



Exhibit 7:

COST ALLOCATION



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OVERVIEW OF COST ALLOCATION

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7.1 Overview

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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.

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7.2 Rate Classes

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7.2.1 CHANGES TO RATE CLASSES

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NEW CUSTOMER CLASSES

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ETPL is not proposing any additional new rate classes.

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7.2.2 UNMETERED LOADS

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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.

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7.2.3 STANDBY RATES

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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.

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

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

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

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

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24 7.2.4 HOST DISTRIBUTOR

25 ETPL became a Host Distributor on January 1, 2007 when Hydro One Networks Inc. ("HONI")
26 became virtually embedded to Erie Thames Distribution system at various points throughout



1 its service territory. Hydro One deregistered multiple wholesale points in ETPL's service
2 territory causing Hydro One to become Embedded within 4 of the communities which ETPL
3 services. ETPL began billing these situations through a retail point of supply and ETPL maintains
4 the metering and billing of the usage that flow into Hydro One's service territory through
5 ETPL's assets.

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

11 7.2.5 MICROFIT

12 ETPL is not proposing to include MicroFIT as a separate class in the cost allocation model in
13 2016. ETPL understands that the CA Model will produce a calculation of unit costs which the
14 Board will use to update the uniform MicroFIT rate at a future date.

15 7.3 Cost Allocation Study

16 7.3.1 OVERVIEW

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

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

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

23 7.3.2 TAB I2: LDC CLASS



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

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

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

11 7.3.3 TAB I3: TB DATA

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

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

16 TABLE 7-1: ETPL 2018 PROPOSED RATE BASE



Rate Base

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

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
Service Revenue Requirement (before Revenues)	\$10,785,163
Revenue Offsets	\$494,448
Base Revenue Requirement (excluding Transformer Ownership Allowance credit adjustment)	\$10,290,716
Distribution revenue	\$10,290,716
Other revenue	\$494,448
3 Total revenue	\$10,785,164



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.

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

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	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

4 **BILLING AND COLLECTING**

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

15 **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	-	-	-	-			
19,439	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			
19,301	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			
<p>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.</p> <p>The budgets here reflect the best available information, not the test year.</p>												

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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.	Customer / Connections	kWh	kW/kVA ⁽¹⁾
	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

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

10 **TABLE 7-6: PERCENTAGE OF 2016 kW WITH TA**
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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

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14 As of August 2017, ETPL has no Wholesale Market Participants and therefore the results entered
 15 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**

	Fixed Charge	Variable Charge	Transformer Allowance
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**

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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.

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<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
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

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NON CO. INCIDENT PEAK											
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

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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.



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REVENUE TO COST RATIOS

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

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

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Name of Customer Class ⁽³⁾	Costs Allocated from Previous Study ⁽¹⁾	%	Allocated Class Revenue Requirement ⁽¹⁾ (7A)	%
<i>From Sheet 10. Load Forecast</i>				
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%

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 2 Table 7-13 below provides information on calculated rate class revenue, consistent with Tab
 3 11 Cost Allocation from the RRWF. Column 7B represents the proposed 2018 Load Forecast
 4 multiplied by the 2017 Approved Rates. Column 7C represents the amounts from Column
 5 7B adjusted to reflect ETPL’s revenue deficiency by using the factor from the CA Model in
 6 Tab O1 cell C 22. ETPL’s factor from the proposed cost allocation is 1.016885. Column 7D
 7 represents the revenue by class using the proposed 2018 revenue to cost ratios discussed in
 8 Section 7.4. Column 7E represents the Other Revenue allocated to each rate class per the
 9 CA Model.

10
 11 TABLE 7-13: CALCULATED CLASS REVENUE
 12

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	\$ 6,114,201	\$ 6,729,756	\$ 374,708
General Service < 50 kW	\$ 1,239,441	\$ 1,259,755	\$ 1,506,192	\$ 50,595
General Service > 50 to 999 kW	\$ 1,050,903	\$ 1,068,127	\$ 667,782	\$ 20,875
General Service > 1,000 to 4,999 kW	\$ 703,748	\$ 715,282	\$ 492,800	\$ 14,642
Large Use	\$ 343,787	\$ 349,422	\$ 455,979	\$ 14,725
Unmetered Scattered Load	\$ 64,102	\$ 65,152	\$ 42,039	\$ 814
Sentinel Lighting	\$ 24,961	\$ 25,370	\$ 54,862	\$ 1,339
Street Lighting	\$ 422,351	\$ 429,274	\$ 235,684	\$ 13,420
Embedded Distributor	\$ 254,948	\$ 259,126	\$ 105,621	\$ 3,330

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



1 The range of acceptable ratios was published in the Board’s letter dated March 31, 2011.
 2 Further to this, the Board’s letter dated June 12, 2015 with regard to the treatment of Street
 3 Lighting connections narrowed the RTC ratio for the street lighting rate class from 70% - 120%
 4 to 80% - 120%, as consistent with the views expressed in the Report of the Board: Review of
 5 Cost Allocation for Unmetered Loads. The RTC ranges proposed by ETPL are within these
 6 ranges.

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

14 **TABLE 7-14: REVENUE TO COST RATIOS**
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Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2012	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
Residential	62.03%	86.31%	94.50%	85 - 115
General Service < 50 kW	12.57%	100.30%	119.16%	80 - 120
General Service > 50 to 999 kW	9.49%	168.46%	106.53%	80 - 120
General Service > 1,000 to 4,999 kW	5.79%	165.76%	115.24%	80 - 120
Large Use	3.38%	81.25%	105.02%	85 - 115
Unmetered Scattered Load	0.78%	177.02%	115.00%	80 - 120
Sentinel Lighting	0.33%	53.08%	111.68%	80 - 120
Street Lighting	3.79%	188.77%	106.22%	80 - 120
Embedded Distributor	1.83%	252.75%	104.92%	80 - 120

16
 17
 18 To determine the proposed RTC ratios, ETPL used the industry common methodology by first
 19 moving all rate classes outside the Board approved range to the upper or lower limit. ETPL
 20 moved Street Lighting down to its 120% limit, Unmetered Scattered Load down to its 120% limit
 21 and moved Embedded Distribution to 100%. ETPL then moved Large Use up to its minimum of



1 85%. As such, ETPL then moved its highest RTC ratio down until it resulted in revenue
 2 neutrality. This resulted in General Service < 50 kW, Unmetered Scattered Load and Street
 3 Lighting having the same RTC ratio at 105.1%

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

6 **TABLE 7-16: PROPOSED 2018-2020 RTC**
 7

Name of Customer Class	Proposed Revenue-to-Cost Ratio			Policy Range
	Test Year	Price Cap IR Period		
	2018	2019	2020	
Residential	94.50%	94.50%	94.50%	85 - 115
General Service < 50 kW	119.16%	119.16%	119.16%	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

8
 9

10



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 6):

7-A Cost Allocation Model



2018 Cost Allocation Model

Sheet I1 Utility Information Sheet

Version

Name of LDC:

Application EB Number:

Date of Application:

Contact Information:

Name:

Title:

Phone Number:

E-Mail Address:

Copyright

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2018 Cost Allocation Model

EB-2017-0038

Sheet I2 Class Selection -

Put identification of this Run in C15 and C17
 Put your proposed rate classes.
 Once 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



2018 Cost Allocation Model

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Sheet I3 Trial Balance Data

Comparisons with RRWF

RRWF Reference:

9. cell F23	Return on Deemed Equity	\$1,415,197	
9. cell F19	Income Taxes (Grossed up)	\$190,777	
9. cell F22	Deemed Interest Expense	\$867,816	
9. cell F25	Service Revenue Requirement	\$10,785,163	From this Sheet
	Revenue Requirement to be Used in this model (\$)	\$10,785,163	\$10,785,163
4. cell G19	Rate Base (\$)	\$40,296,054	
	Rate Base to be Used in this model (\$)	\$40,296,054	\$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-2017-0035

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			
		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
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
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	\$	-	-	\$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	\$	-	-	\$0			
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		100.00%	\$566,197	566,197	\$0	\$	(228,145)	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	\$	-	-	\$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	\$	-	-	\$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	\$	-	-	\$0			
1840-3	Underground Conduit - Bulk Delivery			\$0	-	\$0	\$	-	-	\$0			
1840-4	Underground Conduit - Primary		22.00%	\$727,655	727,655	(\$614,119)	\$	(148,180)	70,600	\$7,536			
1840-5	Underground Conduit - Secondary		78.00%	\$2,579,867	2,579,867	(\$1,535,166)	\$	(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			
1845-4	Underground Conductors and Devices - Primary		34.00%	\$2,693,433	2,693,433	(\$2,369,093)	\$	(506,057)	224,284	\$29,686			
1845-5	Underground Conductors and Devices - Secondary		66.00%	\$5,228,429	5,228,429	(\$5,922,223)	\$	(962,345)	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-2017-0035

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			
		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		
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-2017-0035

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				
		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	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
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			\$ (2,144,319)		\$ 1,053,844	\$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

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Sheet 15.1 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%

2018 Cost Allocation Model

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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	
-----	-----	-----	-----	-----	-----	-----	-----	-----	--

2018 Cost Allocation Model

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Sheet I6.1 Revenue Worksheet -

Total kWhs from Load Forecast	458,589,315
-------------------------------	-------------

Total kW from Load Forecast	632,068
-----------------------------	---------

Deficiency/sufficiency (RRWF 8. cell F51)	170,871
---	---------

Miscellaneous Revenue (RRWF 5. cell F48)	494,448
--	---------

	ID	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
Billing Data													
Forecast kWh	CEN	458,589,315	132,507,178	48,252,843	86,975,191		74,898,209	96,934,403	1,985,669	221,514	517,597	16,296,711	
Forecast kW	CDEM	632,068	-	-	262,052		160,936	168,201	5,449	574	-	34,856	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		371,065			41,928		160,936	168,201					
Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-											
KWh excluding KWh from Wholesale Market Participants	CEN EWMP	458,589,315	132,507,178	48,252,843	86,975,191	-	74,898,209	96,934,403	1,985,669	221,514	517,597	16,296,711	-
Existing Monthly Charge			\$23.22	\$22.29	\$127.91		\$2,537.23	\$10,362.66	\$4.04	\$5.59	\$3.20	\$2,361.50	
Existing Distribution kWh Rate			\$0.0094	\$0.0145							\$0.1142		
Existing Distribution kW Rate					\$3,1024		\$4,2161	\$1,9046	\$23,5048	\$15,6727		\$4,0623	
Existing TOA Rate					\$0.60		\$0.60	\$0.60					
Additional Charges													
Distribution Revenue from Rates		\$10,317,328	\$6,015,606	\$1,239,441	\$1,050,903	\$0	\$800,309	\$444,708	\$422,351	\$24,961	\$64,102	\$254,948	\$0
Transformer Ownership Allowance		\$222,639	\$0	\$0	\$25,157	\$0	\$96,562	\$100,921	\$0	\$0	\$0	\$0	\$0
Net Class Revenue	CREV	\$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

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
Sub-total		(\$178,013)	(\$156,132)	(\$18,203)	(\$2,247)	\$0	(\$406)	(\$414)	(\$306)	(\$120)	(\$88)	(\$97)	\$0
Operation													
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
Sub-total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance													
5175	Maintenance of Meters	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
Billing and Collection													
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
Sub-total		\$1,017,095	\$889,526	\$104,858	\$9,920	\$0	\$256	\$64	\$299	\$7,128	\$4,860	\$184	\$0
Total Operation, Maintenance and Billing		\$1,066,449	\$925,471	\$116,989	\$10,852	\$0	\$361	\$90	\$299	\$7,128	\$4,860	\$399	\$0
Amortization Expense - Meters		\$361,164	\$263,036	\$88,776	\$6,819	\$0	\$768	\$192	\$0	\$0	\$0	\$1,573	\$0
Allocated PILs		\$16,789	\$12,226	\$4,130	\$316	\$0	\$36	\$9	\$0	\$0	\$0	\$73	\$0
Allocated Debt Return		\$76,370	\$55,612	\$18,789	\$1,437	\$0	\$162	\$40	\$0	\$0	\$0	\$331	\$0
Allocated Equity Return		\$124,541	\$90,690	\$30,640	\$2,343	\$0	\$263	\$66	\$0	\$0	\$0	\$540	\$0
Total		\$1,467,301	\$1,190,902	\$241,121	\$19,519	\$0	\$1,184	(\$17)	(\$6)	\$7,008	\$4,773	\$2,818	\$0

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
Distribution Plant													
1860	Meters	\$5,745,100	\$4,184,163	\$1,412,171	\$108,467	\$0	\$12,221	\$3,055	\$0	\$0	\$0	\$25,024	\$0
Accumulated Amortization													
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
Misc Revenue													
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
	Sub-total	(\$178,013)	(\$156,132)	(\$18,203)	(\$2,247)	\$0	(\$406)	(\$414)	(\$306)	(\$120)	(\$88)	(\$97)	\$0
Operation													
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
	Sub-total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance													
5175	Maintenance of Meters	\$49,355	\$35,945	\$12,132	\$932	\$0	\$105	\$26	\$0	\$0	\$0	\$215	\$0
Billing and Collection													
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
	Sub-total	\$1,017,095	\$889,626	\$104,858	\$9,920	\$0	\$256	\$64	\$299	\$7,128	\$4,860	\$184	\$0
	Total Operation, Maintenance and Billing	\$1,066,449	\$925,471	\$116,989	\$10,852	\$0	\$361	\$90	\$299	\$7,128	\$4,860	\$399	\$0
	Amortization Expense - Meters	\$361,164	\$263,036	\$88,776	\$6,819	\$0	\$768	\$192	\$0	\$0	\$0	\$1,573	\$0
	Amortization Expense - General Plant assigned to Meters	\$50,947	\$37,199	\$12,340	\$1,019	\$0	\$118	\$29	\$0	\$0	\$0	\$241	\$0
	Admin and General	\$3,693,057	\$3,203,518	\$405,914	\$38,091	\$0	\$1,276	\$319	\$1,047	\$24,665	\$16,819	\$1,408	\$0
	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
	Total	\$5,225,246	\$4,441,796	\$662,754	\$58,907	\$0	\$2,611	\$340	\$1,041	\$31,673	\$21,591	\$4,533	\$0

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
Distribution Plant													
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 Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1830-3	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
1830-4	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
1830-5	Overhead Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Overhead Conductors and Devices - Subtransmission Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1835-3	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
1835-4	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 Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1845-3	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
1845-4	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
	Sub-total	\$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
Accumulated Amortization													
	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
	Customer Related Net Fixed Assets	\$17,833,220	\$13,524,765	\$2,520,659	\$455,277	\$0	\$16,274	\$1,844	\$1,125,703	\$110,866	\$85,626	(\$7,794)	\$0
	Allocated General Plant Net Fixed Assets	\$1,150,199	\$868,308	\$159,057	\$30,894	\$0	\$1,138	\$128	\$78,030	\$7,684	\$5,501	(\$542)	\$0
	Customer Related NFA Including General Plant	\$18,983,420	\$14,393,073	\$2,679,716	\$486,172	\$0	\$17,412	\$1,972	\$1,203,733	\$118,550	\$91,127	(\$8,335)	\$0
Misc Revenue													
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
	Sub-total	(\$276,175)	(\$243,449)	(\$28,103)	(\$3,192)	\$0	(\$406)	(\$414)	(\$306)	(\$120)	(\$88)	(\$97)	\$0

2018 Cost Allocation Model

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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
Total	\$7,685,133	\$6,259,999	\$965,951	\$138,720	\$0	\$6,862	\$3,372	\$223,293	\$50,115	\$33,575	\$3,246	\$0

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
Total	\$635,701	\$199,509	\$71,469	\$123,234	\$0	\$106,875	\$107,365	\$3,115	\$0	\$80	\$24,055	\$0
Line Transformer 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
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	\$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
General Expenses												
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
Total	\$70,016	\$22,139	\$7,947	\$13,563	\$0	\$11,716	\$11,778	\$225	\$0	\$9	\$2,640	\$0
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	Rate Classification										
		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	\$33,950	\$10,628	\$3,615	\$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	\$29,400	\$29,599	\$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
Total	\$940,157	\$295,034	\$105,742	\$182,137	\$0	\$158,039	\$158,791	\$4,719	\$0	\$118	\$35,577	\$0
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	\$7,390	\$1,229	\$48	\$0	\$6	\$2	\$44	\$0	\$215	\$208	\$6
Adjustment to Customer Related Cost for PLCC	\$90,095	\$78,483	\$9,238	\$716	\$0	\$19	\$5	\$1,020	\$0	\$596	\$19	\$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	(\$4,528,062)	(\$2,404,105)	(\$557,930)	(\$478,953)	\$0	(\$309,009)	(\$374,920)	(\$171,020)	(\$16,157)	(\$11,927)	(\$34,241)	\$0
General Plant - Net Fixed Assets	\$2,164,134	\$1,176,886	\$266,474	\$228,754	\$0	\$176,052	\$179,067	\$81,966	\$7,717	\$5,696	\$90,522	\$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	\$16,331,180	\$4,222,963	\$3,371,064	\$0	\$2,517,401	\$2,571,403	\$1,162,506	\$111,332	\$88,662	\$583,169	\$0
Total Administration and General Expense	\$4,020,098	\$3,844,106	\$565,166	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,871	\$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
Primary Conductors and Poles Gross Assets												
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	\$631	\$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	\$1,616,060	\$510,148	\$183,122	\$312,454	\$0	\$269,981	\$271,400	\$7,881	\$0	\$204	\$60,829	\$0
Subtotal	\$12,429,236	\$3,923,590	\$1,408,403	\$2,403,418	\$0	\$2,076,445	\$2,087,355	\$60,616	\$0	\$1,572	\$467,838	\$0
Primary Conductors and Poles Accumulated Depreciation												
Acct 1830-4 Primary Poles, Towers & Fixtures	(\$1,249,207)	(\$394,343)	(\$141,552)	(\$241,557)	\$0	(\$208,694)	(\$209,791)	(\$6,092)	\$0	(\$158)	(\$47,020)	\$0
Acct 1835-4 Primary Overhead Conductors	(\$3,285,091)	(\$1,037,019)	(\$372,246)	(\$635,232)	\$0	(\$548,612)	(\$551,695)	(\$16,021)	\$0	(\$415)	(\$123,651)	\$0
Acct 1840-4 Primary Underground Conduit	(\$394,233)	(\$124,449)	(\$44,672)	(\$75,232)	\$0	(\$65,961)	(\$66,207)	(\$1,923)	\$0	(\$50)	(\$14,839)	\$0
Acct 1845-4 Primary Underground Conductors	(\$1,481,489)	(\$467,668)	(\$167,873)	(\$286,473)	\$0	(\$247,500)	(\$248,800)	(\$7,225)	\$0	(\$187)	(\$55,763)	\$0
Subtotal	(\$6,410,021)	(\$2,023,479)	(\$726,343)	(\$1,238,494)	\$0	(\$1,070,867)	(\$1,076,493)	(\$31,261)	\$0	(\$811)	(\$241,274)	\$0
Primary Conductor & Poles - Net Fixed Assets	\$6,019,215	\$1,900,111	\$682,059	\$1,164,924	\$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	\$78,962	\$0	\$70,324	\$70,394	\$2,035	\$0	\$49	\$15,743	\$0
Primary C&P Net Fixed Assets Including General Plant	\$6,421,769	\$2,022,101	\$725,098	\$1,243,906	\$0	\$1,075,902	\$1,081,256	\$31,390	\$0	\$810	\$242,307	\$0
Acct 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1840-3 Bulk Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1845-3 Bulk Underground Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1830-5 Secondary Poles, Towers & Fixtures	\$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	\$178,259	\$300,784	\$0	\$259,864	\$261,237	\$0	\$0	\$197	\$58,449	\$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
Subtotal	\$9,511,445	\$3,017,219	\$1,083,054	\$1,848,215	\$0	\$1,596,774	\$1,605,211	\$0	\$0	\$1,209	\$399,765	\$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
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 5155 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 Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5150 Maintenance of Underground Conductors & Devices	\$4,402	\$1,394	\$500	\$854	\$0	\$738	\$742	\$7	\$0	\$1	\$166	\$0
Total	\$59,456	\$18,801	\$6,749	\$11,516	\$0	\$9,950	\$10,002	\$190	\$0	\$8	\$2,242	\$0
General Expenses												
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
Total	\$70,016	\$22,139	\$7,947	\$13,563	\$0	\$11,716	\$11,778	\$225	\$0	\$9	\$2,640	\$0
Primary Conductors and Poles Gross Assets	\$12,429,236	\$3,923,590	\$1,408,403	\$2,403,418	\$0	\$2,076,445	\$2,087,355	\$60,616	\$0	\$1,572	\$467,838	\$0
Acct 1815 - 1855	\$27,863,525	\$8,810,223	\$3,162,497	\$5,397,479	\$0	\$4,682,668	\$4,687,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0

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 <=0	3 GS >=0 to 999 kW	4 GS> 90-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 1830-6 Secondary Poles, Towers & Fixtures	\$35,969	\$11,410	\$4,096	\$6,989	\$0	\$6,038	\$6,070	\$0	\$0	\$5	\$1,361	\$0
Depreciation on Acct 1830-6 Secondary Overhead Conductors	\$79,942	\$38,802	\$6,342	\$9,554	\$0	\$8,058	\$8,065	\$4,879	\$328	\$185	\$1,820	\$0
Depreciation on Acct 1840-6 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 1845-6 Secondary Underground Conductors	\$38,147	\$18,516	\$3,333	\$4,549	\$0	\$3,845	\$3,863	\$2,328	\$156	\$88	\$868	\$0
Depreciation on General Plant Assigned to Secondary C&P	\$48,659	\$14,912	\$5,201	\$9,656	\$0	\$8,592	\$8,605	\$0	\$0	\$5	\$1,024	\$0
Secondary C&P Operations and Maintenance	\$25,704	\$8,173	\$2,934	\$5,006	\$0	\$4,325	\$4,348	\$0	\$0	\$3	\$974	\$0
Allocation of General Expenses	\$23,901	\$7,582	\$2,722	\$4,844	\$0	\$4,172	\$4,184	\$0	\$0	\$0	\$904	\$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
PLAs on Secondary C&P	\$16,441	\$5,215	\$1,872	\$3,186	\$0	\$2,760	\$2,775	\$0	\$0	\$2	\$822	\$0
Debt Return on Secondary C&P	\$74,737	\$23,724	\$8,516	\$14,932	\$0	\$12,955	\$12,952	\$0	\$0	\$10	\$2,829	\$0
Equity Return on Secondary C&P	\$121,900	\$38,688	\$13,887	\$23,699	\$0	\$20,475	\$20,563	\$0	\$0	\$15	\$4,613	\$0
Total	Error - Please Rev	\$212,867	\$66,370	\$103,689	\$0	\$89,603	\$90,027	\$9,414	\$633	\$413	\$20,180	\$0
Secondary NCP	\$24,588	\$102,966	\$6,960	\$3,072	\$0	\$4,492	\$4,779	\$0	\$0	\$41	\$12,277	\$0
PLCC Amount	\$1,649	\$27,390	\$3,229	\$248	\$0	\$6	\$2	\$44	\$215	\$298	\$6	\$0
Adjustment to Customer Related Cost for PLCC	\$44,849	\$56,656	\$5,711	\$488	\$0	\$11	\$3	\$0	\$0	\$281	\$11	\$0
General Plant - Gross Assets	\$8,692,196	\$3,840,091	\$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)	(\$2,484,105)	(\$557,800)	(\$476,953)	\$0	(\$338,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,527)	(\$84,841)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,176,886	\$266,474	\$230,754	\$0	\$176,052	\$179,066	\$81,968	\$7,717	\$5,696	\$40,521	\$0
General Plant - Depreciation	\$507,268	\$303,190	\$88,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439	\$0
Total Net Fixed Assets Excluding General Plant	\$32,978,681	\$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	\$5,000,098	\$3,344,106	\$565,186	\$173,883	\$0	\$95,734	\$97,701	\$71,888	\$28,099	\$20,571	\$22,928	\$0
Total O&M	\$1,447,854	\$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 1830-6 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 1835-6 Secondary Overhead Conductors	\$2,953,266	\$936,863	\$336,294	\$573,881	\$0	\$495,807	\$498,427	\$0	\$0	\$375	\$111,709	\$0
Acct 1840-6 Secondary Underground Conduit	\$1,447,600	\$491,031	\$176,259	\$300,784	\$0	\$259,964	\$261,237	\$0	\$0	\$197	\$85,549	\$0
Acct 1845-6 Secondary Underground Conductors	\$3,137,057	\$995,137	\$357,212	\$609,577	\$0	\$526,647	\$529,429	\$0	\$0	\$399	\$118,657	\$0
Subtotal	\$8,811,445	\$3,017,219	\$1,083,054	\$1,848,215	\$0	\$1,596,774	\$1,605,211	\$0	\$0	\$1,209	\$399,765	\$0
Secondary Conductors and Poles Accumulated Depreciation												
Acct 1830-6 Secondary Poles, Towers & Fixtures	(\$915,281)	(\$195,179)	(\$70,061)	(\$119,658)	\$0	(\$103,293)	(\$103,856)	\$0	\$0	(\$78)	(\$23,273)	\$0
Acct 1835-6 Secondary Overhead Conductors	(\$1,441,780)	(\$457,265)	(\$164,171)	(\$280,155)	\$0	(\$242,042)	(\$243,320)	\$0	\$0	(\$183)	(\$54,534)	\$0
Acct 1840-6 Secondary Underground Conduit	(\$1,078,467)	(\$342,111)	(\$122,803)	(\$209,560)	\$0	(\$181,052)	(\$182,009)	\$0	\$0	(\$137)	(\$40,762)	\$0
Acct 1845-6 Secondary Underground Conductors	(\$3,533,792)	(\$1,120,989)	(\$402,397)	(\$686,666)	\$0	(\$993,250)	(\$996,385)	\$0	\$0	(\$449)	(\$133,684)	\$0
Subtotal	(\$6,669,300)	(\$2,115,634)	(\$789,423)	(\$1,295,944)	\$0	(\$1,119,637)	(\$1,128,553)	\$0	\$0	(\$847)	(\$202,262)	\$0
Secondary Conductor & Poles - Net Fixed Assets	\$2,842,148	\$901,585	\$323,031	\$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	\$3,032,192	\$959,468	\$343,452	\$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
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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	\$436,583	\$137,821	\$49,472	\$84,423	\$0	\$72,508	\$73,321	\$2,129	\$0	\$55	\$18,483	\$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	\$50,829	\$0
Subtotal	\$12,428,296	\$3,923,590	\$1,408,403	\$2,403,418	\$0	\$2,076,445	\$2,087,355	\$60,616	\$0	\$1,572	\$467,838	\$0
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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8120 Maintenance of Poles, Towers & Fixtures	\$10,325	\$3,265	\$1,172	\$2,000	\$0	\$1,728	\$1,737	\$34	\$0	\$1	\$369	\$0
Acct 8125 Maintenance of Overhead Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8130 Overhead Distribution Lines & Feeders - Right of Way	\$44,729	\$14,142	\$5,076	\$8,663	\$0	\$7,484	\$7,522	\$168	\$0	\$6	\$1,686	\$0
Acct 8145 Maintenance of Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8150 Maintenance of Underground Conductors & Devices	\$4,402	\$1,394	\$500	\$854	\$0	\$738	\$742	\$7	\$0	\$1	\$166	\$0
Total	\$59,466	\$18,891	\$6,749	\$11,816	\$0	\$9,950	\$10,002	\$190	\$0	\$8	\$2,242	\$0
General Expenses												
Acct 8085 - Operation Supervision and Engineering	\$13,005	\$4,112	\$1,470	\$2,519	\$0	\$2,178	\$2,188	\$42	\$0	\$2	\$400	\$0
Acct 8010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 8085 - Miscellaneous Distribution Expense	\$57,011	\$18,026	\$6,471	\$11,044	\$0	\$9,540	\$9,590	\$183	\$0	\$7	\$2,149	\$0
Acct 8105 - Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$70,016	\$22,138	\$7,947	\$13,563	\$0	\$11,716	\$11,778	\$225	\$0	\$9	\$2,640	\$0
Secondary Conductors and Poles Gross Assets	\$9,511,445	\$3,017,219	\$1,083,054	\$1,848,215	\$0	\$1,596,774	\$1,605,211	\$0	\$0	\$1,209	\$399,765	\$0
Acct 1815 - 1855	\$27,863,625	\$8,810,223	\$3,162,497	\$5,597,479	\$0	\$4,862,668	\$4,887,125	\$89,497	\$0	\$3,529	\$1,050,507	\$0

2018 Cost Allocation Model

EB-2017-0038

Sheet 03.1 Line Transformers Unit Cost Worksheet -

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> 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	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	0
Line Transformation Unit Cost (\$/kW)	\$0.0000	\$0.0000	\$0.5720	\$0.0000	\$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	\$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)	(\$171,820)	(\$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	\$54,780	\$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	\$10,895	\$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

	1	2	3	4	5	6	7	8	9	10	11
	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 1820-2 Distribution Station Equipment	\$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
Depreciation on Acct 1805-2 Land Station <50 kV	\$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
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
Depreciation on Acct 1810-2 Leasehold Improvements <50 kV	\$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
Acct 5012 - Station Buildings and Fixtures Expense	\$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
Acct 5017 - Distribution Station Equipment - Other	\$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
Allocation of General Expenses	\$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
PIs on Substation Transformers	\$6,526	\$2,277	\$681	\$1,202	\$0	\$938	\$1,170	\$15	\$2	\$5	\$235
Debt Return on Substation Transformers	\$29,686	\$10,359	\$3,100	\$5,469	\$0	\$4,267	\$5,324	\$69	\$8	\$24	\$1,067
Equity Return on Substation Transformers	\$48,411	\$16,892	\$5,055	\$8,918	\$0	\$6,959	\$8,682	\$112	\$13	\$40	\$1,740
Total	\$115,418	\$40,414	\$11,941	\$21,321	\$0	\$16,724	\$20,849	\$268	\$31	\$94	\$4,177
Billed kWh without Substation Transformer Allowance	0	0	262,052	168,201	0	160,936	168,201	5,449	574	0	34,856
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 (\$/kWh)	\$0.0000	\$0.0000	\$0.0814	\$0.0000	\$0.1039	\$0.1240	\$0.0492	\$0.0542	\$0.0000	\$0.1198	\$0.0000
Substation Transformation Unit Cost (\$/kWh)	\$0.0003	\$0.0002	\$0.0002	\$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
General Plant - Accumulated Depreciation	(\$4,529,062)	(\$2,464,105)	(\$57,930)	(\$479,953)	\$0	(\$368,609)	(\$374,920)	(\$171,620)	(\$16,157)	(\$11,927)	(\$84,841)
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
General Plant - Depreciation	\$557,268	\$303,190	\$68,649	\$58,932	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,468	\$10,439
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
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
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
Substation Transformer Rate Base Gross Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1820-2 Distribution Station Equipment	\$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
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
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
Acct 1808-2 Buildings and Fixtures < 50 KV	\$1,008,806	\$352,009	\$105,337	\$185,844	\$0	\$145,014	\$180,917	\$2,328	\$270	\$826	\$36,260
Acct 1810-2 Leasehold Improvements <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,233,029	\$430,248	\$128,750	\$227,151	\$0	\$177,246	\$221,129	\$2,846	\$330	\$1,010	\$44,319
Substation Transformers - Accumulated Depreciation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 1820-2 Distribution Station Equipment	\$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
Acct 1805-2 Land Station <50 kV	\$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
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)
Acct 1810-2 Leasehold Improvements <50 kV	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	(\$104,863)	(\$36,591)	(\$10,950)	(\$19,318)	\$0	(\$15,074)	(\$18,806)	(\$242)	(\$28)	(\$96)	(\$3,769)
Substation Transformers - Net Fixed Assets	\$1,128,166	\$393,658	\$117,800	\$207,833	\$0	\$162,172	\$202,323	\$2,604	\$302	\$94	\$40,550
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
Substation Transformer NFA Including General Plant	\$1,203,485	\$418,931	\$125,233	\$221,936	\$0	\$173,514	\$216,412	\$2,784	\$323	\$983	\$43,368
General Expenses	\$21,675	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$498
Acct 5005 - Operation Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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
Total	\$116,694	\$57,578	\$13,204	\$14,758	\$0	\$11,903	\$11,988	\$3,921	\$382	\$277	\$2,683
Acct 1820-2 Distribution Station Equipment	\$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
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$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

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 Acc't 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 Acc't 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 Acc't 1840-4 Primary Underground Conduit	\$7,236	\$4,023	\$918	\$888	\$0	\$766	\$760	\$55	\$36	\$20	\$171	\$0
Depreciation on Acc't 1845-4 Primary Underground Conductors	\$29,686	\$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	\$6,667	\$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	\$104,269	\$21,246	\$23,473	\$0	\$19,802	\$19,892	\$1,203	\$843	\$530	\$4,492	\$0
PIA on Primary C&P	\$24,032	\$12,977	\$6,301	\$6,814	\$0	\$5,822	\$5,849	\$421	\$278	\$156	\$1,315	\$0
Debt Return on Primary C&P	\$261,979	\$140,908	\$28,684	\$31,450	\$0	\$26,482	\$26,605	\$1,913	\$1,264	\$710	\$5,963	\$0
Equity Return on Primary C&P	\$430,486	\$229,737	\$46,744	\$51,288	\$0	\$41,185	\$41,396	\$3,120	\$2,061	\$1,158	\$9,757	\$0
Total	\$1,556,997	\$826,749	\$168,179	\$186,830	\$0	\$158,131	\$158,783	\$11,008	\$7,462	\$4,199	\$35,695	\$0
General Plant - Gross Assets	\$6,692,195	\$3,640,951	\$824,404	\$707,707	\$0	\$544,061	\$553,987	\$253,587	\$23,874	\$17,623	\$125,363	\$0
General Plant - Accumulated Depreciation	(\$4,520,026)	(\$2,494,103)	(\$557,930)	(\$479,653)	\$0	(\$398,039)	(\$374,800)	(\$171,620)	(\$18,157)	(\$11,507)	(\$84,941)	\$0
General Plant - Net Fixed Assets	\$2,163,134	\$1,178,898	\$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	\$68,649	\$0	\$45,355	\$46,131	\$21,117	\$1,988	\$1,488	\$10,439	\$0
Total Net Fixed Assets Excluding General Plant	\$32,979,681	\$18,331,190	\$4,222,963	\$3,371,064	\$0	\$2,517,401	\$2,571,403	\$1,182,506	\$111,332	\$98,682	\$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	\$1,447,854	\$1,139,421	\$162,894	\$49,539	\$0	\$27,078	\$27,637	\$20,530	\$8,120	\$5,945	\$6,492	\$0
Primary Conductors and Poles Gross Assets	\$6,338,309	\$3,383,290	\$688,239	\$765,140	\$0	\$635,842	\$638,797	\$45,943	\$30,347	\$17,057	\$143,655	\$0
Acc't 1830-4 Primary Poles, Towers & Fixtures	\$10,953,997	\$5,648,139	\$1,189,645	\$1,305,286	\$0	\$1,099,076	\$1,104,185	\$78,415	\$52,455	\$29,483	\$248,313	\$0
Acc't 1840-4 Primary Underground Conduit	\$727,655	\$388,411	\$79,012	\$86,692	\$0	\$72,996	\$73,336	\$5,274	\$3,484	\$1,968	\$16,482	\$0
Acc't 1845-4 Primary Underground Conductors	\$2,675,433	\$1,437,712	\$292,732	\$320,893	\$0	\$270,196	\$271,454	\$19,523	\$12,896	\$7,349	\$61,045	\$0
Subtotal	\$20,715,394	\$11,067,662	\$2,249,359	\$2,468,911	\$0	\$2,078,112	\$2,087,771	\$150,156	\$99,181	\$55,746	\$469,595	\$0
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
Acc't 1830-4 Primary Poles, Towers & Fixtures	(\$2,082,012)	(\$1,111,346)	(\$226,073)	(\$248,049)	\$0	(\$208,862)	(\$209,833)	(\$15,092)	(\$9,968)	(\$5,603)	(\$47,188)	\$0
Acc't 1835-4 Primary Overhead Conductors	(\$5,475,152)	(\$2,922,550)	(\$594,514)	(\$652,304)	\$0	(\$545,252)	(\$551,805)	(\$39,687)	(\$26,214)	(\$14,734)	(\$124,092)	\$0
Acc't 1840-4 Primary Underground Conduit	(\$697,050)	(\$350,720)	(\$71,346)	(\$78,226)	\$0	(\$70,145)	(\$70,246)	(\$4,763)	(\$3,120)	(\$1,742)	(\$14,826)	\$0
Acc't 1845-4 Primary Underground Conductors	(\$2,469,149)	(\$1,317,993)	(\$268,110)	(\$294,172)	\$0	(\$247,698)	(\$248,850)	(\$17,898)	(\$11,822)	(\$6,645)	(\$55,962)	\$0
Subtotal	(\$10,683,369)	(\$5,702,616)	(\$1,180,424)	(\$1,272,806)	\$0	(\$1,071,726)	(\$1,076,708)	(\$77,439)	(\$51,190)	(\$28,786)	(\$242,134)	\$0
Primary Conductor & Poles - Net Fixed Assets	\$10,032,025	\$5,354,938	\$1,068,935	\$1,196,205	\$0	\$1,006,385	\$1,011,063	\$72,717	\$48,031	\$26,967	\$227,371	\$0
General Plant Assigned to Primary C&P - BFA	\$860,327	\$435,764	\$86,737	\$91,104	\$0	\$70,381	\$70,668	\$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
Acc't 1830-3 Bulk Poles, Towers & Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 1835-3 Bulk Overhead Conductors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 1840-3 Bulk Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 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
Acc't 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
Acc't 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
Acc't 1840-5 Secondary Underground Conduit	\$2,579,867	\$1,282,202	\$265,987	\$307,678	\$0	\$280,042	\$281,237	\$157,438	\$10,582	\$5,977	\$58,727	\$0
Acc't 1845-5 Secondary Underground Conductors	\$5,228,429	\$2,537,747	\$539,056	\$625,644	\$0	\$557,007	\$559,429	\$319,068	\$21,466	\$12,113	\$119,018	\$0
Subtotal	\$15,852,409	\$7,694,358	\$1,634,398	\$1,890,563	\$0	\$1,897,867	\$1,905,211	\$967,403	\$66,025	\$36,726	\$360,858	\$0
Operations and Maintenance	\$99,094	\$51,240	\$10,873	\$11,810	\$0	\$9,967	\$10,003	\$2,667	\$461	\$254	\$2,240	\$0
Acc't 8020 Overhead Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8028 Overhead Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8040 Underground Distribution Lines & Feeders - Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8048 Underground Distribution Lines & Feeders - Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8080 Underground Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8088 Overhead Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8128 Maintenance of Poles, Towers & Fixtures	\$17,208	\$8,911	\$1,837	\$2,061	\$0	\$1,729	\$1,737	\$930	\$78	\$44	\$591	\$0
Acc't 8128 Maintenance of Overhead Conductors & Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8138 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	\$0
Acc't 8148 Maintenance of Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8150 Maintenance of Underground Conductors & Devices	\$17,337	\$3,682	\$770	\$875	\$0	\$738	\$742	\$314	\$32	\$18	\$167	\$0
Total	\$99,094	\$51,240	\$10,873	\$11,810	\$0	\$9,967	\$10,003	\$2,667	\$461	\$254	\$2,240	\$0
General Expenses	\$21,075	\$10,695	\$2,452	\$2,741	\$0	\$2,211	\$2,227	\$728	\$71	\$51	\$496	\$0
Acc't 8006 - Operation Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8010 - Load Dispatching	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acc't 8085 - Miscellaneous Distribution Expense	\$95,019	\$46,883	\$10,751	\$12,017	\$0	\$9,892	\$9,781	\$3,183	\$311	\$225	\$2,185	\$0
Acc't 8105 - Operation Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$118,694	\$67,678	\$13,204	\$14,758	\$0	\$11,903	\$11,988	\$3,921	\$382	\$277	\$2,683	\$0
Primary Conductors and Poles Gross Assets	\$20,715,394	\$11,067,562	\$2,249,359	\$2,468,011	\$0	\$2,078,112	\$2,087,771	\$150,156	\$99,181	\$55,746	\$469,595	\$0
Acc't 1818 - 1855	\$54,660,230	\$29,088,220	\$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	\$ 17,208	\$ 8,911	\$ 1,837	\$ 2,061	\$ -	\$ 1,729	\$ 1,737	\$ 930	\$ 78	\$ 44	\$ 591	\$ -
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 99,094	\$ 51,240	\$ 10,873	\$ 11,810	\$ -	\$ 9,967	\$ 10,003	\$ 2,667	\$ 461	\$ 254	\$ 2,240	\$ -

2018 Cost Allocation Model

Sheet O3.4 Secondary Cost Pool Worksheet -

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> 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	\$0
Acct 5045 Underground Distribution Lines & Feeders - Other	\$0	\$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	\$0
Acct 5095 Overhead Distribution Lines & Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Acct 5120 Maintenance of Poles, Towers & Fixtures	\$17,208	\$8,911	\$1,837	\$2,051	\$0	\$1,729	\$1,737	\$430	\$78	\$44	\$391	\$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	\$74,548	\$38,647	\$7,965	\$8,884	\$0	\$7,490	\$7,524	\$1,813	\$341	\$192	\$1,692	\$0
Acct 5145 Maintenance of Underground Conduit	\$0	\$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	\$0
Total	\$99,094	\$51,240	\$10,573	\$11,810	\$0	\$9,957	\$10,003	\$2,557	\$451	\$254	\$2,249	\$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
Secondary Conductors and Poles Gross Assets	\$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
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

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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 99,094	\$ 51,240	\$ 10,573	\$ 11,810	\$ -	\$ 9,957	\$ 10,003	\$ 2,557	\$ 451	\$ 254	\$ 2,249	\$ -



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
Total	\$212,278
Number of Customers	2,018
Metering Unit Cost (\$/Customer/Month)	\$8.77
General Plant - Gross Assets	\$824,404
General Plant - Accumulated Depreciation	(\$557,930)
General Plant - Net Fixed Assets	\$266,474
General Plant - Depreciation	\$68,649
Total Net Fixed Assets Excluding General Plant	\$4,222,963
Total Administration and General Expense	\$565,186
Total O&M	\$162,894
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

<u>Description</u>	Residential	Monthly Unit Cost
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
Total Cost	\$ 1,292,138.00	\$ 6.29
Number of Residential Customers	17119	

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	(\$22,656,141)	(\$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

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
8105	Taxes Other Than Income Taxes	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8110	Income Taxes	Input	\$190,777	\$106,040	\$24,428	\$19,501	\$0	\$14,562	\$14,875	\$6,840	\$644	\$513	\$3,373	\$0
8205-1	Sub-account LEAP Funding	ad	\$12,942	\$10,187	\$1,456	\$443	\$0	\$242	\$247	\$184	\$73	\$53	\$58	\$0
8210	Life Insurance	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8215	Penalties	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8225	Other Deductions	ad	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
			\$104,844,407	\$43,058,270	\$11,931,537	\$15,740,952	\$0	\$13,068,848	\$16,119,833	\$1,656,990	\$188,492	\$193,421	\$2,886,064	\$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
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	\$ -		



Attachment 2 (of 6):

7-B I6 Revenue and Customer Data



Attachment 3 (of 6):

7-C I8 Demand Data



Attachment 4 (of 6):

7-D O1 Revenue to cost RR



Erie Thames Powerlines
Filed: 15 September, 2017
EB-2017-0038
Exhibit 7
Tab 3
Schedule 1
Attachment 5
Page 1 of 1

Attachment 5 (of 6):

7-E O2 Fixed Change Floor Ceiling



Erie Thames Powerlines
Filed: 15 September, 2017
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Exhibit 7
Tab 3
Schedule 1
Attachment 6
Page 1 of 1

Attachment 6 (of 6):

7-F 2018 Load Profile Methodology Report



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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

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
HOUR1	2095.419362	43.74185167	47.90422175	0
HOUR2	2063.004691	43.74185167	47.16317697	0
HOUR3	2040.078917	43.74185167	46.63906166	0
HOUR4	2044.631115	43.74185167	46.74313127	0
HOUR5	2091.452758	43.74185167	47.81353963	0
HOUR6	2189.271269	43.74185167	50.04980781	0
HOUR7	2478.830869	43.74185167	56.66954586	0
HOUR8	2960.865516	43.74185167	67.68953308	0
HOUR9	3432.354551	43.74185167	78.46843287	0
HOUR10	3657.907784	43.74185167	83.6248957	0
HOUR11	3823.150009	43.74185167	87.40256442	0
HOUR12	3830.010408	43.74185167	87.55940277	0
HOUR13	3845.448507	43.74185167	87.91233932	0
HOUR14	3847.49461	43.74185167	87.95911611	0
HOUR15	3815.414784	43.74185167	87.22572636	0
HOUR16	3726.558627	43.74185167	85.19435014	0
HOUR17	3281.446106	43.74185167	75.01845442	0
HOUR18	2954.621667	43.74185167	67.54678996	0
HOUR19	2894.370121	43.74185167	66.16935522	0
HOUR20	2838.870244	43.74185167	64.90055028	0
HOUR21	2704.1365	43.74185167	61.82034818	0
HOUR22	2449.400296	43.74185167	55.99672174	0
HOUR23	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	