.46688338	2.95E-53
HDD12	220.5166264	14.52598096	15.18084231	2.15E-51
HDD13	224.7112121	14.52598096	15.46960668	2.83E-53
HDD14	206.5275726	14.52598096	14.21780555	2.28E-45
HDD15	175.0382718	14.52598096	12.05001385	3.56E-33
HDD16	132.1319362	14.52598096	9.096248757	1.14E-19
HDD17	153.0142523	14.52598096	10.53383264	8.62E-26
HDD18	276.6241011	14.52598096	19.04340243	2.99E-79
HDD19	275.2229711	14.52598096	18.9469456	1.75E-78
HDD20	276.7522323	14.52598096	19.05222326	2.55E-79
HDD21	277.8573946	14.52598096	19.12830503	6.29E-80
HDD22	296.5403396	14.52598096	20.41447944	1.59E-90
HDD23	301.9485611	14.52598096	20.78679312	1.04E-93
HDD24	265.1477234	14.52598096	18.25334373	4.43E-73
CDD1	1073.93601	66.06064985	16.25681874	1.45E-58
CDD2	954.983073	66.06064985	14.4561562	7.96E-47
CDD3	855.2306401	66.06064985	12.94614331	5.53E-38
CDD4	791.7527052	66.06064985	11.98523943	7.69E-33
CDD5	711.5280141	66.06064985	10.77082977	6.98E-27
CDD6	639.7210997	66.06064985	9.683845091	4.56E-22
CDD7	649.2390175	66.06064985	9.827923567	1.12E-22
CDD8	873.4012791	66.06064985	13.22120326	1.59E-39
CDD9	1286.964815	66.06064985	19.48156457	8.93E-83

CDD10	1418.566857	66.06064985	21.47370424	1.02E-99
CDD11	1661.689673	66.06064985	25.15400132	7.62E-135
CDD12	1929.58012	66.06064985	29.20922098	5.14E-179
CDD13	2128.595102	66.06064985	32.2218311	2.63E-215
CDD14	2297.11767	66.06064985	34.77285912	3.29E-248
CDD15	2425.889545	66.06064985	36.72215685	1.28E-274
CDD16	2465.126281	66.06064985	37.31610704	7.08E-283
CDD17	2475.972651	66.06064985	37.4802951	3.55E-285
CDD18	2457.645588	66.06064985	37.20286727	2.70E-281
CDD19	2260.413987	66.06064985	34.21725327	7.03E-241
CDD20	2053.637404	66.06064985	31.08715111	2.65E-201
CDD21	1976.16164	66.06064985	29.91435362	2.98E-187
CDD22	1838.81974	66.06064985	27.83532624	1.97E-163
CDD23	1605.365872	66.06064985	24.30139388	2.83E-126
CDD24	1337.680456	66.06064985	20.24927788	3.97E-89
HOUR1	9441.269475	218.5351958	43.20251226	0
HOUR2	8897.218333	218.5351958	40.7129767	0
HOUR3	8655.748906	218.5351958	39.60803144	0
HOUR4	8672.671059	218.5351958	39.68546589	0
HOUR5	9291.780317	218.5351958	42.51846154	0
HOUR6	10617.373	218.5351958	48.58427019	0
HOUR7	12090.00414	218.5351958	55.32291538	0
HOUR8	12541.65849	218.5351958	57.38965043	0
HOUR9	12560.13814	218.5351958	57.47421184	0
HOUR10	12821.96709	218.5351958	58.67232071	0
HOUR11	13214.20529	218.5351958	60.4671721	0
HOUR12	13423.79534	218.5351958	61.42623978	0
HOUR13	13322.94109	218.5351958	60.96473861	0
HOUR14	13344.09395	218.5351958	61.06153244	0
HOUR15	13862.50691	218.5351958	63.4337497	0
HOUR16	15719.56824	218.5351958	71.9315174	0
HOUR17	17537.89449	218.5351958	80.25203643	0
HOUR18	17250.41954	218.5351958	78.93657349	0
HOUR19	17440.32991	218.5351958	79.8055885	0
HOUR20	17680.54165	218.5351958	80.90477868	0
HOUR21	17069.28283	218.5351958	78.10770603	0
HOUR22	14908.12861	218.5351958	68.21843299	0

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HOUR23	12145.82177	218.5351958	55.5783325	0
HOUR24	10275.27128	218.5351958	47.01883944	0
Mean dependent var	16899.40536	S.D. dependent var	5201.061115	
Sum squared resid	41338425513	S.E. of regression	2178.301709	
R-squared	0.82600886	Adjusted R-squared	0.824590888	
F(71, 8712)	582.5283806	P-value(F)	0	
Log-likelihood	-79944.27412	Akaike criterion	160032.5482	
Schwarz criterion	160542.3577	Hannan-Quinn	160206.2338	
rho	0.891610484	Durbin-Watson	0.216727629	

### GS < 50 Weather Normalization Regression Results

	coefficient	std. error	t-ratio	p-value
HDD1	31.55964932	2.907510171	10.85452757	2.84E-27
HDD2	31.63567294	2.907510171	10.8806749	2.14E-27
HDD3	32.08092227	2.907510171	11.03381257	4.03E-28
HDD4	31.8265667	2.907510171	10.9463303	1.05E-27
HDD5	31.31437383	2.907510171	10.77016828	7.03E-27
HDD6	32.42836312	2.907510171	11.15331029	1.08E-28
HDD7	29.33016488	2.907510171	10.08772563	8.46E-24
HDD8	20.48202324	2.907510171	7.044523331	2.00E-12
HDD9	13.95854969	2.907510171	4.800860139	1.61E-06
HDD10	18.00917024	2.907510171	6.194017968	6.13E-10
HDD11	15.02433703	2.907510171	5.167423721	2.43E-07
HDD12	15.80147783	2.907510171	5.434711111	5.64E-08
HDD13	11.92599319	2.907510171	4.101788985	4.14E-05
HDD14	9.323714888	2.907510171	3.206769483	0.001347195
HDD15	8.543618217	2.907510171	2.938465461	0.003307064
HDD16	9.643173144	2.907510171	3.316642961	0.000914788
HDD17	26.173524	2.907510171	9.002040391	2.68E-19
HDD18	33.91745162	2.907510171	11.66546276	3.26E-31
HDD19	30.66879812	2.907510171	10.54813098	7.42E-26
HDD20	31.06950154	2.907510171	10.68594767	1.73E-26
HDD21	30.08093598	2.907510171	10.34594351	6.09E-25
HDD22	33.24045136	2.907510171	11.4326174	4.70E-30
HDD23	35.09587599	2.907510171	12.07076637	2.78E-33
HDD24	34.43003982	2.907510171	11.84176075	4.18E-32
CDD1	117.2736321	13.22265339	8.869145146	8.83E-19
CDD2	112.9992306	13.22265339	8.545881622	1.49E-17
CDD3	109.4264192	13.22265339	8.275677808	1.47E-16
CDD4	106.652982	13.22265339	8.065928896	8.23E-16
CDD5	106.3786494	13.22265339	8.045181723	9.74E-16
CDD6	103.5857111	13.22265339	7.833957984	5.28E-15
CDD7	118.0133018	13.22265339	8.92508473	5.36E-19
CDD8	161.797358	13.22265339	12.23637596	3.79E-34
CDD9	201.4022119	13.22265339	15.23160337	1.01E-51
CDD10	235.010265	13.22265339	17.77330602	1.90E-69



CDD11	252.3317797	13.22265339	19.08329382	1.44E-79
CDD12	260.7453991	13.22265339	19.71959723	1.01E-84
CDD13	269.3250571	13.22265339	20.36845777	3.91E-90
CDD14	276.1697757	13.22265339	20.88610868	1.45E-94
CDD15	279.0216021	13.22265339	21.101786	1.93E-96
CDD16	274.2531286	13.22265339	20.74115691	2.58E-93
CDD17	252.1615443	13.22265339	19.0704193	1.82E-79
CDD18	228.3914415	13.22265339	17.27273905	9.33E-66
CDD19	203.8920934	13.22265339	15.41990759	6.00E-53
CDD20	196.4751073	13.22265339	14.85897735	2.44E-49
CDD21	197.4368837	13.22265339	14.93171438	8.44E-50
CDD22	170.3542638	13.22265339	12.8835158	1.23E-37
CDD23	150.2654966	13.22265339	11.36424681	1.02E-29
CDD24	136.9337278	13.22265339	10.35599465	5.49E-25
HOURL1	2095.419362	43.74185167	47.90422175	0
HOURL2	2063.004691	43.74185167	47.16317697	0
HOURL3	2040.078917	43.74185167	46.63906166	0
HOURL4	2044.631115	43.74185167	46.74313127	0
HOURL5	2091.452758	43.74185167	47.81353963	0
HOURL6	2189.271269	43.74185167	50.04980781	0
HOURL7	2478.830869	43.74185167	56.66954586	0
HOURL8	2960.865516	43.74185167	67.68953308	0
HOURL9	3432.354551	43.74185167	78.46843287	0
HOURL10	3657.907784	43.74185167	83.6248957	0
HOURL11	3823.150009	43.74185167	87.40256442	0
HOURL12	3830.010408	43.74185167	87.55940277	0
HOURL13	3845.448507	43.74185167	87.91233932	0
HOURL14	3847.49461	43.74185167	87.95911611	0
HOURL15	3815.414784	43.74185167	87.22572636	0
HOURL16	3726.558627	43.74185167	85.19435014	0
HOURL17	3281.446106	43.74185167	75.01845442	0
HOURL18	2954.621667	43.74185167	67.54678996	0
HOURL19	2894.370121	43.74185167	66.16935522	0
HOURL20	2838.870244	43.74185167	64.90055028	0
HOURL21	2704.1365	43.74185167	61.82034818	0
HOURL22	2449.400296	43.74185167	55.99672174	0
HOURL23	2259.503615	43.74185167	51.65541761	0

---

HOUR24	2139.736963	43.74185167	48.91738418	0
Mean dependent var	3329.527783	S.D. dependent var	882.8394524	
Sum squared resid	1656172143	S.E. of regression	436.0073439	
R-squared	0.758064762	Adjusted R-squared	0.756093068	
F(71, 8712)	384.4737558	P-value(F)	0	
Log-likelihood	-65813.96514	Akaike criterion	131771.9303	
Schwarz criterion	132281.7398	Hannan-Quinn	131945.6159	
rho	0.966246901	Durbin-Watson	0.067511619	



Erie Thames Powerlines  
Filed: 15 September, 2017  
EB-2017-0038  
Exhibit 7  
Tab 3  
Schedule 1  
Attachment 7  
Page 1 of 1

***Attachment 7 (of 7):***

***7-G Gross Load Billing Presentation***

## Graig Pettit

---

**From:** Graig Pettit  
**Sent:** November 26, 2015 1:26 PM  
**To:** Ashton Nembhard; Kevin Norton; Doug Blair; Jamie Calvert; Tony Micallef  
**Subject:** Gross Load Billing Presentation  
**Attachments:** Gross load billing GLB (2).pptx; IGPC Segmented Analysis no Rate Class Change.xlsx

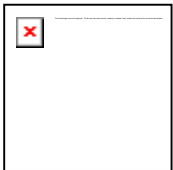
Hello Everyone,

Here is a copy of the presentation I was discussing.

Along with the updated analysis of not being able to move to the lower rate class.

If you have any questions please let me know.

Graig



### Graig Pettit

Manager of Finance & Regulatory Affairs

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# Overall review of the concept

- Gross load billing allows transmitter to recover line connection and transformer connection investments from customers for load displaced by embedded generation.
- An embedded generator can not bypass transmission line connection and transformation connection charges if “required government approvals are obtained after October 30, 1998 and which have installed capacity of 2MW or more for renewable generation and 1 MW or higher for non-renewable generation”.
- Bill determinants will be calculated based on sum of hourly electricity delivered from transmission system plus hourly electricity supplied by embedded generator.

# OEB approved transmission rates

[http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2014-0357/Rate%20Order\\_%202015%20UTR\\_20150108.pdf](http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2014-0357/Rate%20Order_%202015%20UTR_20150108.pdf)

Or see page 5 of 6 in “Rate Order\_ 2015 UTR\_20150108.pdf” file

- **Network Service Rate (PTS-N): 3.78** \$ Per kW of Network Billing Demand<sup>1,2</sup>
- **Line Connection Service Rate (PTS-L): 0.86** \$ Per kW of Line Connection Billing Demand <sup>1,3</sup>
- **Transformation Connection Service Rate (PTS-T): 2.00** \$ Per kW of Transformation Connection Billing Demand<sup>1,3,4</sup>

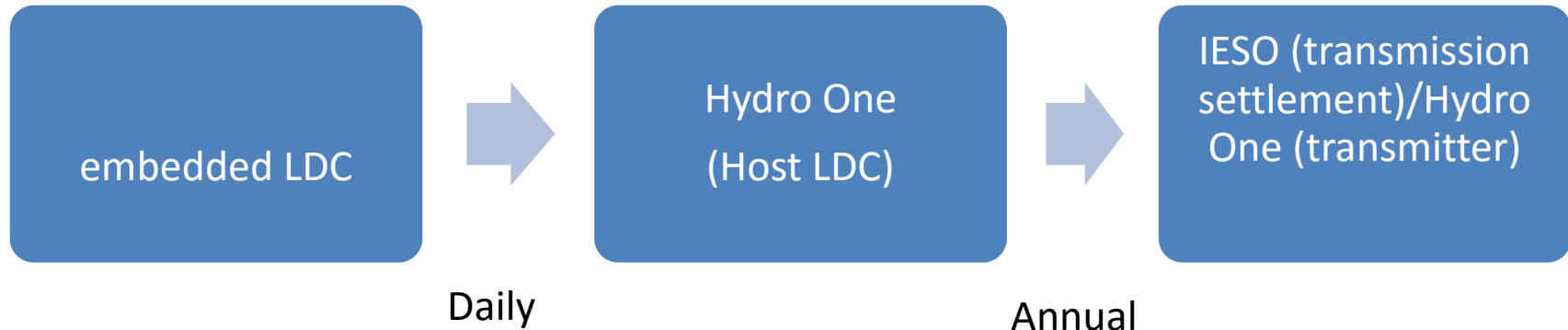
The rates quoted above shall be subject to adjustments with the approval of the Ontario Energy Board.

- **Notes:**
  - 3) The Billing Demand for Line and Transformation Connection Services is defined as the Non-Coincident Peak demand (MW) in any hour of the month. **The customer demand in any hour is the sum of (a) the loss-adjusted demand supplied from the transmission system plus (b) the demand that is supplied by embedded generation for which the required government approvals are obtained after October 30, 1998 and which have installed capacity of 2MW or more for renewable generation and 1 MW or higher for non-renewable generation. The term renewable generation refers to a facility that generates electricity from the following sources: wind, solar, Biomass, Bio-oil, Bio-gas, landfill gas, or water. The demand supplied by embedded generation will not be adjusted for losses.**
- Red fonts are referred as gross load billing. Generation capacity is determined on individual unit size basis.

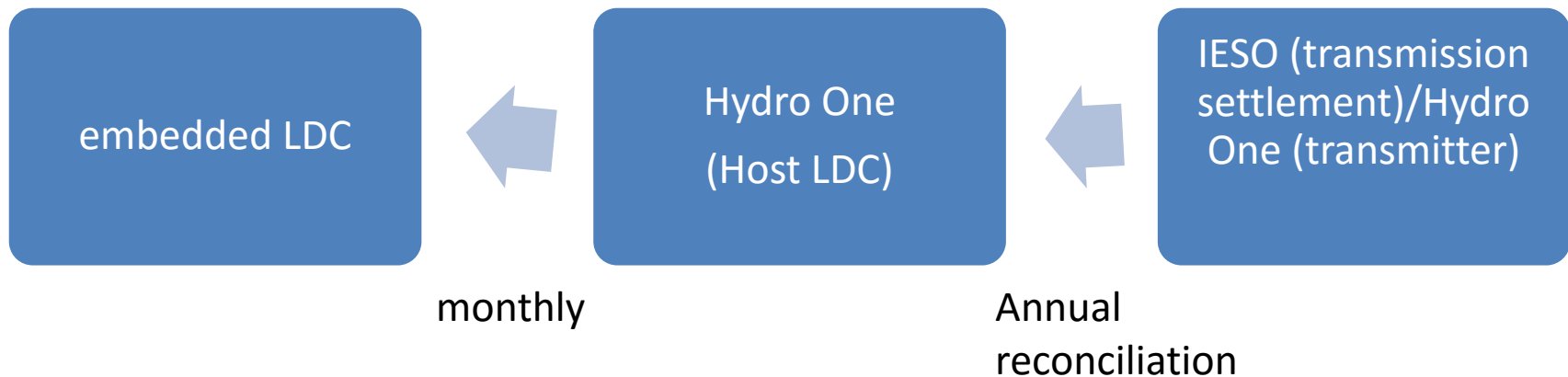
# OEB approved distribution rates

- <http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2013-0416%20Dx%20Rates/Rate Order HydroOne Dx 20150423.pdf>
  - See note below on page 17 of 17
- (5) (b) For customers with load displacement generation above 1 MW, or 2 MW for renewable generation, installed after October 1998, RTSR connection is billed at the gross demand level.
- (14) For customers with load displacement generation above 1MW, or 2 MW for renewable generation, installed after October1998, the ST volumetric charges are billed at the gross demand level.
- DC rates are listed on page 8 of 17
- Gross load billing would apply to billing line items with note 5 and 14.

# Meter readings



# Billing





# Metering requirements

- [http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2014-0357/Rate%20Order %202015%20UTR 20150108.pdf](http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2014-0357/Rate%20Order%202015%20UTR%2020150108.pdf)
- **(G) EMBEDDED GENERATION**
- The Transmission Customers shall ensure conformance of Registered Wholesale Meters in accordance with Chapter 6 of Market Rules, including Metering Registry obligations, with respect to metering installations for embedded generation that is located behind the metering installation that measures the net demand taken from the transmission system if (a) the required approvals for such generation are obtained after October 30, 1998; and (b) the generator unit rating is 2 MW or higher for renewable generation and 1 MW or higher for non-renewable generation; and (c) the Transmission Delivery Point through which the generator is connected to the transmission system attracts Line or Transformation Connection Service charges. The term renewable generation refers to a facility that generates electricity from the following sources: wind, solar, Biomass, Bio-oil, Bio-gas, landfill gas, or water.
- Accordingly, the distributors that are Transmission Customers shall ensure that connection agreements between them and the generators, load customers, and embedded distributors connected to their distribution system have provisions requiring the Transmission Customer to satisfy the requirements for Registered Wholesale Meters and Metering Registry for such embedded generation even if the subject embedded generator(s) do not participate in the IESO-administered energy markets.

# Metering requirements

- [http://www.ieso.ca/Documents/marketRules/mr\\_chapter6.pdf](http://www.ieso.ca/Documents/marketRules/mr_chapter6.pdf)
- Retail meter is required at generator terminals if generator size is less than 20 MW.
- Wholesale meter if generator size is equal/more than 20 MW.

# Next Step

If “embedded generation” qualify for gross load billing:

- Initial paperwork requirement:
  - LDC to complete and send form 1563 to Hydro One distribution company.
  - Hydro One distribution company will submit form 1563 to the IESO
  - [TxDx.HydroOne@HydroOne.com](mailto:TxDx.HydroOne@HydroOne.com). Form 1563 is available here at IESO website:
  - <http://www.ieso.ca/Pages/Participate/Market-Rules-and-Manuals-Library.aspx>

Metering:

- If “embedded generation” is not a load displacement project that existing “embedded generation” metering would be sufficient for settlement.
- LDC will provide historical hourly readings for “lower plant rehabilitation” generation from in-service date to now.
- Going forward, LDC will give Hydro One read only access to “embedded generation” interval meter. Hydro One will collect interval meter readings on daily basis.

LDC billing:

- Hydro One will update LDC retail settlement to include “embedded generation” in monthly settlement.
- Hydro One will calculate retroactive adjustment from “embedded generation” in-service date to now.
- Going forward, hydro one will include gross load billing charges in LDC monthly bill.

# How GLB will appear on bill

- Following charge line items on LDC bill will be based on sum of power delivered from meter “A” and power supplied by meter “B” embedded generator.
  - Facility Charge for connection to Common ST Lines
  - Rate Rider for Disposition of Deferral/Variance Accounts (General) (2015)
  - Rate Rider for Disposition of Deferral/Variance Account (Wholesale Market Service Rate)
  - Retail Transmission Rate – Line Connection Service Rate
  - Retail Transmission Rate – Transformation Connection Service Rate

GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES - Delivery Component			
Service Charge	\$	\$ 2,453.11	\$ 2,453.11 Per Month charge
Distribution Volumetric Rate	\$/kW	\$ 4.0763	\$ 7.8865 Per kW total charge
Low Voltage Volumetric Rate	\$/kW	\$ 0.7635	
Retail Transmission Rate - Network Service Rate	\$/kW	\$ 2.8304	
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	\$ 1.7555	
Transformer Allowance	\$/kW	-\$ 0.6000	
Rate Rider for Deferral/Variance Account Disposition (2014) effective until April 30, 2016	\$/kW	-\$ 2.6210	
Rate Rider for Global Adjustment Account (2014) effective until April 30, 2016	\$/kW	\$ 1.0980	
Rate Rider for Disposition of Deferral/Variance Accounts (2015) - effective until April 30, 2016	\$/kW	-\$ 2.6677	
Rate Rider for Disposition of Global Adjustment Account (2015) - effective until April 30, 2016	\$/kW	\$ 3.2515	
Wholesale Market Service Rate	\$/kWh	\$ 0.0044	\$ 0.0127 Per kWh total charge
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	\$ 0.0013	
Debt Retirement Charge	\$/kWh	\$ 0.0070	

GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES - Delivery Component			
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Rate Rider for Global Adjustment Account (2014) effective until April 30, 2016	\$/kW	\$ 1.0980	
Rate Rider for Disposition of Deferral/Variance Accounts (2015) - effective until April 30, 2016	\$/kW	-\$ 2.6677	
Rate Rider for Disposition of Global Adjustment Account (2015) - effective until April 30, 2016	\$/kW	\$ 3.2515	
Wholesale Market Service Rate	\$/kWh	\$ 0.0044	\$ 0.0127 Per kWh total charge
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	\$ 0.0013	
Debt Retirement Charge	\$/kWh	\$ 0.0070	

Scenario 1 no Maintenance Regular Month

	A	B	A-B
	GS>50	GS>1000	Difference
Delivery Fixed	\$ 2,453.11	\$ 2,453.11	\$ -
Delivery Variable	\$ 11,829.69	\$ 34,381.98	-\$ 22,552.29
Regulatory Variable	\$ 1,854.20	\$ 28,951.35	-\$ 27,097.15
Total	\$ 16,137.00	\$ 65,786.44	-\$ 49,649.44
Demand Estimate	1,500	4,360	
Consumption Estimate	146,000	2,279,634	

Scenario 2 Maintenance Month not during shutdown

	A	B	A-B
	GS>50	GS>1000	Difference
Delivery Fixed	\$ 2,453.11	\$ 2,453.11	\$ -
Delivery Variable	\$ 34,381.98	\$ 34,381.98	\$ -
Regulatory Variable	\$ 15,240.00	\$ 28,951.35	-\$ 13,711.35
Total	\$ 52,075.09	\$ 65,786.44	-\$ 13,711.35
Demand Estimate	4,360	4,360	
Consumption Estimate	1,200,000	2,279,634	

Scenario 3 Maintenance Month during shutdown

	A	B	A-B
	GS>50	GS>1000	Difference
Delivery Fixed	\$ 2,453.11	\$ 2,453.11	\$ -
Delivery Variable	\$ 17,190.99	\$ 34,381.98	-\$ 17,190.99
Regulatory Variable	\$ 2,317.75	\$ 28,951.35	-\$ 26,633.60
Total	\$ 21,961.85	\$ 65,786.44	-\$ 43,824.59
Demand Estimate	2,180	4,360	
Consumption Estimate	182,500	2,279,634	

Change the yellow highlighted cells above to reflect expected levels of consumption and demand

Spot Price Weighted Average	\$ 0.0274
Global Adjustment last Month	\$ 0.0881

**Scenario 1 no Maintenance Regular Month**

	A	B	A-B
	GS>50	GS>1000	Difference
Spot price Weighted Average	\$ 3,993.98	\$ 62,361.67	-\$ 58,367.70
Global Adjustment	\$ 12,855.30	\$ 200,721.80	-\$ 187,866.50
Total	\$ 16,849.28	\$ 263,083.47	-\$ 246,234.19
Consumption Estimate	146,000	2,279,634	

**Scenario 2 Maintenance Month not during shutdown**

	A	B	A-B
	GS>50	GS>1000	Difference
Spot price Weighted Average	\$ 32,827.20	\$ 62,361.67	-\$ 29,534.47
Global Adjustment	\$ 105,660.00	\$ 200,721.80	-\$ 95,061.80
Total	\$ 138,487.20	\$ 263,083.47	-\$ 124,596.27
Consumption Estimate	1,200,000	2,279,634	

**Scenario 3 Maintenance Month during shutdown**

	A	B	A-B
	GS>50	GS>1000	Difference
Spot price Weighted Average	\$ 4,992.47	\$ 62,361.67	-\$ 57,369.20
Global Adjustment	\$ 16,069.13	\$ 200,721.80	-\$ 184,652.67
Total	\$ 21,061.60	\$ 263,083.47	-\$ 242,021.87
Consumption Estimate	182,500	2,279,634	

**Scenario 1 no Maintenance Regular Month**

	A	B	A-B
	GS>50	GS>1000	Difference
Delivery and Regulatory	\$ 16,137.00	\$ 65,786.44	-\$ 49,649.44
Spot and Global Adjustment	\$ 16,849.28	\$ 263,083.47	-\$ 246,234.19
Total	\$ 32,986.28	\$ 328,869.91	-\$ 295,883.63

**Scenario 2 Maintenance Month not during shutdown**

	A	B	A-B
	GS>50	GS>1000	Difference
Spot price Weighted Average	\$ 52,075.09	\$ 65,786.44	-\$ 13,711.35
Global Adjustment	\$ 138,487.20	\$ 263,083.47	-\$ 124,596.27
Total	\$ 190,562.29	\$ 328,869.91	-\$ 138,307.62

**Scenario 3 Maintenance Month during shutdown**

	A	B	A-B
	GS>50	GS>1000	Difference
Delivery and Regulatory	\$ 21,961.85	\$ 65,786.44	-\$ 43,824.59
Spot and Global Adjustment	\$ 21,061.60	\$ 263,083.47	-\$ 242,021.87
Total	\$ 43,023.44	\$ 328,869.91	-\$ 285,846.47