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Cost Allocation Study Requirements

Ex.7/Tab 1/Sch.1 - Overview of Cost Allocation

In 2016, Wellington North Power Inc. (WNP) prepared and filed its original 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. As part of its 2012 Cost of Service Rate Application, WNP updated the cost allocation revenue to cost ratios with 2012 base revenue requirement information. The revenue to cost ratios from WNP's 2012 Cost of Service application (EB-2011-0249) is presented in the table below:

Table 7.1: Previously Approved Ratios (2012 COS)

Customer Class Name	2012 Approved Revenue to Cost Ratio
Residential	99.08%
General Service < 50 kW	95.36%
General Service > 50 to 999 kW	120.00%
General Service > 1,000 to 4,999 kW	95.36%
Sentinel Lights	120.00%
Street Lighting	95.36%
Unmetered Scattered Load	95.35%

The Cost Allocation Study for the 2016 Test Year allocates the 2016 Test Year costs (i.e. the 2016 Test Year forecasted revenue requirement) to the various LDC's customer classes using allocators that are based on the forecasted class loads (kW and kWh) by customer class, customer counts and weighting factors (such as billing, collecting and metering costs).

WNP has used the updated OEB-approved Cost Allocation Model (version 3.3 – issued July 16th 2015) and adhered to the instructions and guidelines issued by the OEB to enter the 2016 Test Year data into this model. WNP has filed a copy of the Cost Allocation Model (version 3.3) as part of its filing submission.

Below is a summary of the process that WNP applied in completing the 2016 Cost Allocation Model:

WNP populated the information on worksheet “I3 - Trial Balance Data” with the 2016 Test Year forecasted data, Target Net Income, PILs, Deemed interest on long term debt and the targeted Revenue Requirement and Rate Base.

In worksheet “I4 -Break-out of Assets”, WNP updated the allocation of the accounts based on 2016 Test Year values.

In worksheet “I5.1 - Miscellaneous data”, WNP updated the deemed equity component of rate base, kilometer of roads in the service area, working capital allowance and the proportion of pole rental revenue from secondary poles.

As instructed by the Board, in worksheet “I5.2 - Weighting Factors”, WNP 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:

Table 7.2: Weighting Factors

	1	2	3	5	7	8	9
	Residential	GS <50	General Service 50 - 999 kW	General Service 1000 - 4999 kW	Street Light	Sentinel Lighting	Unmetered Scattered Load
Weighting Factor for Services Account 1855	1.0	1.0	4.0	6.0	0.0	0.0	0.0
Weighting Factor for Billing and Collecting	1.0	1.5	2.0	4.0	0.85	0.85	1.0

Proposed Services Weighting Factors

Residential:

The weighting factor is set to “1” as per the instructions contained within the Cost Allocation model.

General Service less than 50 kW:

The weighting factor “1” is proposed on the basis servicing of this customer class is similar to that of a residential consumer.

General Service 50 – 999 kW:

The weighting factor “4” is proposed because the requirements of these customers can be more complex and therefore more time-consuming compared to a Residential customer, such as the installation and maintenance of underground services.

General Service 1,000 – 4,999 kW:

The weighting factor of “6” is proposed because these customers require increased levels of engineering and planning.

Street Lighting:

A weighting factor of “0” is proposed for this customer class as the costs incurred are the responsibility of the Township of Wellington North. .

Sentinel Lighting:

The weighting factor of “0” is proposed customer class as the LDC has only three accounts with 29 connections with minimal costs incurred over the past three years.

Unmetered Scattered Load:

A weighting factor of “0” is proposed for this customer class as the LDC has only one account with one connection with zero incurred costs for the past three years.

Proposed Billing and Collecting Weighting Factors

Residential:

The weighting factor is set at “1” as per Cost Allocation instruction sheet.

General Service less than 50 kW:

The weighting factor “1.5” is proposed because these customers are periodically monitored to assess if their kVA demand means that they qualify to move into the GS>50 – 999 kW class. Consequently, the LDC is reading both kVA demand data as well as kWh data for these customers. However, WNP prints less bills and receives fewer calls when compared to the Residential Class.

General Service 50 – 999 kW:

The weighting factor “2” is proposed because these customers are periodically monitored to assess if their kVA demand to assess whether the customer’s should be move to another General Service rate class. Also there is additional staff time is required to prepare and validate each bill to ensure monthly consumption data aligns to the settlement data for the period. However, collection costs are lower than those incurred when dealing with General Service < 50 kW customers

General Service 1,000 – 4,999 kW:

The weighting factor of “4” is proposed because each bill is individually validated to ensure monthly consumption data aligns to the settlement data for the period. Also, for three of the five customers in this class, monthly bills are faxed or e-mailed as well as a paper copy being sent in the mail to the head-office. This class incurs minimal collection costs.

Street Lighting:

The proposed weighting factor is “0.85”. This customer class does not give rise to collection activity and so no collection costs have been allocated. The weighting factor reflects the extremely low volume of bills issued. WNP discusses and confirms load profile data and bill impact with the Township when new rates and charges are introduced.

Sentinel Lights:


The proposed weighting factor is “0.85”. Similar to Street Lighting, this class does not give rise to collection costs. The weighting factor reflects that relatively fewer bills are issued to this customer class. WNP discusses unmetered streetlight load profile data and bill impact with customers when new rates and charges are introduced.

Unmetered Scattered Load:

The “1” is proposed for this customer class as this represents time allocated by the LDC to annually review the load profile that will be applied to the account and discuss this with the customer. WNP discusses unmetered load profile data and bill impact with the customer when new rates and charges are introduced.

In worksheet "I6.1 – Revenue", WNP has populated the 2016 Test Year load forecast data (kWh and kW), the proposed revenue deficiency and miscellaneous revenue as well as existing rates (derived from the 2015 IRM rate application – EB-2014-0121: Decision and Order, March 19th 2015). This is illustrated in the table below:

Table 7.3: Worksheet I6 – Revenue
2016 Load Forecast Data and Revenue at Existing Rates

 Ontario Energy Board 2016 Cost Allocation Model EB-2015-0110 Sheet I6.1 Revenue Worksheet -									
Total kWhs from Load Forecast		102,715,347							
Total kW from Load Forecast		151,949							
Deficiency/sufficiency (RRWF 8. cell F52)		(258,891)							
Miscellaneous Revenue (RRWF 5. cell F48)		150,588							
	ID	Total	1	2	3	5	7	8	9
			Residential	GS <50	General Service 50 - 999 kW	General Service 1000 - 4999 kW	Street Light	Sentinel Lighting	Unmetered Scattered Load
Billing Data									
Forecast kWh	CEN	102,715,347	26,005,466	11,855,213	13,489,914	50,613,209	725,392	23,128	3,024
Forecast kW	CDEM	151,949			41,588	108,301	1,995	65	
Forecast kW, included in CDEM, of customers receiving line transformer allowance		12,855			12,855				
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	102,715,347	26,005,466	11,855,213	13,489,914	50,613,209	725,392	23,128	3,024
Existing Monthly Charge			\$18.49	\$39.25	\$275.90	\$2,254.94	\$7.12	\$5.24	\$18.09
Existing Distribution kWh Rate			\$0.0185	\$0.0168					\$0.0146
Existing Distribution kW Rate					\$3.6643	\$1.8921	\$7.9283	\$19.3776	
Existing TOA Rate					\$0.60				
Additional Charges									
Distribution Revenue from Rates		\$2,341,422	\$1,202,398	\$423,140	\$278,403	\$340,213	\$93,908	\$3,099	\$261
Transformer Ownership Allowance		\$7,713	\$0	\$0	\$7,713	\$0	\$0	\$0	\$0
Net Class Revenue	CREV	\$2,333,709	\$1,202,398	\$423,140	\$270,690	\$340,213	\$93,908	\$3,099	\$261

Worksheet “I6.2 – Customer Data” has been updated with the required Bad Debt and Late Payment revenue data as well as customer/connection number information devices. (WNP has reviewed Navigant’s report “Cost Allocation to Different Types of Street Lighting Configurations” issued June 12 2015 as well as the Board’s letter dated June 12th 2015, “Review of Cost Allocation Policy for Unmetered Loads – EB-2012-0383) and has inputted the number of devices and connections for its Street Lighting class.) Below is a summary of worksheet “I6.2 – Customer Data”:

Table 7.4: Worksheet I6.2 – Customer Data
2016 Billing & Bad Debt Data and Street Light Adjustment Factor

EB-2015-0110									
Sheet I6.2 Customer Data Worksheet -									
	ID	Total	1 Residential	2 GS <50	3 General Service 50 - 999 kW	5 General Service 1000 - 4999 kW	7 Street Light	8 Sentinel Lighting	9 Unmetered Scattered Load
Billing Data									
Bad Debt 3 Year Historical Average	BDHA	\$163,824	\$131,059	\$9,829	\$22,935	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$27,012	\$22,960.40	\$ 3,511.59	\$ 540.24				
Number of Bills	CNB	45,497	39,010	5,706	457	60	36	216	12
Number of Devices	CDEV						914		
Number of Connections (Unmetered)	CCON	935					905	29	1
Total Number of Customers	CCA	3,791	3,250.84	476	38	5	3	18	1
Bulk Customer Base	CCB	-							
Primary Customer Base	CCP	3,869	3,251	476	38	5	80	18	1
Line Transformer Customer Base	CCLT	3,864	3,251	476	38	-	80	18	1
Secondary Customer Base	CCS	3,791	3,251	476	38	5	3	18	1
Weighted - Services	CWCS	3,909	3,251	476	152	30	-	-	-
Weighted Meter -Capital	CWMC	659,359	381,941	233,307	31,120	12,990	-	-	-
Weighted Meter Reading	CWMR	4,034	3,190	710	114	20	-	-	-
Weighted Bills	CWNB	48,949	39,010	8,559	914	240	31	184	12
Bad Debt Data									
Historic Year:	2012	162,755	130,204	9,765	22,786				
Historic Year:	2013	163,157	130,525	9,789	22,842				
Historic Year:	2014	165,561	132,449	9,934	23,179				
Three-year average		163,824	131,059	9,829	22,935	-	-	-	-
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	3,251	26,821	3,251	26,821					
Street Light	914	663	914	663					
	Street Lighting								
	Primary	11.3721							
	Line Transformer	11.3721							

WNP updated the capital cost meter information in worksheet “I7.1 – Meter Capital” based upon 2014 meter costs as well as the meter reading information in worksheet “I7.2 – Meter Reading”.

The data entered in worksheet “I8 – Demand Data” reflects the findings of the 2004 hour by hour load data being scaled to be consistent with WNP’s 2016 load forecast and the inspection of the scaled data to identify the system peaks and class specific peaks. The scaling factor used by each rate class is summarized in the table below:

Table 7.5: Summary of Scaling Factors 2004 to 2016.

Rate Class	2016 Forecast (kWh) (A)	2004 Actual (kWh) (B)	Scaling Factor (C) = (A)/(B)
Residential class	26,005,466	26,670,305	0.9751
General service <50kW	11,855,213	13,147,701	0.9017
General service 50 to 999kW	13,489,914	25,404,251	0.5310
General service 1000 to 4999kW	50,613,209	29,814,556	1.6976
Street lighting	725,392	769,474	0.9427
Sentinel lighting	23,128	35,168	0.6577
Unmetered Scattered Load	3,024	103,193	0.0293
	102,715,347	95,944,647	

The table below shows the Demand Data for 2016 Test Year (adjusted for 2016 Load Forecast) as reflected in the worksheet “I8 – Demand Data” of the Cost Allocation model.

Table 7.6: Worksheet I8 – Demand Data
Demand Data for 2016 Test Year (adjusted for 2016 Load Forecast)

EB-2015-0110										
Sheet I8 Demand Data Worksheet -										
This is an input sheet for demand allocators.										
CP TEST RESULTS		12 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			Total	1	2	3	5	7	8	9
				Residential	GS <50	General Service 50 - 999 kW	General Service 1000 - 4999 kW	Street Light	Sentinel Lighting	Unmetered Scattered Load
CO-INCIDENT PEAK										
1 CP										
Transformation CP	TCP1	17,455		6,232	1,317	1,609	8,126	166	5	0
Bulk Delivery CP	BCP1	17,455		6,232	1,317	1,609	8,126	166	5	0
Total Sytem CP	DCP1	17,455		6,232	1,317	1,609	8,126	166	5	0
4 CP										
Transformation CP	TCP4	67,869		24,672	5,337	7,620	29,563	658	18	1
Bulk Delivery CP	BCP4	67,869		24,672	5,337	7,620	29,563	658	18	1
Total Sytem CP	DCP4	67,869		24,672	5,337	7,620	29,563	658	18	1
12 CP										
Transformation CP	TCP12	185,237	60,968	13,651	20,756	88,323	1,487	46	4	
Bulk Delivery CP	BCP12	185,237	60,968	13,651	20,756	88,323	1,487	46	4	
Total Sytem CP	DCP12	185,237	60,968	13,651	20,756	88,323	1,487	46	4	
NON CO INCIDENT PEAK										
1 NCP										
Classification NCP from Load Data Provider										
	DNCP1	20,090		7,144	2,117	2,377	8,278	166	7	0.4
	Primary NCP	20,090		7,144	2,117	2,377	8,278	166	7	0.4
	Line Transformer NCP	11,812		7,144	2,117	2,377	-	166	7	0.4
	Secondary NCP	20,090		7,144	2,117	2,377	8,278	166	7	0.4
4 NCP										
Classification NCP from Load Data Provider										
	DNCP4	77,523		26,821	8,179	9,117	32,715	663	26	1
	Primary NCP	77,523		26,821	8,179	9,117	32,715	663	26	1
	Line Transformer NCP	44,807		26,821	8,179	9,117	-	663	26	1
	Secondary NCP	77,523		26,821	8,179	9,117	32,715	663	26	1
12 NCP										
Classification NCP from Load Data Provider										
	DNCP12	210,886	67,219	21,868	24,489	95,257	1,984	65	4	
	Primary NCP	210,886	67,219	21,868	24,489	95,257	1,984	65	4	
	Line Transformer NCP	115,629	67,219	21,868	24,489	-	1,984	65	4	
	Secondary NCP	210,886	67,219	21,868	24,489	95,257	1,984	65	4	

- 1 WNP determined that there were no direct allocations necessary in “I9. - Direct Allocations” as
- 2 all assets and operating expenses are attributable to all rate classes. Consequently this
- 3 worksheet has no data beneath the rate classes.
- 4 The revenue to cost ratios calculated in worksheet “O1 – Revenue to Cost” of the Cost
- 5 Allocation model updated for the 2016 Test Year is shown below:

Table 7.7: Worksheet O1 – Revenue to Cost of the Cost Allocation Model

EB-2015-0110 Sheet O1 Revenue to Cost Summary Worksheet -								
Instructions: Please see the first tab in this workbook for detailed instructions								
Class Revenue, Cost Analysis, and Return on Rate Base								
Rate Base	Total	1 Residential	2 GS <50	3 General Service 50 - 999 kV	5 General Service 1000 - 4999 kV	7 Street Light	8 Sentinel Lighting	9 Unmetered Scattered Load
Assets								
crev Distribution Revenue at Existing Rates	\$2,333,709	\$1,202,398	\$423,140	\$270,690	\$340,213	\$93,908	\$3,099	\$261
mi Miscellaneous Revenue (mi)	\$150,588	\$98,184	\$22,965	\$7,644	\$16,225	\$5,113	\$438	\$19
	Miscellaneous Revenue Input equals Output							
Total Revenue at Existing Rates	\$2,484,297	\$1,300,581	\$446,105	\$278,334	\$356,437	\$99,021	\$3,538	\$280
Factor required to recover deficiency (1 + D)	1.1109							
Distribution Revenue at Status Quo Rates	\$2,592,599	\$1,335,786	\$470,081	\$300,719	\$377,954	\$104,326	\$3,443	\$290
Miscellaneous Revenue (mi)	\$150,588	\$98,184	\$22,965	\$7,644	\$16,225	\$5,113	\$438	\$19
Total Revenue at Status Quo Rates	\$2,743,188	\$1,433,970	\$493,046	\$308,363	\$394,179	\$109,439	\$3,882	\$309
Expenses								
di Distribution Costs (di)	\$517,500	\$258,519	\$58,690	\$48,222	\$138,134	\$12,815	\$1,092	\$27
cu Customer Related Costs (cu)	\$528,500	\$396,375	\$103,713	\$15,123	\$3,708	\$8,081	\$1,418	\$82
ad General and Administration (ad)	\$765,368	\$471,176	\$117,332	\$48,563	\$111,023	\$15,394	\$1,803	\$77
dep Depreciation and Amortization (dep)	\$361,570	\$180,792	\$55,678	\$33,037	\$84,272	\$7,177	\$599	\$15
INPUT PILs (INPUT)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
INT Interest	\$220,153	\$109,618	\$29,230	\$22,228	\$54,118	\$4,528	\$420	\$11
Total Expenses	\$2,393,091	\$1,416,480	\$364,643	\$167,175	\$391,255	\$47,996	\$5,331	\$212
Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NI Allocated Net Income (NI)	\$350,096	\$174,319	\$46,483	\$35,348	\$86,060	\$7,201	\$667	\$17
Revenue Requirement (includes NI)	\$2,743,188	\$1,590,799	\$411,126	\$202,523	\$477,315	\$55,197	\$5,998	\$229
	Revenue Requirement Input equals Output							
Rate Base Calculation								
Net Assets								
dp Distribution Plant - Gross	\$8,128,882	\$4,005,420	\$1,078,910	\$778,244	\$2,074,052	\$177,145	\$14,734	\$377
gp General Plant - Gross	\$1,307,335	\$641,700	\$169,290	\$125,989	\$339,052	\$28,848	\$2,395	\$61
accum dep Accumulated Depreciation	(\$1,122,891)	(\$567,702)	(\$171,910)	(\$103,379)	(\$255,429)	(\$22,515)	(\$1,906)	(\$49)
co Capital Contribution	\$90,813	\$100,121	\$37,204	\$44,420	(\$82,151)	(\$9,545)	\$745	\$19
Total Net Plant	\$8,404,138	\$4,179,538	\$1,113,493	\$845,274	\$2,075,524	\$173,933	\$15,967	\$409
Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP								
Cost of Power (COP)	\$13,117,919	\$3,336,661	\$1,513,539	\$1,718,462	\$6,446,514	\$99,187	\$3,165	\$390
OM&A Expenses	\$1,811,368	\$1,126,070	\$279,735	\$111,909	\$252,865	\$36,290	\$4,312	\$186
Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$14,929,287	\$4,462,731	\$1,793,275	\$1,830,371	\$6,699,379	\$135,478	\$7,478	\$576
Working Capital	\$1,119,697	\$334,705	\$134,496	\$137,278	\$502,453	\$10,161	\$561	\$43
Total Rate Base	\$9,523,835	\$4,514,243	\$1,247,989	\$982,551	\$2,577,978	\$184,094	\$16,528	\$452
	Rate Base Input equals Output							
Equity Component of Rate Base	\$3,809,534	\$1,805,697	\$499,196	\$393,021	\$1,031,191	\$73,638	\$6,611	\$181
Net Income on Allocated Assets	\$350,096	\$17,490	\$128,403	\$141,189	\$2,924	\$61,443	(\$1,449)	\$97
Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income	\$350,096	\$17,490	\$128,403	\$141,189	\$2,924	\$61,443	(\$1,449)	\$97
RATIOS ANALYSIS								
REVENUE TO EXPENSES STATUS QUO%	100.00%	90.14%	119.93%	152.26%	82.58%	198.27%	64.71%	134.80%
EXISTING REVENUE MINUS ALLOCATED COSTS	(\$258,891)	(\$290,218)	\$34,979	\$75,811	(\$120,877)	\$43,824	(\$2,461)	\$51
	Deficiency Input equals Output							
STATUS QUO REVENUE MINUS ALLOCATED COSTS	(\$0)	(\$156,830)	\$81,920	\$105,840	(\$83,136)	\$54,242	(\$2,117)	\$80
RETURN ON EQUITY COMPONENT OF RATE BASE	9.19%	0.97%	25.72%	35.92%	0.28%	83.44%	-21.93%	53.54%

- 1 The table below is taken from the OEB Cost Allocation model worksheet “O-2 – Fixed Charge
2 |Floor |Ceiling” and illustrates the minimum and maximum level for the Monthly Fixed Charge for
3 each rate class.

Table 7.8: Worksheet O2 – Fixed Charge | Floor| Ceiling of the Cost Allocation Model

EB-2015-0110								
Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -								
Output sheet showing minimum and maximum level for Monthly Fixed Charge								
Summary								
Customer Unit Cost per month - Avoided Cost	\$9.04	\$20.20	\$28.46	\$7.22	\$0.68	\$3.06	\$7.46	
Customer Unit Cost per month - Directly Related	\$15.15	\$32.18	\$47.85	\$54.31	\$1.22	\$5.41	\$12.98	
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$28.96	\$47.14	\$84.83	\$218.11	\$4.17	\$16.79	\$24.76	
Existing Approved Fixed Charge	\$18.49	\$39.25	\$275.90	\$2,254.94	\$7.12	\$5.24	\$18.09	
Information to be Used to Allocate PILs, ROD, ROE and A&G								
	Total	1 Residential	2 GS <50	3 General Service 50 - 999 kW	5 General Service 1000 - 4999 kW	7 Street Light	8 Sentinel Lighting	9 Unmetered Scattered Load
General Plant - Gross Assets	\$1,307,335	\$641,700	\$169,290	\$125,989	\$339,052	\$28,848	\$2,395	\$61
General Plant - Accumulated Depreciation	(\$595,614)	(\$292,355)	(\$77,127)	(\$57,400)	(\$154,470)	(\$13,143)	(\$1,091)	(\$28)
General Plant - Net Fixed Assets	\$711,721	\$349,346	\$92,162	\$68,589	\$184,582	\$15,705	\$1,304	\$33
General Plant - Depreciation	\$103,275	\$50,692	\$13,373	\$9,953	\$26,784	\$2,279	\$189	\$5
Total Net Fixed Assets Excluding General Plant	\$7,692,417	\$3,830,192	\$1,021,331	\$776,685	\$1,890,942	\$158,228	\$14,663	\$376
Total Administration and General Expense	\$765,368	\$471,176	\$117,332	\$48,563	\$111,023	\$15,394	\$1,803	\$77
Total O&M	\$1,046,000	\$654,894	\$162,403	\$63,345	\$141,843	\$20,896	\$2,509	\$109

Class Revenue Requirements

Ex.7/Tab 2/Sch.1 - Class Revenue Analysis

The table below shows the results of the cost allocation from the 2012 Test Year study as approved in WNP's 2012 Cost of Service rate application (EB-2011-0249). These results are used to compare, analyze the allocation under each option and help the utility determine its 2016 proposed ratios.

Table 7.9: Previously Approved Ratios (2012 COS)

Class	Service Revenue Requirement		Miscellaneous Revenue		Base Revenue		Approved Revenue to Cost Expenses %
Residential	\$1,221,789	51.63%	\$90,940	60.63%	\$1,130,849	51.02%	99.08%
GS < 50 kW	\$434,484	18.36%	\$34,448	22.97%	\$400,036	18.05%	95.36%
GS 50 - 999 kW	\$308,618	13.04%	\$10,511	7.01%	\$298,107	13.45%	120.00%
GS 1,000 - 4,999 kW	\$304,942	12.89%	\$8,949	5.97%	\$295,993	13.36%	95.36%
Sentinel Lights	\$2,684	0.11%	\$136	0.09%	\$2,548	0.11%	120.00%
Street Lighting	\$93,585	3.95%	\$4,990	3.33%	\$88,595	4.00%	95.36%
Unmetered Scattered Loads	\$199	0.01%	\$18	0.01%	\$181	0.01%	95.36%
	\$2,366,300	100.00%	\$149,992	100.00%	\$2,216,308	100.00%	

The table below summarizes the revenue allocation for the proposed 2016 as derived from the Cost Allocation model

Table 7.10: Revenue Allocation from the Cost Allocation Model for 2016 Test Year

<u>Cost Allocation Results</u>	REVENUE ALLOCATION (sheet 01)						
Customer Class Name	Service Rev Req		Misc. Revenue (mi)		Base Rev Req		Revenue to Cost Expenses %
Residential	1,590,799	57.99%	98,184	65.20%	1,492,616	57.57%	90.14%
General Service < 50 kW	411,126	14.99%	22,965	15.25%	388,161	14.97%	119.93%
General Service > 50 to 999 kW	202,523	7.38%	7,644	5.08%	194,879	7.52%	152.26%
General Service 1,000 to 4,999kW	477,315	17.40%	16,225	10.77%	461,090	17.78%	82.58%
Unmetered Scattered Load	229	0.01%	19	0.01%	210	0.01%	134.80%
Sentinel Lighting	5,998	0.22%	438	0.29%	5,560	0.21%	64.71%
Street Lighting	55,197	2.01%	5,113	3.40%	50,084	1.93%	198.27%
TOTAL	2,743,188	100.00%	150,588	100.00%	2,592,599	100.00%	

The table below shows the allocation percentage and base revenue requirement allocation under the three scenarios of (a) existing rates, (b) cost allocation results and (c) 2016 Teat Year proposed allocation.

Table 7.11: Base Revenue Requirement Under 3 Scenarios

Customer Class Name	Base Revenue Requirement %					
	Cost Allocation Results		Existing Rates		Proposed Allocation	
Residential	57.57%	\$1,492,616	51.52%	\$1,335,786	53.07%	\$1,376,020
General Service < 50 kW	14.97%	\$388,161	18.13%	\$470,081	17.48%	\$453,186
General Service > 50 to 999 kW	7.52%	\$194,879	11.60%	\$300,719	9.08%	\$235,377
General Service 1,000 to 4,999kW	17.78%	\$461,090	14.58%	\$377,954	17.78%	\$461,076
Unmetered Scattered Load	0.01%	\$210	0.01%	\$290	0.01%	\$256
Sentinel Lighting	0.21%	\$5,560	0.13%	\$3,443	0.21%	\$5,560
Street Lighting	1.93%	\$50,084	4.02%	\$104,326	2.36%	\$61,123
TOTAL	100.00%	\$2,592,599	100.00%	\$2,592,599	100.00%	\$2,592,599

The table below illustrates the revenue offset allocation which resulted from the 2016 Cost Allocation Study (worksheet O1– Revenue to Cost).

Table 7.12: Revenue Offset Allocation as per Cost Allocation Study

Customer Class Name	Revenue Offsets	
	%	\$
Residential	65.20%	\$98,184
General Service < 50 kW	15.25%	\$22,965
General Service > 50 to 999 kW	5.08%	\$7,644
General Service 1,000 to 4,999kW	10.77%	\$16,225
Unmetered Scattered Load	0.01%	\$19
Sentinel Lighting	0.29%	\$438
Street Lighting	3.40%	\$5,113
TOTAL	100.00%	\$150,588

The table below demonstrates the allocation of WNP's 2016 Test Year Service Revenue requirement under the same three scenarios, namely (a) existing rates, (b) cost allocation results and (c) 2016 Test Year proposed allocation.

Table 7.13: Service Revenue Requirement Under 3 Scenarios

Customer Class Name	Service Revenue Requirement \$		
	Cost Allocation	Existing Rates	Rate Application
Residential	\$1,590,799	\$1,433,970	\$1,474,204
General Service < 50 kW	\$411,126	\$493,046	\$476,152
General Service > 50 to 999 kW	\$202,523	\$308,363	\$243,021
General Service 1,000 to 4,999kW	\$477,315	\$394,179	\$477,301
Unmetered Scattered Load	\$229	\$309	\$275
Sentinel Lighting	\$5,998	\$3,882	\$5,998
Street Lighting	\$55,197	\$109,439	\$66,236
TOTAL	\$2,743,188	\$2,743,188	\$2,743,188

Revenue-to-Cost Ratios

Ex.7/Tab 3/Sch.1 - Cost Allocation Results and Analysis

The tables below show “Appendix 2-P – Cost Allocation” taken from the Board’s Chapter 2 Appendices. The Appendix provides information on previously approved ratios and proposed ratios.

Table 7.14: Chapter 2 Appendix 2-P: Cost Allocation – Allocated Costs

A) Allocated Costs				
Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$ 1,221,789	51.63%	\$ 1,590,799	57.99%
GS < 50 kW	\$ 434,484	18.36%	\$ 411,126	14.99%
GS > 50 - 999 kW	\$ 308,618	13.04%	\$ 202,523	7.38%
GS 1000 to 4999 kW	\$ 304,942	12.89%	\$ 477,315	17.40%
Street Lighting	\$ 93,585	3.95%	\$ 55,197	2.01%
Sentinel Lighting	\$ 2,684	0.11%	\$ 5,998	0.22%
Unmetered Scattered Load (USL)	\$ 199	0.01%	\$ 229	0.01%
Total	\$ 2,366,301	100.00%	\$ 2,743,188	100.00%

Table 7.15: Chapter 2 Appendix 2-P: Cost Allocation – Calculated Class Revenues

B) Calculated Class Revenues				
Classes (same as previous table)	Column 7B Load Forecast (LF) X current	Column 7C L.F. X current approved rates	Column 7D LF X proposed rates	Column 7E Miscellaneous Revenue
Residential	\$ 1,202,398	\$ 1,335,786	\$ 1,376,020	\$ 98,184
GS < 50 kW	\$ 423,140	\$ 470,081	\$ 453,186	\$ 22,965
GS > 50 - 999 kW	\$ 270,690	\$ 300,719	\$ 235,377	\$ 7,644
GS 1000 to 4999 kW	\$ 340,213	\$ 377,954	\$ 461,076	\$ 16,225
Street Lighting	\$ 93,908	\$ 104,326	\$ 61,123	\$ 5,113
Sentinel Lighting	\$ 3,099	\$ 3,443	\$ 5,560	\$ 438
Unmetered Scattered Load (USL)	\$ 261	\$ 290	\$ 256	\$ 19
Total	\$ 2,333,709	\$ 2,592,599	\$ 2,592,599	\$ 150,588

The table below, “Rebalancing Revenue to Cost (R/C) Ratios” demonstrates the Proposed Ratios put forward by WNP are within the Board’s policy range for all rate classes. (This is table C from the Board’s Chapter 2 Appendices, worksheet “Appendix 2-P – Cost Allocation”).

**Table 7.16: Chapter 2 Appendix 2-P: Cost Allocation
– Rebalancing Revenue to Cost Ratios**

C) Rebalancing Revenue-to-Cost (R/C) Ratios				
Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2014	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
Residential	99.08	90.14	92.67	85 - 115
GS < 50 kW	95.36	119.93	115.82	80 - 120
GS > 50 - 999 kW	120.00	152.26	120.00	80 - 120
GS 1000 to 4999 kW	95.36	82.58	100.00	80 - 120
Street Lighting	95.36	198.27	120.00	80 - 120
Sentinel Lighting	120.00	64.71	100.00	80 - 120
Unmetered Scattered Load (USL)	95.36	134.80	120.00	80 - 120

WNP has proposed to adjust the revenue to cost ratios over the period of the 2016 Test Year and recommends that these ratios are held constant over the years of 2017 and 2018 as illustrated in the table below:

Table 7.17: Chapter 2 Appendix 2-P: Cost Allocation – Calculated Class Revenues

D) Proposed Revenue-to-Cost Ratios				
Class	Proposed Revenue-to-Cost Ratios			Policy Range
	2016	2017	2018	
	%	%	%	%
Residential	92.67	92.67	92.67	85 - 115
GS < 50 kW	115.82	115.82	115.82	80 - 120
GS > 50 - 999 kW	120.00	120.00	120.00	80 - 120
GS 1000 to 4999 kW	100.00	100.00	100.00	80 - 120
Street Lighting	120.00	120.00	120.00	80 - 120
Sentinel Lighting	100.00	100.00	100.00	80 - 120
Unmetered Scattered Load (USL)	120.00	120.00	120.00	80 - 120

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

Table 7.18: Proposed Revenue to Cost Ratio Allocation

<u>Revenue to Cost Ratio Allocation</u>				Target Range		3 Year Revenue to Cost Alignment		
Customer Class Name	Calculated R/C Ratio	Proposed R/C Ratio	Variance	Floor	Ceiling	2016	2017	2018
Residential	90%	93%	-3%	85.00	115.00	0.93	0.93	0.93
General Service < 50 kW	120%	116%	4%	80.00	120.00	1.16	1.16	1.16
General Service > 50 to 999 kW	152%	120%	32%	80.00	120.00	1.20	1.20	1.20
General Service 1,000 to 4,999kW	83%	100%	-17%	80.00	120.00	1.00	1.00	1.00
Unmetered Scattered Load	135%	120%	15%	80.00	120.00	1.20	1.20	1.20
Sentinel Lighting	65%	100%	-35%	80.00	120.00	1.00	1.00	1.00
Street Lighting	198%	120%	78%	80.00	120.00	1.20	1.20	1.20

* Ratios highlighted in orange fell outside of the Board's floor to ceiling range.

In reviewing the calculated revenue to cost results from the Cost Allocation study, there are four customer classes that are outside of the Board's floor/ceiling parameters. WNP has applied the same methodology as used in the Applicant's 2012 Cost of Service rate application (EB-2011-0249) for adjusting revenue-to-cost ratio, namely:

- a) For General Service 50-999kW, Unmetered Scattered Load and Street Lighting rate classes, WNP adjusted the revenue-to-cost ratio to 120% (the ceiling limit set by the Board);
- b) For the Sentinel Lights class, WNP adjusted the revenue-to-cost ratio to 80% (the floor limit set by the Board). Given the relative small outcome this had in terms of total bill impacts, WNP then adjusted this ratio to 100%;
- c) For the General Service<50kW class, WNP adjusted the ratio to 116% because at 120%, the Applicant believes this class to be over-recovering costs;
- d) For the Residential customer class, WNP increased this ratio from 90% to 93%. At a cost-to revenue ratio of 90%, it suggests this rate class is being subsidized by other rate classes. The proposed increase in the cost-to-revenue ratio for the Residential class enables adjustments to be made for other rate classes, most notably General Service >50 to 999kW class.

In applying the above ratio adjustments, WNP is looking to maintaining revenue neutrality across all customer classes.

1
2 It should be recognized that WNP has not adjusted the revenue to cost ratio for any customer
3 classes in its annual IRM rate applications. Each IRM application has applied the cost-to-
4 revenue ratios that were approved in WNP's 2012 Cost of Service application.

5
6 WNP has proposed to adjust the revenue to cost ratios over the period of the 2016 Test Year
7 and recommends that these ratios are held constant over the years of 2017 and 2018 (as
8 illustrated in Table 7.18).

9 Also, WNP wish to note that in determining the proposed cost-to-revenue ratio adjustments, the
10 LDC has considered the bill impact for each rate class. In WNP's opinion, these ratios do not
11 result in a bill impact change of more than 5% for each rate class (with the exception of
12 Unmetered Scattered Load that has a bill impact of approximately 9 %.) For further details about
13 the class specific bill impacts, please refer to Exhibit 8.

14 As per the Filing Requirements for Transmission and Distribution Applications dated July 16,
15 2015, WNP has completed OEB Appendix 2-P with the results of the 2016 Test Year cost
16 allocation study. The Allocated cost table (Table 2), calculated class revenues (Table 3) and
17 Rebalancing Revenue-to-Cost (Revenue to Cost) Ratios (Table 4) were summarized in Tables
18 7.14 to 7.17 of this Exhibit.

19
20 Note:

21 The Board's filing requirements associated with the Host Distributor, Standby Rates and New
22 customer or Eliminated customer class are not applicable to WNP's application. WNP is an
23 embedded distributor, has no customers with Standby Rates, has not introduced a new
24 customer class and has not eliminated a customer class since the Applicant filed its rate
25 application (Cost of Service in 2012 or IRM application in 2014).

Appendix

List of Appendices
