# London Hydro Inc.

# 2013 Cost of Service Rate Application (EB-2012-0146/ EB- 2012-0380) Response to Interrogatories

# **Cost Allocation (Exhibit 7)**

#### **Board Staff Interrogatories Questions:**

#### Question OEB 40

Reference: Cost Allocation Model, worksheets I 6.2 'Customer Data' and I 8 'Demand Data'

- a) Please clarify the number of USL customers and connections, and the frequency of customer billing. In particular, if London Hydro is forecasting that it will issue 2027 bills to customers in this class during the year, how does this reconcile with the information provided on the number of customers in this class.
- b) Please confirm that the load profile of Bus Shelters is established by using the calculated hours of use, and that Traffic Signals are established by wattage times 24 hours per day (rather than vice versa as described in London Hydro's Conditions of Service at pp. 60-61).
- c) Please describe the other significant loads that are included in the USL class and explain:
  - i. how their load profiles have been established, and
  - *ii.* whether any of these loads have a temperature-sensitive or seasonal component in their load profile.

#### Response OEB 40

a) The number of customers for the Unmetered Scattered Load ("USL") customer class is 55. The number of connections is 1,544 as reflected in the Cost Allocation Model worksheet I6.2

"Customer Data". The frequency of the billing to the Unmetered Scattered Load customer class is monthly.

The forecasting figure of 2,027 bills to be issued does not equate with the above data. It appears that adjustments need to be made as a result of an improper formula which was included in cell L17 of the Cost Allocation Model worksheet I6.2 "Customer Data" and that consideration that London Hydro applies USL billings on some of the other Customer non-USL class billings that are issued.

In the cell L17 includes an incorrect formula that multiplies the number of connections by a factor 1.3125, resulting in an error as to the number of bills. This error in the resulting number of bills appears to be unique to the USL class. Further, although we have 55 customers' accounts, there are 16 USL customers who have their USL bills recorded on another non-USL service billing. Thus to reduce duplicate billing factor in the Cost Allocation Model, the USL customer count (billed) that should be reflected is 39 (55 customer count subtract 16 customers who have USL billing activity applied to non-USL billing).

Therefore, the correct forecast for the number of bills to be issued to the USL customer class is 468 (frequency of billing 12 X number of customers who have separate USL billing 39) and not 2,027 as reflected in cell L17 of the Cost Allocation Model worksheet I6.2 "Customer Data" of the Application model.

The following Tables reflect the error and the correction to L17 of the Cost Allocation Model worksheet I6.2 "Customer Data":

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### **Original Application Filing:**

L17 🔻 🔿 🏄	=+L19*1.3125									
A	В	С	D	E	F	Н	I.	J	К	L
				-				-	-	
			1	2	3	5	6	1	8	9
	ID	Total	Residential	GS <50	GS 50 to 4,999 kW	Co Generation	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load

#### Sheet I6. 2 Customer Data Worksheet - Final Run

			1	2	3	5	6	7	8	9
	ID	Total	Residential	GS <50	GS 50 to 4,999 kW	Co Generation	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load
Billing Data					•					
Bad Debt 3 Year Historical Average	BDHA	\$1,372,422	\$1,111,316	\$197,206	\$63,900	\$0	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$1,215,006	\$716,968	\$203,733	\$292,928	\$0	\$1,377	\$0	\$0	\$(
Number of Bills	CNB	1,781,065	1,613,582	143,297	19,446	36	36	12	2,629	2,027
Number of Devices								35,004		
Number of Connections (Unmetered)	CCON	18,641						16,416	681	1,544
Total Number of Customers	CCA	153,868	138,004	11,970	1,662	3	3	1	681	1,544
Bulk Customer Base	CCB	-								
Primary Customer Base	ССР	153,868	138,004	11,970	1,662	3	3	1	681	1,544
ine Transformer Customer Base	CCLT	153,728	138,004	11,968	1,528	2	-	1	681	1,544
Secondary Customer Base	CCS	152,260	138,004	11,968	62	-	-	1	681	1,544
Weighted - Services	CWCS	167,605	138,004	17,952	465	-	-	9,850	409	926
Weighted Meter -Capital	CWMC	19,836,486	11,038,319	6,309,953	2,398,776	44,719	44,719	-	-	
Weighted Meter Reading	CWMR	2,129,018	1,616,568	143,544	365,378	1,764	1,764	-	-	
Weighted Bills	CWNB	1,886,660	1,613,582	143,297	126,399	540	540	12	263	2,02

### Adjusted:

#### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

			1	2	3	5	6	7	8	9
	ID	Total	Residential	GS <50	GS 50 to 4,999 kW	Co Generation	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load
Billing Data										
Bad Debt 3 Year Historical Average	BDHA	\$1,372,422	\$1,111,316	\$197,206	\$63,900	\$0	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$1,215,006	\$716,968	\$203,733	\$292,928	\$0	\$1,377	\$0	\$0	\$0
Number of Bills	CNB	1,779,506	1,613,582	143,297	19,446	36	36	12	2,629	468
Number of Devices								35,004		
Number of Connections (Unmetered)	CCON	18,641						16,416	681	1,544
Total Number of Customers	CCA	153,868	138,004	11,970	1,662	3	3	1	681	1,544
Bulk Customer Base	CCB	-	100.001	44.070	4.000				004	
Primary Customer Base	CCP	153,868	138,004	11,970	1,662	3	3	1	681 681	1,544
Line Transformer Customer Base	CCLT CCS	153,728	138,004	11,968	1,528	2	-	1	681	1,544 1,544
Secondary Customer Base	LLS	152,260	138,004	11,968	62	-	-	1	001	1,044
Weighted - Services	CWCS	167,605	138,004	17,952	465	-	-	9,850	409	926
Weighted Meter -Capital	CWMC	19,836,486	11,038,319	6,309,953	2,398,776	44,719	44,719	-	-	-
Weighted Meter Reading	CWMR	2,129,018	1,616,568	143,544	365,378	1,764	1,764	-	-	-
Weighted Bills	CWNB	1,885,101	1,613,582	143,297	126,399	540	540	12	263	468

#### Sheet I6.2 Customer Data Worksheet - Final Run

The following Tables reflect the resulting adjustments of the USL billing number change to worksheet "O1 Rev to Cost RR" of the Cost Allocation Model:

### **Original Application Filing:**

#### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

			1	2	3	5	6	7	8	9	11
late lase isets		Total	Residential	G\$ <50	GS 50 to 4,999 ⊾₩	Co Generation	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Back- up/Stand Power
ret	Distribution Revenue at Existing Rates	\$59,355,018	\$36,097,050	\$7,785,060	\$12,045,905	\$274,161	\$1,606,434	\$1,049,340	\$46,684	\$84,251	\$366
ni 👘	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,150	\$470,048	\$691,791	\$5,842	\$36,940	\$75,794	\$3,168	\$7,459	\$15
			llaneous Reven								
	Total Revenue at Existing Rates		\$38,188,200	\$8,255,107	\$12,737,696	\$280,003	\$1,643,374	\$1,125,134	\$49,853	\$91,710	\$381,3
	Factor required to recover deficiency (1 + D)	1.1081									
	Distribution Revenue at Status Quo Rates	\$65,770,373	\$39,998,580	\$8,626,504	\$13,347,881	\$303,794	\$1,780,064	\$1,162,758	\$51,730	\$93,357	\$405
	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,150	\$470,048	\$691,791	\$5,842	\$36,940	\$75,794	\$3,168	\$7,459	\$1
	Total Revenue at Status Quo Rates	\$69,168,355	\$42,089,730	\$9,096,551	\$14,039,671	\$309,636	\$1,817,004	\$1,238,552	\$54,899	\$100,816	\$421,
	Expenses										
di	Distribution Costs (di)	\$15,566,232	\$8,134,046	\$2,130,787	\$4,181,781	\$62,372	\$402,424	\$416,360	\$17,249	\$40,453	\$18
	Customer Related Costs (cu)	\$5,686,628	\$4,388,205	\$740,219	\$547,155	\$4,061	\$4,061	\$15	\$335	\$2,578	***
ad lep	General and Administration (ad) Depreciation and Amortization (dep)	\$12,591,657 \$15,788,219	\$7,389,611 \$8,407,978	\$1,707,292 \$2,436,212	\$2,817,197 \$3,915,290	\$39,753 \$59,345	\$242,228 \$338,384	\$251,908 \$427,038	\$10,610 \$17,672	\$25,888 \$41,065	\$10 \$143
PUT	PILs (INPUT)	\$934,484	\$502,445	\$139,183	\$230,837	\$3,604	\$13,341	\$421,030	\$11,012	\$41,005	314
NT	Interest	\$8,648,455	\$4,650,021	\$1,288,111	\$2,136,353	\$33,356	\$184,551	\$245,345	\$10,149	\$23,636	\$70
	Total Expenses		\$33,472,306	\$8,441,803	\$13,828,614	\$202,491	\$1,191,589	\$1,367,776	\$57,111	\$136,174	\$517
	Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
I	Allocated Net Income (NI)	\$9,952,634	\$5,351,240	\$1,482,356	\$2,458,513	\$38,386	\$212,382	\$282,342	\$11,679	\$27,200	\$8
	Revenue Requirement (includes NI)	\$69,168,355	\$38,823,593	\$9,924,160	\$16,287,127	\$240,877	\$1,403,970	\$1,650,118	\$68,789	\$163,374	\$60
	,	Revenue Requ	irement Input e	guals Output							
	Rate Base Calculation										
	Net Assets										
lp 👘	Distribution Plant - Gross	\$381,356,639	\$202,367,225	\$54,949,680	\$97,501,563	\$1,506,954	\$8,830,438	\$10,924,129	\$451,942	\$1,052,099	\$3,77
IP _	General Plant - Gross	\$40,109,063	\$14,875,327	\$3,245,582	\$18,250,623	\$97,398	\$1,652,313	\$1,126,558	\$46,515	\$108,660	\$70
n dep	Accumulated Depreciation Total Net Plant	[\$194,084,996]	(\$102,714,745)	(\$27,624,702)	(\$49,905,664)	(\$774,037)	(\$4,685,501)	(\$5,585,317)	(\$231,094)	(\$537,733)	(\$2,02)
	l otal Net Plant	\$221,380,106	\$114,528,407	\$30,570,570	\$65,846,522	\$830,314	\$5,797,250	\$6,465,370	\$267,363	\$623,026	\$2,451
	Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
DP	0	\$335,766,210	\$110,392,922	\$40,107,713	\$157,976,140	\$4,284,146	\$19,969,281	\$2,446,427	\$79,715	\$509,865	
JP	Cost of Power (COP) OM&A Expenses	\$33,844,516	\$10,352,322	\$40,101,113	\$7,546,133	\$106,185	\$13,363,201 \$648,712	\$668,883	\$13,15	\$503,005 \$68,919	\$28
	Directly Allocated Expenses	10,000,000	02	02,010,44	02	02	211,0404	02	40,024 02	02	\$20
	Sebtotal	\$369,610,726		\$44,686,011	\$165,522,274	\$4,550,552	\$20,617,994	\$5,115,510	\$107,909	1578,783	\$287,
	Working Capital	\$42,209,545	\$14,880,806	\$5,103,142	\$18,902,644	\$501,376	\$2,354,575	\$355,768	\$12,323	\$66,097	\$32
	Total Rate Base		*******		\$84,749,166	\$1,331,690	\$8,151,825	\$6,821,138	\$279,686	\$689,123	\$2,484
	Equity Component of Rate Base	Rate Ba \$107,836,104	se input equals \$51,763,689	Output \$14,269,485	\$33,899,666	\$532,676	\$3,260,730	\$2,728,455	\$111.874	\$275,649	\$993
	Equity component of nate base	\$101,030,104									
				\$654,748	\$211,057	\$107,145	\$625,415	(\$129,224)	(\$2,212)	(\$35,358)	(\$135,
	Net Income on Allocated Assets	\$9,913,107	\$8,617,424	\$034,140				**		\$0	
	Net Income on Allocated Assets Net Income on Direct Allocation Assets	\$9,913,107 \$0	\$8,617,424 \$0	\$054,140	\$0	\$0	\$0	\$0	\$0	*0	
					\$0 \$211,057	\$0 \$107,145	\$0 \$625,415	\$0 (\$129,224)	\$0 (\$2,212)	(\$35,358)	(\$135,
	Net Income on Direct Allocation Assets Net Income	\$0	\$0	\$0	-			-	-	-	(\$135,
	Net Income on Direct Allocation Assets Net Income RATIOS ANALYSIS	\$0 \$9,913,107	\$0 \$8,617,424	\$0 \$654,748	\$211,057	\$107,145	\$625,415	(\$129,224)	(\$2,212)	(\$35,358)	•
	Net Income on Direct Allocation Assets Net Income	\$0	\$0	\$0	-		\$625,415	(\$129,224)	-	-	•
	Net Income on Direct Allocation Assets Net Income RATIOS ANALYSIS REVENUE TO EXPENSES STATUS QUO2	\$0 \$9,913,107 100.002	\$0 \$8,617,424 108.412	\$0 \$654,748 91.662	\$211,057 86.202	\$107,145 128.552	\$625,415 129.422	<b>(\$129,224)</b> 75.062	(\$2,212) 79.812	(\$35,358) 61.712	
	Het Income on Direct Allocation Assets Net Income RATIOS ANALYSIS REVENUE TO EXPENSES STATUS QUO2 EXISTING REVENUE MINUS ALLOCATED COSTS	\$0 \$9,913,107 100.002 (\$6,415,350) Deficies	\$0 \$8,617,424 108.412 (\$635,393) cy Iaput equals	\$0 \$654,748 91.662 (\$1,663,052) Output	\$211,057 86.202 (\$3,543,431)	\$107,145 128.552 \$33,126	<b>\$625,415</b> <b>129,423</b> \$239,403	(\$129,224) 75.062 (\$524,984)	<b>(\$2,212)</b> <b>79.812</b> (\$18,937)	<b>(\$35,358)</b> 61,712 (\$71,664)	(\$22
	Net Income on Direct Allocation Assets Net Income RATIOS ANALYSIS REVENUE TO EXPENSES STATUS QUO2	\$0 \$9,913,107 100.002 (\$6,415,350)	\$0 \$8,617,424 108,412 (\$635,333)	\$0 \$654,748 91.662 (\$1,663,052)	\$211,057 86.202	\$107,145 128.552	\$625,415 129.422	<b>(\$129,224)</b> 75.062	(\$2,212) 79.812	(\$35,358) 61.712	

#### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### Adjusted:

Class Revenue, Cost Analysis, and Return on Rate Base

			1	2	3	5	6	ז	8	9	11
Rate Base Assets		Total	Residential	G\$ <50	GS 50 to 4,999 k₩	Co Generation	Large Use >5 <b>M∀</b>	Street Light	Sentinel	Unmetered Scattered Load	Back- up/Standby Power
cret	Distribution Revenue at Existing Rates	\$59,355,018	\$36,097,050	\$7,785,060	\$12,045,905	\$274,161	\$1,606,434	\$1,049,340	\$46,684	\$84,251	\$366,13
ni 👘	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,297 cellaneous Reven	\$470,061	\$691,802	\$5,842	\$36,940	\$75,794	\$3,168	\$7,288	\$15,79
	Total Revenue at Existing Rates	\$62,753,000	\$38,188,346		\$12,737,707	\$280,003	\$1,643,374	\$1,125,134	\$49,853	\$91,539	\$381,923
	Factor required to recover deficiency (1 + D)	1.1081	400,100,040	4016331160	416,101,101	4200,000	41,040,014	41,162,104	440,020	401,000	4001,02
	Distribution Revenue at Status Quo Rates	\$65,770,373	\$39,998,580	\$8,626,504	\$13,347,881	\$303,794	\$1,780,064	\$1,162,758	\$51,730	\$93,357	\$405,70
	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,297	\$470,061	\$631,802	\$5,842	\$36,940	\$75,794	\$3,168	\$7,288	\$15,78
	Total Revenue at Status Quo Rates	\$69,168,355	\$42,089,876	\$9,096,564	\$14,039,682	\$309,636	\$1,817,004	\$1,238,552	\$54,899	\$100,645	\$421,49
di	Expenses Distribution Costs (di)	\$15,566,232	\$8,134,046	\$2,130,787	\$4,181,781	\$62,372	\$402,424	\$416,960	\$17,249	\$40,453	\$180,1
ce .	Customer Related Costs (cu)	\$5,686,628	\$4,389,902	\$740,363	\$547,288	\$4,061	\$4,061	\$15	\$335	\$596	100,1
ad	General and Administration (ad)	\$12,591,657	\$7,390,573	\$1,707,378	\$2,817,273	\$39,753	\$242,229	\$251,308	\$10,611	\$24,764	\$107,16
dep INPUT	Depreciation and Amortization (dep) PILs (INPUT)	\$15,788,219	\$8,407,978 \$502,445	\$2,436,212 \$139,183	\$3,915,290 \$230,837	\$59,345	\$338,384 \$19,941	\$427,038	\$17,672	\$41,065	\$145,23
INT	Interest	\$934,484 \$8,648,455	\$502,445 \$4,650,021	\$135,163 \$1,288,111	\$2,136,353	\$3,604 \$33,356	\$184,551	\$26,510 \$245,345	\$1,097 \$10,149	\$2,554 \$23,636	\$8,31 \$76,93
	Total Expenses	\$59,215,674	\$33,474,966	\$8,442,039	\$13,828,822	\$202,492	\$1,191,590	\$1,367,776	\$57,111	\$133,067	\$517,81
	Direct Allocation	\$0	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0
NI	Allocated Net Income (NI)	\$9,952,634	\$5,351,240	\$1,482,356	\$2,458,513	\$38,386	\$212,382	\$282,342	\$11,679	\$27,200	\$88,53
	Revenue Requirement (includes NI)	\$69,168,355	\$38,826,252		\$16,287,335	\$240,878	\$1,403,971	\$1,650,118	\$68,790	\$160,268	\$606,34
		Revenue Re	quirement Input e	guals Output							
	Rate Base Calculation										
	Net Assets										
dp	Distribution Plant - Gross	\$381,356,639	\$202,367,225	\$54,949,680	\$97,501,563	\$1,506,354	\$8,830,438	\$10,324,123	\$451,942	\$1,052,099	\$3,772,61
gp com den	General Plant - Gross Accumulated Depreciation	\$40,109,063 (\$194,084,996)	\$14,875,927 (\$102,714,745)	\$3,245,592 (\$27,624,702)	\$18,250,623 (\$43,305,664)	\$97,398 (\$774,037)	\$1,652,313 (\$4,685,501)	\$1,126,558 (\$5,585,317)	\$46,515 (\$231,094)	\$108,660 (\$537,733)	\$705,47 (\$2,026,20)
cean dep	Total Net Plant	\$227,380,706	\$114,528,407	\$30,570,570	\$65,846,522	\$830,314	\$5,797,250	\$6,465,370	\$267,363	\$623,026	\$2,451,883
	Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(
COP	Cost of Power (COP) OM&A Expenses Directly Allocated Expenses	\$335,766,210 \$33,844,516 \$0	\$110,332,322 \$13,314,521 \$10	\$40,107,713 \$4,578,534 \$0	\$157,976,140 \$7,546,342 \$0	\$4,284,146 \$106,186 \$0	\$19,969,281 \$648,713 \$0	\$2,446,427 \$668,883 \$0	\$79,715 \$28,194 \$0	\$509,865 \$65,812 \$0	\$ \$287,32 \$
	Subtotal	\$369,610,726	\$150,507,445	\$44,686,247	\$165,522,482	\$4,550,555	\$20,617,995	\$5,115,510	\$107,510	\$575,677	\$287,329
	Working Capital	\$42,209,545	\$14,881,110	\$5,103,169	\$18,902,667	\$501,376	\$2,354,575	\$355,768	\$12,323	\$65,742	\$32,813
	Total Rate Base	\$269,590,259	\$129,409,525	\$35,673,739	\$84,749,189	\$1,331,690	\$8,151,825	\$6,821,138	\$279,686	\$688,769	\$2,484,696
		Rate	Base Input equals	Output							
	Equity Component of Rate Base	\$107,836,104	\$51,763,810	\$14,269,496	\$33,899,676	\$532,676	\$3,260,730	\$2,728,455	\$111,874	\$275,507	\$993,878
	Net Income on Allocated Assets	\$9,913,107	\$8,614,911	\$654,525	\$210,860	\$107,144	\$625,415	(\$129,224)	(\$2,212)	(\$32,422)	(\$135,884
	Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1
	Net Income	\$9,913,107	\$8,614,911	\$654,525	\$210,860	\$107,144	\$625,415	(\$129,224)	(\$2,212)	(\$32,422)	(\$135,884
	RATIOS ANALYSIS REVENUE TO EXPENSES STATUS QUOZ	100.002	108.412	91.66Z	86.202	128.542	129,422	75.06 <b>2</b>	79.812	62.802	69.5
	EXISTING REVENUE MINUS ALLOCATED COSTS		(\$637,906) ency input equals		(\$3,549,628)	\$33,125	\$239,402	(\$524,984)	(\$18,937)	(\$68,728)	(\$224,42
	STATUS QUO REVENUE MINUS ALLOCATED COST		\$3,263,624	(\$827,832)	(\$2,247,653)	\$68,758	\$413,033	(\$411,566)	(\$13,891)	(\$59,622)	(\$184,85
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.19%	16.64%	4.53%	0.62%	20.11%	19,18%	-4.74%	-1.98%	-11.77%	-13.61

## Original Filed Appendix 2-P

		Appendix 2	'-P		
		Cost Allocat			
Please complete the following f	our tables.				
A) Allocated Costs					
Classes	Costs Allocated	%	Costs Allocated in 2013 Test Year	%	
	from 2009 Study		Study (Column 7A)	, -	
Residential	\$ 31,448,713	57.57%		56.13%	
GS < 50 kW	\$ 6,897,739	12.63%		14.35%	
GS > 50 kW < GS < 4,999 kW	\$ 13,083,386	23.95%		23.55%	
GS 50 to 4,999 kW (Co-Generation)		0.19%		0.35%	
Large Use >5MW	\$ 1,148,208	2.10%		2.03%	
Street Light	\$ 1,366,580	2.50%		2.39%	
Sentinel	\$ 73,669	0.13%		0.10%	
Unmetered Scattered Load	\$ 186,056	0.34%	\$ 163,374	0.24%	
Standby	\$ 317,015	0.58%	\$ 606,347	0.88%	
Total	\$ 54,624,309	100.00%	\$ 69,168,355	100.00%	
B) Calculated Class Revenues					
		Column 7B	Column 7C	Column 7D	Column 7E
lasses (same as previous table)		Load Forecast (LF) X current approved rates	L.F. X current approved rates X (1 + d)	LF X proposed rates	Miscellaneous Revenue
Residential					
		\$ 36,097,050	\$ 39,998,580	\$ 36,984,049	\$ 2,091,150
GS < 50 kW		\$ 7,785,060	\$ 8,626,504		\$ 470,048
GS > 50 kW < GS < 4,999 kW		\$ 12,045,905	\$ 13,347,881	\$ 15,595,336	\$ 691,791
GS 50 to 4,999 kW (Co-Generatio	on)	\$ 274,161	\$ 303,794	\$ 235,035	\$ 5,842
Large Use >5MW		\$ 1,606,434	\$ 1,780,064	\$ 1,507,428	\$ 36,940
Street Light		\$ 1,049,340	\$ 1,162,758	\$ 1,326,806	\$ 75,794
Sentinel			1.		
		\$ 46,684	\$ 51,730	\$ 58,742	\$ 3,168
Unmetered Scattered Load		\$ 84,251	\$ 93,357	\$ 139,577	\$ 7,459
Standby		\$ 366,133	\$ 405,706	\$ 469,288	\$ 15,790
			łł		
		á 50.055.040	6 65 770 979	<u> </u>	é <u> </u>
Total	1	\$ 59,355,018	\$ 65,770,372	\$ 65,770,372	\$ 3,397,982
1 + d	1.1081				
1+0	1.1081				
Notes:					
1 Columns 7B to 7D - LF mean applicable). Revenue Quantities s riders.					
2 Columns 7C and 7D - Columr	n total in each colum	n should equal the I	3ase Revenue Requ	irement	
3 Columns 7C - The Board cost	t allocation model ca				Revenue
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa	t allocation model ca ates.	Iculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19.	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19.	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19. C) Rebalancing Revenue-to-Co	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo action model, enter Previously Approved Ratios	orksheet O-1, cell C Miscellaneous Reve Status Quo	21. "d" is defined as	Worksheet O-1,
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19.	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo cation model, enter Previously	orksheet O-1, cell C Miscellaneous Reve Status Quo	21. "d" is defined as	
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19. C) Rebalancing Revenue-to-Co	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo sation model, enter Previously Approved Ratios Most Recent	orksheet O-1, cell C Miscellaneous Reve Status Quo Ratios	21. "d" is defined as nue as it appears in <b>Proposed Ratios</b>	Worksheet O-1,
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19. C) Rebalancing Revenue-to-Co Class	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year: 2010	Miscellaneous Reve Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A)	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) %	Worksheet O-1, Policy Range %
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19. C) Rebalancing Revenue-to-Co Class Residential	t allocation model ca ates. ard-issued Cost Alloc	Iculates "1+d" in we action model, enter Previously Approved Retent Year: 2010 %	orksheet O-1, cell C Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A) %	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65	Worksheet O-1, Policy Range
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Boa row 19. C) Rebalancing Revenue-to-Co Class Residential GS < 50 kW	t allocation model ca ates. ard-issued Cost Alloc	Previously Approved Ratios Most Recent 2010 % 108.10	Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A) % 108.41	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00	Worksheet O-1, Policy Range % 85 - 115
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Board row 19. C) Rebalancing Revenue-to-Co Class Class Residential GS < 50 kW GS > 50 kW < GS < 4,999 kW	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80	Miscellaneous Reve Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120
<ul> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Rate</li> <li>Columns 7E - If using the Board cown 19.</li> <li>Rebalancing Revenue-to-Common Common Commo</li></ul>	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Iculates "1+d" in we action model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 128.55 129.42	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Board row 19. <b>C) Rebalancing Revenue-to-Co</b> <b>Class</b> Residential GS < 50 kW < GS < 4,999 kW GS > 50 to 4,999 kW (Co-Generatic Large Use >SMW Street Light	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent 2010 % 108.10 108.80 80.00 180.00 80.00 80.00	Status Quo Ratios           (7C + 7E) / (7A)           %           108.41           91.66           86.20           128.55           129.42           75.06	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 80 - 120 80 - 120 85 - 115 70 - 120
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Board row 19. <b>C) Rebalancing Revenue-to-Co</b> <b>Class</b> Residential GS < 50 kW GS > 50 kW < GS < 4,999 kW GS 50 to 4,999 kW (Co-Generation Large Use >5MW Street Light Sentinel	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Iculates "1+d" in wo action model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 80.00 85.00 70.00	Niscellaneous Reve Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 128.55 129.42 75.06 79.81	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 80 - 120 80 - 120
<ul> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Rate</li> <li>Columns 7E - If using the Board cown 19.</li> <li>Rebalancing Revenue-to-Common Common Commo</li></ul>	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Iculates "1+d" in wo action model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 85.00 70.00 70.00	Status Quo Ratios           (7C + 7E) / (7A)           %           108.41           91.66           86.20           128.55           129.42           75.06           79.81           61.71	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 100.00 100.00 90.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 85 - 115 70 - 120 80 - 120 80 - 120 80 - 120
3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra 4 Columns 7E - If using the Board row 19. <b>C) Rebalancing Revenue-to-Co</b> <b>Class</b> Residential GS < 50 kW GS > 50 kW < GS < 4,999 kW GS 50 to 4,999 kW (Co-Generation Large Use >5MW Street Light Sentinel	t allocation model ca ates. ard-issued Cost Alloc ost (R/C) Ratios	Iculates "1+d" in wo action model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 80.00 85.00 70.00	Niscellaneous Reve Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 128.55 129.42 75.06 79.81	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 80 - 120 80 - 120

### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### Adjusted Appendix 2-P

		Appendix 2	2-P		
		Cost Allocat			
Please complete the following f	our tables.				
A) Allocated Costs					
			Costs Allocated		
Classes	Costs Allocated	%	in 2013 Test Year	%	
	from 2009 Study	1	Study (Column 7A)		
Residential	\$ 31,448,713	57.57%	\$ 38,826,252	56.13%	
GS < 50 kW	\$ 6,897,739	12.63%		14.35%	
GS > 50 kW < GS < 4,999 kW	\$ 13,083,386	23.95%		23.55%	
GS 50 to 4,999 kW (Co-Generation)	\$ 102,943	0.19%		0.35%	
Large Use >5MW	\$ 1,148,208	2.10%	\$ 1,403,971	2.03%	
Street Light	\$ 1,366,580	2.50%		2.39%	
Sentinel	\$ 73,669	0.13%		0.10%	
Unmetered Scattered Load	\$ 186,056	0.34%		0.23%	
Standby	\$ 317,015	0.58%	\$ 606,347	0.88%	
···· · · · · · · · · · · · · · · · · ·					
Total	\$ 54,624,309	100.00%	\$ 69,168,355	100.00%	
B) Calculated Class Revenues					
Classes (same so provious table	2)	Column 7B	Column 7C	Column 7D	Column 7E
Classes (same as previous table)		Load Forecast (LF) X current approved rates	L.F. X current approved rates X (1 + d)	LF X proposed rates	Miscellaneous Revenue
Residential		A	A	*	
		\$ 36,097,050	\$ 39,998,580	\$ 36,986,398	\$ 2,091,150
GS < 50 kW		\$ 7,785,060	\$ 8,626,504	\$ 9,454,348	\$ 470,048
GS > 50 kW < GS < 4,999 kW		\$ 12,045,905	\$ 13,347,881	\$ 15,595,545	\$ 691,791
GS 50 to 4,999 kW (Co-Generatio	n)	\$ 274,161	\$ 303,794	\$ 235,036	\$ 5,842
Large Use >5MW		\$ 1,606,434	\$ 1,780,064	\$ 1,507,429	\$ 36,940
Street Light		\$ 1,049,340	\$ 1,162,758	\$ 1,326,806	\$ 75,794
Sentinel		1			
		\$ 46,684	\$ 51,730	\$ 58,742	\$ 3,168
Unmetered Scattered Load		\$ 84,251	\$ 93,357	\$ 136,782	\$ 7,459
Standby		\$ 366,133	\$ 405,706	\$ 469,288	\$ 15,790
		l'			
Total		\$ 59,355,018	\$ 65,770,372	\$ 65,770,372	\$ 3,397,982
1 + d	1.1081				
Notes:					
1 Columns 7B to 7D - LF mean applicable). Revenue Quantities s riders.					
2 Columns 7C and 7D - Column	total in each colum	ו should equal the I	Base Revenue Requ	lirement	
<ol> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> </ol>	allocation model ca				Revenue
2 Columns 7C and 7D - Column 3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra	allocation model ca ites.	lculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
2 Columns 7C and 7D - Column 3 Columns 7C - The Board cost Deficiency/ Revenue at Current Ra	allocation model ca ites.	lculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
<ol> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Board</li> </ol>	: allocation model ca ites. ard-issued Cost Alloc	lculates "1+d" in wo	orksheet O-1, cell C	21. "d" is defined as	
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> </ul>	: allocation model ca ites. ard-issued Cost Alloc	Iculates "1+d" in wo ation model, enter Previously Approved Ratios	orksheet O-1, cell C Miscellaneous Reve Status Quo	21. "d" is defined as	Worksheet O-1,
<ol> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> </ol>	: allocation model ca ites. ard-issued Cost Alloc	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year:	orksheet O-1, cell C Miscellaneous Reve Status Quo	21. "d" is defined as	
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> </ul>	: allocation model ca ites. ard-issued Cost Alloc	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year: 2010	Miscellaneous Reve Miscellaneous Reve Status Quo Ratios (7C + 7E) / (7A)	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A)	Worksheet O-1, Policy Range
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Board row 19.</li> <li>C) Rebalancing Revenue-to-Co</li> </ul>	: allocation model ca ites. ard-issued Cost Alloc	Previously Approved Ratios Most Recent Year: 2010 %	Status Quo Ratios (7C + 7E) / (7A)	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) %	Worksheet O-1, Policy Range %
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> </ul>	: allocation model ca ites. ard-issued Cost Alloc	Previously Approved Ratios Most Recent Year: 2010 % 108.10	Status Quo Ratios (7C + 7E) / (7A) % 108.41	21. "d" is defined as enue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65	Worksheet O-1, Policy Range % 85 - 115
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> <li>Residential</li> <li>GS &lt; 50 kW</li> </ul>	: allocation model ca ites. ard-issued Cost Alloc	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80	orksheet O-1, cell C         Miscellaneous Reve         Status Quo         Ratios         (7C + 7E) / (7A)         %         108.41         91.66	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Board cost</li> <li><b>C) Rebalancing Revenue-to-Co</b></li> <li><b>Class</b></li> <li><b>Residential</b></li> <li>GS &lt; 50 kW</li> <li>GS &lt; 4,999 kW</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.80 80.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> <li>Residential</li> <li>GS &gt; 50 kW &lt; GS &lt; 4,999 kW</li> <li>GS 50 to 4,999 kW (Co-Generation</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00	Status Quo         Ratios         (7C + 7E) / (7A)         %         108.41         91.66         86.20         128.54	21. "d" is defined as enue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> <li>Residential</li> <li>GS &lt; 50 kW</li> <li>GS &lt; 50 kW &lt; GS &lt; 4,999 kW</li> <li>GS 50 to 4,999 kW (Co-Generation Large Use &gt;5MW</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 80.00	Status Quo Ratios           (7C + 7E) / (7A)           %           108.41           91.66           86.20           128.54           129.42	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>4 Columns 7E - If using the Boar row 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 80.00 85.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 129.42 129.42 75.06	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00 85.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 80 - 120 85 - 115 70 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> <li>Residential</li> <li>GS &gt; 50 kW</li> <li>GS &gt; 50 kW &lt; GS &lt; 4,999 kW</li> <li>GS &gt; 50 kW &lt; GS &lt; 4,999 kW</li> <li>Street Light</li> <li>Sentinel</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 85.00 70.00	Status Quo Ratios           (7C + 7E) / (7A)           %           108.41           91.66           86.20           128.54           129.42           75.06           79.81	21. "d" is defined as enue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 80 - 120 85 - 115 70 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Rate</li> <li>Columns 7E - If using the Board row 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> </ul>	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 85.00 70.00 70.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 128.54 129.42 75.06 79.81 62.91	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 85 - 115 70 - 120 80 - 120 80 - 120 80 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Boarow 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> </ul> Residential GS < 50 kW GS > 50 kW < GS < 4,999 kW GS > 50 kW < GS < 4,999 kW Street Light Sentinel	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 85.00 70.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 129.42 129.42 75.06 79.81 62.91 62.91 69.51	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 80 - 120 85 - 115 70 - 120
<ul> <li>Columns 7C and 7D - Column</li> <li>Columns 7C - The Board cost</li> <li>Deficiency/ Revenue at Current Ra</li> <li>Columns 7E - If using the Board row 19.</li> <li>C) Rebalancing Revenue-to-Co</li> <li>Class</li> </ul> Residential GS < 50 kW GS > 50 kW < GS < 4,999 kW GS > 50 to 4,999 kW (Co-Generation Large Use > 5MW) Street Light Sentinel Unmetered Scattered Load	allocation model cal ttes. ard-issued Cost Alloc st (R/C) Ratios	Iculates "1+d" in wo ation model, enter Previously Approved Ratios Most Recent Year: 2010 % 108.10 108.80 80.00 180.00 85.00 70.00 70.00	Status Quo Ratios (7C + 7E) / (7A) % 108.41 91.66 86.20 128.54 129.42 75.06 79.81 62.91	21. "d" is defined as nue as it appears in Proposed Ratios (7D + 7E) / (7A) % 100.65 100.00 100.00 100.00 110.00 85.00 90.00	Worksheet O-1, Policy Range % 85 - 115 80 - 120 80 - 120 85 - 115 70 - 120 85 - 115 70 - 120 80 - 120 80 - 120 80 - 120

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

In referencing the changes in the Appendix 2-P: Cost Allocation from the originally filed worksheet to that of the adjusted worksheet, the Costs Allocated in 2013 Test Year Study(Column 7A) for USL move from \$163,374 to an amount of \$160,268. In regards to Load Forecast X Proposed Rates (Column 7D) the USL figures move from \$139,577 to an amount of \$135,782.

The resulting Status Quo Ratios reflected in Table C: Rebalancing Revenue-to-Cost (R/C) Ratios of Appendix 2-P: Cost Allocation reflect USL moving from a ratio of 61.71% to that of 62.91%. The Status Quo Ratios for Residential class does not reflect any adjustment (108.41% ratio). In rebalancing the Revenue-to-Cost Ratios, and due to the small adjustment amount for the USL class, the Proposed Ratios do not reflect any changes from that refelcted in the Application.

b) London Hydro can confirm the load profile of Bus Shelters is established by using the calculated hours of use, and that Traffic Signals are established by wattage times 24 hours per day.

The description in London Hydro's Conditions of Service, 3.8.2 Traffic Lights and 3.8.3 Bus Shelters had been revised to reflect both London Hydro practices and OEB regulatory requirements. London Hydro thanks Board staff for identification to London Hydro as to this disconnect between the information contained in the narrative of the Conditions of Service and the Distribution Systems Code and regrets any inconveniences that this may have caused.

Original Cost of Service Statement:

#### 3.8.2 Traffic Signals

The location of supply for traffic signal systems will vary and must be established for each application through consultation with London Hydro.

Feeds may be from either the overhead or underground electrical systems and in all cases a disconnect switch will need to be installed and approved by the Electrical Safety Authority. All cabling used for the purpose of traffic signal installations, must be installed in dedicated conduits separate from street lighting or any other secondary duct work.

The service voltage for traffic signal systems will be 120 volts, single phase, 2 wire. Prior to the energization of a new traffic signal service, London Hydro will require notification from the Electrical Safety Authority that the installation has been inspected and approved. The final

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

power source connection will be made by London Hydro or by the City of London's traffic signal contractor upon approval by London Hydro.

All traffic signal services will be unmetered and energy consumption will be based on the connected wattage and the calculated hours of use using the approved methods and rates established by the OEB. A connection fee for new traffic signal (and intersection lighting) feeds will apply based on London Hydro's approved commercial connection charge for a 100 Amp U/G 120/240 volt service. London Hydro personnel must be involved in the disconnection and reconnection of existing traffic signal services fed from padmount transformers or vaults where there is no disconnect switch accessible to the City of London's traffic signal Contractor. A charge per trip will apply as described in Appendix A. London Hydro Inc. Conditions of Service

#### 3.8.3 Bus Shelters

The service location for bus shelters will vary and must be established for each application through consultation with London Hydro. The service voltage will be 120 volts, single phase, 2 wire and the method of supply could be from either overhead or underground circuits.

All underground feeds must be in separate conduit from the bus shelter to the power supply location. For feeds originating from London Hydro's overhead system, the underground conduit for the cable riser will generally extend from the bus shelter to the nearest power supply pole. However, the service location could vary and London Hydro must be consulted for each application. Prior to the energization of a new bus shelter service, London Hydro will require notification from the Electrical Safety Authority that the installation has been inspected and approved. The final power source connection will be made by London Hydro.

Bus service shelters will be unmetered and energy consumption will be based on the connected wattage, utilized 24 hours per day, using the methods and rates approved by the OEB. A connection fee for new bus shelter feeds will apply based on London Hydro's approved connection charge for a 100 Amp U/G 120/240 volt service.

**Revised Cost of Service Statement:** 

#### 3.8.2 Traffic Signals

The location of supply for traffic signal systems will vary and must be established for each application through consultation with London Hydro.

Feeds may be from either the overhead or underground electrical systems and in all cases a disconnect switch will need to be installed and approved by the Electrical Safety Authority. All cabling used for the purpose of traffic signal installations, must be installed in dedicated conduits separate from street lighting or any other secondary duct work.

The service voltage for traffic signal systems will be 120 volts, single phase, 2 wire. Prior to the energization of a new traffic signal service, London Hydro will require notification from the Electrical Safety Authority that the installation has been inspected and approved. The final power source connection will be made by London Hydro or by the City of London's traffic signal contractor upon approval by London Hydro.

All traffic signal services will be unmetered and energy consumption will be based on the connected wattage, utilized 24 hours per day, using the methods and rates approved by the OEB. A connection fee for new traffic signal (and intersection lighting) feeds will apply based on London Hydro's approved commercial connection charge for a 100 Amp U/G 120/240 volt service. London Hydro personnel must be involved in the disconnection and reconnection of existing traffic signal services fed from padmount transformers or vaults where there is no disconnect switch accessible to the City of London's traffic signal Contractor. A charge per trip will apply as described in Appendix A. London Hydro Inc. Conditions of Service

#### 3.8.3 Bus Shelters

The service location for bus shelters will vary and must be established for each application through consultation with London Hydro. The service voltage will be 120 volts, single phase, 2 wire and the method of supply could be from either overhead or underground circuits.

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

All underground feeds must be in separate conduit from the bus shelter to the power supply location. For feeds originating from London Hydro's overhead system, the underground conduit for the cable riser will generally extend from the bus shelter to the nearest power supply pole. However, the service location could vary and London Hydro must be consulted for each application. Prior to the energization of a new bus shelter service, London Hydro will require notification from the Electrical Safety Authority that the installation has been inspected and approved. The final power source connection will be made by London Hydro.

Bus service shelters will be unmetered and energy consumption will be based on the connected wattage and the calculated hours of use using the approved methods and rates established by the OEB. A connection fee for new bus shelter feeds will apply based on London Hydro's approved connection charge for a 100 Amp U/G 120/240 volt service.

c)

- i. The USL class includes the following types of notable unmetered loads:
  - Rogers Cable Power Supplies Load profile based on device rating and estimated hours of use.
- Traffic Signals and Crosswalks Load profile based on device rating multiplied by 24 hours per day.
- Bus Shelters Load profile based on device rating and estimated hours of use.
- Billboard Signs Load profile based on device rating and estimated hours of use.
- Miscellaneous private lighting installations that have been grandfathered (previously referred to as dusk to dawn lighting) – Load profile based on device rating and estimated hours of use.
- ii. The above loads do not have any temperature-sensitive or seasonal components built into these rates.

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### London Properties Management Association (LPMA) Interrogatories Questions:

#### LPMA #37

Ref: Exhibit 7, page 17 & OEB #40

Please explain the difference in the revenue to cost ratios shown on page 17 of Exhibit 7 in Output Sheet O-1 and the ratios shown on page 90 of the OEB interrogatory responses in the O1 Rev to Cost RR table shown as "Original Application Filing".

#### Response LPMA #37

There should be no recorded difference in the revenue to cost ratios shown on page 17 of Exhibit 7 in Output Sheet O-1 and the ratios shown on page 90 of the OEB interrogatory responses in the O1 Rev to Cost RR table shown as "Original Application Filing".

The following reflects copies of the two versions of Output Sheets O-1.

### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

# Output Sheet O-1, page 17 of Exhibit 7

		1	1	2	3	5	6	7	8	9	11
Rate Base Assets		Total	Residential	GS <50	GS 50 to 4,999 kW	Co Generation	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Back-up/Standby Power
crev	Distribution Revenue at Existing Rates	\$59,355,018	\$36,097,050	\$7,785,060	\$12,045,905	\$274,161	\$1,606,434	\$1,049,340	\$46,684	\$84,251	\$366,133
mi	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,150	\$470,048	\$691,791	\$5,842	\$36,940	\$75,794	\$3,168	\$7,459	\$15,790
	. ,	Mis	cellaneous Revenu								
	Total Revenue at Existing Rates	\$62,753,000	\$38,188,200	\$8,255,107	\$12,737,696	\$280,003	\$1,643,374	\$1,125,134	\$49,853	\$91,710	\$381,923
	Factor required to recover deficiency (1 + D)	1.1081									
	Distribution Revenue at Status Quo Rates	\$65,770,373	\$39,998,580	\$8,626,504	\$13,347,881	\$303,794	\$1,780,064	\$1,162,758	\$51,730	\$93,357	\$405,706
	Miscellaneous Revenue (mi) Total Revenue at Status Quo Rates	\$3,397,982 \$69,168,355	\$2,091,150 \$42,089,730	\$470,048 \$9,096,551	\$691,791 \$14,039,671	\$5,842 \$309,636	\$36,940 \$1,817,004	\$75,794 \$1,238,552	\$3,168 \$54,899	\$7,459 \$100,816	\$15,790 \$421,496
	Expenses	\$05,100,333	\$42,005,730	\$9,090,001	\$14,035,071	\$309,030	\$1,017,004	\$1,230,332	\$34,033	\$100,810	3421,430
di	Distribution Costs (di)	\$15,566,232	\$8,134,046	\$2,130,787	\$4,181,781	\$62.372	\$402,424	\$416,960	\$17,249	\$40.453	\$180,161
cu	Customer Related Costs (cu)	\$5,686,628	\$4,388,205	\$740,219	\$547,155	\$4,061	\$4,061	\$15	\$335	\$2,578	\$100,101
ad	General and Administration (ad)	\$12,591,657	\$7,389,611	\$1,707,292	\$2,817,197	\$39,753	\$242,228	\$251,908	\$10,610	\$25,888	\$107,169
dep	Depreciation and Amortization (dep)	\$15,788,219	\$8,407,978	\$2,436,212	\$3,915,290	\$59,345	\$338,384	\$427,038	\$17,672	\$41,065	\$145,235
INPUT	PILs (INPUT)	\$934,484	\$502,445	\$139,183	\$230,837	\$3,604	\$19,941	\$26,510	\$1,097	\$2,554	\$8,313
INT	Interest Total Expenses	\$8,648,455 \$59,215,674	\$4,650,021 \$33,472,306	\$1,288,111 \$8,441,803	\$2,136,353 \$13,828,614	\$33,356 \$202,491	\$184,551 \$1,191,589	\$245,345 \$1,367,776	\$10,149 \$57,111	\$23,636 \$136,174	\$76,934 \$517,811
	Total Expenses	\$39,213,074	\$33,472,300	\$0,441,003	\$13,020,014	\$202,491	\$1,191,569	\$1,307,770	\$57,111	\$130,174	\$317,011
	Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NI	Allocated Net Income (NI)	\$9,952,634	\$5,351,240	\$1,482,356	\$2,458,513	\$38,386	\$212,382	\$282,342	\$11,679	\$27,200	\$88,536
	Revenue Requirement (includes NI)	\$69,168,355	\$38,823,593	\$9,924,160	\$16,287,127	\$240,877	\$1,403,970	\$1,650,118	\$68,789	\$163,374	\$606,347
		Revenue Req	uirement Input equ	uals Output							
	Rate Base Calculation										
	Net Assets										
dp	Distribution Plant - Gross	\$381,356,639	\$202,367,225	\$54,949,680	\$97,501,563	\$1,506,954	\$8,830,438	\$10,924,129	\$451,942	\$1,052,099	\$3,772,610
gp	General Plant - Gross	\$40,109,063	\$14,875,927	\$3,245,592	\$18,250,623	\$97,398	\$1,652,313	\$1,126,558	\$46,515	\$108,660	\$705,475
	Accumulated Depreciation	(\$194,084,996)	(\$102,714,745)	(\$27,624,702)	(\$49,905,664)	(\$774,037)	(\$4,685,501)	(\$5,585,317)	(\$231,094)	(\$537,733)	(\$2,026,202)
	Total Net Plant	\$227,380,706	\$114,528,407	\$30,570,570	\$65,846,522	\$830,314	\$5,797,250	\$6,465,370	\$267,363	\$623,026	\$2,451,883
	Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP	Cost of Power (COP)	\$335,766,210	\$110.392.922	\$40.107.713	\$157.976.140	\$4,284,146	\$19.969.281	\$2.446.427	\$79,715	\$509.865	\$0
	OM&A Expenses	\$33,844,516	\$19,911,861	\$4,578,298	\$7,546,133	\$106,185	\$648,712	\$668.883	\$28,194	\$68,919	\$287,329
	Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal	\$369,610,726	\$130,304,784	\$44,686,011	\$165,522,274	\$4,390,332	\$20,617,994	\$3,115,310	\$107,909	\$578,783	\$287,329
	Working Capital	\$42,209,545	\$14,880,806	\$5,103,142	\$18,902,644	\$501,376	\$2,354,575	\$355,768	\$12,323	\$66,097	\$32,813
	Total Rate Base	\$269,590,259	\$129,409,222	\$35,673,712	\$84,749,166	\$1,331,690	\$8,151,825	\$6,821,138	\$279,686	\$689,123	\$2,484,696
	Equity Component of Rate Base	Rate Ba \$107,836,104	se Input equals O \$51,763,689	14,269,485	\$33,899,666	\$532,676	\$3,260,730	\$2,728,455	\$111,874	\$275,649	\$993,878
	Net Income on Allocated Assets	\$9,913,107	\$8,617,424	\$654,748	\$211,057	\$107,145	\$625,415	(\$129,224)	(\$2,212)	(\$35,358)	(\$135,888)
	Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Net Income	\$9,913,107	\$8,617,424	\$654,748	\$211,057	\$107,145	\$625,415	(\$129,224)	(\$2,212)	(\$35,358)	(\$135,888)
	RATIOS ANALYSIS										
	REVENUE TO EXPENSES STATUS QUO%	100.00%	108.41%	91.66%	86.20%	128.55%	129.42%	75.06%	79.81%	61.71%	69.51%
	EXISTING REVENUE MINUS ALLOCATED COSTS	(\$6,415,350)	(\$635,393)	(\$1,669,052)	(\$3,549,431)	\$39,126	\$239,403	(\$524,984)	(\$18,937)	(\$71,664)	(\$224,424)
	STATUS QUO REVENUE MINUS ALLOCATED COSTS	Deficier \$0	s3,266,137	(\$827,608)	(\$2,247,456)	\$68,759	\$413,034	(\$411,566)	(\$13,891)	(\$62,558)	(\$184,851)
	RETURN ON EQUITY COMPONENT OF RATE BASE	9.19%	16.65%	4.59%	0.62%	20.11%	19.18%	-4.74%	-1.98%	-12.83%	-13.67%

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### **Output Sheet O-1, OEB #40, Original Application Filing**

Class Revenue, Cost Analysis, and Return on Rate Base

			1	2	3	5	6	۲	8	9	11
Rate Base Assets		Total	Residential	G\$ <50	GS 50 to 4,999 k₩	Co Generation	Large Use >5₩₩	Street Light	Sentinel	Unmetered Scattered Load	Back- up/Staadby Power
crev ni	Distribution Revenue at Existing Rates Miscellaneous Revenue (mi)	\$59,355,018 \$3,397,982	\$36,097,050 \$2,091,150	\$7,785,060 \$470,048	\$12,045,905 \$691,791	\$274,161 \$5,842	\$1,606,434 \$36,940	\$1,049,340 \$75,794	\$46,684 \$3,168	\$84,251 \$7,459	\$366,13 \$15,79
			llaneous Reven								
	Total Revenue at Existing Rates Factor required to recover deficiency (1+D)	\$62,753,000 1.1081	\$38,188,200	\$8,255,107	\$12,737,696	\$280,003	\$1,643,374	\$1,125,134	\$49,853	\$91,710	\$381,923
	Distribution Revenue at Status Quo Rates	\$65,770,373	\$39,998,580	\$8,626,504	\$13,347,881	\$303,794	\$1,780,064	\$1,162,758	\$51,730	\$93,357	\$405,70
	Miscellaneous Revenue (mi)	\$3,397,982	\$2,091,150	\$470,048	\$631,731	\$5,842	\$36,940	\$75,794	\$3,168	\$7,459	\$15,79
	Total Revenue at Status Quo Rates	\$69,168,355	\$42,089,730	\$9,096,551	\$14,039,671	\$309,636	\$1,817,004	\$1,238,552	\$54,899	\$100,816	\$421,49
	Expenses										
di	Distribution Costs (di)	\$15,566,232	\$8,134,046	\$2,130,787	\$4,181,781	\$62,372	\$402,424	\$416,960	\$17,249	\$40,453	\$180,16
9	Customer Related Costs (cu)	\$5,686,628	\$4,388,205	\$740,219	\$547,155	\$4,061	\$4,061	\$15	\$335	\$2,578	\$
ad dep	General and Administration (ad) Depreciation and Amortization (dep)	\$12,591,657 \$15,788,219	\$7,389,611 \$8,407,978	\$1,707,292 \$2,436,212	\$2,817,197 \$3,915,290	\$39,753 \$59,345	\$242,228 \$338,384	\$251,908 \$427,038	\$10,610 \$17,672	\$25,888 \$41,065	\$107,16 \$145,23
NPUT	PILs (INPUT)	\$934,484	\$502,445	\$139,183	\$230,837	\$3,604	\$19,941	\$26,510	\$1,097	\$2,554	\$140,20
INT	Interest	\$8,648,455	\$4,650,021	\$1,288,111	\$2,136,353	\$33,356	\$184,551	\$245,345	\$10,149	\$23,636	\$76,93
	Total Expenses	\$59,215,674	\$33,472,306	\$8,441,803	\$13,828,614	\$202,491	\$1,191,589	\$1,367,776	\$57,111	\$136,174	\$517,81
	Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NI	Allocated Net Income (NI)	\$9,952,634	\$5,351,240	\$1,482,356	\$2,458,513	\$38,386	\$212,382	\$282,342	\$11,679	\$27,200	\$88,53
	Revenue Requirement (includes NI)	\$69,168,355	\$38,823,593	\$9,924,160	\$16,287,127	\$240,877	\$1,403,970	\$1,650,118	\$68,789	\$163,374	\$606,34
		Revenue Requ	irement Input e	quals Uutput							
	Rate Base Calculation										
	Net Assets										
dp	Distribution Plant - Gross	\$381,356,639	\$202,367,225	\$54,949,680	\$97,501,563	\$1,506,354	\$8,830,438	\$10,924,129	\$451,942	\$1,052,033	\$3,772,61
9P	General Plant - Gross Accumulated Depreciation	\$40,109,063 (\$194,084,996)	\$14,875,927 (\$102,714,745)	\$3,245,592 (\$27,624,702)	\$18,250,623 (\$49,905,664)	\$97,398 (\$774,037)	\$1,652,313 (\$4,685,501)	\$1,126,558	\$46,515 (\$231,034)	\$108,660 (\$537,733)	\$705,47 (\$2,026,20
cun dep	Total Net Plant	\$227,380,706	\$114,528,407	\$30,570,570	\$65,846,522	\$830,314	\$5,797,250	\$6,465,370	\$267,363	\$623,026	\$2,451,883
	Directly Allocated Net Fixed Assets	\$0	<b>\$</b> 0	<b>t</b> 0	\$0	\$0	\$0	\$0	<b>\$</b> 0	<b>t</b> 0	\$(
COP	Cost of Power (COP)	\$335,766,210	\$110.392.922	\$40,107,713	\$157,976,140	\$4,284,146	\$19.969.281	\$2,446,427	\$79.715	<b>\$</b> 509,865	1
COP	OM&A Expenses	\$33,844,516	\$10,332,322 \$19,911,861	\$40,101,113	\$151,516,140 \$7,546,133	\$4,204,140 \$106,185	\$13,363,201 \$648,712	\$668,883	\$13,15	\$68,919	\$ \$287,32
	Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
	Sebtotal	\$369,610,726		\$44,686,011	\$165,522,274	\$4,590,532	\$20,617,994	\$\$,115,510	\$107,909	\$578,783	\$287,325
	Working Capital	\$42,209,545	\$14,880,806	\$5,103,142	\$18,902,644	\$501,376	\$2,354,575	\$355,768	\$12,323	\$66,097	\$32,81
	Total Rate Base	\$269,590,259		\$35,673,712	\$84,749,166	\$1,331,690	\$8,151,825	\$6,821,138	\$279,686	\$689,123	\$2,484,696
	Total Rate Base		######################################		\$84,749,166	\$1,331,690	\$8,151,825	\$6,821,138	\$279,686	\$689,123	\$2,484,03
	Total Rate Base Equity Component of Rate Base				\$84,749,166 \$33,899,666	\$1,331,690 \$532,676	\$8,151,825 \$3,260,730	\$6,821,138 \$2,728,455	\$279,686 \$111,874	\$689,123 \$275,649	\$2,484,63 \$993,87
		Rate Ba	se input equals	Output							\$993,87
	Equity Component of Rate Base	Rate Ba \$107,836,104	se input equals \$51,763,689	Output \$14,269,485	\$33,899,666	\$532,676	\$3,260,730	\$2,728,455	\$111,874	\$275,649	\$993,87 (\$135,88
	Equity Component of Rate Base Net Income on Allocated Assets	Rate Ba \$107,836,104 \$9,913,107	se laput equals \$51,763,689 \$8,617,424	Output \$14,269,485 \$654,748	\$33,899,666 \$211,057	\$532,676 \$107,145	\$3,260,730 \$625,415	\$2,728,455 (\$129,224)	\$111,874 (\$2,212)	\$275,649 (\$35,358)	
	Equity Component of Rate Base Net Income on Allocated Assets Net Income on Direct Allocation Assets	Rate Ba \$107,836,104 \$9,913,107 \$0	se Input equals \$51,763,689 \$8,617,424 \$0	Output \$14,269,485 \$654,748 \$0	\$33,899,666 \$211,057 \$0	\$532,676 \$107,145 \$0	\$3,260,730 \$625,415 \$0	\$2,728,455 (\$129,224) \$0	\$111,874 (\$2,212) \$0	\$275,649 (\$35,358) \$0	\$993,87 (\$135,88 \$
	Equity Component of Rate Base Net Income on Allocated Assets Net Income on Direct Allocation Assets Net Income	Rate Ba \$107,836,104 \$9,913,107 \$0	se Input equals \$51,763,689 \$8,617,424 \$0	Output \$14,269,485 \$654,748 \$0 \$654,748	\$33,899,666 \$211,057 \$0	\$532,676 \$107,145 \$0	\$3,260,730 \$625,415 \$0 \$625,415	\$2,728,455 (\$129,224) \$0	\$111,874 (\$2,212) \$0	\$275,649 (\$35,358) \$0	\$993,87 (\$135,88 \$ (\$135,88
	Equity Component of Rate Base Net Income on Allocated Assets Net Income on Direct Allocation Assets Net Income RATIOS ANALYSIS	Rate Ba \$107,836,104 \$9,913,107 \$0 \$9,913,107 100.002 (\$6,415,350)	se laput equals \$51,763,689 \$8,617,424 \$0 \$8,617,424 108,412 (\$635,333)	Output \$14,269,485 \$654,748 \$0 \$654,748 91,662 (\$1,669,052)	\$33,899,666 \$211,057 \$0 \$211,057	\$532,676 \$107,145 \$0 \$107,145	\$3,260,730 \$625,415 \$0 \$625,415	\$2,728,455 (\$129,224) \$0 (\$129,224)	\$111,874 (\$2,212) \$0 (\$2,212)	\$275,649 (\$35,358) \$0 (\$35,358)	\$993,87 (\$135,88 \$ (\$135,88 \$ (\$135,88 63.5
	Equity Component of Rate Base Net Income on Allocated Assets Net Income on Direct Allocation Assets Net Income RATIOS ANALYSIS REVENUE TO EXPENSES STATUS QUO2	Rate Ba \$107,836,104 \$9,913,107 \$0 \$9,913,107 100.002 (\$6,415,350)	se laput equals \$51,763,689 \$8,617,424 \$0 \$8,617,424 108,412	Output \$14,269,485 \$654,748 \$0 \$654,748 91,662 (\$1,669,052)	\$33,899,666 \$211,057 \$0 \$211,057 86.202	\$532,676 \$107,145 \$0 \$107,145 128.552	\$3,260,730 \$625,415 \$0 \$625,415 123,423	\$2,728,455 (\$129,224) \$0 (\$129,224) 75.062	\$111,874 (\$2,212) \$0 (\$2,212) 79.812	\$275,649 (\$35,358) \$0 (\$35,358) 61.712	\$993,87 (\$135,88 \$

#### LPMA #38

Ref: Exhibit 7, page 8 & OEB #40

Please provide a revised Table 7-8 from Exhibit 7 that reflects the corrections that resulted from the response to OEB #40.

#### Response: LMPA #38

The Table 7-8 from Exhibit 7 has been updated to reflect changes as a result of OEB IR #40. The only change in Revenue-to-Cost Ratio 2013 Test Year is associated with Unmetered Scattered Load (from 61.71% to 62.80%). This change was made to update the forecasted number of customers for Unmetered Scattered Load.

Customer Class	Revenue-to- Cost Ratio 2013 Test Year	Target Low	Ranges High
Cusioner Class	2013 1 631 1 641	LOW	nign
Residential	108.41%	85.00%	115.00%
GS <50 kW	91.66%	80.00%	120.00%
GS 50 to 4,999 kW	86.20%	80.00%	120.00%
GS 50 to 4,999 kW (Co-Generation)	128.55%	80.00%	120.00%
Large Use >5MW	129.42%	85.00%	115.00%
Street Light	75.06%	70.00%	120.00%
Sentinel	79.81%	80.00%	120.00%
Unmetered Scattered Load	61.71%	80.00%	120.00%
Standby Power	69.51%	80.00%	120.00%

#### **Original Filing: Table 7-8 2013 Initial Revenue-to-Cost Ratios by Customer Class**

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

Customer Class	Revenue-to- Cost Ratio 2013 Test Year	Target Low	Ranges High
Residential	108.41%	85.00%	115.00%
GS <50 kW	91.66%	80.00%	120.00%
GS 50 to 4,999 kW	86.20%	80.00%	120.00%
GS 50 to 4,999 kW (Co-Generation)	128.55%	80.00%	120.00%
Large Use >5MW	129.42%	85.00%	115.00%
Street Light	75.06%	70.00%	120.00%
Sentinel	79.81%	80.00%	120.00%
Unmetered Scattered Load	62.80%	80.00%	120.00%
Standby Power	69.51%	80.00%	120.00%

# Amended -OEB IRR#40: Table 7-8 -2013 Initial Revenue-to-Cost Ratios by Customer Class

#### LPMA #39

#### Ref: Exhibit 7, page 8

- a) If London Hydro reduced the revenue to cost ratio for the GS 50 to 4999 (Cogeneration) class to 120%, the Large Use ratio to 115% and increased the revenue to cost ratio for the USL class to 80% and the Standby Power class to 80%, what would be the net impact on revenues, assuming no other changes to the ratios for the other rate classes?
- b) Assuming that there is a revenue shortfall as a result of the response to part (a) above, please increase the classes with the lowest revenue to cost ratio until it reaches the next lowest class and them increase these ratios until they reach the next lowest and so on, until the revenue shortfall is eliminated. Please provide the resulting Table 7-8 that results from this stepwise approach.

#### Response: LMPA #38

a) The net impact on revenues, as a result of changes to reducing the Revenue-to-Cost Ratios ratio for the GS 50 to 4999 (Cogeneration) class to 120%; the Large Use ratio to 115%; increased the revenue to cost ratio for the USL class to 80%; and the Standby Power class to 80%, are reflected in the following copy of Appendix 2-P Cost Allocation Tables.

As per LPMA IR question, no other changes made to the ratios for the other rate classes. Therefore, Base Revenue Totals will not agree as no offsets requested to be made to other rate classes.

C) Rebalancing Revenue-to-Cost (R/C) Ratios				
	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	
Class	Most Recent Year: 2010	ar: (7C + 7E) / (7A) (7D + 7E) / (7A)		Policy Range
	%	%	%	%
Residential	108.10	108.41	108.41	85 - 115
GS < 50 kW	108.80	91.66	91.66	80 - 120
GS > 50 kW < GS < 4,999 kW	80.00	86.20	86.20	80 - 120
GS 1,000 to 4,999 kW (Co-Generation)	180.00	128.54	120.00	80 - 120
Large Use >5MW	80.00	129.42	115.00	85 - 115
Street Light	85.00	75.06	75.06	70 - 120
Sentinel	70.00	79.81	79.81	80 - 120
Unmetered Scattered Load	70.00	62.80	80.00	80 - 120
Standby	80.00	69.51	80.00	80 -120
		-	-	

### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

Classes	OEB IR # 40 LPMA IR # 39 Changes Ratios				Difference
Residential	\$ 39,998,580	\$	39,998,580	-\$	0
GS < 50 kW	\$ 8,626,504	\$	8,626,504	-\$	0
GS > 50 kW < GS < 4,999 kW	\$ 13,347,881	\$	13,347,881	-\$	0
GS > 1,000 kW < GS < 4,999 kW Co -Gen	\$ 303,794	\$	283,212	\$	20,582
Large Use >5MW	\$ 1,780,064	\$	1,577,627	\$	202,438
Street Light	\$ 1,162,758	\$	1,162,758	-\$	0
Sentinel	\$ 51,730	\$	51,730	\$	0
Unmetered Scattered Load	\$ 93,357	\$	120,926	-\$	27,569
Standby	\$ 405,706	\$	469,287	-\$	63,581
Total	\$ 65,770,373	\$	65,638,504	\$	131,869

# Comparison of Base Revenues:

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

b) Based on OEB IRR #40 results for Revenue-to-Cost Ratios by Customer Class, incorporating ratios as requested in LPMA # 39, and the adjusting to the lowest revenue to cost ratios reflects the results in Table- LMPA 39 b): Table 7-8 -2013 Initial Revenue-to-Cost Ratios by Customer Class.

The changes in ratios were made to the following Customer classes:

Customer Class	Revenue to Cost Ratios Per LPMA IR #38	Revenue to Cost Ratios Per IR LPMA # 39 a)
Residential	108.41%	108.41%
GS <50 kW	91.66%	91.66%
GS 50 to 4,999 kW	86.20%	86.20%
GS 1,000 to 4,999 kW (Co-Generation)	120.00%	120.00%
Large Use >5MW	115.00%	115.00%
Street Light	75.06%	82.00%
Sentinel	79.81%	82.00%
Unmetered Scattered Load	80.00%	82.00%
Standby Power	80.00%	82.00%

The Base Revenue Requirement shortfall of \$131,869 is eliminated with the above adjustments of the second column (Revenue-to-Cost Ratios per IR LPMA # 39 a).

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### OEB IRR#40: Table 7-8 2013 Revenue-to-Cost Ratios by Customer Class

Customer Class	Revenue-to- Cost Ratio 2013 Test Year	Target Ranges Low High			
Residential	108.41%	85.00%	115.00%		
GS <50 kW	91.66%	80.00%	120.00%		
GS 50 to 4,999 kW	86.20%	80.00%	120.00%		
GS 50 to 4,999 kW (Co-Generation)	128.55%	80.00%	120.00%		
Large Use >5MW	129.42%	85.00%	115.00%		
Street Light	75.06%	70.00%	120.00%		
Sentinel	79.81%	80.00%	120.00%		
Unmetered Scattered Load	62.80%	80.00%	120.00%		
Standby Power	69.51%	80.00%	120.00%		

# LMPA 39 b): Table 7-8 2013 Revenue-to-Cost Ratios by Customer Class

Customer Class	Revenue-to- Cost Ratio 2013 Test Year	Target Ranges Low High			
Residential	108.41%	85.00%	115.00%		
GS <50 kW	91.66%	80.00%	120.00%		
GS 50 to 4,999 kW	86.20%	80.00%	120.00%		
GS 1,000 to 4,999 kW (Co-Generation)	120.00%	80.00%	120.00%		
Large Use >5MW	115.00%	85.00%	115.00%		
Street Light	82.00%	70.00%	120.00%		
Sentinel	82.00%	80.00%	120.00%		
Unmetered Scattered Load	82.00%	80.00%	120.00%		
Standby Power	82.00%	80.00%	120.00%		

#### LPMA #40

Ref: Exhibit 7, pages 3-5

- a) Other than the changes noted in Tables 7-2 through 7-5, what other improvements has London Hydro made to the cost allocation study from that filed in the previous cost of service application?
- b) Approximately what percentage of the total revenue requirement has been impacted by the changes noted in Tables 7-2 through 7-5?

#### Response LPMA #40:

a) The only change made to the cost allocation model, from what was originally filed in the Application, and was to comply with changes requested in Board staff IR Q #40. In response to the Board staff IR, as found on page 88, is indicated:

Therefore, the correct forecast for the number of bills to be issued to the USL customer class is 468 (frequency of billing 12 X number of customers who have separate USL billing 39) and not 2,027 as reflected in cell L17 of the Cost Allocation Model worksheet 16.2 "Customer Data" of the Application model.

The cost allocation model was adjusted from 2,027 numbers of bills to 468 for forecasted Unmetered Scattered Load customers.

b) London Hydro did not make any adjustments to Tables 7-2 through to 7-5 (originally filed Application). Therefore, the total for revenue requirement has not been impacted.

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### School Energy Coalition (SEC) Interrogatories Questions:

#### <u>SEC – 38</u>

#### [Ex. 7, p. 10]

Please recalculate the proposed rates based on bringing all classes to within the Board-approved ranges, re-allocating the resulting revenue changes to the classes with the lowest (for a re-allocation to) or highest (for a re-allocation from) revenue to cost ratios before the re-allocation. Please provide a table in the format of Table 8-20 showing the calculation of the revenue from each class.

#### RESPONSE SEC 38:

The following Tables reflect the bringing of proposed ratios to within Board-approved ranges and reallocating the resulting revenue changes to classes with lowest or highest revenue to cost ratios before the reallocation.

#### Table 8-20 – Reconciliation of the Rate Class Revenue

2013 Test							
Customer Class	Fixed Distribution Revenue	Variable Distribution Revenue	Total Distribution Revenue	Transformer Discounts	Net Distribution Revenue	Expected	Variance \$
Residential	\$ 22,907,289	\$ 17,787,636	\$ 40,694,925		\$ 40,694,925	\$ 40,694,925	\$-
GS <50 kW	4,634,471	4,110,298	8,744,769		8,744,769	8,744,769	-
GS 50 to 4,999 kW	6,153,873	7,293,094	13,446,966	(\$680,652)	12,766,313.89	12,766,314	-
GS 50 to 4,999 kW (Co-Generation)	89,997	191,243	281,240	(\$29,200)	252,040	252,040	-
Standby Power	-	471,237	471,237	(\$92,880)	378,357	378,357	-
Large Use >5MW	724,356	852,719	1,577,075		1,577,075	1,577,075	-
Street Light	644,716	533,988	1,178,703		1,178,703	1,178,703	-
Sentinel	28,238	24,346	52,584		52,584	52,584	-
Unmetered Scattered Load	37,681	87,923	125,605		125,605	125,605	-
Total	\$ 35,220,620	\$ 31,352,483	\$ 66,573,104	(\$802,732)	\$ 65,770,372	\$ 65,770,372	\$ -

#### EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

Rate Classification	2013 Distribution Revenue Before Trans. Disc. at Existing Rates	Proposed Cost Allocation Revenue Adjustments	2013 Cost Allocation Adjusted Revenues	%
Residential	42,089,730	131,736	42,221,466	04.049/
General Service Less Than 50 kW		0	, ,	61.04%
	9,096,551	0	9,096,551	13.15%
General Service 50 to 4,999 kW	14,039,671	0	14,039,671	20.30%
General Service 1,000 to 4,999 kW (Co-Generation)	309,636	(20,582)	289,054	0.42%
Backup / Standby Power	421,496	63,581	485,077	0.70%
Large Use	1,817,004	(202,438)	1,614,566	2.33%
Street Lighting	1,238,552	0	1,238,552	1.79%
Sentinel Lighting	54,899	134	55,033	0.08%
Unmetered Scattered Load	100,816	27,569	128,385	0.19%
	\$ 69,168,355	\$0	\$ 69,168,355	100.00%

#### Apportionment of Revenue to Rate Classes - 2013

Distribution Rate Allocation Between Fixed & Variable Rates For 2013 Test Year												
Customer Class	i i	tal Gross Rev. Requirement fore Transf Disc	Proposed Fixed Rate	Resulting Variable Rate		Total Fixed Revenue	1	Total Variable Revenue	Gross Revenue Requirement	Transformer Allowances		se Revenue equirement
Residential	\$	40,694,925	\$ 13.83	\$ 0.0164	\$	22,907,289	\$	17,787,636.37	\$ 40,694,924.92		\$	40,694,925
GS <50 kW	\$	8,744,769	32.26	0.0105		4,634,471		4,110,298	8,744,769		\$	8,744,769
GS 50 to 4,999 kW	\$	13,446,966	308.60	1.8631		6,153,873		7,293,094	13,446,966	(680,653)	\$	12,766,314
GS 50 to 4,999 kW (Co-Generation)	\$	281,240	2,499.91	3.9297		89,997		191,243	281,240	(29,200)	\$	252,040
Large Use >5MW	\$	1,577,075	20,120.99	2.2004		724,356		852,719	1,577,075	-	\$	1,577,075
Street Light	\$	1,178,703	1.53	7.9397		644,716		533,988	1,178,703		\$	1,178,703
Sentinel	\$	52,584	3.46	11.4297		28,238		24,346	52,584		\$	52,584
Unmetered Scattered Load	\$	125,605	2.03	0.0176		37,681		87,923	125,605		\$	125,605
Standby Power	\$	471,237	-	3.0442		-		471,237	471,237	(92,880)	\$	378,357
TOTAL	\$	66,573,105			\$	35,220,620	\$	31,352,484	\$ 66,573,105	-\$ 802,732	\$	65,770,372
	Fore	cast Fixed/Variab	ole Ratios - On Gro	ss Revenue		53%		47%	100%			
	Exis	Existing Fixed/Variable Ratios - On Gross Revenue				55%	5	45%	100%			
			e Ratios - On Net			54%	_	46%				
	EXIS	ting Fixed/Variabl	e Ratios - On Net	Kevenue	_	56%	<b>,</b>	44%	100%			

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

### **Energy Probe (EP) Interrogatories Questions:**

#### Energy Probe-28

Ref: Exhibit 7, Tables 7-2 and 7-3

Please provide a version of the above Tables including the historic Weighting Factors used by LH and also the default values in the Boards 2011 Report.

#### **Response Energy Probe-28**

#### Table – Analysis Weighting Factors for Cost Allocation Study

Table 7-2 - Services (Account 1855)			
Rate Class	Services Weighting Factor	Services Weighting Factor	Services Weighting Factor
	As filed	OEB Default*	LH 2007 CA
Residential	1	1	1
General Service < 50kW	1.5	2	2
General Service ≥ 50 -4,999 kW	7.5	10	10
Large User	0	30	0
Street Light	0.6	1	1
Sentinel Light	0.6	1	1
Unmetered Scattered Load	0.6	1	1
Co Gen	0	n/a	15
Table 7-3 - Billing and Collection (Acco			
Rate Class	Billing Weighting Factor	Billing Weighting Factor	Billing Weighting Factor
	As filed	OEB Default*	LH 2007 CA
Residential	1	1	1
General Service < 50kW	1	2	2
General Service ≥ 50 -4,999 kW	6.5	7	7
Large User	15	15	15
Street Light	1	1	1
Sentinel Light	0.1	0.1	0.1
Unmetered Scattered Load	1	5	1
Co Gen	15	n/a	n/a
* Per Staff Report to the Board EB-2010-0219 Imp			

Electricity Distributor Cost Allocation Policy, August 4, 2011.

#### Energy Probe-29

- Ref: Exhibit 7, Tables7-4 and 7-5
  - a) Did LH use Meter type weightings in the past? If so please provide a version of Table 7-5 showing these and default values?
  - b) Please explain how the weightings were developed for Services and Billing and Collecting.

#### **RESPONSE Energy Probe 29**

Table 7-5 - Meter Reading (Sheet I7.2)			
Meter Type	Meter Reading Weighting Factor	Meter Reading Weighting Factor	Meter Reading Weighting Factor
	As Filed	OEB Default*	LH 2007 CA
Smart Meter	1	1	1
Residential Urban-Inside	2.61	2	2
GS – Walking – with or without other Service	3.8	3	3
GS – Vehicle with other services	5.08	3	3
GS W/O Demand**	3.35	3	3
Interval	49	49	49
<ul> <li>* Per Staff Report to the Board EB-2010-0219 Implimentation</li> <li>Electricity Distributor Cost Allocation Policy, August 4, 2</li> <li>** Appears not specified in Board staff Report</li> </ul>			

a) Table – Analysis Weighting Factors Meter Reading

b) London Hydro undertook a 2012 review of the costs for servicing each rate class. The results of this review are summarized below.

EB-2012-0146/EB-2012-0380 Response to Interrogatories Questions Exhibit 7: Cost Allocation February 4, 2013

Rate Class	Services Weighting Factor	Explanation of Weighting Factors
Residential*	1	Default weighting factor per OEB guidelines
General Service < 50kW	1.5	Service costs for average GS< 50 kW found to approximate 1.51 factor to that of average residential.
General Service ≥ 50 -4,999 kW	7.5	Service costs for average GS< 50 kW found to approximate 7.5 factor to that of average residential.
Large User	0	Rate class own their own service.
Street Light	0.6	Streetlight, Sentinel, and USL found to have same Service Costs, which is 0.6 cost of residential service cost.
Sentinel Light	0.6	Streetlight, Sentinel, and USL found to have same Service Costs, which is 0.6 cost of residential service cost.
Unmetered Scattered Load	0.6	Streetlight, Sentinel, and USL found to have same Service Costs, which is 0.6 cost of residential service cost.
Co Gen	0	Rate class own their own service.
* Per Staff Report to the Board EB-2010-0219	Implimentation of	the Pavisions at the Board

Electricity Distributor Cost Allocation Policy, August 4, 2011.

London Hydro undertook a 2012 review of the costs for billing and collections for each rate class. The results of this review are summarized below.

Table 7-2 - Services (Account 1855)		
Rate Class	Billing Weighting Factor	Explanation of Weighting Factors
Residential*	1	Default weighting factor per OEB guidelines
General Service < 50kW	1	With the introduction of smart meter/ tou systems, the costs are very simular, even though bill is slightly more complex for GS< 50, very small consideration.
General Service ≥ 50 -4,999 kW	6.5	Cost attibutable to this class reflect needed administer and collect associated multiple units of measure and the resulting nature of the bill calculation, complexity of bill, annual rate reclassification reviews, and added customer care. Contained in this class are customers whose meters read bu MV-90 xi using TCP/IP communication methods. The MV-90 system requires a full time business analyst, licencing and maintenance for MV- 90.
Large User	15	Both Large User and Co-Gen have simular and standard costs. Costs associated with class are utilization of MV-90 meter readings with multiple measures of units, TCP/IP communications, the nature of the bill calculations,complexity of the bill, and the key account service levels assigned to class.
Street Light	1	Monthly manual modifications to files by business analyst, monthly provision of load for pricing files.
Sentinel Light	0.1	With no meter readings required and only one time account set up of account minimal costs. Costs are 0.6 of residential.
Unmetered Scattered Load	1	Costs associated with USL found to be simular to that of residential.
Co Gen	15	Both Large User and Co-Gen have simular and standard costs.

\* Per Staff Report to the Board EB-2010-0219 Implimentation of the Revisions ot the Board

Electricity Distributor Cost Allocation Policy, August 4, 2011.

# **Vulnerable Energy Consumers Coalition (VECC) Interrogatories Questions:**

#### **VECC 36.0**

#### Reference: Exhibit 7, page 4 / OEB #40 a)

- a) Please explain why the Billing and Collection factor is considered to be the same for Residential as for Street Lighting. Does the Street Lighting factor include consideration of: i) the need to manage/monitor the numbers and wattage of street lighting devices and b) the need to produce consolidated bills for street lighting customers?
- b) With respect to the referenced 16 USL customers whose bills are recorded on a non-USL service billing, what are the other associated customer classes?
- c) Apart from being updated to include more recent data, have there been any improvements in London's engineering record keeping or financial records keeping since 2008 that would result in an improvement in the assignment of costs to USOA accounts and/or the breakout of assets as performed on Sheet I4. If yes, please describe what these improvements were and how they affected/improved the assignment of costs to USOA accounts and/or the breakout of assets.

#### Response: VECC #36.0

a) In the development of the 2012 Cost Allocation Study for London Hydro the default weighting factors, as established by "Staff Report to the Board –Implementation of the Revisions to the Board's Electricity Cost Allocation Policy, August 4, 2011, for Billing and Collection were thought not to provide the cost causality needed to allocate to cost rate classes for London Hydro.

Instead London Hydro performed a study of the costs involved in Billing and Collections for each rate class. VECC is correct that taken into consideration for determining the weighting for Streetlight customers for Billing and Collection was the need to manage and monitor the over 35, 000 streetlights. The most significant costs are the need to utilize software (with its support, and maintenance costs), and the monthly manual modification to streetlight files, and monthly provision of load for pricing files.

To accommodate manual modifications to streetlight files a business analyst is needed. Also taken into consideration, an offset to the Billing and Collection weighting for the Streetlight

customer class is this class has London Hydro produce a consolidated billing (in which one bill is sent to the City of London).

- b) The 16 USL customers whose bills are recorded on a non-USL service billings include 5 customers GS under 50 kW class and 11 at GS over 50 kW to 4,999 kW class.
- c) London Hydro has tried to seek better information for its cost allocation study that would allow improved cost causality, to allocate cost to the appropriate rate class. However, London Hydro did not take the approach to improve engineering record keeping or financial records and then applying these improvements to better the assignment of costs to USofA accounts.

London Hydro does not track assets and costs by customer class. In fact, most of London Hydro's PP&E are used by most or all customer classes. London Hydro has tried to seek better cost casualty by detailed analyzing of costs and PP&E (and incorporate these findings into such areas as weighting factors for billing and collections of the Cost Allocation Study). Overall, the cost and PP&E are allocated to customer classes using the Board's cost allocation methodology and model.

#### VECC 37.0

Reference: Exhibit 7, page 6, line 7

- a) Please confirm that the "original informational filing" referred to is the CA filing made by London in 2007.
- b) What year's load data was used to establish the load profiles in the "original informational filing"?
- c) Please provide a schedule that for each customer class sets out the average monthly use per customer forecast for 2013 and compares it with the average use per customer for the year that the load profiles are based on (i.e., not the year that the informational CA filings cost data is based on).

#### Response: VECC Q. # 37

- a) London Hydro can confirm that the "original informational filing" as identified in Exhibit 7. Page 6, line 7, does referred to 2007 London Hydro's Cost Allocation Study.
- b) 2004 weather normalized data was used to establish the load profiles in the original information filing. It was weather normalized over a 30 year period by Hydro One at the wholesale level.
- c) The following table provides the average monthly use per customer/connection forecast for 2013 and compares it with the average use per customer/connection for 2004. It is London Hydro understanding that 2004 was the year the load profiles were based on.

Year	Residential	GS<50	GS>50	Large User	Cogeneration	Street Lighting	Sentinels	USL			
Monthly Usage per Customer/Con	Monthly Usage per Customer/Connection (kWh per customer/connection)										
2004 Actual	723	2,890	81,124	6,111,218	494,237	59	96	483			
2013 Test	653	2,736	78,520	5,431,004	1,165,150	57	96	269			

#### VECC 37.0

#### Reference: Exhibit 7, page 8 /OEB #40 a)

a) Based on the CA results in OEB 40 a), what would be the revenue deficiency if:

- *i.* the ratios for GS >50-4,999 (Cogeneration) and Large User were reduced to 120% and 115% respectively
- *ii.* the ratio for Street Lights was increased to 70% and
- *iii.* the ratios for Sentinel, USL and Standby were increased to 80%.
- b) How much would the ratio for the GS >50-4,999 class need to increase in order to offset this revenue deficiency?

#### Response: VECC # 38:

a) i) Revenue deficiency would be \$222,911. Please see following snapshot of Appendix 2-P Cost Allocation, reflected below, for further details.

	0	Column 7B		Column 7C		Column 7D		Column 7E	
Classes (same as previous table)	(L	Load Forecast (LF) X current approved rates		L.F. X current approved rates X (1 + d)		LF X proposed rates		Miscellaneous Revenue	
Residential	\$	36,097,050	\$	39,998,580	\$	39,998,580	\$	2,091,297	
GS < 50 kW	\$	7,785,060	\$	8,626,504	\$	8,626,504	\$	470,061	
GS > 50 kW < GS < 4,999 kW	\$	12,045,905	\$	13,347,881	\$	13,347,881	\$	691,802	
GS 50 to 4,999 kW (Co-Generation)	\$	274,161	\$	303,794	\$	283,212	\$	5,842	
Large Use >5MW	\$	1,606,434	\$	1,780,064	\$	1,577,627	\$	36,940	
Street Light	\$	1,049,340	\$	1,162,758	\$	1,162,785	\$	75,794	
Sentinel	\$	46,684	\$	51,730	\$	51,730	\$	3,168	
Unmetered Scattered Load	\$	84,251	\$	93,357	\$	93,357	\$	7,288	
Standby	\$	366,133	\$	405,706	\$	405,706	\$	15,790	
Total	\$	59,355,018	\$	65,770,372	\$	65,547,380	\$	3,397,982	
1+d 1.	1081								
Note s:									

1 Columns 7B to 7D - LF means Load Forecast of Annual Billing Quantities (i.e. customers or connections X 12, (kWh or kW, as applicable). Revenue Quantities should be net of Transformer Ownership Allowance. Exclude revenue from rate adders and rate riders.

2 Columns 7C and 7D - Column total in each column should equal the Base Revenue Requirement

3 Columns 7C - The Board cost allocation model calculates "1+d" in worksheet O-1, cell C21. "d" is defined as Revenue Deficiency/ Revenue at Current Rates.

4 Columns 7E - If using the Board-issued Cost Allocation model, enter Miscellaneous Revenue as it appears in Worksheet O-1, row 19.

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

<b>0</b>	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range	
Class	Most Recent Year: 2010	(7C + 7E) / (7A)	(7D + 7E) / (7A)		
	2010	%	%	%	
Residential	108.10	108.41	108.41	85 - 115	
GS < 50 kW	108.80	91.66	91.66	80 - 120	
GS > 50 kW < GS < 4,999 kW	80.00	86.20	86.20	80 - 120	
GS 50 to 4,999 kW (Co-Generation)	180.00	128.54	120.00	80 - 120	
Large Use >5MW	80.00	129.42	115.00	85 - 115	
Street Light	85.00	75.06	75.06	70 - 120	
Sentinel	70.00	79.81	79.81	80 - 120	
Unmetered Scattered Load	70.00	62.80	62.80	80 - 120	
Standby	80.00	69.51	69.51	80 -120	
		-	-		

ii) Revenue deficiency would be \$306,487.

Notes:

iii) Revenue deficiency would be \$215,181. Please see following snapshot of Appendix 2-P Cost Allocation, reflected below, for further details.

		Column 7B		Column 7C		Column 7D		Column 7E	
Classes (same as previous table)	)	Load Forecast (LF) X current approved rates		L.F. X current approved rates X (1 + d)		LF X proposed rates		Miscellaneous Revenue	
Residential		\$	36,097,050	\$	39,998,580	\$	39,998,580	\$	2,091,297
GS < 50 kW		\$	7,785,060	\$	8,626,504	\$	8,626,504	\$	470,061
GS > 50 kW < GS < 4,999 kW		\$	12,045,905	\$	13,347,881	\$	13,347,881	\$	691,802
GS 50 to 4,999 kW (Co-Generation	ו)	\$	274,161	\$	303,794	\$	283,212	\$	5,842
Large Use >5MW		\$	1,606,434	\$	1,780,064	\$	1,577,627	\$	36,940
Street Light		\$	1,049,340	\$	1,162,758	\$	1,079,289	\$	75,794
Sentinel		\$	46,684	\$	51,730	\$	51,861	\$	3,168
Unmetered Scattered Load		\$	84,251	\$	93,357	\$	120,926	\$	7,288
Standby		\$	366,133	\$	405,706	\$	469,312	\$	15,790
Total		\$	59,355,018	\$	65,770,372	\$	65,555,191	\$	3,397,982
1 + d	1.1081								

1 Columns 7B to 7D - LF means Load Forecast of Annual Billing Quantities (i.e. customers or connections X 12, (kWh or kW, as applicable). Revenue Quantities should be net of Transformer Ownership Allowance. Exclude revenue from rate adders and rate riders.

2 Columns 7C and 7D - Column total in each column should equal the Base Revenue Requirement

3 Columns 7C - The Board cost allocation model calculates "1+d" in worksheet O-1, cell C21. "d" is defined as Revenue Deficiency/ Revenue at Current Rates.

4 Columns 7E - If using the Board-issued Cost Allocation model, enter Miscellaneous Revenue as it appears in Worksheet O-1, row 19.

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

Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range	
Class	Most Recent				
	Year: 2010	(7C + 7E) / (7A)	(7D + 7E) / (7A)		
	%	%	%	%	
Residential	108.10	108.41	108.41	85 - 115	
GS < 50 kW	108.80	91.66	91.66	80 - 120	
GS > 50 kW < GS < 4,999 kW	80.00	86.20	86.20	80 - 120	
GS 50 to 4,999 kW (Co-Generation)	180.00	128.54	120.00	80 - 120	
Large Use >5MW	80.00	129.42	115.00	85 - 115	
Street Light	85.00	75.06	70.00	70 - 120	
Sentinel	70.00	79.81	80.00	80 - 120	
Unmetered Scattered Load	70.00	62.80	80.00	80 - 120	
Standby	80.00	69.51	80.00	80 -120	
		-	-		

b) The Ratio would be for GS> 50-4,999 class would be 87.52% in order to offset the revenue deficiency per VECC 38 a).

All Respectfully Submitted