



## EXHIBIT 7 – COST ALLOCATION

2018 Cost of Service

Westario Power Inc.  
EB-2017-0084

## 7.1 TABLE OF CONTENT

1	<b>7.1 Table of Content .....</b>	<b>1</b>
2	<b>7.2 Cost Allocation Study Requirements .....</b>	<b>3</b>
3	7.2.1 Overview of Cost Allocation .....	3
4	<b>7.3 Class Revenue Requirements .....</b>	<b>15</b>
5	7.3.1 Class Revenue Analysis.....	15
6	<b>7.4 Revenue-to-Cost Ratios .....</b>	<b>17</b>
7	7.4.1 Cost Allocation Results and Analysis .....	17

## Table of Figures

1	Table 1 - Previously Approved Ratios (2013 COS) .....	3
2	Table 2 - Weighting Factors.....	5
3	Table 3 - Load Profiles from 2010/2013 CoS.....	9
4	Table 4 - Demand Data for 2018 Test Year (adjusted for 2018 Load Forecast) .....	10
5	Table 5 - Sheet I6-2 of the Cost Allocation Model.....	11
6	Table 6 - Sheet I6-1 of the Cost Allocation Model.....	12
7	Table 7 - Sheet O-1 of the Cost Allocation Model.....	13
8	Table 8 - Sheet O-2 of the Cost Allocation Model.....	14
9	Table 9 - Results of the Cost Allocation Study.....	15
10	Table 10- Base Revenue Requirement Under 3 Scenarios .....	16
11	Table 11 - Revenue Offset Allocation as per Cost Allocation Study.....	16
12	Table 12 - Service Revenue Requirement Under 3 Scenarios .....	16
13	Table 13 – Proposed Revenue Allocation .....	17
14	Table 14 - OEB Appendix 2-P .....	18
15	Table 15 – 2018 Allocation .....	20
16	Table 16 Table of Shortfall reallocation.....	21

## 7.2 COST ALLOCATION STUDY REQUIREMENTS

### 7.2.1 OVERVIEW OF COST ALLOCATION

WPI 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 (2013)**

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, WPI 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. WPI notes that there have been no changes in its class composition since 2013.<sup>1</sup>

**Table 1 - Previously Approved Ratios (2013 COS)**

<i>Customer Class Name</i>	<b>2013 Approved Revenue to Cost Ratio</b>
<i>Residential</i>	96.79%
<i>General Service &lt; 50 kW</i>	96.75%
<i>General Service &gt; 50 to 4999 kW</i>	120.00%
<i>USL</i>	120.00%
<i>Sentinel Lights</i>	96.70%
<i>Street Lighting</i>	96.75%

<sup>1</sup> New customer class or eliminated customer class - rationale and restatement of revenue requirement from previous CoS

**Proposed Cost Allocation Study (2018)**

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.

WPI has used the 2017 OEB-approved Cost Allocation Model and followed the instructions and guidelines issued by the OEB to enter the 2018 data into this model.<sup>2</sup>

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

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

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

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

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

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<sup>2</sup> 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	1.4	4.3	0.4	.07	0.9
Insert Weighting Factor for Billing and Collecting	1.0	1.0	4.3	2.1	0.8	1.1

WPI notes that its weighting factors have not changed since its last cost of service.

### **Proposed Weighting Factors**<sup>3</sup>

#### **Services Weighting Factors**

**Residential:** the Services weighting factor was set to "1", per Cost Allocation instruction sheet.

**General Service less than 50 kW,** The proposed Services weighting factor of 1.4 reflects that these customers require slightly greater capacity than do residential customers. In addition to this there are increased levels of engineering and planning required for these services relative to residential.

**General Service greater than 50 kW:** The proposed Services weighting factor of 4.3 reflects that these customers require significantly greater capacity than do residential customers. The increased capacity of these services also requires increased levels of engineering and planning relative to residential or GS less than 50kW services.

**Street Lights:** The proposed Services weighting factor of 0.4 reflects the lower level of services required street light connections relative to residential customers. Minimal engineering and planning needs are required for street light services.

**Sentinel Lighting:** The proposed services weighting factor of 0.7 reflects the lower level of services required for sentinel lighting connections relative to residential customers. In

<sup>3</sup> Description of weighting factors, and rationale for use of default values (if applicable)

1        addition to this, there are also less engineering and planning needs required for sentinel  
2        lighting relative to residential services.

3        **USL:** The proposed services weighting factor of 0.9 reflects the slightly lower level of services  
4        required for sentinel lighting connections relative to residential customers. In addition to  
5        this, there are also less engineering and planning needs required for USL relative to  
6        residential services.

**Proposed Billing and Collecting Weighting Factors**

**Residential:** the Billing weighting factor is set at "1", per Cost Allocation instruction sheet.

**General Service less than 50 kW:** The proposed Billing and Collecting weighting factor of 1.0 represents that the costs associated with billing and collecting a GS less than 50 kW customer are identical to billing and collecting from a residential customer. The process for billing and collecting from each of these customer classes is the same and therefore the same weighting factor has been used.

**General Service greater than 50 kW:** The proposed billing and collecting weighting factor is 4.3 as costs of meter reading for GS over 50kW is significantly higher than the costs of meter reading for Residential of GS less than 50kW. Collections charges are very similar to Residential and GS less than 50kW.

**Street Lights:** The proposed billing and collecting weighting factor of 2.1 for street lights are a result of the high billing costs for street lights relative to residential customers. This customer class does not give rise to collecting activity so no collecting costs have been allocated.

**Sentinel Lighting:** The proposed weighting factor is 0.8. The cost of billing these customers is very similar to residential. This customer class does not give rise to Collecting activity and so no Collecting costs have been allocated.

**Unmetered Scattered Load:** The proposed weighting factor is 1.1. Like Street Lighting, this class does not give rise to Collecting costs. The higher weighting factor relative to residential customers reflects the increased costs associated with billing these customers.

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

WPI 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.



1 The data entered on sheet I8 reflects the findings of the 2004 hour by hour load data being  
2 scaled to be consistent with the 2018 load forecast and the inspection of the scaled data to  
3 identify the system peaks and class specific peaks. The original demand data study was  
4 contracted out to HONI by the OEB in 2004 in advance of the 2006 EDR process. Over the past  
5 four years, the utility's regulatory consultant has reached out to HONI's demand data experts  
6 multiple times in hopes of getting background information and training on the mechanics  
7 behind the demand data study of 2004. HONI has never returned the calls, and therefore, at this  
8 time, WPI does not have enough background information or the capacity to update the demand  
9 data beyond the scaling. <sup>4</sup>

10 The scaled demand data is presented at the next page.

11 WPI has completed its cost allocation study using the OEB's methodology. A live Excel version of  
12 2017 cost allocation model has been filed along with this application. WPI confirms that it has  
13 also populated sheets 11 and 12 of the Revenue Requirement Work Form. WPI confirms that  
14 the inputs to the model are consistent with the test year load forecast, changes to customer  
15 classes and load profiles. <sup>5</sup>

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<sup>4</sup> 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

<sup>5</sup> 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 3 - Load Profiles from 2010/2013 CoS**

This is an input sheet for demand allocators.

CP TEST RESULTS		4 CP							
NCP TEST RESULTS		4 NCP							
Co-incident Peak		Indicator							
1 CP		CP 1							
4 CP		CP 4							
12 CP		CP 12							
Non-co-incident Peak		Indicator							
1 NCP		NCP 1							
4 NCP		NCP 4							
12 NCP		NCP 12							
Customer Classes		1	2	3	7	8	9		
	Total	Residential	GS <50	GS>50-Regular	Street Light	Sentinel	Unmetered Scattered Load		
CO-INCIDENT PEAK									
1 CP									
Transformation CP	TCP1	84,544	44,347	12,673	27,493	-	-	31	
Bulk Delivery CP	BCP1	84,544	44,347	12,673	27,493	-	-	31	
Total Sytem CP	DCP1	84,544	44,347	12,673	27,493	-	-	31	
4 CP									
Transformation CP	TCP4	320,620	174,708	42,815	101,673	1,297	4	123	
Bulk Delivery CP	BCP4	320,620	174,708	42,815	101,673	1,297	4	123	
Total Sytem CP	DCP4	320,620	174,708	42,815	101,673	1,297	4	123	
12 CP									
Transformation CP	TCP12	821,450	406,061	116,067	296,404	2,541	8	369	
Bulk Delivery CP	BCP12	821,450	406,061	116,067	296,404	2,541	8	369	
Total Sytem CP	DCP12	821,450	406,061	116,067	296,404	2,541	8	369	
NON CO INCIDENT PEAK									
1 NCP									
Classification NCP from Load Data Provider		DNCP1	95,643	50,999	14,255	28,931	1,413	5	40
Primary NCP		PNCP1	95,643	50,999	14,255	28,931	1,413	5	40
Line Transformer NCP		LTNCP1	95,643	50,999	14,255	28,931	1,413	5	40
Secondary NCP		SNCP1	66,712	50,999	14,255		1,413	5	40
4 NCP									
Classification NCP from Load Data Provider		DNCP4	360,853	189,686	52,953	112,946	5,106	17	145
Primary NCP		PNCP4	360,853	189,686	52,953	112,946	5,106	17	145
Line Transformer NCP		LTNCP4	360,853	189,686	52,953	112,946	5,106	17	145
Secondary NCP		SNCP4	247,907	189,686	52,953		5,106	17	145
12 NCP									
Classification NCP from Load Data Provider		DNCP12	932,250	449,941	146,417	320,779	14,674	50	389
Primary NCP		PNCP12	932,250	449,941	146,417	320,779	14,674	50	389
Line Transformer NCP		LTNCP12	932,250	449,941	146,417	320,779	14,674	50	389
Secondary NCP		SNCP12	611,471	449,941	146,417		14,674	50	389

2

1 **Table 4 - Demand Data for 2018 Test Year (adjusted for 2018 Load Forecast)**

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

<u>Customer Classes</u>			1	2	3	7	8	9
Total			Residential	GS <50	GS>50- Regular	Street Light	Sentinel	Unmetered Scattered Load
<b>CO-INCIDENT PEAK</b>								
<b>1 CP</b>								
Transformation CP	TCP1	78,758	44,085	10,929	23,714	-	-	30
Bulk Delivery CP	BCP1	78,758	44,085	10,929	23,714	-	-	30
Total Sytem CP	DCP1	78,758	44,085	10,929	23,714	-	-	30
<b>4 CP</b>								
Transformation CP	TCP4	300,688	160,528	43,633	95,382	1,020	6	119
Bulk Delivery CP	BCP4	300,688	160,528	43,633	95,382	1,020	6	119
Total Sytem CP	DCP4	300,688	160,528	43,633	95,382	1,020	6	119
<b>12 CP</b>								
Transformation CP	TCP12	768,150	386,965	107,094	270,731	2,983	19	357
Bulk Delivery CP	BCP12	768,150	386,965	107,094	270,731	2,983	19	357
Total Sytem CP	DCP12	768,150	386,965	107,094	270,731	2,983	19	357
<b>NON CO INCIDENT PEAK</b>								
<b>1 NCP</b>								
Classification NCP from Load Data Provider	DNCP1	89,799	45,679	16,983	26,620	485	3	30
Primary NCP	PNCP1	89,799	45,679	16,983	26,620	485	3	30
Line Transformer NCP	LTNCP1	89,799	45,679	16,983	26,620	485	3	30
Secondary NCP	SNCP1	89,799	45,679	16,983	26,620	485	3	30
<b>4 NCP</b>								
Classification NCP from Load Data Provider	DNCP4	343,886	169,901	63,134	108,625	2,082	13	132
Primary NCP	PNCP4	343,886	169,901	63,134	108,625	2,082	13	132
Line Transformer NCP	LTNCP4	343,886	169,901	63,134	108,625	2,082	13	132
Secondary NCP	SNCP4	343,886	169,901	63,134	108,625	2,082	13	132
<b>12 NCP</b>								
Classification NCP from Load Data Provider	DNCP12	886,284	402,204	172,198	305,620	5,867	37	357
Primary NCP	PNCP12	886,284	402,204	172,198	305,620	5,867	37	357
Line Transformer NCP	LTNCP12	886,284	402,204	172,198	305,620	5,867	37	357
Secondary NCP	SNCP12	886,284	402,204	172,198	305,620	5,867	37	357

- 1 No Direct Allocations were entered on Sheet I9.
- 2 The revenue to cost ratios calculated on Sheet O1 of the Cost Allocation model updated for the
- 3 2018 Test Year are provided at the next page.

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**Table 5 - Sheet I6-2 of the Cost Allocation Model<sup>6</sup>**

			1	2	3	7	8	9
			Residential	GS <50	GS>50- Regular	Street Light	Sentinel	Unmetered Scattered Load
<b>ID</b>								
<b>Total</b>								
<u>Billing Data</u>								
Bad Debt 3 Year Historical Average	<b>BDHA</b>	\$109,613	\$38,414	\$37,816	\$33,383	\$0	\$0	\$0
Late Payment 3 Year Historical Average	<b>LPHA</b>	\$10,000	\$3,505	\$3,450	\$3,045			
Number of Bills	<b>CNB</b>	283,607	249,438	30,936.00	2,480.62	12.00	94.07	646.03
Number of Devices	<b>CDEV</b>					6,193		
Number of Connections (Unmetered)	<b>CCON</b>	29,826	20,786	2,578	207	6,193	8	54
Total Number of Customers	<b>CCA</b>	23,634	20,786	2,578	207	1	8	54
Bulk Customer Base	<b>CCB</b>	-						
Primary Customer Base	<b>CCP</b>	62,676	20,786	20,786	20,786	255	8	54
Line Transformer Customer Base	<b>CCLT</b>	62,676	20,786	20,786	20,786	255	8	54
Secondary Customer Base	<b>CCS</b>	62,432	20,786	20,786	20,786	11	8	54
Weighted - Services	<b>CWCS</b>	27,816	20,786	3,609	889	2,477	5	48
Weighted Meter -Capital	<b>CWMC</b>	15,848,294	13,081,322	1,704,036	1,062,936	-	-	-
Weighted Meter Reading	<b>CWMR</b>	24,049	20,633	2,568	848	-	-	-
Weighted Bills	<b>CWNB</b>	291,852	249,438	30,936	10,667	25	75	711

**Bad Debt Data**

<b>Historic Year:</b>	2012	79,608	27,627	35,941	16,040			
<b>Historic Year:</b>	2013	80,821	33,637	34,243	12,941			
<b>Historic Year:</b>	2014	168,411	53,979	43,265	71,167			
<b>Three-year average</b>		<b>109,613</b>	<b>38,414</b>	<b>37,816</b>	<b>33,383</b>	-	-	-

6

<sup>6</sup> Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

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**Table 6 - Sheet I6-1 of the Cost Allocation Model<sup>7</sup>**

<b>Total kWhs from Load Forecast</b>	409,297,707
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<b>Total kW from Load Forecast</b>	441,025
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<b>Deficiency/sufficiency ( RRWF 8. cell F51)</b>	- 1,058,714
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<b>Miscellaneous Revenue (RRWF 5. cell F48)</b>	337,674
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Billing Data	ID	Total	1	2	3	7	8	9
			Residential	GS <50	GS>50- Regular	Street Light	Sentinel	Unmetered Scattered Load
Forecast kWh	CEN	409,297,707	182,208,797	63,336,490	161,339,327	2,137,697	13,545	261,852
Forecast kW	CDEM	441,025			434,344	6,664	17	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		165,000			165,000			
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	409,297,707	182,208,797	63,336,490	161,339,327	2,137,697	13,545	261,852
Existing Monthly Charge			\$20.06	\$25.14	\$232.02	\$6.00	\$5.75	\$6.38
Existing Distribution kWh Rate			\$0.0082	\$0.0113				\$0.0239
Existing Distribution kW Rate					\$2.1801	\$5.0515	\$29.7440	
Existing TOA Rate					\$0.60			
Additional Charges								
Distribution Revenue from Rates		\$10,004,725	\$6,497,838	\$1,493,433	\$1,522,467	\$479,573	\$1,033	\$10,380
Transformer Ownership Allowance		\$99,000	\$0	\$0	\$99,000	\$0	\$0	\$0
Net Class Revenue	CREV	\$9,905,725	\$6,497,838	\$1,493,433	\$1,423,467	\$479,573	\$1,033	\$10,380

<sup>7</sup> Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

1

**Table 7 - Sheet O-1 of the Cost Allocation Model<sup>8</sup>**

	Total	Residential	GS <50	GS>50- Regular	Street Light	Sentinel	Unmetered Scattered Load
Distribution Revenue at Existing Rates	\$9,905,725	\$6,497,838	\$1,493,433	\$1,423,467	\$479,573	\$1,033	\$10,380
Miscellaneous Revenue (mi)	\$337,674	\$155,072	\$90,564	\$89,681	\$2,202	\$18	\$137
Miscellaneous Revenue Input equals Output							
<b>Total Revenue at Existing Rates</b>	<b>\$10,243,399</b>	<b>\$6,652,910</b>	<b>\$1,583,997</b>	<b>\$1,513,148</b>	<b>\$481,775</b>	<b>\$1,051</b>	<b>\$10,517</b>
Factor required to recover deficiency (1 + D)	1.1069						
Distribution Revenue at Status Quo Rates	\$10,964,439	\$7,192,321	\$1,653,050	\$1,575,606	\$530,829	\$1,144	\$11,489
Miscellaneous Revenue (mi)	\$337,674	\$155,072	\$90,564	\$89,681	\$2,202	\$18	\$137
<b>Total Revenue at Status Quo Rates</b>	<b>\$11,302,113</b>	<b>\$7,347,392</b>	<b>\$1,743,614</b>	<b>\$1,665,287</b>	<b>\$533,032</b>	<b>\$1,162</b>	<b>\$11,626</b>
<b>Expenses</b>							
Distribution Costs (di)	\$1,764,574	\$1,044,111	\$276,125	\$365,304	\$77,185	\$203	\$1,646
Customer Related Costs (cu)	\$1,404,959	\$1,145,162	\$173,310	\$84,049	\$76	\$226	\$2,135
General and Administration (ad)	\$2,826,500	\$1,936,373	\$402,054	\$413,632	\$70,746	\$377	\$3,318
Depreciation and Amortization (dep)	\$1,993,885	\$1,240,699	\$287,867	\$405,707	\$57,956	\$175	\$1,481
PILs (INPUT)	\$392,622	\$231,065	\$58,850	\$88,120	\$14,213	\$40	\$335
Interest	\$1,109,784	\$653,128	\$166,345	\$249,079	\$40,174	\$112	\$947
<b>Total Expenses</b>	<b>\$9,492,324</b>	<b>\$6,250,538</b>	<b>\$1,364,551</b>	<b>\$1,605,891</b>	<b>\$260,350</b>	<b>\$1,132</b>	<b>\$9,862</b>
<b>Direct Allocation</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Allocated Net Income (NI)	\$1,809,788	\$1,065,093	\$271,268	\$406,188	\$65,514	\$182	\$1,544
<b>Revenue Requirement (includes NI)</b>	<b>\$11,302,113</b>	<b>\$7,315,631</b>	<b>\$1,635,818</b>	<b>\$2,012,080</b>	<b>\$325,863</b>	<b>\$1,314</b>	<b>\$11,406</b>
Revenue Requirement Input equals Output							
<b>Rate Base Calculation</b>							
<b>Net Assets</b>							
Distribution Plant - Gross	\$78,955,540	\$47,035,321	\$11,780,388	\$17,272,046	\$2,793,250	\$7,943	\$66,592
General Plant - Gross	\$7,398,887	\$4,362,687	\$1,108,221	\$1,654,046	\$266,888	\$745	\$6,300
Accumulated Depreciation	(\$28,391,180)	(\$17,202,927)	(\$4,208,425)	(\$5,982,086)	(\$971,331)	(\$2,850)	(\$23,562)
Capital Contribution	(\$11,184,710)	(\$6,662,945)	(\$1,668,790)	(\$2,446,729)	(\$395,687)	(\$1,125)	(\$9,433)
<b>Total Net Plant</b>	<b>\$46,778,536</b>	<b>\$27,532,136</b>	<b>\$7,011,393</b>	<b>\$10,497,277</b>	<b>\$1,693,120</b>	<b>\$4,713</b>	<b>\$39,897</b>
<b>Directly Allocated Net Fixed Assets</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Cost of Power (COP)	\$57,377,618	\$25,543,038	\$8,878,860	\$22,617,440	\$299,674	\$1,899	\$36,708
OM&A Expenses	\$5,996,033	\$4,125,646	\$851,489	\$862,985	\$148,007	\$806	\$7,099
Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Subtotal</b>	<b>\$63,373,651</b>	<b>\$29,668,684</b>	<b>\$9,730,349</b>	<b>\$23,480,425</b>	<b>\$447,681</b>	<b>\$2,704</b>	<b>\$43,807</b>
<b>Working Capital</b>	<b>\$4,753,024</b>	<b>\$2,225,151</b>	<b>\$729,776</b>	<b>\$1,761,032</b>	<b>\$33,576</b>	<b>\$203</b>	<b>\$3,286</b>
<b>Total Rate Base</b>	<b>\$51,531,560</b>	<b>\$29,757,288</b>	<b>\$7,741,169</b>	<b>\$12,258,309</b>	<b>\$1,726,696</b>	<b>\$4,916</b>	<b>\$43,183</b>
Rate Base Input equals Output							
<b>Equity Component of Rate Base</b>	<b>\$20,612,624</b>	<b>\$11,919,016</b>	<b>\$3,097,198</b>	<b>\$4,886,492</b>	<b>\$690,678</b>	<b>\$1,966</b>	<b>\$17,273</b>
<b>Net Income on Allocated Assets</b>	<b>\$1,809,788</b>	<b>\$1,100,316</b>	<b>\$374,913</b>	<b>\$62,407</b>	<b>\$270,222</b>	<b>\$42</b>	<b>\$1,889</b>

<sup>8</sup> Hard copy of sheets I-6, I-8, O-1 and O-2 (first page)

Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income	\$1,809,788	\$1,100,316	\$374,913	\$1,809,788	\$62,407	\$270,222	\$42
<b>RATIOS ANALYSIS</b>							
REVENUE TO EXPENSES STATUS QUO%	100.00%	100.46%	106.33%	100.00%	82.86%	162.82%	89.31%
EXISTING REVENUE MINUS ALLOCATED COSTS	(\$1,058,714)	(\$660,795)	(\$56,041)	(\$1,058,714)	(\$494,315)	\$153,452	(\$251)
Deficiency Input equals Output							\$62,407
STATUS QUO REVENUE MINUS ALLOCATED COSTS	\$0	\$33,688	\$103,576	(\$342,176)	\$204,708	(\$140)	\$345
RETURN ON EQUITY COMPONENT OF RATE BASE	8.78%	9.23%	12.10%	1.28%	39.12%	2.13%	10.94%

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**Table 8 - Sheet O-2 of the Cost Allocation Model<sup>9</sup>**

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	1	2	3	7	8	9
Summary	Residential	GS <50	GS>50- Regular	Street Light	Sentinel	Unmetered Scattered Load
Customer Unit Cost per month - Avoided Cost	\$6.01	\$4.13	\$6.51	\$0.00	\$2.38	\$3.28
Customer Unit Cost per month - Directly Related	\$10.05	\$8.24	\$25.62	\$0.00	\$4.50	\$6.18
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$19.01	\$20.80	\$91.75	\$4.12	\$6.43	\$13.96
Existing Approved Fixed Charge	\$20.06	\$25.14	\$232.02	\$6.00	\$5.75	\$6.38

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<sup>9</sup> 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 9 below shows the results of the cost allocation updated 2018 study. These results are used to compare and analyze the distribution costs under each option and help the utility determine its 2018 proposed ratios.

**Table 9 - Results of the Cost Allocation Study**

**Cost Allocation Results**

**REVENUE ALLOCATION (sheet O1)**

**CUSTOMER UNIT COST PER  
MONTH (sheet O2)**

<i>Customer Class Name</i>	<b>Service Rev Req (row40)</b>		<b>Misc. Revenue (mi) (row19)</b>		<b>Base Rev Req</b>		<b>Rev2Cost Expenses %</b>	<b>Avoided Costs (Minimum Charge)</b>	<b>Directly Related</b>	<b>Minimum System with PLCC * adjustment</b>	<b>Maximum Charge or Existing Rate</b>
<i>Residential</i>	7,330,270	64.86%	171,637	50.83%	7,158,633	65.29%	100.46%	\$6.01	\$10.05	\$19.01	\$20.06
<i>General Service &lt; 50 kW</i>	1,636,434	14.48%	86,959	25.75%	1,549,474	14.13%	106.33%	\$4.13	\$8.24	\$20.80	\$25.14
<i>General Service &gt; 50 to 4999 kW</i>	1,996,825	17.67%	79,043	23.41%	1,917,782	17.49%	82.86%	\$6.51	\$25.62	\$91.75	\$232.02
<i>Unmetered Scattered Load</i>	11,406	0.10%	262	0.08%	11,144	0.10%	103.03%	\$3.28	\$6.18	\$13.96	\$13.96
<i>Sentinel Lighting</i>	1,314	0.01%	30	0.01%	1,284	0.01%	89.31%	\$2.38	\$4.50	\$6.43	\$6.43
<i>Street Lighting</i>	325,863	2.88%	-258	0.08%	326,121	2.97%	162.82%	(\$0.00)	(\$0.00)	\$4.12	\$6.00
<b>TOTAL</b>	<b>11,302,113</b>	<b>100.00%</b>	<b>337,674</b>	<b>100.00%</b>	<b>10,964,439</b>	<b>100.00%</b>					

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



**Table 10- Base Revenue Requirement Under 3 Scenarios**

**Revenue Reallocation - Service Revenue Requirement**

<b>Customer Class Name</b>	<b>Proposed Base Revenue Requirement %</b>					
	<b>Cost Allocation Results</b>		<b>Existing Rates</b>		<b>Proposed Allocation</b>	
<i>Residential</i>	65.29%	7,158,633	65.60%	7,192,321	65.59%	7,192,016
<i>General Service &lt; 50 kW</i>	14.13%	1,549,474	15.08%	1,653,050	15.08%	1,653,055
<i>General Service &gt; 50 to 4999 kW</i>	17.49%	1,917,782	14.37%	1,575,606	15.64%	1,715,358
<i>Unmetered Scattered Load</i>	0.10%	11,144	0.10%	11,489	0.10%	11,497
<i>Sentinel Lighting</i>	0.01%	1,284	0.01%	1,144	0.01%	1,218
<i>Street Lighting</i>	2.97%	326,121	4.84%	530,829	3.57%	391,294
<b>TOTAL</b>	<b>100.00%</b>	<b>10,964,439</b>	<b>100.00%</b>	<b>10,964,439</b>	<b>100.00%</b>	<b>10,964,439</b>

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

**Table 11 - Revenue Offset Allocation as per Cost Allocation Study**

<b>Customer Class Name</b>	<b>Revenue Offsets</b>	
	<b>%</b>	<b>\$</b>
<i>Residential</i>	50.83%	171,637
<i>General Service &lt; 50 kW</i>	25.75%	86,959
<i>General Service &gt; 50 to 4999 kW</i>	23.41%	79,043
<i>Unmetered Scattered Load</i>	0.08%	262
<i>Sentinel Lighting</i>	0.01%	30
<i>Street Lighting</i>	0.08%	-258
<b>TOTAL</b>	<b>100.00%</b>	<b>337,674</b>

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

**Table 12 - Service Revenue Requirement Under 3 Scenarios**

<b>Customer Class Name</b>	<b>Service Revenue Requirement \$</b>		
	<b>Existing Rates</b>	<b>Cost Allocation</b>	<b>Rate Application</b>
<i>Residential</i>	7,363,958	7,330,270	7,363,653
<i>General Service &lt; 50 kW</i>	1,740,009	1,636,434	1,740,014
<i>General Service &gt; 50 to 4999 kW</i>	1,654,649	1,996,825	1,794,401
<i>Unmetered Scattered Load</i>	11,751	11,406	11,759
<i>Sentinel Lighting</i>	1,174	1,314	1,249
<i>Street Lighting</i>	530,572	325,863	391,036
<b>TOTAL</b>	<b>11,302,113</b>	<b>11,302,113</b>	<b>11,302,113</b>

## 7.4 REVENUE-TO-COST RATIOS

### 7.4.1 COST ALLOCATION RESULTS AND ANALYSIS

Table 14 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 13 – Proposed Revenue Allocation**

<b>Customer Class Name</b>	<b>Calculated R/C Ratio</b>	<b>Proposed R/C Ratio</b>	<b>Variance</b>	<b>Target Range</b>	
				<b>Floor</b>	<b>Ceiling</b>
<i>Residential</i>	1.00	1.00	0.0000	0.85	1.15
<i>General Service &lt; 50 kW</i>	1.06	1.06	0.0000	0.80	1.20
<i>General Service &gt; 50 to 4999 kW</i>	0.83	0.90	-0.0700	0.80	1.20
<i>Unmetered Scattered Load</i>	1.03	1.03	-0.0007	0.80	1.20
<i>Sentinel Lighting</i>	0.89	0.95	-0.0569	0.80	1.20
<i>Street Lighting</i>	1.63	1.20	0.4282	0.80	1.20

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**Table 14 - OEB Appendix 2-P**

**A) Allocated Costs**

<b>Classes</b>	<b>Costs Allocated from Previous Study</b>	<b>%</b>	<b>Costs Allocated in Test Year Study (Column 7A)</b>	<b>%</b>	
<i>Residential</i>	\$935,362.68	58.81%	\$7,330,270.03	64.86%	
<i>General Service &lt; 50 kW</i>	\$227,731.82	14.32%	\$1,636,433.61	14.48%	
<i>General Service &gt; 50 to 4999 kW</i>	\$398,722.21	25.07%	\$1,996,825.31	17.67%	
<i>Unmetered Scattered Load</i>	\$1,201.92	0.08%	\$11,405.92	0.10%	
<i>Sentinel Lighting</i>	\$1,333.28	0.08%	\$1,314.30	0.01%	
<i>Street Lighting</i>	\$26,213.09	1.65%	\$325,863.39	2.88%	
<b>Total</b>	\$1,590,565.00	100.00%	\$11,302,112.55	100.00%	

**B) Calculated Class Revenues**

	(from CA - O1 row 18)				
	<b>Column 7B</b>	<b>Column 7C</b>	<b>Column 7D</b>	<b>Column 7E</b>	
<b>Classes (same as previous table)</b>	<b>Load Forecast (LF) X current approved rates</b>	<b>L.F. X current approved rates X (1 + d)</b>	<b>LF X proposed rates</b>	<b>Miscellaneous Revenue</b>	
<i>Residential</i>	\$6,497,838.10	\$7,192,320.53	\$7,192,016.29	\$171,637.10	
<i>General Service &lt; 50 kW</i>	\$1,493,433.37	\$1,653,050.04	\$1,653,055.10	\$86,959.18	
<i>General Service &gt; 50 to 4999 kW</i>	\$1,423,467.06	\$1,575,605.80	\$1,715,358.09	\$79,043.01	
<i>Unmetered Scattered Load</i>	\$10,379.91	\$11,489.31	\$11,497.22	\$261.92	
<i>Sentinel Lighting</i>	\$1,033.13	\$1,143.56	\$1,218.28	\$30.31	
<i>Street Lighting</i>	\$479,573.15	\$530,829.45	\$391,293.71	-\$257.64	
<b>Total</b>	\$9,905,724.73	\$10,964,438.68	\$10,964,438.68	\$337,673.87	

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

<b>Class</b>	<b>Previously Approved Ratios</b>	<b>Status Quo Ratios</b>	<b>Proposed Ratios</b>	<b>Policy Range</b>
	<b>Most Recent Year:</b>	<b>(7C + 7E) / (7A)</b>	<b>(7D + 7E) / (7A)</b>	
	<b>2014</b>			
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
<i>Residential</i>	100.00	100.46	100.46	85 - 115
<i>General Service &lt; 50 kW</i>	98.00	106.33	106.33	80 - 120
<i>General Service &gt; 50 to 4999 kW</i>	100.00	82.86	89.86	80 - 120
<i>Unmetered Scattered Load</i>	70.00	103.03	103.10	80 - 120
<i>Sentinel Lighting</i>	120.00	89.31	95.00	85 - 115
<i>Street Lighting</i>	120.00	162.82	120.00	

**D) Proposed Revenue-to-Cost Ratios**

<b>Class</b>	<b>Proposed Revenue-to-Cost Ratios</b>				<b>Policy Range</b>
	<b>2017</b>	<b>2018</b>	<b>2019</b>		
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	
<i>Residential</i>	100.46				85 - 115
<i>General Service &lt; 50 kW</i>	106.33				80 - 120
<i>General Service &gt; 50 to 4999 kW</i>	89.86				80 - 120
<i>Unmetered Scattered Load</i>	103.10				80 - 120
<i>Sentinel Lighting</i>	95.00				85 - 115
<i>Street Lighting</i>	120.00				

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 15 – 2018 Allocation**

<b>Customer Class Name</b>	<b>Target Range</b>				
	<b>Calculated R/C Ratio</b>	<b>Proposed R/C Ratio</b>	<b>Variance</b>	<b>Floor</b>	<b>Ceiling</b>
<i>Residential</i>	1.00	1.00	0.0000	0.85	1.15
<i>General Service &lt; 50 kW</i>	1.06	1.06	0.0000	0.80	1.20
<i>General Service &gt; 50 to 4999 kW</i>	0.83	0.90	-0.0700	0.80	1.20
<i>Unmetered Scattered Load</i>	1.03	1.03	-0.0007	0.80	1.20
<i>Sentinel Lighting</i>	0.89	0.95	-0.0569	0.80	1.20
<i>Street Lighting</i>	1.63	1.20	0.4282	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.<sup>10</sup>

WPI proposes to maintain the Residential class, the Residential General Service <50kW, USL classes at their existing ratios 100%, 106% and 103% respectively. WPI proposes to increase the ratio for the GS>50 class from 83% to 90%. At 163%, the Street Lighting ratio fell higher than the ceiling therefore WPI proposes to bring it down to at 120%.<sup>11</sup> The proposed cost re-allocation results in the shortfall allocation shown in the table below.

<sup>10</sup> 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.

<sup>11</sup> 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

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**Table 16 Table of Shortfall reallocation**

<b>Customer Class Name</b>	<b>Shortfall Reconciliation</b>
<i>Residential</i>	\$304.24
<i>General Service &lt; 50 kW</i>	-\$5.06
<i>General Service &gt; 50 to 4999 kW</i>	-\$139,752.30
<i>Unmetered Scattered Load</i>	-\$7.91
<i>Sentinel Lighting</i>	-\$74.72
<i>Street Lighting</i>	\$139,535.75
<i>Total</i>	0

2 For further details about the class specific bill impacts, please refer to Exhibit 8. WPI confirms  
3 that it 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. <sup>12 13</sup>

5 WPI 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. <sup>14 15 16</sup>

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<sup>12</sup> 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.

<sup>13</sup> 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

<sup>14</sup> Host Distributor - evidence of consultation with embedded Dx

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

<sup>16</sup> 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.