



EXHIBIT 7 – COST ALLOCATION

2019 Cost of Service

Chapleau Public Utilities Corporation
EB-2018-0087

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7.2 COST ALLOCATION STUDY REQUIREMENTS

7.2.1 OVERVIEW OF COST ALLOCATION

CPUC has prepared and is filing a cost allocation informational filing consistent with its understanding of the Directions and Policies in the Board's Reports of November 28, 2007 Application of Cost Allocation for Electricity Distributors, and March 31, 2011 Review of Electricity Distribution Cost Allocation Policy (EB-2010-0219) (the "Cost Allocation Reports") and all subsequent updates.

The main objectives of the original informational filing in 2006 were to provide information on any apparent cross-subsidization among a distributor's rate classifications and to support future rate applications. This information is updated to reflect new parameters and inputs and then used to adjust any cross-subsidization in the proposed rates.

Previously Approved Cost Allocation Study (2012)

The Previously Board Approved ratios are presented as a point of reference to the proposed 2019 ratios. As part of its last Cost of Service Rate Application, CPUC updated the cost allocation revenue to cost ratios with 2014 base revenue requirement information. The revenue to cost ratios from the 2014 application are presented below. CPUC notes that there have been no changes in its class composition since 2014.¹

Table 1 - Previously Approved Ratios (2012 COS)

<i>Customer Class Name</i>	2012 Approved Revenue to Cost Ratio
<i>Residential</i>	97.47
<i>General Service < 50 kW</i>	104.28
<i>General Service > 50 to 4999 kW</i>	120.00
<i>USL</i>	118.20
<i>Sentinel Lights</i>	81.52
<i>Street Lighting</i>	81.52

¹ MFR - New customer class or eliminated customer class - rationale and restatement of revenue requirement from previous CoS

1 **Proposed Cost Allocation Study (2019)**

2 The Cost Allocation Study for 2019 allocates the 2019 test year costs (i.e., the 2019 forecast
3 revenue requirement) to the various customer classes using allocators that are based on the
4 forecast class loads (kW and kWh) by class, customer counts, etc.

5 CPUC has used the most up to date (2018) OEB-approved Cost Allocation Model and followed
6 the instructions and guidelines issued by the OEB to enter the 2019 data into this model.²

7 CPUC populated the information on Sheet I3, Trial Balance Data with the 2019 forecasted data,
8 Target Net Income, PILs, interest on long term debt, and the targeted Revenue Requirement and
9 Rate Base.

10 On Sheet I4, Break-out of Assets, CPUC updated the allocation of the accounts based on 2019
11 values.

12 In Sheet I5.1, Miscellaneous data, CPUC updated the deemed equity component of rate base,
13 kilometer of roads in the service area, working capital allowance, the proportion of pole rental
14 revenue from secondary poles, and the monthly service charges.

15 As instructed by the Board, in Sheet I5.2, Weighting Factors, CPUC has used LDC specific factors
16 rather than continue to use OEB approved default factors. The utility has applied service and
17 billing & collecting weightings for each customer classification.

18 These weightings are based on a review of time and costs incurred in servicing its customer
19 classes; they are discussed further below:

20

² MFR - If Cost Allocation Model other than OEB model used - exclude LV, exclude DVA such as smart meters

Table 2 - Weighting Factors

	1	2	3	7	8	9
	Residential	GS <50	GS > 50 to 4999 kW	Street Light	Sentinel	Unmetered Scattered Load
Insert Weighting Factor for Services Account 1855	1.0	1.0	1.0	1.0	1.0	1.0
Insert Weighting Factor for Billing and Collecting	1.0	1.0	1.2	0.6	0.6	0.6

CPUC notes that it does not carry any balances in account 1855 therefore the effects of the weighting factors are irrelevant.

Proposed Billing and Collecting Weighting Factors³

- Residential: weighted for services and for billing and collecting as "1" per Cost Allocation instruction sheet
- General Service less than 50 kW: weighted "1" for billing & collecting. CPUC feels that no more time, attention and costs are spent on these customers as the residential class. The weighting factor for services requires more planning and monitoring for general service class than the residential class.
- The Weighted factor for the General Service greater than 50 kW also resulted in 1.2 for billing and collecting: The breakdown of the weighting factor is shown at table 3 below.
- A Weighting factor of 0.6 is also used for the billing and collecting of the Sentinel, Streetlights and Unmetered Scattered Load class as it requires less costs and effort to bill these classes than the residential class.

A derivation of the billing and collecting weighting factors are shown in the table below.

³ MFR - Description of weighting factors, and rationale for use of default values (if applicable)

Table 3 – Breakdown of Weighting Factors

2017

Accounts 5305 - 5340							
	Residential	GS < 50	GS > 50	Unmetered Scattered Load	Sentinel	Street Lighting	
<i># of Connections</i>	1065.00	156.00	16.00	4.00	23.00	328.00	
<i>Harris Computer Corporation</i>	1725.35	252.73	0.00	0.00	0.00	0.00	
<i>Sensus Canada Inc.</i>	33389.30	4890.83	0.00	0.00	0.00	0.00	
<i>Payroll related meter reads</i>			769.08				
<i>Bad Debt</i>	5127.71	558.36	81.34	0.00	0.00	0.00	
<i>5315 - Customer Billing</i>	53785.92	7878.50	808.05	202.01	1161.57	16565.05	
<i>Total</i>	94028.28	13580.42	1658.47	202.01	1161.57	16565.05	
<i>Cost Per Connection</i>	88.29	87.05	103.65	50.50	50.50	50.50	
<i>Weighting (Residential set as standard)</i>	1.00	0.99	1.17	0.57	0.57	0.57	

Sheet I6.2 has been updated with the required Bad Debt and Late Payment revenue data as well as the number of customer/connection.

CPUC updated the capital cost per meter information on Sheet I7.1 and the meter reading information on I7.2 to reflect its completed deployment of smart meters.

In normal circumstances, a utility should update its demand data (and sheet I8) to reflect the findings of the 2004 hour by hour load data being scaled to be consistent with the 2019 load forecast and the inspection of the scaled data to identify the system peaks and class specific peaks.

To update the demand data, the utility would normally use the original demand data study calculated and provided by HONI by the OEB in 2004 in advance of the 2006 EDR process.

Unfortunately, CPUC has been unable to locate the file dating back to 2006 in order to update it with the proposed 2019 load forecast therefore CPUC has opted to use the same demand data as did in its 2012 Cost of Service application.

1 CPUC has reached out to the OEB, the retired manager, Hydro One and the retired consultant
2 who worked on the 2012 application and has been unable to successfully locate the file. ⁴ In
3 support of its decision to use the demand data from 2012, CPUC believes that its customer
4 count and load has not changed dramatically enough to warrant an update of the demand data
5 in the absence of the core file needed to do so.

6 The 2012 and proposed demand data is presented at the next page.

7 CPUC has completed its cost allocation study using the OEB's methodology. A live Excel version
8 of 2019 cost allocation model has been filed along with this application. CPUC confirms that it
9 has also populated sheets 11 and 12 of the Revenue Requirement Work Form. CPUC confirms
10 that the inputs to the model are consistent with the test year load forecast, changes to customer
11 classes and load profiles. ⁵

⁴ MFR - Explanation provided if a distributor is unable to update its load profiles and confirm that it intends to put plans in place to update its load profiles the next time a cost allocation model is filed

⁵ MFR – Completed cost allocation study using the OEB-approved methodology or a comparable model must be filed reflecting future loads and costs and be supported by appropriate explanations and live Excel spreadsheets. Sheets 11 and 12 of the RRWF must also be completed. Live Excel version of 2017 cost allocation model will be filed (updated load profiles or scaled version of HONI CAIF). Model must be consistent with test year load forecast, changes to customer classes and load profiles.

1

Table 4 - Load Profiles from 2012 CoS

Customer Classes			1	2	3	7	8	9		
			Total	Residential	GS <50	GS>50- Regular	Unmetered Scattered Load	Sentinel	Street Lighting	
			CP Sanity Check	Pass	Pass	Pass	Pass	Check 4CP	Check 4CP	
CO-INCIDENT PEAK										
1 CP										
Transformation CP	TCP1	7,694		4,248	1,585	1,833	1	2	25	
Bulk Delivery CP	BCP1	7,694		4,248	1,585	1,833	1	2	25	
Total Sytem CP	DCP1	7,694		4,248	1,585	1,833	1	2	25	
4 CP										
Transformation CP	TCP4	28,559		15,759	6,059	6,554	4	11	172	
Bulk Delivery CP	BCP4	28,559		15,759	6,059	6,554	4	11	172	
Total Sytem CP	DCP4	28,559		15,759	6,059	6,554	4	11	172	
12 CP										
Transformation CP	TCP12	63,764	33,923	13,761	15,780	11	18	271		
Bulk Delivery CP	BCP12	63,764	33,923	13,761	15,780	11	18	271		
Total Sytem CP	DCP12	63,764	33,923	13,761	15,780	11	18	271		
NON CO_INCIDENT PEAK										
1 NCP		NCP Sanity Check		Pass	Pass	Pass	Pass	Pass	Pass	
Classification NCP from Load Data Provider	DNCP1	8,490		4,669	1,768	1,969	1	9	74	
Primary NCP	PNCP1	8,490		4,669	1,768	1,969	1	9	74	
Line Transformer NCP	LTNCP1	8,490		4,669	1,768	1,969	1	9	74	
Secondary NCP	SNCP1	8,490		4,669	1,768	1,969	1	9	74	
4 NCP										
Classification NCP from Load Data Provider	DNCP4	31,029		16,928	6,638	7,132	4	32	295	
Primary NCP	PNCP4	31,029		16,928	6,638	7,132	4	32	295	
Line Transformer NCP	LTNCP4	31,029	16,928	6,638	7,132	4	32	295		
Secondary NCP	SNCP4	31,029	16,928	6,638	7,132	4	32	295		
12 NCP										
Classification NCP from Load Data Provider	DNCP12		69,792	36,203	15,314	17,303	11	75	886	
Primary NCP	PNCP12		69,792	36,203	15,314	17,303	11	75	886	
Line Transformer NCP	LTNCP12		69,792	36,203	15,314	17,303	11	75	886	
Secondary NCP	SNCP12		69,792	36,203	15,314	17,303	11	75	886	

1 **Table 5 - Demand Data for 2019 Test Year (adjusted for 2019 Load Forecast)**

<u>Customer Classes</u>			1	2	3	7	8	9		
			Total	Residential	GS <50	GS>50- Regular	Unmetered Scattered Load	Sentinel	Street Lighting	
			CP Sanity Check	Pass	Pass	Pass	Pass	Check 4CP	Check 4CP	
CO-INCIDENT PEAK										
1 CP										
Transformation CP	TCP1	7,694		4,248	1,585	1,833	1	2	25	
Bulk Delivery CP	BCP1	7,694		4,248	1,585	1,833	1	2	25	
Total Sytem CP	DCP1	7,694		4,248	1,585	1,833	1	2	25	
4 CP										
Transformation CP	TCP4	28,559		15,759	6,059	6,554	4	11	172	
Bulk Delivery CP	BCP4	28,559		15,759	6,059	6,554	4	11	172	
Total Sytem CP	DCP4	28,559		15,759	6,059	6,554	4	11	172	
12 CP										
Transformation CP	TCP12	63,764	33,923	13,761	15,780	11	18	271		
Bulk Delivery CP	BCP12	63,764	33,923	13,761	15,780	11	18	271		
Total Sytem CP	DCP12	63,764	33,923	13,761	15,780	11	18	271		
NON CO_INCIDENT PEAK										
1 NCP		NCP Sanity Check		Pass	Pass	Pass	Pass	Pass	Pass	
Classification NCP from Load Data Provider	DNCP1	8,490		4,669	1,768	1,969	1	9	74	
Primary NCP	PNCP1	8,490		4,669	1,768	1,969	1	9	74	
Line Transformer NCP	LTNCP1	8,490		4,669	1,768	1,969	1	9	74	
Secondary NCP	SNCP1	8,490		4,669	1,768	1,969	1	9	74	
4 NCP										
Classification NCP from Load Data Provider	DNCP4			31,029	16,928	6,638	7,132	4	32	295
Primary NCP	PNCP4			31,029	16,928	6,638	7,132	4	32	295
Line Transformer NCP	LTNCP4		31,029	16,928	6,638	7,132	4	32	295	
Secondary NCP	SNCP4		31,029	16,928	6,638	7,132	4	32	295	
12 NCP										
Classification NCP from Load Data Provider	DNCP12		69,792	36,203	15,314	17,303	11	75	886	
Primary NCP	PNCP12		69,792	36,203	15,314	17,303	11	75	886	
Line Transformer NCP	LTNCP12		69,792	36,203	15,314	17,303	11	75	886	
Secondary NCP	SNCP12		69,792	36,203	15,314	17,303	11	75	886	

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3 No Direct Allocations were entered on Sheet I9.

- 1 The revenue to cost ratios calculated on Sheet O1 of the Cost Allocation model updated for the
- 2 2019 Test Year are provided at the next page.

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Table 6 - Sheet I6-2 of the Cost Allocation Model⁶

			1	2	3	7	8	9
	ID	Total	Residential	GS <50	GS > 50 to 4999 kW	Street Light	Sentinel	Unmetered Scattered Load
Billing Data								
Bad Debt 3 Year Historical Average	BDHA	\$8,624	\$6,037	\$2,587	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$5,084	\$3,558.80	\$1,525.20				
Number of Bills	CNB	14,697	12,397	1,782	183	48	276	12
Number of Devices	CDEV							
Number of Connections (Unmetered)	CCON	355				4	23	328
Total Number of Customers	CCA	1,225	1,033	148	15	4	23	1
Bulk Customer Base	CCB	-						
Primary Customer Base	CCP	1,221	1,033	148	15	-	23	1
Line Transformer Customer Base	CCLT	1,221	1,033	148	15	-	23	1
Secondary Customer Base	CCS	1,225	1,033	148	15	4	23	1
Weighted - Services	CWCS	1,552	1,033	148	15	4	23	328
Weighted Meter -Capital	CWMC	351,835	325,171	20,664	6,000	-	-	-
Weighted Meter Reading	CWMR	1,181	1,033	148	-	-	-	-
Weighted Bills	CWNB	14,566	12,397	1,764	214	27	157	7

Bad Debt Data

Historic Year:	2014	18,900	13,230	5,670				
Historic Year:	2015	6,763	4,734.10	2,028.90				
Historic Year:	2016	208	145.60	62.40				
Three-year average		\$8,624	\$6,037	\$2,587	\$0	\$0	\$0	\$0

Street Lighting Adjustment Factors

NCP Test Results	4 NCP			
Class				
Residential	1,033	16,928	1,033	16,928
Street Light	-	4	-	4

Street Lighting Adjustment Factors	
Primary	
Line Transformer	

⁶ MFR - Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

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Table 7 - Sheet I6-1 of the Cost Allocation Model⁷

Total kWhs from Load Forecast	26,173,316
--------------------------------------	------------

Total kW from Load Forecast	19,722
------------------------------------	--------

Deficiency/sufficiency (RRWF 8. cell F51)	-221,259
---	----------

Miscellaneous Revenue (RRWF 5. cell F48)	50,729
---	--------

			1	2	3	7	8	9
	ID	Total	Residential	GS <50	GS>50- Regular	Unmetered Scattered Load	Sentinel	Street Lighting
Billing Data								
Forecast kWh	CEN	26,173,316	13,831,681	4,880,502	7,147,174	5,232	24,760	283,967
Forecast kW	CDEM	19,722			18,883		65	774
Forecast kW, included in CDEM, of customers receiving line transformer allowance		-						
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	-						
Existing Monthly Charge			\$24.04	\$35.18	\$193.66	\$24.99	\$8.65	\$4.43
Existing Distribution kWh Rate			\$0.0140	\$0.0179		\$0.0336		
Existing Distribution kW Rate					\$3.6185		\$15.0437	\$20.6218
Existing TOA Rate								
Additional Charges								
Distribution Revenue from Rates		\$783,561	\$491,667	\$150,035	\$103,727	\$1,375	\$3,365	\$33,392
Transformer Ownership Allowance		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Class Revenue	CREV	\$783,561	\$491,667	\$150,035	\$103,727	\$1,375	\$3,365	\$33,392

⁷ MFR - Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

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Table 8 - Sheet O-1 of the Cost Allocation Model⁸

		1	2	3	7	8	9
	Total	Residential	GS <50	GS>50- Regular	Unmetered Scattered Load	Sentinel	Street Lighting
Distribution Revenue at Existing Rates	\$783,561	\$491,667	\$150,035	\$103,727	\$1,375	\$3,365	\$33,392
Miscellaneous Revenue (mi)	\$50,729	\$33,102	\$9,211	\$6,034	\$19	\$233	\$2,129
	Miscellaneous Revenue Input equals Output						
Total Revenue at Existing Rates	\$834,289	\$524,769	\$159,246	\$109,761	\$1,394	\$3,599	\$35,521
Factor required to recover deficiency (1 + D)	1.2824						
Distribution Revenue at Status Quo Rates	\$1,004,820	\$630,502	\$192,402	\$133,017	\$1,764	\$4,316	\$42,821
Miscellaneous Revenue (mi)	\$50,729	\$33,102	\$9,211	\$6,034	\$19	\$233	\$2,129
Total Revenue at Status Quo Rates	\$1,055,548	\$663,604	\$201,613	\$139,051	\$1,782	\$4,549	\$44,950
Expenses							
Distribution Costs (di)	\$237,434	\$135,640	\$43,842	\$41,904	\$33	\$1,049	\$14,965
Customer Related Costs (cu)	\$140,666	\$121,195	\$16,774	\$1,479	\$174	\$1,001	\$44
General and Administration (ad)	\$451,325	\$305,678	\$72,378	\$52,792	\$239	\$2,396	\$17,842
Depreciation and Amortization (dep)	\$120,706	\$81,776	\$17,926	\$16,913	\$13	\$268	\$3,810
PILs (INPUT)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$42,390	\$26,676	\$6,851	\$7,240	\$6	\$108	\$1,509
Total Expenses	\$992,521	\$670,964	\$157,770	\$120,329	\$465	\$4,822	\$38,170
Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated Net Income (NI)	\$63,028	\$39,664	\$10,186	\$10,766	\$8	\$160	\$2,244
Revenue Requirement (includes NI)	\$1,055,548	\$710,628	\$167,956	\$131,095	\$473	\$4,982	\$40,414
	Revenue Requirement Input equals Output						
Rate Base Calculation							
Net Assets							
Distribution Plant - Gross	\$2,946,900	\$1,815,886	\$491,133	\$505,069	\$411	\$8,896	\$125,506
General Plant - Gross	\$978,118	\$615,542	\$158,072	\$167,069	\$131	\$2,483	\$34,821
Accumulated Depreciation	(\$2,438,409)	(\$1,495,886)	(\$408,956)	(\$418,215)	(\$343)	(\$7,605)	(\$107,404)
Capital Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Net Plant	\$1,486,609	\$935,542	\$240,249	\$253,922	\$198	\$3,774	\$52,924
Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost of Power (COP)	\$2,692,686	\$1,422,990	\$502,101	\$735,294	\$538	\$2,547	\$29,214
OM&A Expenses	\$829,425	\$562,512	\$132,994	\$96,175	\$446	\$4,447	\$32,850
Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$3,522,111	\$1,985,502	\$635,096	\$831,470	\$985	\$6,994	\$62,065
Working Capital	\$264,158	\$148,913	\$47,632	\$62,360	\$74	\$525	\$4,655
Total Rate Base	\$1,750,767	\$1,084,455	\$287,881	\$316,282	\$272	\$4,299	\$57,578
	Rate Base Input equals Output						
Equity Component of Rate Base	\$700,307	\$433,782	\$115,152	\$126,513	\$109	\$1,719	\$23,031

⁸ MFR - Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

Net Income on Allocated Assets	\$63,028	(\$7,360)	\$43,842	\$18,722	\$1,318	(\$273)	\$6,780
Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income	\$63,028	(\$7,360)	\$43,842	\$18,722	\$1,318	(\$273)	\$6,780
RATIOS ANALYSIS							
REVENUE TO EXPENSES STATUS QUO%	100.00%	93.38%	120.04%	106.07%	376.62%	91.30%	111.23%
EXISTING REVENUE MINUS ALLOCATED COSTS	(\$221,259)	(\$185,859)	(\$8,710)	(\$21,334)	\$921	(\$1,384)	(\$4,893)
Deficiency Input equals Output							
STATUS QUO REVENUE MINUS ALLOCATED COSTS	\$0	(\$47,024)	\$33,656	\$7,956	\$1,309	(\$433)	\$4,536
RETURN ON EQUITY COMPONENT OF RATE BASE	9.00%	-1.70%	38.07%	14.80%	1209.87%	-15.91%	29.44%

1

2

Table 9 - Sheet O-2 of the Cost Allocation Model⁹

	1	2	3	7	8	9
<u>Summary</u>	Residential	GS <50	GS>50- Regular	Unmetered Scattered Load	Sentinel	Street Lighting
Customer Unit Cost per month - Avoided Cost	\$12.42	\$9.46	\$10.33	\$3.40	\$3.38	-\$0.02
Customer Unit Cost per month - Directly Related	\$24.26	\$20.44	\$20.44	\$7.36	\$7.35	\$0.00
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$33.00	\$29.28	\$31.38	\$8.41	\$17.65	\$9.91
Existing Approved Fixed Charge	\$24.04	\$35.18	\$193.66	\$24.99	\$8.65	\$4.43

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⁹ MFR - Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

7.3 CLASS REVENUE REQUIREMENTS

7.3.1 CLASS REVENUE ANALYSIS

Table 10 below shows the results of the cost allocation updated 2019 study. These results are used to compare and analyze the distribution costs under each option and help the utility determine its 2019 proposed ratios.

Table 10 - Results of the Cost Allocation Study

<i>Customer Class Name</i>	Service Rev Req (row40)		Misc. Revenue (mi) (row19)		Base Rev Req		Rev2Cost Expenses %	Avoided Costs (Minimum Charge)	Directly Related	Minimum System with PLCC * adjustment
<i>Residential</i>	710,628	67.32%	33,102	65.25%	677,526	67.43%	93.38%	\$12.42	\$24.59	\$33.50
<i>General Service < 50 kW</i>	167,956	15.91%	9,211	18.16%	158,745	15.80%	120.04%	\$9.46	\$20.71	\$29.71
<i>General Service > 50 to 4999 kW</i>	131,095	12.42%	6,034	11.90%	125,061	12.45%	106.07%	\$10.32	\$20.86	\$32.03
<i>Unmetered Scattered Load</i>	473	0.04%	19	0.04%	455	0.05%	376.62%	\$3.40	\$7.37	\$8.44
<i>Sentinel Lighting</i>	4,982	0.47%	233	0.46%	4,749	0.47%	91.30%	\$3.38	\$7.39	\$17.84
<i>Street Lighting</i>	40,414	3.83%	2,129	4.20%	38,284	3.81%	111.23%	(\$0.02)	(\$0.00)	\$10.11
TOTAL	1,055,548	100.00%	50,729	100.00%	1,004,820	100.00%				

Table 11 below shows the allocation percentage and base revenue requirement allocation under existing rates, cost allocation results and proposed 2019 proposed allocation.

Table 11- Base Revenue Requirement Under 3 Scenarios

Customer Class Name	Proposed Base Revenue Requirement %					
	Cost Allocation Results		Existing Rates		Proposed Allocation	
<i>Residential</i>	67.43%	677,528	62.75%	630,502	62.76%	630,629
<i>General Service < 50 kW</i>	15.80%	158,745	19.15%	192,402	19.15%	192,399
<i>General Service > 50 to 4999 kW</i>	12.45%	125,059	13.24%	133,017	13.24%	133,012
<i>Unmetered Scattered Load</i>	0.05%	455	0.18%	1,764	0.12%	1,165
<i>Sentinel Lighting</i>	0.47%	4,749	0.43%	4,316	0.48%	4,794
<i>Street Lighting</i>	3.81%	38,284	4.26%	42,821	4.26%	42,821
TOTAL	100.00%	1,004,820	100.00%	1,004,820	100.00%	1,004,820

Table 12 below shows the revenue offset allocation which resulted from Cost Allocation Study (Sheet O1).

Table 12 - Revenue Offset Allocation as per Cost Allocation Study

Customer Class Name	Revenue Offsets	
	%	\$
<i>Residential</i>	65.25%	33,102
<i>General Service < 50 kW</i>	18.16%	9,211
<i>General Service > 50 to 4999 kW</i>	11.90%	6,034
<i>Unmetered Scattered Load</i>	0.04%	19
<i>Sentinel Lighting</i>	0.46%	233
<i>Street Lighting</i>	4.20%	2,129
TOTAL	100.00%	50,729

Table 13 shows the allocation of the service revenue requirement under the same three scenarios.

Table 13 - Service Revenue Requirement Under 3 Scenarios

Customer Class Name	Service Revenue Requirement \$		
	Existing Rates	Cost Allocation	Rate Application
<i>Residential</i>	663,604	710,630	663,731
<i>General Service < 50 kW</i>	201,613	167,956	201,610
<i>General Service > 50 to 4999 kW</i>	139,051	131,093	139,046
<i>Unmetered Scattered Load</i>	1,782	473	1,184
<i>Sentinel Lighting</i>	4,549	4,982	5,028
<i>Street Lighting</i>	44,950	40,414	44,950
TOTAL	1,055,548	1,055,548	1,055,548

7.4 REVENUE-TO-COST RATIOS

7.4.1 COST ALLOCATION RESULTS AND ANALYSIS

Table 16 at the next page shows Appendix 2-P of the Board Appendices while Table 13 below shows the utility's proposed ratios. The Appendix provides information on previously approved ratios and proposed ratios. The section following Appendix 2-P addresses the method and logic used to update the ratios from the Cost Allocation study to the proposed ratios.

Table 14 – Proposed Revenue Allocation

Customer Class Name	Calculated R/C Ratio	Proposed R/C Ratio	Variance	Target Range	
				Floor	Ceiling
<i>Residential</i>	0.9338	0.9340	-0.00	0.85	1.15
<i>General Service < 50 kW</i>	1.2004	1.2004	0.00	0.80	1.20
<i>General Service > 50 to 4999 kW</i>	1.0607	1.0607	0.00	0.80	1.20
<i>Unmetered Scattered Load</i>	3.7661	2.5009	1.27	0.80	1.20
<i>Sentinel Lighting</i>	0.9130	1.0091	-0.10	0.80	1.20
<i>Street Lighting</i>	1.1122	1.1123	-0.00	0.80	1.20

In accordance with the minimum filing requirements, Table 14b below shows the revenue by class that would apply if all rates were changed by a uniform percentage between classes that are eligible to move ratios. CPUC notes that applying the revenue change to classes above the 1.00 would result in them moving further away from 1.00.

Table 14b – Proposed Revenue Allocation at equal % (Res and Sentinel)

Customer Class Name	R/C at (equal split)	Proposed R/C Ratio	R/C Variance	Revenue (equal split)	Revenues at Proposed R/C Ratio	Variance
<i>Residential</i>	0.9343	0.9340	0.0003	663,905	663,731	174.00
<i>General Service < 50 kW</i>	1.2004	1.2004	0.00	201,610	201,610	0.00
<i>General Service > 50 to 4999 kW</i>	1.0607	1.0607	0.00	139,046	139,046	0.00
<i>Unmetered Scattered Load</i>	2.5010	2.5009	0.00	1,184	1,184	0.00
<i>Sentinel Lighting</i>	0.9740	1.0091	0.04	4,853	5,028	175.00
<i>Street Lighting</i>	1.1123	1.1123	0.00	44,950	44,950	0.00
				1,055,548	1,055,548	

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Table 15 - OEB Appendix 2-P

A) Allocated Costs

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$513,150.00	64.23%	\$710,604.65	67.32%
General Service < 50 kW	\$156,531.00	19.59%	\$167,950.24	15.91%
General Service > 50 to 4999 kW	\$90,813.00	11.37%	\$131,088.31	12.42%
Unmetered Scattered Load	\$1,983.00	0.25%	\$473.26	0.04%
Sentinel	\$3,314.00	0.41%	\$4,982.22	0.47%
Street Lights	\$33,127.00	4.15%	\$40,412.18	3.83%
Total	\$798,918.00	100.00%	\$1,055,510.86	100.00%

B) Calculated Class Revenues

(from CA - O1 row 18)

Classes (same as previous table)		Column 7B	Column 7C	Column 7D	Column 7E
		Load Forecast (LF) X current approved rates	L.F. X current approved rates X (1 + d)	LF X proposed rates	Miscellaneous Revenue
Residential		\$491,667.00	\$630,501.80	\$630,628.67	\$33,101.98
General Service < 50 kW		\$150,035.00	\$192,401.52	\$192,398.88	\$9,211.01
General Service > 50 to 4999 kW		\$103,727.00	\$133,016.54	\$133,012.04	\$6,034.17
Unmetered Scattered Load		\$1,375.00	\$1,763.67	\$1,164.92	\$18.72
Sentinel		\$3,365.00	\$4,315.50	\$4,794.28	\$233.32
Street Lights		\$33,392.00	\$42,820.54	\$42,820.79	\$2,129.40
Total		\$783,561.00	\$1,004,819.58	\$1,004,819.58	\$50,728.60

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

Class		Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
		Most Recent Year:	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
		2012			
		%	%	%	%
Residential		97.47	93.39	93.40	85 - 115
General Service < 50 kW		104.28	120.04	120.04	80 - 120
General Service > 50 to 4999 kW		120.00	106.07	106.07	80 - 120
Unmetered Scattered Load		118.20	376.62	250.10	80 - 120
Sentinel		81.52	91.30	100.91	85 - 115
Street Lights		81.52	111.23	111.23	

D) Proposed Revenue-to-Cost Ratios

Class		Proposed Revenue-to-Cost Ratios			Policy Range
		2019	2020	2021	
		%	%	%	%
Residential		93.40			85 - 115
General Service < 50 kW		120.04			80 - 120
General Service > 50 to 4999 kW		106.07			80 - 120
Unmetered Scattered Load		250.10	160	120	80 - 120
Sentinel		100.91			85 - 115

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Table 16 below shows the utility's proposed Revenue to Cost reallocation based on an analysis of the proposed results from the Cost Allocation Study vs. the Board imposed floor and ceiling ranges.

Table 16 – 2019 Allocation

Customer Class Name	Calculated R/C Ratio	Proposed R/C Ratio	Variance	Target Range	
				Floor	Celiling
<i>Residential</i>	0.9338	0.9340	-0.00	0.85	1.15
<i>General Service < 50 kW</i>	1.2004	1.2004	0.00	0.80	1.20
<i>General Service > 50 to 4999 kW</i>	1.0607	1.0607	0.00	0.80	1.20
<i>Unmetered Scattered Load</i>	3.7661	2.5009	1.27	0.80	1.20
<i>Sentinel Lighting</i>	0.9130	1.0091	-0.10	0.80	1.20
<i>Street Lighting</i>	1.1122	1.1123	-0.00	0.80	1.20

* Ratios highlighted in pink fell outside of the floor to ceiling range.

The proposed Revenue to Cost ratio is adjusted by changing the allocation percentage for each class. The utility reviews and assesses the bill impacts for each class before adjusting the Revenue to Cost ratios.¹⁰

CPUC proposes to maintain the residential class, the General Service <50kW, GS"50kW and the Street Lighting class at their existing ratios 120%, 107% and 111% respectively. CPUC proposes to decrease the ratio for the USL class from 371% to 246% and to increase the Sentinel Lighting from 90% to 100%.¹¹ The proposed cost re-allocation results in the shortfall allocation shown in the table below.

¹⁰ MFR - To support a proposal to rebalance rates, the distributor must provide information on the revenue by class that would apply if all rates were changed by a uniform percentage. Ratios must be compared with the ratios that will result from the rates being proposed by the distributor.

¹¹ MFR - Confirmation of communication with unmetered load customers when proposing changes to the level of the rates and charges or the introduction of new rates and charges

Table 17 Table of Shortfall reallocation

Customer Class Name	Shortfall Reconciliation
<i>Residential</i>	-126.9
<i>General Service < 50 kW</i>	2.6
<i>General Service > 50 to 4999 kW</i>	4.5
<i>Unmetered Scattered Load</i>	598.8
<i>Sentinel Lighting</i>	-478.8
<i>Street Lighting</i>	-0.3
<i>Total</i>	-126.9

2 For further details about the class specific bill impacts, please refer to Exhibit 8. CPUC confirms
3 that is has communicated its proposed rates and bill impacts to its Street Lighting and USL
4 customers and that it did not receive any comments and feedback on the issue. ^{12 13}

5 CPUC is not a Host Distributor therefore evidence of consultation with embedded distributors is
6 not applicable. The utility does not have unique circumstances which justify specific MicroFit
7 rates and the utility is not seeking Standby Rates in this application. ^{14 15 16}

¹² MFR - If R:C ratios outside deadband based on model - distributors must include cost allocation proposal to bring them within the OEB-approved ranges. In making any such adjustments, distributors should address potential mitigation measures if the impact of the adjustments on the rates of any particular class or classes is significant.

¹³ MFR - Unmetered Loads (including Street Lighting) - Confirmation of communication with unmetered load customers when proposing changes to the level of the rates and charges or the introduction of new rates and charges

¹⁴ MFR - Host Distributor - evidence of consultation with embedded Dx

¹⁵ MFR - microFIT - if the applicant believes that it has unique circumstances which would justify a certain rate, appropriate documentation must be provided

¹⁶ MFR - Standby Rates - if seeking approval on final basis, provide evidence that affected customers have been advised. If seeking changes to standby charges, provide rationale and evidence that affected customer have been advised.