# **EXHIBIT 7 - COST ALLOCATION**

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#### 1 COST ALLOCATION OVERVIEW:

#### 2 **Introduction:**

On September 29, 2006, the Board issued its directions on Cost Allocation Methodology for Electricity Distributors (the "Directions"). On November 15, 2006, the Board issued the Cost Allocation Information Filing Guidelines for Electricity Distributors ("the Guidelines"), the Cost Allocation Model (the "Model") and User Instructions (the "Instructions") for the Model. PDI prepared a cost allocation information filing consistent with PDI's understanding of the Directions, the Guidelines, the Model and the Instructions.

9 One of the main objectives of the filing was to provide information on any apparent cross-10 subsidization among a distributor's rate classifications. It was felt that this would give an 11 indication of cross-subsidization from one class to another and this information would be useful 12 as a tool in future rate applications.

In PDI's 2009 Cost of Service Application (EB-2008-0241), the results of the original cost allocation information filing were updated as recommended by VECC and approved by the Board to exclude "costs" and "revenues" associated with transformer ownership allowance. The results of this updated study were used as a basis for PDI to reallocate distribution revenues across customer classes to address the issue of cross-subsidization. In the 2010 IRM Application, EB-2009-0241, PDI adjusted its revenue-to-cost ratios in accordance with the Board's findings in the 2009 Cost of Service Application.

20 On September 2, 2010, the Board began a proceeding, EB-2010-0219, with the mandate to 21 review and revise the existing Cost Allocation policy as needed. On March 31, 2011, the Report 22 of the Board was released in relation to EB-2010-0219. In the letter accompanying the report, 23 the Board indicated that a Working Group would be formed to revise the original Cost 24 Allocation Model to address the revision highlighted in the March 31st Board Report. On 25 August 5, 2011, the Board released the new Cost Allocation model and instructed 2012 Cost of 26 Service filers to use the revised model in their applications. On June 28, 2012, the Board released 27 a revised Cost Allocation model to be used by 2013 Cost of Service filers in their applications.

1 In the March 31<sup>st</sup> Board Report, the Board stated that "default weighting factors should now be

2 utilized only in exceptional circumstances". Distributors are therefore now expected to develop

3 their own weighting factors.

For the purposes of this Application, PDI has used the 2013 version of the cost allocation model and submitted the revised cost allocation study to reflect 2013 test year costs, customer numbers and demand values. The 2013 demand values are based on the weather normalized load forecast used to design rates. PDI has developed weighting factors as outlined below based on discussions with staff experienced in the subject area.

#### 9 Table 7-1 Service Weighting Factors - Services (Account 1855)

Rate Class	Factor
Residential	1.00
General Service < 50 kW	6.61
General Service $> 50 \text{ kW}$	41.30
Large User	0.0
Street Lighting	0.0
Sentinel Lighting	0.0
Unmetered Scattered Load	0.32

10

11

#### 12 Table 7-2 Billing and Collection Weighting Factors (Accounts 5315 – 5340, except 5335)

Rate Class	Factor
Residential	1.00
General Service < 50 kW	0.87
General Service $> 50$ kW	0.93
Large User	0.74
Street Lighting	0.62
Sentinel Lighting	0.82
Unmetered Scattered Load	0.82

#### Table 7-3 Meter Capital Installation Costs (Sheet I7.1) 1

Meter Type	Installation Cost per Meter
Smart Meter - Residential	\$87
Smart Meter - General Service < 50 kW	\$304
Demand with IT	\$2,170
Demand with IT and Interval Capability - Secondary	\$2,500
Demand with IT and Interval Capability - Primary	\$10,000

<sup>2</sup> 3

#### Table 7-4 Meter Reading Weighting Factor (Sheet I7.2) 4

Meter Type	Factor
Residential	1.00
General Service < 50 kW	1.00
General Service $> 50 \text{ kW}$	1.00
Large User	1.00

#### **1 SUMMARY OF RESULTS AND PROPOSED CHANGES:**

2 The data used in the updated cost allocation study is consistent with PDI's cost data that supports 3 the proposed 2013 revenue requirement outlined in this Application. Consistent with the 4 Guidelines, PDI's assets were broken out into primary and secondary distribution functions using 5 the proportions assumed in the original cost allocation study. The breakout of assets, capital 6 contributions, depreciation, accumulated depreciation, customer data and load data by primary, 7 line transformer and secondary categories were developed from the best data available to PDI, its 8 engineering records, and its customer and financial information systems. The cost allocation 9 study has been included in Appendix L.

10 Capital contributions, depreciation and accumulated depreciation by USoA are consistent with 11 the information provided in the 2013 continuity statement shown in Exhibit 2. The rate class 12 customer data used in the updated cost allocation study is consistent with the 2013 customer 13 forecast outlined in Exhibit 3. For the Street Lighting class, the number of connections reflects 14 the actual number of connections of the street light system to PDI's distribution system. The load 15 profiles for all rate class are the same as those used in the original information filing but have 16 been scaled to match the 2013 load forecast. The following table outlines the scaling factors 17 used by rate class.

# 1 Table 7-5 Load Profile Scaling Percentages

Rate Class	2004 Weather Normal Values used in Original Filing (kWh)	2013 Weather Normal Values (KWh)	Scaling Factor	
Residential	303,594,227	294,240,107	96.9%	
General Service < 50 kW	130,550,090	112,158,205	85.9%	
General Service > 50 kW	330,877,467	350,715,605	106.0%	
Large User	65,153,441	53,896,862	82.7%	
Street Lighting	6,312,677	5,413,675	85.8%	
Sentinel Lighting	1,119,884	697,744	62.3%	
Unmetered Scattered Load	2,529,936	1,632,744	64.5%	
Total	840,137,722	818,754,942	97.5%	

2

- 3 The allocated cost by rate class from the original cost allocation study and the 2013 updated
- 4 study are provided in the following Table 7-6.

# 5 Table 7-6 Allocated Cost (Appendix 2-P)

Rate Class	2009 Board Approved Cost Allocation Study	%	Cost Allocated in the 2013 Study	%
Residential	\$7,560,833	55.2%	\$10,471,540	64.3%
General Service < 50 kW	\$2,308,444	16.9%	\$2,395,636	14.7%
General Service > 50 kW	\$2,419,352	17.7%	\$2,614,948	16.1%
Large User	\$262,708	1.9%	\$261,368	1.6%
Street Lighting	<b>\$711,18</b> 3	5.2%	\$469,886	2.9%
Sentinel Lighting	\$64,016	0.5%	\$29,022	0.2%
Unmetered Scattered Load	\$371,354	2.7%	\$49,437	0.3%
Total	\$13,697,890	100.0%	\$16,291,837	100.0%

The results of a cost allocation study are typically presented in the form of revenue-to-cost ratios. The ratio is shown by rate classification and is the percentage of distribution revenue collected by rate classification compared to the costs allocated to the classification. The percentage identifies the rate classifications that are being subsidized and those that are over-contributing. A percentage of less than 100% means the rate classification is under-contributing and is being subsidized by other classes of customers. A percentage of greater than 100% indicates the rate classification is over-contributing and is subsidizing other classes of customers.

8 In the March 31, 2011 Report of the Board on Cost Allocation released in relation to EB-2010-9 0219, the Board established what it considered to be the appropriate ranges of revenue-to-cost 10 ratios. Those are summarized in Table 7-7 below. In addition, Table 7-7 provides the revenue-11 to-cost ratios from: PDI's approved 2010 approved rate application (EB-2009-0241); the updated 12 2013 cost allocation study and the proposed 2013 to 2015 ratios.

PDI is proposing in this Application to re-align its revenue-to-cost ratios by adjusting the allocation of revenue to the General Service > 50 kW, Sentinel Lighting and USL rate classes in order to be within the Board's target range In addition, an adjustment is made to increase the ratio for Residential classes in order to maintain revenue neutrality.

17 The table below summarizes the proposed changes to the revenue-to-cost ratios.

## 18 Table 7-7 Changes in Revenue-to-Cost Ratios by Customer Class

Class	2010 Board Approved	2013 Updated Cost	2013 Proposed Ratios	2014 Proposed Ratios	2015 Proposed Ratios		Targets Max
Residential	103.35%	87.53%	93.07%	93.07%	93.07%	85.0%	115.0%
General Service < 50 kW	100.60%	106.02%	106.02%	106.02%	106.02%	80.0%	120.0%
General Service > 50 kW	103.35%	129.76%	120.00%	120.00%	120.00%	80.0%	120.0%
Large User	85.00%	101.01%	101.01%	101.01%	101.01%	85.0%	115.0%
Street Lighting	70.00%	120.64%	120.00%	120.00%	120.00%	70.0%	120.0%
Sentinel Lighting	70.00%	194.14%	120.00%	120.00%	120.00%	80.0%	120.0%
Unmetered Scattered Load	80.00%	618.24%	120.00%	120.00%	120.00%	80.0%	120.0%

In preparing the 2013 load forecast, it was noted that the number of connections needs to be
 updated for the Sentinel Lighting and Unmetered Scattered Load classes. The proposed 2013
 revenue-to-cost ratios realign these classes within the board targets.

The following table 7-8 provides information on calculated class revenue. The resulting 2013
proposed base revenue will be the amount used in Exhibit 8 to design the proposed distribution
charges in this Application.

#### 7 Table 7-8 Calculated Class Revenue (Appendix 2-P)

#### 8

Class	2013 Base Revenue at Existing Rates	2013 Proposed Base Revenue Allocated at Existing Rates Proportion	2013 Proposed Base Revenue	Miscellaneous Revenue	
Residential	\$7,952,109	\$8,285,511	\$8,811,682	\$880,426	
General Service < 50 kW	\$2,282,022	\$2,377,699	\$2,377,699	\$162,061	
General Service > 50 kW	\$3,107,588	\$3,237,878	\$2,982,566	\$155,371	
Large User	\$235,212	\$245,073	\$245,073	\$18,943	
Street Lighting	\$505,234	\$526,417	\$523,393	\$40,470	
Sentinel Lighting	\$51,688	\$53,855	\$32,338	\$2,489	
Unmetered Scattered Load	\$290,236	\$302,404	\$56,086	\$3,239	
Total	\$14,424,089	\$15,028,837	\$15,028,837	\$1,263,000	

Peterborough Distribution Inc. EB-2012-0160 Exhibit 7 Tab 1 Schedule 2

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Appendix L

**Cost Allocation Model** 

Pages I.6, I.8, O.1, O.2

Sheet I6.	1 Revenue V	Workshee	t -						
Total kWhs from Load Forecast	818,754,942								
Total kWs from Load Forecast	992,456								
Deficiency from RRWF	- 604,748								
Miscellaneous Revenue	1,263,000								
		[	1	2	3	6	7	8	9
	ID	Total	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetere Scattered Lo
Billing Data					11				
orecast kWh	CEN	818,754,942	294,240,107	112,158,205	350,715,605	53,896,862	5,413,675	697,744	1,632,
orecast kW	CDEM	992,456			862,025	113,561	14,877	1,993	
orecast kW, included in CDEM, of ustomers receiving line transformer llowance		250,411			250,411				
ptional - Forecast kWh, included in EN, from customers that receive a ne transformation allowance on a Wh basis. In most cases this will ot be applicable and will be left ank.									
Wh excluding KWh from Wholesale larket Participants	CEN EWMP	818,754,942	294,240,107	112,158,205	350,715,605	53,896,862	5,413,675	697,744	1,632,
Wh - 30 year weather normalized nount	Click here to Enter Data	818,754,942	294,240,107	112,158,205	350,715,605	53,896,862	5,413,675	697,744	1,632,1
kisting Monthly Charge kisting Distribution kWh Rate			\$11.91 \$0.0116	\$29.90 \$0.0090	\$247.49	\$6,311.79	\$3.16	\$3.73	\$11 \$0.1
kisting Distribution kW Rate kisting TFOA Rate			30.0116	30.0050	\$2.4354 \$0.60	\$0.7373	\$13.1880	\$17.8300	JU. 1
dditional Charges									
istribution Revenue from Rates		\$14,574,335	\$7,952,109	\$2,282,022	\$3,257,835	\$235,212	\$505,234	\$51,688	\$290,
ansformer Ownership Allowance	CDEV	\$150,246	\$0	\$0	\$150,246	\$0	\$0	\$0	
et Class Revenue	CREV	\$14,424,089	\$7,952,109	\$2,282,022	\$3,107,588	\$235,212	\$505,234	\$51,688	\$290,
ata Mismatch Analysis									
evenue with 30 year weather ormalized kWh		14,424,089	7,952,109	2,282,022	3,107,588	235,212	505,234	51,688	290,

<u>Weather Normalized Data from Hydro</u> One	Total	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load
kWh - 30 year weather normalized amount	818,754,942	294,240,107	112,158,205	350,715,605	53,896,862	5,413,675	697,744	1,632,744
Loss Factor		<b>1.0000</b>	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Sheet I6.2 Customer Data Worksheet -										
_	1 2 3 6 7 8									
	ID	Total	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load	
Billing Data		1			11		I I		1	
Bad Debt 3 Year Historical Average	BDHA	\$184,606	\$138,057	\$14,097	\$32,451	\$0	\$0	\$0	\$0	
Late Payment 3 Year Historical										
Average	LPHA	\$200,000	\$134,687	\$30,515	\$30,684	\$4,114				
Number of Bills	CNB	430,289	381,102	42,562	4,681	24	48	1,776	96	
Number of Devices							8,150	361	384	
Number of Connections (Unmetered)	CCON	8,682					8,150	148	384	
Total Number of Customers	CCA	35,697	31,758	3,547	390	2				
Bulk Customer Base	CCB	-								
Primary Customer Base	CCP	35,697	31,758	3,547	390	2				
Line Transformer Customer Base	CCLT	35,643	31,758	3,511	374					
Secondary Customer Base	CCS	31,226	29,712	1,514	-					
Weighted - Services	CWCS	39,843	29,712	10,008	-	-	-	-	123	
Weighted Meter -Capital	CWMC	4,917,792	2,762,989	1,078,233	1,056,570	20,000	-	-		
Weighted Meter Reading	CWMR	35,697	31,758	3,547	390	2	-	-		
Weighted Bills	CWNB	424,066	381,102	37,029	4,353	18	30	1,456	79	

# Bad Debt Data

Historic Year:	2009	232,960	143,978	2,003	86,979				
Historic Year:	2010	165,761	139,328	19,987	6,446				
Historic Year:	2011	155,097	130,866	20,302	3,929				
Three-year average		184,606	138,057	14,097	32,451	-	-	-	-

SI	neet I8 De	emand Dat	a Worksh	eet -					
This is an input s allocators.	heet for deman	nd							
CP TEST RE		12 CP							
NCP TEST RE		4 NCP							
Co-incident	Poak	Indicator							
1 CP	Teak	CP 1							
4 CP 12 CP		CP 4 CP 12							
Non-co-incide									
1 NCP		Indicator NCP 1							
4 NCP		NCP 4							
12 NCF	)	NCP 12							
		[	1	2	3	6	7	8	9
Customer Classes		Total	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load
						I	1		I
CO-INCIDEN	ΡΕΔΚ	-							
		1							
1 CP Transformation CP	TCP1	144,710	72,278	12,792	50,670	7,087	1,340	171	37
Bulk Delivery CP	BCP1	144,710	72,278	12,792	50,670	7,087	1,340	171	37
Total Sytem CP	DCP1	144,710	72,278	12,792	50,670	7,087	1,340	171	37
4 CP									
Transformation CP	TCP4	554,603	248,933	62,158	209,783	28,374	3,826	493	1,03
Bulk Delivery CP	BCP4	554,603	248,933	62,158	209,783	28,374	3,826	493	1,03
Total Sytem CP	DCP4	554,603	248,933	62,158	209,783	28,374	3,826	493	1,03
12 CP									
Transformation CP	TCP12	1,517,106	606,514	207,014	605,494	85,720	8,760	1,129	2,47
	BCP12	1,517,106	606,514	207,014	605,494	85,720	8,760	1,129	
	BCP12 DCP12			207,014 207,014	605,494		8,760 8,760	1,129 1,129	2,47 2,47
Bulk Delivery CP Total Sytem CP NON CO_INCIDI	DCP12	1,517,106	606,514		605,494	85,720		1,129	
Total Sytem CP	DCP12	1,517,106	606,514		605,494	85,720		1,129	
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from	DCP12	1,517,106 1,517,106	606,514 606,514	207.014	605,494 605,494	85,720 85,720	8,760	1,129 1,129	2,47
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider	DCP12 ENT PEAK DNCP1	1,517,106 1,517,106 178,892	606,514 606,514 74,040	207,014	605,494 605,494 62,598	85,720 85,720 9,699	8,760	1,129 1,129 322	2,47
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP	DCP12 ENT PEAK DNCP1 PNCP1	1,517,106 1,517,106 178,892 178,892	606,514 606,514 74,040 74,040	207,014 28,999 28,999	605,494 605,494 62,598 62,598	85,720 85,720	8,760 2,533 2,533	1,129 1,129 322 322	2,47 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP	DCP12 ENT PEAK DNCP1 PNCP1 LTNCP1	1,517,106 1,517,106 178,892 178,892 166,321	606,514 606,514 74,040 74,040 74,038	207,014 28,999 28,999 28,706	605,494 605,494 62,598	85,720 85,720 9,699	8,760 2,533 2,533 2,533	1,129 1,129 322 322 322 322	2,47 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP	DCP12 ENT PEAK DNCP1 PNCP1	1,517,106 1,517,106 178,892 178,892	606,514 606,514 74,040 74,040	207,014 28,999 28,999	605,494 605,494 62,598 62,598	85,720 85,720 9,699	8,760 2,533 2,533	1,129 1,129 322 322	2,47 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP 4 NCP	DCP12 ENT PEAK DNCP1 PNCP1 LTNCP1	1,517,106 1,517,106 178,892 178,892 166,321	606,514 606,514 74,040 74,040 74,038	207,014 28,999 28,999 28,706	605,494 605,494 62,598 62,598	85,720 85,720 9,699	8,760 2,533 2,533 2,533	1,129 1,129 322 322 322 322	2,47 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP 4 NCP Classification NCP from	DCP12 ENT PEAK DNCP1 PNCP1 LTNCP1 SNCP1	1,517,106 1,517,106 1,517,106 178,892 178,892 166,321 85,205	606,514 606,514 74,040 74,040 74,038 69,268	207,014 28,999 28,999 28,706 12,378	605,494 605,494 62,598 62,598 60,019 -	85,720 85,720 9,699 9,699 -	8,760 2,533 2,533 2,533 2,533	1,129 1,129 322 322 322 322 322	2,41 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP 4 NCP Classification NCP from Load Data Provider	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4	1,517,106 1,517,106 1,517,106 178,892 178,892 166,321 85,205 682,317	606,514 606,514 74,040 74,040 74,038 69,268 281,718	207,014 28,999 28,999 28,706 12,378 110,704	605,494 605,494 605,494 62,598 62,598 60,019 -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533 2,533 2,533 2,533 2,533 6,452	1.129 1.129 322 322 322 322 322 322 825	2,47 70 70 70 70 2,11
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP 4 NCP Classification NCP from Load Data Provider Primary NCP	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4 PNCP4	1,517,106 1,517,106 178,892 178,892 166,321 85,205 682,317 683,388	606,514 606,514 74,040 74,040 74,038 69,268 281,718 281,718	207,014 28,999 28,999 28,706 12,378 110,704 110,704	605,494 605,494 605,494 62,598 62,598 60,019 -	85,720 85,720 9,699 9,699 -	8,760 2,533 2,533 2,533 2,533 2,533 6,452 7,523	1.129 1.129 322 322 322 322 322 322 322 322	2,47 70 70 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4	1,517,106 1,517,106 1,517,106 178,892 178,892 166,321 85,205 682,317	606,514 606,514 74,040 74,040 74,038 69,268 281,718	207,014 28,999 28,999 28,706 12,378 110,704	605,494 605,494 605,494 62,598 62,598 60,019 -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533 2,533 2,533 2,533 2,533 6,452	1.129 1.129 322 322 322 322 322 322 825	2,47 70 70 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Secondary NCP 12 NCP	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4 PNCP4 LTNCP4	1,517,106 1,517,106 1,517,106 178,892 178,892 166,321 85,205 682,317 683,388 633,388 633,316	606,514 606,514 74,040 74,040 74,038 69,268 281,718 281,718 281,713	207,014 28,999 28,999 28,706 12,378 110,704 110,704 109,586	605,494 605,494 605,494 62,598 62,598 60,019 -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533	1,129 1,129 322 322 322 322 322 322 322 322 322 3	2,41 70 70 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Line Transformer NCP Secondary NCP Line Transformer NCP Secondary NCP 12 NCP Classification NCP from Classification NCP from	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4 PNCP4 PNCP4 SNCP4 SNCP4	1,517,106 1,517,	606,514 606,514 74,040 74,040 74,038 69,268 281,718 281,718 281,713 263,564	207,014 28,999 28,999 28,706 12,378 110,704 110,704 109,586 47,255	605,494 605,494 605,494 62,598 60,019 - - 243,593 243,593 233,556 -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533 2,533 2,533 2,533 2,533 2,533 6,452 7,523 7,523 7,523	1,129 1,129 1,129 322 322 322 322 322 322 322 322 322 3	2,47 70 70 70 70 70 70 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Classification NCP from Load Data Provider 12 NCP Classification NCP from Load Data Provider	DCP12 DNCP1 PNCP1 LTNCP1 LTNCP1 SNCP1 DNCP4 PNCP4 LTNCP4 SNCP4 SNCP4 DNCP4	1,517,106 1,517,106 1,517,106 178,892 178,892 166,321 85,205 682,317 683,388 635,316 321,277 1,790,534	606,514 606,514 74,040 74,040 74,038 69,268 281,718 281,718 281,713 263,564 693,113	207,014 28,999 28,999 28,706 12,378 110,704 110,704 109,586 47,255 291,404	605,494 605,494 605,494 62,598 62,598 60,019 - - - - - - - - - - - - - - - - - - -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533 2,533 2,533 2,533 2,533 2,533 6,452 7,523 7,523 7,523 7,523	1.129 1.129 1.129 322 322 322 322 322 322 322 322 322 3	2,47 70 70 70 70 70 70 70 70 70 70 70 70 70
Total Sytem CP NON CO_INCIDI 1 NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP Classification NCP from Load Data Provider Primary NCP Line Transformer NCP Secondary NCP 12 NCP Classification NCP from	DCP12 DNCP1 PNCP1 LTNCP1 SNCP1 DNCP4 PNCP4 PNCP4 SNCP4 SNCP4	1,517,106 1,517,	606,514 606,514 74,040 74,040 74,038 69,268 281,718 281,718 281,713 263,564	207,014 28,999 28,999 28,706 12,378 110,704 110,704 109,586 47,255	605,494 605,494 605,494 62,598 60,019 - - 243,593 243,593 233,556 -	85,720 85,720 9,699 9,699 - - - - - - - - - - - - - - - - - -	8,760 2,533 2,533 2,533 2,533 2,533 2,533 6,452 7,523 7,523 7,523	1,129 1,129 1,129 322 322 322 322 322 322 322 322 322 3	2,47 70 70 70 70 70 70 70 70 70 70

	<u>uctions:</u> se see the first tab in this workbook for detailed in:	structions							
Class	s Revenue, Cost Analysis, and Return on F	Rate Base							
			1	2	3	6	7	8	9
ate Base Assets	9	Total	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load
crev mi	Distribution Revenue at Existing Rates Miscellaneous Revenue (mi)	\$14,424,089 \$1,263,000	\$7,952,109 \$880,426	\$162,061	\$155,371	\$235,212 \$18,943	\$505,234 \$40,470	\$51,688 \$2,489	\$290,236 \$3,239
	Total Revenue at Existing Rates	\$15,687,089	\$8.832.535	ue Input equals O \$2,444,084		\$254,155	\$545.704	\$54,176	\$293,475
	Factor required to recover deficiency (1 + D)	1.0419	\$0,032,333	\$2,444,004	\$5,202,555	\$234,133	\$343,104	\$34,110	\$200,410
	Distribution Revenue at Status Quo Rates Miscellaneous Revenue (mi)	\$15,028,837 \$1,263,000	\$8,285,512 \$880,426	\$2,377,699 \$162,061	\$3,237,878 \$155,371	\$245,073 \$18,943	\$526,417 \$40,470	\$53,855 \$2,489	\$302,404 \$3,239
	Total Revenue at Status Quo Rates	\$16,291,837	\$9,165,938	\$2,539,760	\$3,393,249	\$264,017	\$566,887	\$56,343	\$305,644
	Expenses	to 040 700	\$1,714,656	\$500.394	\$625.366	\$79.123	\$106.275	64.000	\$12.640
di cu	Distribution Costs (di) Customer Related Costs (cu)	\$3,042,793 \$2,812,006	\$1,714,656 \$2,374,189	\$287,224	\$625,366	\$79,123 \$1,465	\$106,275	\$4,338 \$7,605	\$12,640 \$411
ad	General and Administration (ad)	\$3,488,992	\$2,411,497	\$475,548		\$49,090	\$68,788	\$6,996	\$8,206
dep	Depreciation and Amortization (dep)	\$2,673,856	\$1,517,561	\$443,569	\$543,385	\$48,142	\$107,310	\$3,670	\$10,219
INPUT	PILs (INPUT)	\$257,435	\$147,783	\$41,493	\$50,375	\$5,032	\$11,285	\$386	\$1,082
INT	Interest	\$1,648,154	\$946,137	\$265,644	\$322,511	\$32,216	\$72,246	\$2,473	\$6,920
	Total Expenses	\$13,923,236	\$9,111,823	\$2,013,872	\$2,151,460	\$215,069	\$366,059	\$25,468	\$39,485
	Direct Allocation	\$0	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$0	\$0
NI	Allocated Net Income (NI)	\$2,368,601	\$1,359,717	\$381,764	\$463,488	\$46,299	\$103,827	\$3,554	\$9,953
	Revenue Requirement (includes NI)	\$16,291,837	\$10,471,540	\$2,395,636	\$2,614,948	\$261,368	\$469,886	\$29,022	\$49,437
		Revenue Rec	quirement Input e	equals Output					

	Sheet O1 Revenue to Cos	t <b>Summ</b> a <b>r</b> y	y Worksh	eet ·					
	Rate Base Calculation								
dp gp accum dej	<u>Net Assets</u> Distribution Plant - Gross General Plant - Gross Accumulated Depreciation	\$105,292,225 \$2,900,192 (\$40,100,666)	\$61,377,303 \$1,707,063 (\$23,005,316)	\$17,171,467 \$479,573 (\$6,391,461)	\$19,581,089 \$521,882 (\$7,850,044)	\$1,922,708 \$52,026 (\$753,250)	\$4,630,622 \$123,127 (\$1,862,919)	\$157,214 \$4,212 (\$62,536)	\$451,822 \$12,309 (\$175,139)
со	Capital Contribution Total Net Plant	(\$13,853,111) \$54,238,640	(\$8,934,172) \$31,144,878	(\$2,515,055) \$8,744,523	(\$1,648,918) \$10,604,009	(\$162,249) \$1,059,235	(\$514,126) \$2,376,704	(\$17,538) \$81,352	(\$61,052) \$227,939
	Total Net Plant	\$04,238,640	\$31,144,878	\$8,744,523	\$10,604,009	\$1,009,230	\$2,376,704	\$81,302	\$221,939
	Directly Allocated Net Fixed Assets	\$0	<b>\$</b> 0	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0
СОР	Cost of Power (COP) OM&A Expenses Directly Allocated Expenses	\$83,514,611 \$9,343,791 \$0	\$30,013,068 \$6,500,342 \$0	\$11,440,357 \$1,263,166 \$0	\$35,773,680 \$1,235,189 \$0	\$5,497,586 \$129,679 \$0	\$552,205 \$175,219 \$0	\$71,171 \$18,939 \$0	\$166,543 \$21,258 \$0
	Subtotal	\$92,858,402	\$36,513,411	\$12,703,523	\$37,008,869	\$5,627,264	\$727,424	\$90,111	\$187,801
	Working Capital	\$12,071,592	\$4,746,743	\$1,651,458	\$4,811,153	\$731,544	\$94,565	\$11,714	\$24,414
	Total Rate Base	\$66,310,232	\$35,891,621	\$10,395,981	\$15,415,162	\$1,790,780	\$2,471,269	\$93,066	\$252,353
		Rate Base Input equals Output							
	Equity Component of Rate Base	\$26,524,093	\$14,356,649	\$4,158,393	\$6,166,065	\$716,312	\$988,508	\$37,226	\$100,941
	Net Income on Allocated Assets	\$2,368,601	\$54,114	\$525,888	\$1,241,789	\$48,947	\$200,828	\$30,875	\$266,159
	Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Net Income	\$2,368,601	\$54,114	\$525,888	\$1,241,789	\$48,947	\$200,828	\$30,875	\$266,159
	RATIOS ANALYSIS								
	REVENUE TO EXPENSES STATUS QUO%	100.00%	87.53%	106.02%	129.76%	101.0 <mark>1</mark> %	120.64%	194.14%	618.24%
	EXISTING REVENUE MINUS ALLOCATED COSTS	(\$604,748)	(\$1,639,005)	\$48,448	\$648,012	(\$7,213)	\$75,819	\$25,154	\$244,038
		Deficie	ncy Input equals	Output					
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	\$0	(\$1,305,603)	\$144,124	\$778,301	\$2,648	\$97,001	\$27,321	\$256,206
	RETURN ON EQUITY COMPONENT OF RATE BASE	8,93%	0.38%	12.65%	20.14%	6.83%	20.32%	82.94%	263.68%

#### Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet •

Output sheet showing minimum and maximum level for Monthly Fixed Charge

	1	2	3	6	7	8	9
<u>Summary</u>	Residential	General Service < 50 kW	General Service > 50 kW	Large Use >5MW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load
Customer Unit Cost per month - Avoided Cost	\$5.90	\$9.11	\$49.45	\$7.24	\$0.00	\$3.75	\$0.06
Customer Unit Cost per month - Directly Related	\$8.96	\$12.71	\$62.51	\$47.68	\$0.00	\$5.98	\$0.11
ustomer Unit Cost per month - Minimum System ith PLCC Adjustment	\$16.76	\$25.91	\$86.31	\$188.22	\$4.78	\$9.83	\$4.27
Existing Approved Fixed Charge	\$11.91	\$29.90	\$247.49	\$6,311.79	\$3.16	\$3.73	\$11.10