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7.2 COST ALLOCATION STUDY REQUIREMENTS

7.2.1 OVERVIEW OF COST ALLOCATION

CWH 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.

The Previously Board Approved ratios are presented as a point of reference to the proposed 2018 ratios. As part of its last Cost of Service Rate Application, CWH updated the cost allocation revenue to cost ratios with 2013 base revenue requirement information. The revenue to cost ratios from the 2013 application are presented below.

Table 1: Previously Approved Ratios (2013 COS)

Customer Class Name	2013 Approved Revenue to Cost Ratio
Residential	99.65
General Service < 50 kW	99.05
General Service 50 to 2,999 kW	99.75
General Service 3,000-4,999 kW	99.69
Unmetered Scattered Load	120
Sentinel Lighting	120
Street Lighting	120

The Cost Allocation Study for 2018 allocates the 2018 test year costs (i.e., the 2018 forecast revenue requirement) to the various customer classes using allocators that are based on the forecast class loads (kW and kWh) by class, customer counts, etc.

1 CWH has used the most up to date (2017) OEB-approved Cost Allocation Model^{1 2} and followed
2 the instructions and guidelines issued by the OEB to enter the 2018 data into this model.

3 CWH populated the information on Sheet I3, Trial Balance Data with the 2018 forecasted data,
4 Target Net Income, PILs, Deemed interest on long term debt, and the targeted Revenue
5 Requirement and Rate Base.

6 On Sheet I4, Break-out of Assets, CWH updated the allocation of the accounts based on 2018
7 values.

8 On Sheet I5.1, Miscellaneous data, CWH updated the deemed equity component of rate base,
9 kilometer of roads in the service area, working capital allowance and the proportion of pole
10 rental revenue from secondary poles.

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

14 These weightings are based on a review of time and costs incurred in servicing its customer
15 classes; they are discussed further below:³

16

Table 2: Weighting Factors

	1	2	3	5	7	8	9
	Residential	GS <50	GS > 50 to 2999 kW	GS > 3000 to 4999 kW	Street Light	Sentinel	Unmetered Scattered Load
Insert Weighting Factor for Services Account 1855	1.0	5.0	23.3	23.3	1.0	1.0	1.0
Insert Weighting Factor for Billing and Collecting	1.0	1.0	5.4	5.4	2.1	2.1	2.1

¹ 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.

² 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.

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

1 **Proposed Services Weighting Factors**

2 **Residential:** the Services weighting factor was set to “1”, per Cost Allocation instruction
3 sheet.

4 **General Service less than 50 kW:** The proposed Services weighting factor of 5.0 reflects
5 that these customers require greater capacity than do residential customers as well
6 increased levels of planning and engineering as well as larger size of conductor, which is
7 more costly and more material.

8 **General Service greater than 50 kW (GS 50-2,999 kW and GS 3,000-4,999 kW):** The
9 proposed Services weighting factor of 23.3 reflects that these customers require greater
10 capacity than do residential customers as well increased levels of planning, engineering as
11 well as larger size of conductor, which is more costly and more material.

12 **Street Lighting and Sentinel and USL Load:** A Services weighting factor of 1.0 is proposed
13 for all three customer classes as the costs.

14 **Proposed Billing and Collecting Weighting Factors**

15 **Residential:** The Billing and Collecting-weighting factor is set at 1, per Cost Allocation
16 instruction sheet.

17 **General Service less than 50 kW:** the proposed Billing and Collecting weighting factor is
18 also 1. CWH doesn't experience a significant difference between time required to bill this
19 class when compared to the residential class.

20 **General Service greater than 50 kW (GS 50-2,999 kW and GS 3,000-4,999 kW):** The
21 proposed Billing and Collecting-weighting factor is 5.4. All customers within this
22 classification are mandated to be moved to MIST meters no later than 2020. CWH is in the
23 process of doing this, with the result being meters settled through a 3rd Party vendor with a
24 retail meter account. This allows the customer access to their daily data so they can track
25 their consumption and respond quickly to higher consumptions. This service has a monthly
26 fee and therefore the billing/collection allocation is higher.

1 **Street Lighting, Sentinel Lights and USL:** the proposed weighting factor is 2.1. These
2 classes do not give rise to Collecting costs. The customers in these classes requires manual
3 intervention if connections are added or removed and thus have a higher allocation when
4 compared to the residential class.

5 In Sheet I6.1 Revenue has been populated with the 2018 Test Year forecast data as well as
6 existing rates.

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

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

11 The data entered on sheet I8 reflects the findings of the 2004 hour by hour load data being
12 scaled to be consistent with the 2018 load forecast and the inspection of the scaled data to
13 identify the system peaks and class specific peaks. The updated demand data is presented at
14 the next page. No Direct Allocations were entered on Sheet I9.

15 **Embedded Distributor Class⁴**

16 CWH is not a host to any distributor.

17 **Unmetered Scattered Loads (including Street Lights)⁵**

18 CWH communicates with unmetered load customers to assist them in understanding the
19 regulatory requirements in which CWH operates. Since CWH's largest customer in this category
20 in the Township of Centre Wellington, CWH confirms load and rate impact whenever increases
21 are completed. CWH also communicated the rate increase forecasted for this rate application
22 and the impacts to its customers.

⁴ MFR - Host Distributor - evidence of consultation with embedded Dx.

⁵ 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.

1 **MicroFIT⁶**

2 CWH has requested an increase in the MircoFIT rate from the current \$5.40 per month to \$10.00
3 per month to cover the cost of the settlement process.

4 **Standby Rates⁷**

5 CWH is not seeking approval on a final basis, or changes to standby charges.

6 **New or Eliminated Customer Classes⁸**

7 CWH is not proposing to include or eliminate any customer classes.

⁶ MFR - microFIT - if the applicant believes that it has unique circumstances which would justify a certain rate, appropriate documentation must be provided.

⁷ 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.

⁸ MFR - New customer class or eliminated customer class - rationale and restatement of revenue requirement from previous CoS.

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Table 3: Load Profiles from 2013 CoS

Customer Classes		Total	Residential	GS 50-2999 kW	Street Lighting	GS<50	Sentinel Lighting	GS 3000-4999	USL
CO-INCIDENT PEAK (kW)									
1 CP									
Total System CP	DCP1	26,295	9,644	9,161	263	3,802	9	3,358	58
4 CP									
Total System CP	DCP4	103,378	35,483	38,098	793	14,976	27	13,739	263
12 CP									
Total System CP	DCP12	287,804	95,662	112,368	1,671	38,542	76	38,685	800
NON_CO_INCIDENT PEAK (kW)									
1 NCP									
Classification NCP from Load Data Provider	DNCP1	30,714	10,252	10,832	273	5,127	21	4,127	83
4 NCP									
Classification NCP from Load Data Provider	DNCP4	118,816	38,963	42,922	1,088	19,121	68	16,352	303
12 NCP									
Classification NCP from Load Data Provider	DNCP12	329,372	104,554	123,341	3,232	50,451	154	46,841	800

2

1 **Table 4: I8 Demand Data for 2018 Test Year (adjusted for 2018 Load Forecast)⁹**

Customer Classes		Total	1 Residential	2 GS <50	3 GS > 50 to 2999 kW	5 GS > 3000 to 4999 kW	7 Street Light	8 Sentinel	9 Unmetered Scattered Load
CO-INCIDENT PEAK									
1 CP									
Transformation CP	TCP1	23,956	9,385	3,548	8,468	2,495	-	6	54
Bulk Delivery CP	BCP1	23,956	9,385	3,548	8,468	2,495	-	6	54
Total System CP	DCP1	23,956	9,385	3,548	8,468	2,495	-	6	54
4 CP									
Transformation CP	TCP4	94,041	35,581	14,735	34,940	8,499	-	28	259
Bulk Delivery CP	BCP4	94,041	35,581	14,735	34,940	8,499	-	28	259
Total System CP	DCP4	94,041	35,581	14,735	34,940	8,499	-	28	259
12 CP									
Transformation CP	TCP12	261,854	94,048	40,287	104,045	22,671	-	54	749
Bulk Delivery CP	BCP12	266,690	94,048	40,287	104,503	27,049	-	54	749
Total System CP	DCP12	266,690	94,048	40,287	104,503	27,049	-	54	749
NON CO_INCIDENT PEAK									
1 NCP									
Classification NCP from Load Data Provider	DNCP1	26,033	9,613	4,007	9,161	3,067	125	6	54
Primary NCP	PNCP1	26,033	9,613	4,007	9,161	3,067	125	6	54
Line Transformer NCP	LTNCP1	26,033	9,613	4,007	9,161	3,067	125	6	54
Secondary NCP	SNCP1	26,033	9,613	4,007	9,161	3,067	125	6	54
4 NCP									
Classification NCP from Load Data Provider	DNCP4	108,431	37,915	17,842	39,672	12,152	519	48	284
Primary NCP	PNCP4	108,431	37,915	17,842	39,672	12,152	519	48	284
Line Transformer NCP	LTNCP4	108,431	37,915	17,842	39,672	12,152	519	48	284
Secondary NCP	SNCP4	108,431	37,915	17,842	39,672	12,152	519	48	284
12 NCP									
Classification NCP from Load Data Provider	DNCP12	300,029	101,743	47,076	114,003	34,808	1,541	108	749
Primary NCP	PNCP12	300,029	101,743	47,076	114,003	34,808	1,541	108	749
Line Transformer NCP	LTNCP12	300,029	101,743	47,076	114,003	34,808	1,541	108	749
Secondary NCP	SNCP12	300,029	101,743	47,076	114,003	34,808	1,541	108	749

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3 The Customer Data tab of the Cost Allocation model updated for the 2018 Test Year are
4 provided at the next page.

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

Table 5: Sheet I6-2 of the Cost Allocation Model

	ID	Total	Residential	GS <50	GS > 50 to 2999 kW	GS > 3000 to 5000 kW	Street Light	Sentinel	Unmetered Scattered Load
Billing Data									
Bad Debt 3 Year Historical Average	BDHA	\$8,515	\$7,859	\$656	\$0	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	(\$14,827)	(\$1,637)	(\$13,190)					
Number of Bills	CNB	83,226	73,284	9,098	545		36	108	156
Number of Devices	CDEV						1,716	29	
Number of Connections (Unmetered)	CCON	1,465					1,436	29	
Total Number of Customers	CCA	6,937	6,107	758	45	1	3	9	13
Bulk Customer Base	CCB	-							
Primary Customer Base	CCP	7,017	6,107	758	45	1	84	9	13
Line Transformer Customer Base	CCLT	7,004	6,107	758	32	1	84	9	13
Secondary Customer Base	CCS	6,923	6,107	758	32	1	3	9	13
Weighted - Services	CWCS	12,146	6,107	3,791	747	23	1,436	29	13
Weighted Meter -Capital	CWMC	1,556,049	1,128,839	361,963	63,627	1,621	-	-	-
Weighted Meter Reading	CWMR	6,951	6,107	758	54	1	4	11	16
Weighted Bills	CWNB	85,964	73,284	9,098	2,952	-	76	227	328
Bad Debt Data			92.30%	7.70%					
Historic Year:	2014	4,541	4,191	350					
Historic Year:	2015	16,711	15,424	1,287					
Historic Year:	2016	4,293	3,962	331					
Three-year average		8,515	7,859	656	-	-	-	-	-
Street Lighting Adjustment Factors									
NCP Test Results	4 NCP								
	Primary Asset Data			Line Transformer Asset Data					
Class	Customers/ Devices	4 NCP	Customers/ Devices	4 NCP					
Residential	6,107	37,915	6,107	37,915					
Street Light	1,716	519	1,716	519					
	Street Lighting Adjustment Factors								
	Primary	20.5401							
	Line Transformer	20.5401							

Table 6: Sheet I6-1 of the Cost Allocation Model

Total kWhs from Load Forecast		144,365,460									
Total kW from Load Forecast		205,472									
Deficiency/sufficiency (RRWF 8. cell F51)		- 465,817									
Miscellaneous Revenue (RRWF 5. cell F48)		292,400									
			1	2	3	5	7	8	9		
			Residential	GS <50	GS > 50 to 2999 kW	GS > 3000 to 5000 kW	Street Light	Sentinel	Unmetered Scattered Load		
Billing Data											
Forecast kWh			CEN	144,365,460	44,716,576	20,596,746	59,273,907	18,632,513	558,906	38,252	548,560
Forecast kW			CDEM	205,472			160,292	43,538	1,536	106	
Forecast kW, included in CDEM, of customers receiving line transformer allowance				133,978			91,184	42,794			
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	144,365,460	44,716,576	20,596,746	59,273,907	18,632,513	558,906	38,252	548,560
Existing Monthly Charge					\$21.02	\$18.44	\$170.19	\$685.86	\$1.93	\$4.73	\$6.92
Existing Distribution kWh Rate					\$0.0074	\$0.0192					\$0.0109
Existing Distribution kW Rate							\$3.7113	\$2.9277	\$9.3109	\$12.5207	
Existing TOA Rate							\$0.60	\$0.60			
Additional Charges											
Distribution Revenue from Rates				\$3,321,886	\$1,871,336	\$563,220	\$687,579	\$135,696	\$54,048	\$2,949	\$7,059
Transformer Ownership Allowance				\$80,387	\$0	\$0	\$54,710	\$25,676	\$0	\$0	\$0
Net Class Revenue			CREV	\$3,241,500	\$1,871,336	\$563,220	\$632,869	\$110,020	\$54,048	\$2,949	\$7,059
					1,871,336	563,220	632,869	110,020	54,048	2,949	7,059

The revenue to cost ratios calculated on Sheet O1 and O2 of the Cost Allocation model updated for the 2018 Test Year are provided at the next page.

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Table 7: Sheet O-1 of the Cost Allocation Model

	Total	Residential	GS <50	GS > 50 to 2999 kW	GS > 3000 to 5000 kW	Street Light	Sentinel	Unmete r e d Scattered Load
Distribution Revenue at Existing Rates	\$3,241,500	\$1,871,336	\$563,220	\$632,869	\$110,020	\$54,048	\$2,949	\$7,059
Miscellaneous Revenue (mi)	\$292,400	\$164,228	\$55,526	\$48,118	\$13,446	\$9,951	\$455	\$675
Miscellaneous Revenue Input equals Output								
Total Revenue at Existing Rates	\$3,533,900	\$2,035,564	\$618,746	\$680,986	\$123,466	\$63,999	\$3,404	\$7,734
Factor required to recover deficiency (1 + D)	1.1437							
Distribution Revenue at Status Quo Rates	\$3,707,317	\$2,140,255	\$644,157	\$723,814	\$125,830	\$61,815	\$3,373	\$8,073
Miscellaneous Revenue (mi)	\$292,400	\$164,228	\$55,526	\$48,118	\$13,446	\$9,951	\$455	\$675
Total Revenue at Status Quo Rates	\$3,999,717	\$2,304,483	\$699,683	\$771,932	\$139,276	\$71,766	\$3,828	\$8,749
Expenses								
Distribution Costs (di)	\$654,100	\$282,787	\$130,832	\$162,069	\$46,464	\$29,742	\$830	\$1,377
Customer Related Costs (cu)	\$595,000	\$501,229	\$72,579	\$17,669	\$97	\$411	\$1,233	\$1,781
General and Administration (ad)	\$1,174,400	\$730,901	\$191,709	\$173,325	\$45,225	\$28,362	\$1,915	\$2,962
Depreciation and Amortization (dep)	\$590,700	\$255,659	\$105,485	\$166,586	\$49,451	\$11,818	\$432	\$1,270
PIs (INPUT)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest	\$379,818	\$153,003	\$68,757	\$113,614	\$33,818	\$9,464	\$293	\$869
Total Expenses	\$3,394,018	\$1,923,579	\$569,362	\$633,263	\$175,055	\$79,797	\$4,703	\$8,259
Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated Net Income (NI)	\$605,699	\$243,995	\$109,647	\$181,182	\$53,929	\$15,093	\$468	\$1,385
Revenue Requirement (includes NI)	\$3,999,717	\$2,167,575	\$679,010	\$814,444	\$228,984	\$94,889	\$5,171	\$9,644
Revenue Requirement Input equals Output								
Rate Base Calculation								
Net Assets								
Distribution Plant - Gross	\$24,924,626	\$10,785,660	\$4,581,827	\$6,734,209	\$1,980,757	\$763,976	\$24,256	\$53,941
General Plant - Gross	\$4,326,410	\$1,754,030	\$761,400	\$1,304,262	\$390,183	\$103,193	\$3,340	\$10,001
Accumulated Depreciation	(\$11,869,977)	(\$5,424,818)	(\$2,189,074)	(\$2,966,675)	(\$865,192)	(\$386,513)	(\$13,074)	(\$24,631)
Capital Contribution	(\$1,820,247)	(\$841,630)	(\$346,641)	(\$412,759)	(\$118,126)	(\$94,907)	(\$2,509)	(\$3,676)
Total Net Plant	\$15,560,811	\$6,273,242	\$2,807,512	\$4,659,037	\$1,387,622	\$385,749	\$12,013	\$35,636
Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost of Power (COP)								
Cost of Power (COP)	\$20,053,083	\$6,211,355	\$2,860,991	\$8,233,441	\$2,588,149	\$77,635	\$5,313	\$76,198
OM&A Expenses	\$2,423,500	\$1,514,917	\$395,120	\$353,063	\$91,787	\$58,515	\$3,978	\$6,120
Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$22,476,583	\$7,726,273	\$3,256,111	\$8,586,504	\$2,679,936	\$136,149	\$9,291	\$82,318
Working Capital	\$1,685,744	\$579,470	\$244,208	\$643,988	\$200,995	\$10,211	\$697	\$6,174
Total Rate Base	\$17,246,554	\$6,852,713	\$3,051,720	\$5,303,025	\$1,588,617	\$395,960	\$12,709	\$41,809
Rate Base Input equals Output								
Equity Component of Rate Base	\$6,898,622	\$2,741,085	\$1,220,688	\$2,121,210	\$635,447	\$158,384	\$5,084	\$16,724
Net Income on Allocated Assets	\$605,699	\$380,903	\$130,320	\$138,670	(\$35,779)	(\$8,031)	(\$875)	\$490
Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income	\$605,699	\$380,903	\$130,320	\$138,670	(\$35,779)	(\$8,031)	(\$875)	\$490
RATIOS ANALYSIS								
REVENUE TO EXPENSES STATUS QUO%	100.00%	106.32%	103.04%	94.78%	60.82%	75.63%	74.04%	90.72%
EXISTING REVENUE MINUS ALLOCATED COSTS	(\$465,817)	(\$132,011)	(\$60,264)	(\$133,458)	(\$105,518)	(\$30,890)	(\$1,766)	(\$1,910)
Deficiency Input equals Output								
STATUS QUO REVENUE MINUS ALLOCATED COSTS	\$0	\$136,908	\$20,673	(\$42,512)	(\$89,708)	(\$23,123)	(\$1,343)	(\$895)
RETURN ON EQUITY COMPONENT OF RATE BASE	8.78%	13.90%	10.68%	6.54%	-5.63%	-5.07%	-17.21%	2.93%

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Table 8: Sheet O-2 of the Cost Allocation Model

	1	2	3	5	7	8	9
Summary	Residential	GS <50	GS > 50 to 2999 kW	GS > 3000 to 5000 kW	Street Light	Sentinel	Unmetered Scattered Load
Customer Unit Cost per month - Avoided Cost	\$7.07	\$8.44	\$34.73	-\$7.96	\$0.01	\$3.13	\$9.92
Customer Unit Cost per month - Directly Related	\$12.89	\$15.61	\$63.55	\$0.98	\$0.03	\$6.08	\$19.35
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$21.23	\$38.30	\$141.05	\$216.85	\$5.12	\$10.79	\$29.22
Existing Approved Fixed Charge	\$21.02	\$18.44	\$170.19	\$685.86	\$1.93	\$4.73	\$6.92

2

1 **7.3 CLASS REVENUE REQUIREMENTS**

2 **7.3.1 CLASS REVENUE ANALYSIS¹⁰**

3 Table 9 below shows the results of the cost allocation updated 2018 study. These results are
4 used to compare, analyze the allocation under each option and help the utility determine its
5 2018 proposed ratios.

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.

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Table 9: Results of the Cost Allocation Study

Cost Allocation Results	REVENUE ALLOCATION (sheet O1)						CUSTOMER UNIT COST PER MONTH (sheet O2)				Maximum Charge	Maximum Charge or Existing Rate
	Service Rev Req (row40)		Misc. Revenue (mi) (row19)		Base Rev Req		Rev2Cost Expenses %	Avoided Costs (Minimum Charge)	Directly Related	Minimum System with PLCC * adjustment		
Residential	2,167,575	54.19%	164,228	56.17%	2,003,347	54.04%	106.32%	\$7.07	\$12.89	\$21.23	\$21.23	\$21.23
General Service < 50 kW	679,010	16.98%	55,526	18.99%	623,484	16.82%	103.04%	\$8.44	\$15.61	\$38.30	\$38.30	\$38.30
General Service 50 to 2999 kW	814,444	20.36%	48,118	16.46%	766,326	20.67%	94.78%	\$34.73	\$63.55	\$141.05	\$141.05	\$170.19
General Service 3000-4999 kW	228,984	5.73%	13,446	4.60%	215,538	5.81%	60.82%	(\$7.96)	\$0.98	\$216.85	\$216.85	\$685.86
Unmetered Scattered Load	9,644	0.24%	675	0.23%	8,969	0.24%	90.72%	\$9.92	\$19.35	\$29.22	\$29.22	\$29.22
Sentinel Lighting	5,171	0.13%	455	0.16%	4,716	0.13%	74.04%	\$3.13	\$6.08	\$10.79	\$10.79	\$10.79
Street Lighting	94,889	2.37%	9,951	3.40%	84,938	2.29%	75.63%	\$0.01	\$0.03	\$5.12	\$5.12	\$5.12
TOTAL	3,999,717	100.00%	292,400	100.00%	3,707,317	100.00%						

2 Table 10 below shows the allocation percentage and base revenue requirement allocation under existing rates, cost allocation results and
3 proposed 2018 proposed allocation.

4

1

Table 10: Base Revenue Requirement Under 3 Scenarios

Customer Class Name	Proposed Base Revenue Requirement %					
	Cost Allocation Results		Existing Rates		Proposed Allocation	
Residential	54.04%	2,003,347	57.73%	2,140,255	56.43%	2,092,149
General Service < 50 kW	16.82%	623,484	17.38%	644,157	17.36%	643,586
General Service 50 to 2999 kW	20.67%	766,326	19.52%	723,814	19.54%	724,272
General Service 3000-4999 kW	5.81%	215,538	3.39%	125,830	4.58%	169,967
Unmetered Scattered Load	0.24%	8,969	0.22%	8,073	0.22%	8,063
Sentinel Lighting	0.13%	4,716	0.09%	3,373	0.09%	3,439
Street Lighting	2.29%	84,938	1.67%	61,815	1.78%	65,841
TOTAL	100.00%	3,707,317	100.00%	3,707,317	100.00%	3,707,317

2

3 Table 11 below shows the revenue offset allocation which resulted from Cost Allocation Study
4 (Sheet O1).

5

Table 11: Revenue Offset Allocation as per Cost Allocation Study

Customer Class Name	Revenue Offsets	
	%	\$
Residential	56.17%	164,228
General Service < 50 kW	18.99%	55,526
General Service 50 to 2999 kW	16.46%	48,118
General Service 3000-4999 kW	4.60%	13,446
Unmetered Scattered Load	0.23%	675
Sentinel Lighting	0.16%	455
Street Lighting	3.40%	9,951
TOTAL	100.00%	292,400

6

1 Table 12 shows the allocation of the service revenue requirement under the same 3 scenarios.

2

Table 12: Service Revenue Requirement Under 3 Scenarios

Customer Class Name	Service Revenue Requirement \$		
	Existing Rates	Cost Allocation	Rate Application
Residential	2,304,483	2,167,575	2,256,377
General Service < 50 kW	699,683	679,010	699,112
General Service 50 to 2999 kW	771,932	814,444	772,390
General Service 3000-4999 kW	139,276	228,984	183,413
Unmetered Scattered Load	8,749	9,644	8,738
Sentinel Lighting	3,828	5,171	3,895
Street Lighting	71,766	94,889	75,792
TOTAL	3,999,717	3,999,717	3,999,717

3

1 **7.4 REVENUE-TO-COST RATIOS**

2 **7.4.1 COST ALLOCATION RESULTS AND ANALYSIS¹¹**

3 Table 13 below shows Appendix 2-P of the Board Appendices. The Appendix provides
 4 information on previously approved ratios and proposed ratios. The section following Appendix
 5 2-P addresses the method and logic used to update the ratios from the Cost Allocation study to
 6 the proposed ratios.

7 **Table 13: Cost Allocation Appendix 2-P Cost Allocation**

A) Allocated Costs

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$1,440,293.00	61.47%	\$2,167,574.71	54.19%
General Service < 50 kW	\$385,103.00	16.44%	\$679,009.77	16.98%
General Service 50 to 2999 kW	\$421,859.00	18.00%	\$814,444.14	20.36%
General Service 3000-4999 kW	\$52,982.00	2.26%	\$228,984.21	5.73%
Unmetered Scattered Load	\$4,342.00	0.19%	\$9,644.07	0.24%
Sentinel Lighting	\$2,229.00	0.10%	\$5,170.72	0.13%
Street Lighting	\$36,271.00	1.55%	\$94,889.20	2.37%
Total	\$2,343,079.00	100.00%	\$3,999,716.83	100.00%

8

¹¹ 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.

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	\$1,871,336.00	\$2,140,254.78	\$2,091,907.13	\$164,227.87
General Service < 50 kW	\$563,220.00	\$644,156.57	\$643,585.76	\$55,526.11
General Service 50 to 2999 kW	\$632,869.00	\$723,814.45	\$724,272.09	\$48,117.87
General Service 3000-4999 kW	\$110,020.00	\$125,830.23	\$169,967.05	\$13,446.18
Unmetered Scattered Load	\$7,059.00	\$8,073.20	\$8,062.62	\$675.42
Sentinel Lighting	\$2,949.00	\$3,372.99	\$3,681	\$455.20
Street Lighting	\$54,048.00	\$61,814.61	\$65,840.79	\$9,951.34
Total	\$3,241,501.00	\$3,707,316.83	\$3,707,316.83	\$292,400.00

1

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

Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2013	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
Residential	99.65	106.32	104.10	85 - 115
General Service < 50 kW	99.05	103.04	102.96	80 - 120
General Service 50 to 2999 kW	99.75	94.78	94.84	80 - 120
General Service 3000-4999 kW	99.69	60.82	80.10	80 - 120
Unmetered Scattered Load	120.00	90.72	90.61	80 - 120
Sentinel Lighting	120.00	74.04	80.00	80 - 120
Street Lighting	120.00	75.63	79.87	80 - 120

2

D) Proposed Revenue-to-Cost Ratios					
Class	Proposed Revenue-to-Cost Ratios			Policy Range	
	2018	2019	2020		
	%	%	%	%	
Residential	104.10			85 - 115	
General Service < 50 kW	102.96			80 - 120	
General Service 50 to 2999 kW	94.84			80 - 120	
General Service 3000-4999 kW	80.10			80 - 120	
Unmetered Scattered Load	90.61			80 - 120	
Sentinel Lighting	80.00			80 - 120	
Street Lighting	79.87			80 - 120	

3

1 Table 14 below shows the utility's proposed Revenue to Cost reallocation based on an analysis
 2 of the proposed results from the Cost Allocation Study vs the Board imposed floor and ceiling
 3 ranges.

4 **Table 14: Proposed Allocation**

Customer Class Name	Calculated R/C Ratio	Proposed R/C Ratio	Variance
Residential	1.06	1.04	0.02
General Service < 50 kW	1.03	1.03	0.00
General Service 50 to 2999 kW	0.95	0.95	-0.00
General Service 3000-4999 kW	0.61	0.80	-0.19
Unmetered Scattered Load	0.91	0.91	0.00
Sentinel Lighting	0.74	0.80	-0.06
Street Lighting	0.76	0.80	-0.04

5 * Ratios fell outside of the floor to ceiling range.

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

9 CWH proposes to decrease the ratio for the Residential class from 1.06% to 1.04%. Both the
 10 General Service <50kW at 1.03% and GS 50-2999kW at 0.95% fell within the range therefore
 11 they need not be changed. The GS 3,000-4,999kW class is being subsidized by other class
 12 therefore, CWH proposes to move from 0.60% to the floor of 0.80%.

13 At a ratio of 0.91%, the calculated ratio for the USL class fell within the range therefore, the
 14 utility proposes to leave it as is. Both Street Lighting and Sentinel ratios fell slightly below the
 15 floor of 0.80% range therefore CWH proposes a small readjustment, (0.04 for street lighting and
 16 0.06 for sentinel lighting to bring them back up to the floor of 0.80) Bill Impacts are discussed in
 17 detail at Exhibit 8.