Board Staff Interrogatories Orangeville Hydro Limited 2010 Electricity Distribution Rates EB-2009-0272

Rate Base

1. Distribution Plant

Refs: Exhibit 2 / 2 / 3 / pp. 2, 10, and 16; Exhibit 2 / 3 / 2 / pp. 1 and 9

Please provide a summary table showing for each year 2006 – 2010 the total project cost for each category under Distribution Plant, together with the percentage breakdown of Distribution Plant by category. (For example, in 2009 Substation category cost of two projects was \$117,828, which relative to Distribution Plant expenditure of \$1,292,828 is 9.1%.)

Response

OHL has supplied a summary table below with the percentage breakdown of Distribution Plant by category.

					CAPITAL EX		ES					
	20	05	20	06	20	07	20	08	20	09	20	10
Category	Total	% of Total										
Cust Demand	\$180,256	21.5%	\$458,615	42.8%	\$694,203	52.2%	\$384,817	27.9%	\$810,666	46%	617,872	32%
Security					\$46,567	3.5%						
Renewal	\$218,616	26.1%	\$210,761	19.7%	\$441,604	33.2%	\$682,767	49.5%	\$429,497	25%	744,410	39%
Substation	\$386,377	46.0%	\$133,238	12.4%			\$97,245	7.0%	\$117,828	7%	11,127	1%
Regulatory			\$75,736	7.1%	\$154,596	11.6%	\$29,284	2.1%	\$393,398	22%	15,349	1%
Reliability											168,550	9%
Tx Inventory	\$14,462	1.7%	\$153,472	14.3%	(\$146,514)	-11.0%	\$150,485	10.9%				
Land Rights	\$150		\$6,056	0.6%	\$3,956	0.3%						
Metering	\$39,265	4.7%	\$33,215	3.1%	\$135,383	10.2%	\$35,548	2.6%			157,276	8%
Green Energy Act											188,606	10%
Total	\$839,125	100%	\$1,071,094	100%	\$1,329,794	100%	\$1,380,146	100%	\$1,751,390	100%	\$1,903,190	100%
Cont. Capital	(\$112,889)		(\$226,554)		(\$534,860)		(\$254,245)		(\$458,562)		(287,833)	
Grand Total	\$726,236		\$844,540		\$794,935		\$1,125,900		\$1,292,828		\$1,615,357	

2. In-Service Dates

Ref: Exhibit 2 / 3 / 2 / p. 1

Why are the Regulatory projects on William Street and Hansen Street included in the 2009 table on this page, rather than with the other projects with 2010 in-service dates on page 9?

Response

The in service dates for these projects were incorrectly stated as completed in 2010 as they will be completed in 2009.

3. 2010 Capital Expenditures

Ref: Exhibit 2 / 3 / 2 / p. 9

The table on p. 9 appears to be missing its heading and an unknown number of rows at the bottom. Please provide a complete version of the table.

Response

Please find a complete version of the table below.

						2010 Capital E	xpenaltures						
													1
	In Service			Account	Account	Account	Account	Account	Account	Account	Account	Account	Account
Category	Date	Project Description	Total Project	1605	1820	1830	1835	1840	1845	1850	1855	1860	1995
Cust Demand	2010	Edgewood Valley	52,277			-	-	21,544	7,981	13,440	9,312	-	
Cust Demand	2010	Broadway Grande	239,029			-	-	63,120	33,157	101,593	41,160		1
Cust Demand	2010	Mono Development Ph 4	211,889			-	-	50,203	26,146	102,858	32,682		1
Cust Demand	2010	4 Misc New Services	114,676			-	-	-	23,290	82,690	-	8,695	1
Renewal	2010	Orangeville Mall Conversion	90,462			8,318	6,060	10,498	11,238	54,350	-		
Renewal	2010	Browns Farm Conversion	318,895			-	-	46,646	67,251	204,999	-		1
Renewal	2010	C Line Conversion	80,999			-	-	9,709	17,468	53,822	-		1
Renewal	2010	Misc Pole Replacement	24,990			9,815	15,175	-	-	-	-		
Renewal	2010	King St Rebuilds	26,780			11,893	6,135	-	-	8,753	-		
Renewal	2010	Water Street Removal 7200 kV	42,247			-	10,503	10,693	11,388	9,664	-		
Renewal	2010	Broadway Removal Old Circuit	84,634			-	3,635	9,709	17,468	53,822	-	-	
Renewal	2010	Remove Old 4 kV Rear Lot	34,783			-	-	6,813	14,735	13,235	-	-	
Renewal	2010	Centennial Road Removals	40.619			11.914	28.705	-	-	-	-	-	
Regulatory	2010	Shirley St., Marion St	15.349			-	3.371	4.610	7.367	-	-	-	[
Reliability	2010	Fault Indicators Replacement	55 697			-	55 697	-	-	-	-	-	
Substation	2010	DS#1 Removal Project	11.127		11.127								
Metering	2010	Wholesale Meter M5 & M26	100.000		100.000								
Metering	2010	>50 Class Meter Ungrades	57 276									57 276	
Reliability	2010	Remote Sensors	50,601				50 601					57,270	
Green Energy Act	2010	Large Renewable Generation-Other	136 202				50,601		85 601				
Green Energy Act	2010	MicroEIT Enablement	52 404				50,001		00,001		27.404	25.000	
Reliability	2010	Optimization Study	62 253		12 451		24 901		24 901		27,404	23,000	
itendointy	2010	Total Contributed Capital	(287 833)		12,101		21,501		21,501				(287 833)
	2010	Total contributed capital	(207,000)										(207,000)
Total			1 615 257		122 579	41.020	255 294	222 544	247.000	600 225	110.550	00.071	(207 022)
TOLAT			1,010,007	-	125,576	41,959	200,004	255,544	547,990	099,225	110,559	90,971	(207,033)
													L
	In Service			Account	Account	Account	Account	Account	Account	Account	Account	Account	Account
Category	Date	Project Description	Total Project	1905	1915	1920	1925	1930	1935	1940	1945	1970	1980
Facilities	2010	Washroom Renovations	10,000	10,000									
Equipment	2010	Telephone System	25,000		25,000								
Hardware	2010	Computer Hardware	57,800			57,800						l	
Software	2010	Misc Computer Software	118,780				118,780					l	
Vehicles	2010	Replace Vehicles	65,000					65,000					
Tools & Equip	2010	Major Tool Replacement	6,000							5,000	1,000	ļ]	
Equipment	2010	Scada System	15,000										15,000
Equipment	2010	Load Management	22,000									22,000	
													I
Total			319,580	10,000	25,000	57,800	118,780	65,000	-	5,000	1,000	22,000	15,000
		Total Capital Expenditures	1,934,937										

4. In-Service Date of Wholesale Meter Upgrade

Ref: Exhibit 2 / 3 / 2 / p. 14

- a. The in-service date for the wholesale meter transformers is approximately 18 months from the purchase order. The description of early stages of the project, eg. a site visit, are described in the future tense, which would seem to indicate an in-service date after 2010.
- b. Is the capital cost of this project included in the 2010 rate base? If so, please provide an explanation or justification for including it.

Response

a. Hydro One has made a commitment for the M5 metering equipment to be moved outside of the Hydro One TS. A site visit for the M5 project recently occurred in late September and the work is expected to start late-2009 but is dependent on Hydro One's availability of resources. Due to the fact that we were unsure about including the project in 2009, we moved it to 2010. Hydro One will be installing and anchoring a 65ft pole and transferring the M5 44kV circuit onto the new pole in OHL territory. OHL will be installing the M5 44kV metering equipment. An external consulting firm was used for equipment selection and supply. The M5 work alone will be approximately \$100,000. We incorrectly described the project as 'M5

and M26" and should not have included the M26 label in our description. The M26 metering replacement which is a completely different project is planned by the end of 2010 and may not proceed until 2011. OHL has not included the M26 project in the 2010 budget.

b. Yes the capital cost of this M5 project is included in the 2010 rate base. As mentioned previously, OHL expected that the M5 project could be expected by late-fall, however we decided to include it in 2010 due to Hydro One and the availability of resources. We have received an estimate from Hydro One and our contractor and the project will proceed therefore it should be included in at least 2010.

5. 2010 Green Energy projects

Refs: Exhibit 2 / 2 / 1 / p. 5; Exhibit 2 / 3 / 2 / p. 14-15

There are four projects listed under the heading of Green Energy, totalling approximately \$330,000.

- a. Does any portion of the expected Contributed Capital in 2010 arise from these projects? If so, how much?
- b. What will the amortization period be for these projects?
- c. Are these projects included in the Fixed Asset Continuity Table (the first reference)? If so, which row(s) are they in, and what is the CCA class?

Response

- a. There is no contributed capital expected in 2010 arising from these projects. Also amount has been revised to \$302,000 in the Green Energy Plan Table 4 (Appendix A of this submission)
- b. The amortization will be according to OEB APH handbook for accounts 1835, 1845, 1855 and 1860 which is 25 years and 1920 – 5 years, 1980 – 15 years.
- c. These projects are included in the Fixed Asset Continuity Table in row 10, 1835, CCA class 47; row 12, 1845, CCA class 47; row 14, 1855, CCA class 47; and row 15, 1860, CCA Class 47; in row 22, 1920 CCA class 12; in row 33, 1980, CCA class 8.

6. Guidelines for Distribution System Planning

Refs: Exhibit 2 / 3 / 2 / pp. 15-16; OEB Guidelines 'Deemed Conditions of Licence: Distribution System Planning" (G-2009-0087)

Four projects are listed in the second reference as 2010 Green Energy Act projects: remote sensors, large renewable connections, MicroFIT enablement, and the optimization study. The Board's Guidelines 'Deemed Conditions of Licence: Distribution System Planning" at p. 12 says that smart grid activities should be incremental to on-going or planned activities that are included in rates or approved capital budgets.

Please include a more detailed description of the remote sensors and the optimization study projects, with particular attention to whether either or both of these projects would have likely been undertaken by Orangeville Hydro in the course to upgrading its distribution system, even in the absence of the Green Energy Act.

Response

There were four projects listed in Exhibit 2/3/2 p.15 and 16 where there should have been only two projects. In the absence of the Green Energy Act, Orangeville Hydro would still install the remote sensors in 2010 and 2011 as part of our asset management plan and perform the optimization study. However to enable the Green Energy Act we will continue to install additional sensors in future years and have revised Table 4 in the Green Energy Act Plan in Appendix A. These additional sensors would not be installed in the absence of the higher standards of outage management that will be required to maintain a safe and reliable system. Hence, only the expenditures after 2011 for remote sensors should be included in OHL's Green Energy Plan. The remote sensors are to provide system data and help with outage management. Remote Sensors will gather data from the system at strategic points. This data will include voltage and current, and system problems such as

spikes, or alert us to outages. Utilizing this data will help us analyze and correct any problems on our distribution system. In the event of an outage, the sensors will alert us to the location of the outage. As more sensors are added, the outage location would be more defined.

The Optimization Study is **not** included in the budget (Table 4 of the Green Energy Plan) that OHL submitted as an Addendum to the rate application. OHL included this project under the descriptions in Exhibit 2/3/2/p. 15-16 in error. The optimization study should have been included under the descriptions as a reliability project.

7. Computer Software

Refs: Exhibit 2 / 2 / 3 / p. 20; Exhibit 2 / 3 / 2 / pp. 7 and 17; Exhibit 2 / 3 / 3 / Appendix A / p. 5 and 6

The Harris CIS System project described at p. 20 in the first reference and at p. 7 of the second reference sum to approximately \$210,000. Additional cost of software at \$118,780 is described at p. 17 of the second reference. The capital cost to Orangeville Hydro and Grand Valley Energy Inc. described in the presentation at p. 5 is \$259,300.

- a. Please reconcile the above cost numbers, concerning the planned timing and amounts.
- b. Has the project realized the benefits and costs described in the presentation? In particular, is some or all of the 2010 planned expenditure intended to complete the project described in the presentation?
- c. Is the capital expenditure on the Harris CIS System expected to be complete as of 2010, or is there expected to be additional capital expenditure?
- d. Has there been any saving realized as a result of other distributors using the system, as described at p. 6 of the Appendix under the heading "File Nexus Co-op Model"?

Response

a. The Harris system project on p. 20 was the initial deposit that was made in 2008 for \$50,753 and on p. 7 the amount of 158,050 is the balance due after conversion. File Nexus was also included as part of the new CIS project and included in the amount given in the presentation. Please see the table below for the costs that were referred to in the presentation amounting to 253,000 (259,000 at the time of the presentation).

Description	Amount
2008 Harris Software Deposit	50,753
2009 Harris Software	158,050
2009 File Nexus	43,969
Total	252,772

- b. Yes, the project has realized the benefits and costs mentioned in the presentation. OHL is scheduled to 'go live' November 2, 2009 and the planned expenditure of \$158,050 will be remitted by the end of the year. However the File Nexus planned for 2009 will not go ahead until 2011 due to the upcoming Smart Meter rollout in 2010. OHL will be removing the File Nexus project amounting to \$43,969 from the 2009 forecast and deferring to 2011. At the time that final rates are determined, OHL will adjust the 2009 budget to exclude the File Nexus capital costs.
- c. The capital expenditure will be complete on the Harris CIS System as of 2010 and there will not be any additional capital expenditures.
- d. The savings are already included in the capital costs and operational costs. There are other parties interested in the concept of the "UCS Group" and there may be future operational savings.

Working Capital Allowance

8. Transmission Cost Forecast

Ref: Exhibit 8 / 1 / 3 / p. 2, Table 10

Orangeville Hydro has provided detailed costs of Network and Connection Service in 2007 and 2008.

Please provide a similar cost estimate for 2010, consistent with the load forecast. Please show the derivation of the 2010 cost estimate, using the currently approved Uniform Transmission Rates for the portion that is forecast to be purchased from the IESO, and currently approved Hydro One Retail Transmission Service Rates for the Sub-Transmission class for the portion that is forecast to be purchased from the host distributor.

Response

The chart below is the forecasted cost of the retail transmission rates billed to OHL from Hydro One. OHL is not billed by the IESO for wholesale transmission since OHL is completely embedded. The rates used to calculate the forecasted costs are based on Hydro One's current application to the Ontario Energy Board for 2010 rates.

						2010	2010
	2008	2009	2010	Trans	Trans	Trans	Trans
	Data	Forecast	Forecast	Network	Conn	Network	Conn
HON Current Rate				2.24	1.39		
HON 2010 Applied				2.37	1.37		
Jan	43,215	43,705	44,579	2.37	1.37	\$105,652	\$61,073
Feb	42,451	42,504	43,354	2.37	1.37	\$102,749	\$59,395
Mar	38,878	39,967	40,766	2.37	1.37	\$96,616	\$55,850
Apr	35,167	36,404	37,132	2.37	1.37	\$88,003	\$50,871
Мау	40,871	34,481	35,171	2.37	1.37	\$83,354	\$48,184
Jun	42,436	43,216	44,080	2.37	1.37	\$104,470	\$60,390
Jul	44,133	37,711	38,465	2.37	1.37	\$91,163	\$52,697
Aug	41,951	45,326	46,233	2.37	1.37	\$109,571	\$63,339
Sep	35,753	35,105	35,807	2.37	1.37	\$84,864	\$49,056
Oct	38,346	37,533	38,284	2.37	1.37	\$90,732	\$52,449
Nov	41,867	40,796	41,612	2.37	1.37	\$98,620	\$57,008
Dec	43,454	42,082	42,924	2.37	1.37	\$101,729	\$58,806
Total	488,522	478,830	488,407			\$1,157,524	\$669,118

The chart below is the similar cost estimate based on the load forecast. The chart shows a variance in both cases. As stated in Exhibit 8 / 1 / 3 / p.3, OHL proposes to maintain the existing Network Transmission rate charged to customers. The reason that OHL is not proposing to increase the Network Transmission rate is because the variance in account 1584 is an amount owing to the customer and by not increasing the rate that variance owing to the customer will decline and will be somewhat self correcting.

	Retail Transmission Service Rates (RTSR)									
		2010			2010					
Month	Retail Transmission Network Cost	Retail Transmission Network Billing	Variance	Retail Transmission Connection Cost	Retail Transmission Connection Billing	Variance				
January	105,652	92,657	12,996	61,073	44,834	16,239				
February	102,749	114,890	(12,141)	59,395	79,677	(20,282)				
March	96,616	170,730	(74,113)	55,850	64,879	(9,029)				
April	88,003	99,115	(11,111)	50,871	59,234	(8,363)				
May	83,354	62,314	21,040	48,184	36,028	12,156				
June	104,470	138,459	(33,989)	60,390	84,299	(23,909)				
July	91,163	73,496	17,666	52,697	42,439	10,258				
August	109,571	75,382	34,189	63,339	44,542	18,796				
September	84,864	110,786	(25,922)	49,056	66,140	(17,084)				
October	90,732	81,192	9,541	52,449	47,229	5,220				
November	98,620	106,594	(7,974)	57,008	63,429	(6,421)				
December	101,729	113,100	(11,370)	58,806	69,585	(10,780)				
Total:	1,157,524	1,238,714	(81,189)	669,118	702,316	(33,199)				

9. Low Voltage Cost Forecast

Ref: Exhibit 8 / 1 / 1 / p. 9

It would be convenient to have documentation and a table showing the derivation of the forecast Low Voltage cost of \$200,513. Please ensure that the table shows clearly the forecast billing loads, and that the documentation explains how Hydro One Rate Rider # 4 is factored into the cost forecast if at all.

Response

OHL has revised the LV Cost of Power calculations from \$200,513 to \$314,695 as we have removed the Hydro One Rate Rider #4. The Rate Rider #4 is over an 11 month period commencing June 2009. Hydro One's current rates are provided in the chart below.

Component	Charge Determinant per Billing Month	Proposed 2010
Service Charge	\$/Delivery Point	\$211.68
Common ST Lines Charge	\$/KW	\$0.444
LVDS	\$/KW	\$1.859

	2008	2009	2010		Serv Chg	LV charges
	Data	Forecast	Forecast	Rate	211.68	_
Meter Points					4	
Jan	40,767	43,705	44,579	0.4440	847	20,640
Feb	48,411	42,504	43,354	0.4440	847	20,096
Mar	37,294	39,967	40,766	0.4440	847	18,947
Apr	33,998	34,510	35,200	0.4440	847	16,475
May	39,714	40,438	41,247	0.4440	847	19,160
Jun	41,333	41,949	42,787	0.4440	847	19,844
Jul	51,565	52,865	53,922	0.4440	847	24,788
Aug	45,607	46,857	47,794	0.4440	847	22,067
Sep	36,310	37,602	38,354	0.4440	847	17,876
Oct	36,384	37,882	38,640	0.4440	847	18,003
Nov	40,057	41,867	42,704	0.4440	847	19,807
Dec	41,247	43,372	44,239	0.4440	847	20,489
Total						238,193
	LVDS					
la u	4005	0005	0045	4.050		0.000
Jan	1985	2025	2045	1.859		3,802
Feb	1940	1979	1999	1.859		3,715
Mar	1784	1820	1838	1.859		3,417
Apr	1290	1316	1329	1.859		2,471
iviay	1226	1251	1263	1.859		2,348
Jun	1267	1292	1305	1.859		2,426
Jui	1300	1326	1339	1.859		2,490
Aug	1250	1275	1288	1.859		2,394
Sep	1292	1318	1331	1.859		2,474
Oct	1498	1528	1543	1.859		2,869
NOV	1810	1846	1865	1.859		3,466
Dec	2125	2168	2189	1.859		4,070
Tatal						25.044
Total						35,941
			Total I V C	hargos		274 125
				larges		214,135

The above chart provides forecasted demand that Hydro One would bill OHL for LV and LVDS charges. OHL would propose that whatever the most recent Hydro One rates for LV charges are at the time final rates are determined be used for the purposes of calculating LV Charges. OHL made an error on the Cost of Power Forecast and used the uplifted kWhs to calculate the LV Charges and there is a variance to the Cost of Power table provided in Exhibit 2/4/1 / Appendix C, p. 2. We have adjusted the working capital allowance due to the new calculation for the cost of power as found in the table below.

Electricity - Commodity	2010	2010 Loss			
Class per Load Forecast	Forecasted	Factor		2010	
Residential	84,928,233	1.0468	88,902,303	\$0.0607	\$5,398,148
Street Lighting	1,798,732	1.0468	1,882,901	\$0.0607	\$114,330
Sentinel Lighting	129,899	1.0468	135,977	\$0.0607	\$8,257
GS<50kW	38,954,924	1.0468	40,777,752	\$0.0607	\$2,476,025
GS>50kW	122,840,423	1.0468	128,588,529	\$0.0607	\$7,807,895
Intermediate	376,928	1.0468	394,566	\$0.0607	\$23,958
Unmetered Scattered Load	374,519	1.0468	392,044	\$0.0607	\$23 <i>,</i> 805
TOTAL	249,403,658		260,682,028		\$15,852,418
<u> Transmission - Network</u>		Volume			
Class per Load Forecast		Metric		2010	
Residential		kWh	88,902,303	\$0.0052	\$462,292
Street Lighting		kW	5,102	\$1.4605	\$7,451
Sentinel Lighting		kW	360	\$1.4678	\$528
GS<50kW		kWh	40,777,752	\$0.0048	\$195,/33
GS>50KW		KW	293,178	\$1.9365	\$567,739
Intermediate	J	KVV	202.044	\$0.0000 \$0.0048	\$U
	1	KVVII	392,044	\$0.0048	\$1,882
IUIAL					31,233,023
Transmission - Connection		Volume			
Class per Load Forecast		Metric		2010	
Residential		kWh	88.902.303	\$0.0030	\$269.534
Street Lighting		kW	5.102	\$0.8318	\$4.244
Sentinel Lighting		kW	360	\$0.8493	\$306
GS<50kW		kWh	40,777,752	\$0.0027	\$111,666
GS>50kW		kW	293,178	\$1.0761	\$315,487
Intermediate		kW	0	\$0.0000	\$0
Unmetered Scattered Load	k	kWh	392,044	\$0.0027	\$1,074
TOTAL					\$702,309
Wholesale Market Service	<u>/RRA</u>				
Class per Load Forecast				2010	
Residential			88,902,303	\$0.0065	\$577,865
Street Lighting			1,882,901	\$0.0065	\$12,239
			135,977	\$0.0065	\$884 ¢205.055
GS<50KW			40,777,752	\$0.0065 \$0.0065	\$205,055 ¢025 025
Untermediate			204 566	\$0.0005	\$053,023
Unmetered Scattered Load	4		394,500	\$0.0005	\$2,505
TOTAL			332,044	Ç0.0005	\$1.696.981
10 // 2					<i>\</i>
Low Voltage					
Class per Load Forecast				2010	
Residential		kWh	84,928,233	\$0.0012	\$103,011
Street Lighting		kW	5,102	\$0.3328	\$1,698
Sentinel Lighting		kW	360	\$0.3398	\$122
GS<50kW		kWh	38,954,924	\$0.0011	\$42,676
GS>50kW		kW	293,178	\$0.4305	\$126,215
Intermediate		kW	0		\$0
Unmetered Scattered Load	ł	kWh	374,519	\$0.0011	\$410
TOTAL					\$274,132
	2010				
1705-Power Purchased	\$15 857 110				
4703-POWEL PUTCHASED	\$15,052,418 \$1 606 001				
4714-Charges-NIM	\$1,090,981 \$1,225,625				
4716-Charges-CN	\$702 309				
4750-Low Voltage	\$274 132				
	<i>427 1</i> ,132				
TOTAL	19,761,466				

10. Transmission and LV Costs in the Working Capital Allowance

Ref: Exhibit 2 / 4 / 1 / Appendix C / p. 2

Orangeville Hydro's forecast of the cost of power includes two components for transmission cost and a component for low voltage cost. All of these components appear to be based on forecast revenue that will come to Orangeville Hydro under the requested rates rather than the forecast cost to Orangeville Hydro. It will be difficult to update the cost of power in the existing format if any of the rates change prior to the issuance of Orangeville Hydro's Rate Order.

In place of the revenue forecasts, please substitute the cost forecasts derived in the previous two interrogatories in the calculation of the working capital allowance.

OHL maintains that the forecast cost of power should be based on the forecast revenue instead of cost because this method was used in previous submissions. OHL has also provided a table below noting that the materiality difference in the two methods is minimal. To update the cost of power for transmission rates, OHL would increase or decrease the rates as advised in the next issuance of the Guideline G-2007-001 to update the cost of power.

20)10	
4705-Power Purchased	\$15,852,418	\$15,852,418
4708-Charges-WMS	\$1,696,981	\$1,696,981
4714-Charges-NW	\$1,235,625	\$1,157,524
4716-Charges-CN	\$702,309	\$669,118
4750-Low Voltage	\$274,132	\$274,132
TOTAL	\$19,761,466	\$19,650,173
15% Working Capital	\$2,964,220	\$2,947,526
Regulated Rate of Return	\$190,006	\$188,936
Difference		\$1,070

Load Forecast

11. Summary of Operating Revenue

Ref: Exhibit 3 / 1 / 2 / 'Summary of Operating Revenue Table'

Is revenue from Grand Valley Energy Inc. included in this table? If so, is it included in all years, or only the more recent years?

Response

Yes, the revenue from Grand Valley Energy Inc. is included in the Summary of Operating Revenue table for all years.

12. Weather Variables in the Regression Model

Ref: Exhibit 3 / 2 / 1 / p. 2

The effect of Cooling Degree Days (CDD) may be increasing over time as air conditioning becomes more predominant year-by-year. The effect of Heating Degree Days (HDD) may be decreasing as gas is substituted for electric space heating.

Did OHL estimate any version(s) of the regression model in which the effect of HDD and CDD could change over the historic period? If so, please describe the model and why it was not used. If not, why was only linear version used?

Response

OHL did not estimate any version(s) of the regression model in which the effect of HDD and CDD could change over the historic period. A linear version was only used since as outlined in Exhibit 3, Tab 2, Schedule 1, Page 9, Table 4 the difference between the predicted purchases and the actual purchases over the historic period was minimal and in OHL's opinion no further adjustments were needed to produce a more accurate prediction model.

13. Weather Normalization

Ref: Exhibit 3 / 2 / 1 / p. 3

OHL has used the 10-year averages of (HDD) and Cooling Degree Days (CDD), rather than alternatives such as 20 years or a more recent period such as 5 years.

- a. Please provide the 20-year average of Heating Degree Days (HDD) and the 10-year average used by OHL in its forecast. Please also provide the 20-year and 10-year averages of Cooling Degree Days (CDD). (The average of the annual sums would perhaps be preferable to month-by-month averages.)
- b. Please show how these averages are used to derive the difference of 1,297,166 kWh, which is mentioned at line 2 of the referenced page.

Response

- a. OHL has included a table below comparing the average of the 10 year HDD and CDD values with the 20 year HDD and CDD values.
- b. OHL completed a regression analysis based on 11 years of HDD and CDD historical values which was included in our application. To do this, OHL pulled the information from the Environment Canada website to compile a list of HDD and CDD data for an 11 year time period by month, and added this data to the file used to complete the regression analysis. OHL also compiled a list of 20 year HDD and CDD data, on a monthly basis.

For the 11 years of historical data, the average HDD and CDD was determined on a monthly basis. The average monthly values for HDD and CDD were used as the weather normal values for HDD and CDD in the 2010 load forecast outlined in the application. The resulting 2010 forecast that reflects these weather normal values is 263,316,067 kWh. We then determined the trend of HDD and CDD, by month, over a 20 year time period. For 2010, we then replaced the 11-year monthly average HDD and CDD values in with the 20 year trended monthly data and determined a new forecast amount of 262,018,901 kWh. The difference between these two values is 1,297,166 kWh.

Average of 10 year HDD	Average of 20 year HDD	Average of 10 year CDD	Average of 20 year CDD	
4259	4113	180	180	

14. Dependent Variable

Ref: Exhibit 3 / 2 / 1 / p. 7; and p. 21 'Summary of Forecast Data'

Does the dependent variable 'OHL Monthly Predicted kWh Purchases' in the regression model include purchases by Grand Valley Energy Inc throughout the period? If not, please describe how the amounts in the referenced table are reconciled with the forecast model.

Response

Yes, Grand Valley purchases are included in all amounts in the Summary of Forecast Data table throughout the period.

15. Population in the Regression Model

Ref: Exhibit 3 / 2 / 1 / p. 7

The coefficient of "Population" in the forecast model is 550. Please confirm the interpretation of this coefficient, that the model predicts that OHL will purchase 550 kWh per month, plus a factor for losses, for an increase of 1 person in the population, assuming all other factors are held constant.

Response

Yes, this is the correct interpretation of the coefficient assigned to the "Population" variable.

16. Population Data

Ref: Exhibit 3 / 2 / 1 / Appendix A

Orangeville's population is shown as growing by 9 or 10 people per month during 2006, slowing to 4-6 per month in 2008, and then assumed to increase by only 2-3 per month in 2010. The source of population data is described at p. 7 as Census data.

- a. Please describe how frequently the census population data is actually updated for Orangeville, together with how the 2010 population forecast was derived to use in the 2010 forecast of kWh purchases.
- b. Please describe the steps that OHL took to ensure that its population forecast was realistic. For example, is the 2010 population forecast used by OHL generally consistent with forecasts from other sources, such as regional forecasts from provincial or private forecasting agencies? Is the forecast generally consistent with the assumptions used by other entities in Orangeville, such as a local planning authority?

<u>Response</u>

- The population numbers that OHL used were provided by the Town of Orangeville and Town of Grand Valley, and these numbers were based on Census data from 1996, 2001 and 2006. The population data was a yearly value, based on a combined total of Orangeville and Grand Valley residents. The monthly totals were a moving average of the prior year and future year.
- b. Please see the table below to compare data provided by the Town of Orangeville as stated above using part census data, and a more recent report completed in August 2009 by an outside consultant. It was noted in the report by Hemson that "The present growth forecast differs significantly from previous forecasts prepared for development charges purposes, reflecting the introduction in 2006 of the Provincial *Places to Grow* legislation."

Year	Provided by Town of Orangeville	Provided by Hemson report
2008	27300	27082
2009	27330	27535
2010	27360	27988

Orangeville Population Data

Based on census data

17. Forecast of Number of Customers

Ref: Exhibit 3 / 2 / 1 / p. 4, Table 2

OHL's 2010 load forecast is based on the assumption that the number of General Service customers will increase slightly from 2008 to 2009 and then remain constant.

a. Is this assumption consistent with other forecasts, such as a local planning agency?b. Please provide a brief description of alternative forecast(s) if applicable.

Response

a. OHL attends a regular meeting with the Public Utilities Co-ordination Committee, along with employees from the Planning department from the Town of Orangeville, as well as employees of other departments from the Town of Orangeville. This committee meets to discuss new developments within the Town, both residential and commercial. There are no commercial forecasted developments planned for 2010 which is why the load forecast for General Service customers did not change between 2009 and 2010.

18. Forecast Usage by Residential Customers

Ref: Exhibit 3 / 2 / 1 / p. 5, Table 3, and p. 11

OHL is forecasting a decrease of 2.5% in usage per residential customer in both 2009 and 2010, which seems quite substantial. The effect of CDM programs is cited at p. 11 as a factor.

- a. Are there other factors besides CDM that support the forecast of decreased usage per customer?
- b. Has OHL done a survey of CDM program participants, or some other study, to support the assumption that participation rates will be high enough and the effect on consumption will be large enough to have such a large downward impact on OHL's load? If so, please describe the survey or study.
- c. Is the decrease of 2.5% assumed to be cumulative, ie slightly more than 5% after two years, or is the assumption that the decrease occurs only once (at the beginning of 2009)?

<u>Response</u>

- a. The forecast reduction for the residential class was based only on CDM. There was an error in the reduction amount that was used originally for CDM, we have now corrected this amount.
- b. OHL itself has not conducted a study of CDM participants and programs, but we used the data provided by a report prepared by the Ontario Power Authority that was sent to all LDC's in 2009.
- c. OHL used the values from the OPA report to forecast the reduction in consumption for residential customers. We used the amounts for the years of 2009 and 2010 in their respective forecast amounts. Please see below for a sample of the report. These amounts are not cumulative. We will include these updates at the time that final rates are determined.

Orangeville Hydro Limited					
Initiative Name	Program	Program		Gross	
	Name	Year	Annual	Energy S	avings
				(MWh)	
			2008	2009	2010

2008 Cool Savings Rebate	Consumer	2008	61	61	61
2008 Every Kilowatt Counts Power Savings Event	Consumer	2008	122	121	121
			343	342	342

19. Blackout Flag Variable

Ref: Exhibit 3 / 2 / 1 / p. 8

Was the "blackout flag" variable applied to a single month, or to more than one month? If the latter, please describe how it was used.

Response

Yes, the "blackout flag" variable was applied to a single month that being August 2003.

20. Manual Adjustment to the Load Forecast

Refs: Exhibit 3 / 2 / 1 / p. 10 'Manual Adjustment to Forecast'; Exhibit 3 / 2 / 1 / p. 21 'Summary of Forecast Data'

- a. The manual adjustment in the final column, second row, appears to be not the same adjustment as is explained at p. 10, Table 6. Which one is correct?
- b. If the amount in Table 6 is correct, please make the required adjustment to the affected class(es) in the referenced table.

Response

a. The table on p.21 was incorrect; it did not include the CDM forecast adjustments. The values in both tables should match and have been corrected. We have also made adjustments to the total CDM forecast, therefore we will include these updates at the time that final rates are determined. Please see the corrected table below.

Orangeville Hydro Weather Normal Load Forecast for 2010 Rate Application

	2006 Board Approved	2006 Actual	2007 Actual	2008 Actual	2009 Weather Normal	2010 Weather Normal							
Actual kWh Purchases		259,662,833	265,059,732	257,950,545									
Predicted kWh Purchases		258,167,939	262,611,965	260,954,481	262,826,600	263,316,067							
Manual Adjustments					-1,458,921	-4,960,083							
					261,367,679	258,355,983							
% Difference		-0.6%	-0.9%	1.2%									
Billed kWh		250,897,683	256,622,372	249,716,485	252,674,931	249,649,139							
By Class													
Residential													
Customers	9,392	9,483	9,547	9,619	9,813	10,045							
kWh	83,847,548	85,059,823	85,922,369	85,459,087	85,694,053	85,544,830							
	General Service < 50 kW												
Customers	986	994	1,030	1,061	1,081	1,081							
kWh	30,141,516	35,198,596	37,055,213	37,433,972	38,775,970	38,955,819							
General Service > 50													
Customers	146	130	131	132	133	133							
kWh	123,592,470	128,541,421	131,518,571	124,560,248	125,941,852	122,842,932							
kW	299,583	304,914	313,687	297,642	300,570	293,184							
		Street	ights										
Connections	2,639	2,506	2,519	2,643	2,683	2,724							
kWh	1,687,678	1,594,469	1,615,441	1,734,012	1,766,075	1,798,732							
kW	4,838	4,452	4,445	4,842	5,009	5,102							
	1	Sentine	Lights	1	T								
Connections	172	175	179	177	168	170							
kWh	140,307	130,122	133,476	136,892	129,305	129,899							
kW	382	370	373	379	358	360							
	1	Unmetere	ed Loads	1	T								
Customers	0	35	35	35	0	0							
Connections	0	0	0	0	151	151							
kWh	0	373,252	377,302	392,274	367,676	376,928							
		Tot	al		T								
Customer/Connections	13,335	13,322	13,439	13,665	14,028	14,303							
kWh	239,409,519	250,897,683	256,622,372	249,716,485	252,674,931	249,649,139							
kW from applicable classes	304,802	309,736	318,505	302,862	305,937	298,645							

21. Summary of Forecast Data

Ref: Exhibit 3 / 2 / 1 / p. 21 'Summary of Forecast Data'

The '% Difference' in the 2010 column appears to be approximately 3.7%.

- a. How is the row '% Difference' calculated?
- b. Should the % Difference be the same as the loss adjustment derived at p. 12, Table 7, i.e. 3.43%? Please provide a brief explanation.

Response

- a. The % Difference in this table is the difference between the Actual kWh Purchases and the Predicted kWh Purchases and is only applicable to the actual years 2006, 2007 and 2008. The % Difference calculation is not applicable for 2010.
- b. This 3.43% is the total Loss Adjustment %, which is the difference between the Actual kWh Purchases, and the Billed kWh. These values should not be the same as the % Difference from the Summary of Forecast Data table.

Operating Costs

22. Inflation Rate

Ref: Exhibit 4 / 2 / 3 / pp. 6 and 9

Please describe the source document(s) that Orangeville Hydro used for its inflation rate forecasts of 2.6% for 2009 and 2.3% for 2010.

Response

OHL used an increase of 3% based on the union employee negotiated contracts plus anticipated overtime required to implement various projects. All other expenses are looked at individually within each USofA account if known increase might arise by contractor or service. If a contract or service may increase we used the 2009 2nd GIRM rate of 2.3% as approved in OEB decisions for the 2009 cost of service rate applications. In some cases the costs remain the same from year to year.

23. MicroFIT Preparations

Ref: Exhibit 4 / 2 / 3 / p. 8

It appears that the cost of contractors is expected to be maintained for a number at a level of \$140,000 per year more than during previous years, beginning in the test year.

- a. How has Orangeville Hydro arrived at its forecast of \$60k for the MicroFIT settlement expenses, eg. have competitive bids been sought and obtained?
- b. Please confirm that item ii) the cost of settling MicroFIT accounts is expected to be an expense of \$60k in 2010 followed by continuing expenditures of \$10k for a number of years.
- c. Are any of these expenses associated with the MicroFIT program expected to be recovered from the interim rate for embedded micro generators approved by the Board on September 21, 2009? Please explain.

Response

- a. When describing the increase in contractors of \$140,000, OHL mistakenly implied that the cost of \$60,000 was for the MicroFIT application. The cost of contractors will increase an additional \$70,000 with the new CIS system. The MicroFIT operating expense for settlement is expected to be \$10,000. Harris is our sole supplier for the CIS system, in this instance no competitive bids will be received.
- b. No, the settling of the MicroFIT accounts is expected to be an expense of \$10k every year. The GEA budget notes these amounts as capital expenditures, however they should be expenses. A new chart is provided in Appendix A. OHL was incorrect in stating in Exhibit 4/ 2 / 3 / p.8 that the contractor cost of \$60k was due to the MicroFIT program, only \$10k was the cost driver. The remaining 70k is because the new CIS system will be hosted and maintained by an outside source dealing with all upgrades backup, networking making the costs in the long run less expensive.
- c. No, there are no expenses associated with MicroFIT that will be recovered from the interim rate for embedded generators. Under EB-2009-0326 Procedural Order 1, utilities are instructed to recover all costs related to MicroFit embedded generation through interim rates. Prior to this announcement, OHL was instructed to include the GEA plans in the 2010 rate filing. Since the rate filing was submitted in advance of the September 21 interim rate announcement, these MicroFit related costs are included in revenue requirement.

24. MicroFIT costs in Green Energy Plan

Refs: Exhibit 4 / 2 / 3 / p. 8; Addendum:Green Energy Plan / 'Budget and Resources', p. 38

Please provide a more complete explanation of the scope of work by contractors during the test year, to understand the extent to which an enhanced customer information system is required to accommodate MicroFIT projects, and the extent to which enhancements may be required for other purposes even in the absence of the Green Energy Plan.

Response

As mentioned in #23, OHL erred in stating that the contractor increased in costs of \$60k related to the MicroFIT. OHL requires \$60,000 as discussed above, for the new module that is in the 2010 capital budget in account 1925, and not an expense as indicated in Exhibit 4 / 2 / 3 / p.8. Please see updated table noted as Appendix A.

25. Executive Salaries and Expenses

Ref: Exhibit 4 / 2 / 3 / p. 12

Please provide a breakdown to show how account 5605 'Executive Salaries and Expenses' increases from the 2008 actual amount of \$250,260 to a test year forecast of \$386,005, i.e. how much is inflation, how much is the items described on pp. 18 and 21, and how much of the increase consists of other costs if any.

Response

Please find below the table that breaks down to show the increase in cost for account 5605.

Description	Amount
2009 Increase - Board Member	\$27,000
2009 Increase - Staff Shift	\$70,200
2009 Decrease - Managerial Services	(\$5,000)
2009 Increase - Inflation 6%	\$14,800
2010 Increase - Training Courses	\$5,000
2010 Increase - Inflation 7%	\$23,000
	\$135,000

26. Training and Development

Ref: Exhibit 4 / 2 / 3 / p. 21

Is the cost of seminars and training in account 5605 an expense only in the test year, or an expense primarily in the test year but continuing in subsequent years, or is it a sustained annual amount?

Response

This will be a sustained annual amount due to the increase of one staff and 2 board members added to this account.

27. CDM and Marketing Costs

Ref: Exhibit 4 / 2 / 3 / p. 21-22; Addendum: Green Energy Plan / pp. 24-27

- a. Please describe the 2010 cost drivers in more detail, in order to show the extent to which Goal 3 "Evolution of CDM" and Goal 4 "Marketing Campaign" are accommodated in Orangeville Hydro's revenue requirement.
- b. Please confirm that the test year revenue requirement does not include any cost for an alternative-fueled green vehicle, as described at p. 27.

Response

- a. With reference to Goal 3 "Evolution of CDM" the In Home controls are the only portion included in Orangeville Hydro's revenue requirement. Other costs will be applied for at the OPA. With reference to Goal 4 "Marketing Campaign" the funds amounting to \$16,000 for this activity is part of Orangeville Hydro's revenue requirement. OHL has removed the \$16,000 from the Green Energy Plan budget and have attached an updated table in Appendix A.
- b. The test year revenue requirement does not include any cost for an alternative fueled green vehicle. As described at page 27 of the Addendum "Green Energy Plan".

28. LEAP

Ref: Exhibit 4 / 2 / 3 / p. 23

Orangeville Hydro states that its account 5410 'Community Relations' includes a component for LEAP (Low-Income Energy Assistance Program), which can be calculated at approximately \$6400 as a pre-determined percentage of the revenue requirement.

Is any portion of this cost intended for an existing on-going program, or is the amount intended only for a new initiative that would begin in 2009 or 2010?

Response

As OHL does not have an existing LEAP program, it is intended that a new initiative would begin in 2010.

29. OEB-initiated Costs

Exhibit 4 / 2 / 3 / p. 24, Table 7

Please provide a description of the costs in the third row of the table, which are incurred due to OEB section 30 costs.

Response

The costs of \$50,000 for OEB section 30 are the cost awards to the interveners for this proceeding. These costs should have been classified under OEB section 11.

30. Affiliate Services

Ref: Exhibit 4 / 2 / 4 / p. 1

The references to tables at lines 4 and 9 appear to be inaccurate or incomplete. Please verify

that the references are accurate or make any necessary updates.

Response

The references to tables at lines 4 (Table 3) and 9 (Table 1) should have both been referencing to Table 8.

31. Billing System Costs

Ref: Exhibit 4 / 2 / 5 / p. 3

Orangeville Hydro has projected payments to Harris Computer Systems of \$130,826 in 2009 and \$133,835 in the test year.

- a. Please list the account(s) where these expenditures are recorded.
- b. Please confirm whether or not purchases of this nature are likely to be continued at this level in subsequent years.

<u>Response</u>

- a. The projected payments to Harris Computer Systems noted on the Purchases of Services is the total payable amount that includes the portion that would be expensed to water and sewer billing services for the Town of Orangeville and Township of Grand Valley East Luther. Please note that the distribution expenses are \$98k and represents an increase over \$70 our legacy system. This is because the new CIS system will be hosted and maintained by an outside source dealing with all upgrades backup, networking making the costs in the long run less expensive. The accounts that the costs are recorded are 5065, Meter Maintenance, 5310, Meter Reading, 5315, Billing and 5320, Collections.
- b. Yes, we expect the expenses to continue at this level in subsequent years, unless there are significant industry-related software programming changes.

Cost of Debt

32. Cost of Long-Term Debt

Ref: Exhibit 5 / 1 / 3 / p. 1 'Table 2 – Cost of Long-Term Debt'

In order to understand the proposed weighted cost of debt in this table:

- a. Please confirm that the loan from Scotiabank with a 10-year term has been paid off and does not affect the weighted cost of debt in this application.
- b. Please explain how the weighted cost of debt can be more than 6% when all components of the average are below 6%. Alternatively, please provide a recalculation of the weighted cost.

<u>Response</u>

- a) The loan from Scotiabank with a 10-year term has been paid off and does not affect the weighted cost of capital.
- b) There was an error in the formula to calculate the weighted cost of debt, the formula was not adjusted correctly to reflect a change in borrowing requirements that was made during the process. OHL made this correction to 5.63% and it is shown in the table below.

				Weigh	ted Debt C	ost				
Description	Debt Holder	Affliated with LDC?	Date of	Issuance	Principal	Term (Years)	Rat	te%	Year Applied to	Interest Cost
Chartered Bank	Scotia Bank	N	July 10), 2002	7,900,000	10	5.7	'7%	2006	455,830
Chartered Bank	TD Bank	N							2006	0
Chartered Bank	Scotia Bank	N	July 10), 2002	7,900,000	10	5.7	7%	2007	263,507
Chartered Bank	TD Bank	N	July 30), 2007	6,429,398	25	5.5	9%	2007	151,639
Chartered Bank	TD Bank	N	July 30), 2007	6,243,540	25	5.5	9%	2008	354,715
Chartered Bank	TD Bank	N							2008	0
Chartered Bank	TD Bank	N	July 30), 2007	6,063,061	25	5.5	9%	2009	343,023
Chartered Bank	TD Bank	N				25	5.6	6%	2009	0
Chartered Bank	TD Bank	N	July 30), 2007	5,838,903	25	5.5	9%	2010	331,688
Chartered Bank	nfraOntario	N	January	1, 2010	2,000,000	25	5.5	7%	2010	109,807
Total I	ong Term D.	ebt Outstan	ding at end	of 2006	7,900,000	Total Interest Cost for 2006			06	455,830
						Weighted Debt Cost Rate for 2006 5.77%				
Total	Long Term D	Debt Outstar	nding at end	l of 2007	7,279,527	Тс	otal Interest	Cost for 20	07	415,146
										(
						weig	nted Debt C	ost Rate for	2007	5.70%
T -4-11	T D			-{ 2000	6 242 540	-		Cart (au 20	00	254 745
Iotal I	ong Term D	ebt Outstan	ding at end	of 2008	6,243,540	10	otal Interest	Cost for 20	08	354,715
						Woig	htad Daht (ost Pata for	2008	5 68%
						weig		USL NALE IUI	2008	3.08%
Total I	ong Term D	eht Outstan	ding at end	of 2009	6.063.061	Т	otal Interest	Cost for 20	09	343 023
Total			ung at enu	01 2009	0,003,001			COSt IOI 20	09	343,023
						Weig	hted Debt (ost Pate for	2009	5 66%
						weig	meu best t		2005	5.00%
Total I	ong Term D	ebt Outstan	ding at end	of 2010	7 838 903	Т	ntal Interest	Cost for 20	10	441 495
iotait	ong renn D		ung at ellu	0.2010	,030,505		stal interest	2031 101 20	10	++1,455
						Weig	hted Debt (ost Rate for	2010	5.63%
						weig	inten Debt (ost nate 10	2010	5.05%

33. Interest Expense in the Revenue Requirement

Ref: Exhibit 5 / 1 / 3 / p. 1 'Table 2 – Cost of Long-Term Debt'; Exhibit 6 / 1 / 1 / p. 2 'Calculation of Revenue Deficiency or Surplus'

Considering that the cost of short term debt is not very large, please reconcile the interest cost in Exhibit 5, at \$441,495, with the Deemed Interest cost in Exhibit 6, at \$652,936.

Response

Due to the error made in Exhibit 5, the change made in question 32 reduced the deemed interest cost to \$570,825. The interest of \$570,825 is the result of the Board deemed capitalization policy and the amount of \$441,495 is the expected actual interest to be paid to the bank.

Other Operating Revenues

34. Gains from Disposition of Property

Ref: Exhibit 3 / 4 / 1 / p. 1

Orangeville Hydro is proposing an amount of \$800 as the component for "Gains on Disposition of Utility and Other Property', which appears to be 50% of the account 4355 in 2010. The amount in this account during the bridge year, and in two of the previous three years, is considerably more than this amount.

Please explain why \$1600 is the appropriate amount to forecast for account 4355, rather than some larger amount such as the average over several previous years.

Response

OHL will be disposing of a small truck and van in 2010 and we have budgeted to purchase of a new pick- up truck and van. In the estimated amount of \$1600 we also considered some of the disposals in account 4360 as we have averaged \$1,700 in this account from 2006. We estimated approximately \$3,300 on the sale of the two vehicles. In a most recent transaction for a pick up we received \$2,500 trade-in value and estimated this transaction at \$2,000. The van we will probably trade in for somewhere around \$1,500 but we estimated on the low side due to the shape of the vehicle.

35. Typical Non-Operating Income

Ref: Exhibit 3 / 4 / 1 / p. 4, Table 3

- a. Please confirm that OHL retains the revenue in account 4375-2 'Water/Sewer Penalties', such that \$20,300 can be included in OHL's revenue offset.
- b. Please provide a brief description of the activities and transactions recorded in accounts 4355, 4360, and 4390, in 2008 Actual, 2009 Bridge, and 2010 Test., including comments on a stable amount for the longer term if applicable.

Response

- a. OHL does not consider the 4375-2 Water/Sewer penalties in our revenue offset because they are revenues associated with the water and sewer billing services for the Town of Orangeville and the Township of Grand Valley East Luther.
- b. In account 4355 we record the gains and costs (if any) on the disposal of OHL's general plant assets. In account 4360, we record any of the losses on disposal of OHL's general plant assets. In account 4390, we record the revenues and costs for the sale of scrap.

Cost Allocation

36. Output Worksheets

Ref: Exhibit 7 / 1 / 2 / Appendix B '2010 Updated Cost Allocation Study

Please provide a copy of the following pages without any of the data being obscured by the Instructions that the Adobe program has apparently misaligned on top of the Excel spreadsheet (perhaps by deleting the Instructions prior to re-printing):

- Sheet O1 'Revenue to Cost Summary Worksheet'
- Sheet O2 ' Monthly Fixed Charge Min. & Max Worksheet'

Response

We have provided a new copy of the data in Appendix B – Sheet O1 and Sheet O2.

37. Energy and Demand Forecast Data Inputs

Ref: Exhibit 7 / 1 / 2 / Appendix B '2010 Updated Cost Allocation Study'; Cost Allocation

Informational Filing EB-2006-0247

The Residential load factor assumed in the test year cost allocation differs from the amount provided by Hydro One for the Informational Filing.

- a. Please provide Sheet I6 'Customer Data' and I8 'Demand Data' from the Informational Filing.
- b. Please confirm that the data and calculations in the following table are correct, and that all the data are for weather-normalized loads. If necessary make appropriate corrections:

c. Please provide a brief explanation of any updated or additional information has been used in the updated cost allocation study, relating to the Residential class load profile, such that the energy would have grown by a larger percentage than the monthly peaks (as evidenced by the increased load factor in the final row of the table).

d. Please describe any other load profiles that have been changed appreciably between the Informational Filing and the 2010 Updated study, with a brief justification for the changes.

Residential Class	Informational Filing	2010 Updated Cost Allocation Study	Percentage Increase		
	col. 1	col. 2	(col 2 / col 1) – 1.0		
Annual Energy (kWh)	77,951,983	84,928,233	8.9%		
Load on Secondary System (kW: SNCP4)	68,361	72,316	5.8%		

<u>Response</u>

- a. Sheet I6, Customer Data and I8, Demand Data from the Informational Filing are provided in Appendix B.
- b. The data and calculations in the above table are correct and all data are for weather-normalized loads.
- c. The Residential load of 68,361 kW from the original information filing was at a wholesale level but the Residential of load of 72,316 in the 2010 updated cost allocation study is at the retail level. If the Residential load of 68,361 was reduced for losses the percentage increase to 72,316 would be similar to the increase in kWhs. However, it would not be exactly the same percentage increase since the kWhs in the original information filing of 77,951,983 is weather actual but the kWhs in the 2010 updated cost allocation study of 84,928,233 is weather normal.
- d. Other than scaling the load profiles from a 2004 wholesale level to a 2010 retail level, no other adjustments were made to the load profiles.

Rate Design

38. Total Distribution Revenue

Ref: Exhibit 8 / 1 / 7 / p. 1

The table '2010 Test Year Distribution Revenue Reconciliation shows total revenue of \$5,206,475. This amount does not appear in the Calculation of Revenue Deficiency (Exhibit 6 / 1 / 1 / p. 2) nor in the cost allocation study (Exhibit 7 / 1 / 2 / Appendix B).

Please confirm that this amount equals revenue from Monthly Service Charges, volumetric Rates, and LV Charges, and excludes revenue from the Smart Meter Rate Adder and the Rate Riders. If not confirmed, please explain what is included in the reconciliation amount.

Response

The table '2010 Test Year Distribution Revenue Reconciliation \$5,206,475 and the Calculation of Revenue Deficiency \$5,005,962 is a difference of \$200,513. The amount in the Reconciliation includes the Monthly Service Charges, volumetric rates and LV charges that amount to \$200,513 as noted in the table below. Please refer to question # 9 as we have revised our LV cost of power calculations from \$200,513 to \$314,695.

Rate Classification	Proposed Distribution Revenue	Proposed LV Charges Revenue	Total
Residential	\$3,239,709	\$75,346	\$3,315,055
General Service Less	\$834,494	\$31,215	\$865,709
General Service Greater	\$861,026	\$92,318	\$953,344
Street Lights	\$49,159	\$89	\$49,248
Sentinel Lights	\$6,558	\$1,242	\$7,800
Unmetered Scattered	\$15,018	\$302	\$15,320
Total	\$5,005,962	\$200,513	\$5,206,475

39. General Service > 50 kW Class

Ref: Exhibit 8 / 1 / 1 / p. 7

Orangeville Hydro suggests that the General Service > 50 kW class should be considered for a split into two classes, because the proposed Monthly Service Charge is high for the smaller customers in the current class.

- a. Does Orangeville Hydro have hourly load data from interval billing meters for the larger customers in the class? If so, for customers above what size, and for how many years have the interval meters been in place?
- b. Has Orangeville Hydro done any calculations that would show the load profile of a hypothetical class of larger customers?
- c. Has Orangeville Hydro done any calculations that would show the load profile of the hypothetical class of smaller customers (e.g. the profile of the whole class as provided by Hydro One for the Informational Filing, prorated to the scale in the 2010 load forecast, and less the profile of the larger customers)?

Response

We are not considering that this class be split into two classes and this was a misstatement "to maintain the current fixed and variable proportions of its rates with the exception of General Service 50 to 4999 kW." OHL wishes to maintain the current fixed and variable proportions of all the rate classes. OHL may contemplate introducing a new customer class in the future once Smart Meters implemented and the Rate Design review are both completed. Therefore Question 39 a. b. and c. are not applicable.

40. Fixed:Variable Ratio of GS>50 kW Class

Ref: Exhibit 8 / 1 / 1 / p. 7; Exhibit 8 / 1 / 9 / Appendix A / p. 5

Orangeville Hydro suggests that it would be appropriate, in the case of the GS>50 kW class, to reduce the proportion of revenue derived from the Monthly Service Charge from 56.55% to 51.16%. However, the bill impact calculations show that the proposal is to increase the Monthly Service Charge by 44% and the volumetric rate by less than 18%. The same pattern holds for any customers in Grand Valley.

Please explain the apparent contradiction between reducing the proportion of revenue from the fixed charge, on the one hand, and increasing the fixed charge more than the volumetric charge on the other hand. Alternatively, please check the rate design calculations and make any necessary corrections.

Response

Again, this was a misstatement; OHL would like to maintain the fixed variable proportions for the General Service (50kW to 4999kW).

41. Unmetered Scattered Load

Ref: Exhibit 8 / 1 / 9 / Appendix A / p. 7

Orangeville Hydro has calculated the bill impact of billing an Unmetered Scattered Load customer on a per-connection basis rather than per-customer as it does currently. The fixed portion of the bill on a customer with 57 connections is shown, and the effect is such that the impact on the total bill is 9.9%.

Does Orangeville Hydro have any customers with more than 57 unmetered connections that would be subject to the proposed monthly charge of \$6.40 per connection? If so, please indicate how many connections the largest customer has, and provide a bill impact scenario for a customer with that number of connections and a typical volume of consumption.

Response

Orangeville Hydro Limited has two customers that both have 57 connections for unmetered Scattered Load. We do not have any customers with a larger number of connections for this class. We have provided the Bill Impacts for 57 connections to encompass both similar customers.

42. Specific Service Charges

Refs: Exhibit 1 / 1 / 5 / p. 2); Exhibit 3 / 3 / 1 / p. 1, Table 1 'Summary of Other Operating Revenue'

Orangeville Hydro has requested approval, in Exhibit 1, to continue with its Specific Service Charges as approved for 2009 and its forecast of revenue from Specific Service Charges is nearly unchanged in Exhibit 3. On the other hand, the proposed list of Specific Service Charges includes a number of new charges: request for other billing information, income tax letter, legal letter charge, collection of account charge – no disconnection – after regular hours, and two charges relating to load control devices. Similarly, a number of currently approved charges do not appear on the proposed tariff: pulling post-dated cheques, notification charge, credit reference, charge to certify cheque, and two charges relating to temporary services.

- a. Please identify any of the items in the foregoing lists of additions and deletions that may be simply name changes.
- b. For each other addition or deletion, please provide the rationale for the proposed list of Specific Service Charges.
- c. Please explain why the total revenue forecast is so little changed, and provide a discussion of whether any uncertainty about the revenue offset is mostly toward positive or negative.

Response

OHL provided incorrect charges noted on the Tariff Sheet submitted in our 2010 rate application. The section on the 2010 Tariff Sheet for specific charges has been corrected to show the applicable service charges are shown below and were used to calculate the revenue offsets. Orangeville Hydro is maintaining and not requesting any new charges from the previous 2009 rate application.

Specific Service Charges

Customer Administration		
Arrears certificate	\$	15.00
Pulling Post Dated Cheques	\$	15.00
Notification Charge	\$	15.00
Account History	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned cheque charge (plus bank charges)	\$	15.00
Charge to certify cheque	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Meter dispute charges plus Measurement Canada fees (if meter found correct)	\$	30.00
Special meter reads	\$	30.00
Non-Payment of Account		
Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Collection of account charge - no disconnection	\$	30.00
Disconnect/Reconnect at meter - during regular hours	\$	65.00
Disconnect/Reconnect at meter - after regular hours	\$	185.00
Disconnect/Reconnect at pole - during regular hours	\$	185.00
Disconnect/Reconnect at pole - after regular hours	\$	415.00
Temporary service install & remove - overhead - no transformer	\$	500.00
Temporary service install & remove - underground - no transformer	\$	300.00
Temporary service install & remove - overhead - with transformer	\$	1000.00
Specific Charge for Access to the Power Poles \$/pole/year	\$	22.35

43. Supply Facility Loss Factor

Ref: Exhibit 8 / 1 / 8 / p. 2, Table 15 'Supply Facility Loss Factor'

Please provide a breakdown of the amount of energy delivered to Orangeville Hydro together with Grand Valley Energy from Hydro One Transmission through the IESO, versus the energy delivered through the host distributor Hydro One Distribution.

Response

All energy is delivered to Orangeville and Grand Valley through the IESO therefore we are completely embedded. Orangeville has three metering points and Grand Valley has one. Grand Valley and one of Orangeville's metering points are billed with losses at 1.034. The other two metering points that are located inside the Hydro Transformer Station are billed with losses at 1.006 until such time that we relocate the meters due to Hydro One policy. One of the metering points, the M5 has been budgeted for in 2010 to remove from inside the TS and will attract losses at 1.034 in the future. We have averaged the supplies facility loss factor over 2004 to 2008 at 1.0134.

Deferral and Variance Accounts

44. Audited Regulatory Assets

Refs: Exhibit 1/3/1/ Appendix F; Exhibit 9 / 1 / 1 / p. 5, Table 1; Exhibit 9 / 1 / 4 / Appendix A

Note 5 to the Orangeville Hydro Financial Statements shows net regulatory liabilities of (\$1,255,409), and Note 4 to the Grand Valley Energy Inc. Financial Statements shows net regulatory liabilities of (\$24,072), at December 31, 2008. The total of these amounts (\$1,279,481) does not match the total including interest shown in either of the other two references (\$1,376,895, and \$1,285,486 respectively).

Please provide an explanation of the sources of the disparity, in enough detail to assure the Board that the amounts sought for disposition are consistent with the Applicant's audited financial statements.

Response

Exhibit 9 / 1 / 4 / Appendix A is the correct balance of \$1,285,486 and does not agree with the Financial Statements for Grand Valley and Orangeville because the Audit Firm includes the Hydro One Regulatory Asset Recovery Amounts for 2004 and 2006 in their total liability. The table below separates the amounts that were included in the financial statements and reconciles to the Regulatory Asset Continuity Schedule.

		2005/2006Hydro One Reg Asset Recovery	Total Regulatory Assets
GV Financial Statements	(24,072)	(7,314)	(16,758)
OHL Financial Statements	(1,255,409)	13,319	(1,268,728)
			(1,285,486)

Exhibit 9/1/1/p.5, Table 1 had two errors on the 2008 Trial Balance and have been corrected in the Table below. The first error was the RSVA – Power Global Adjustment amount of \$97,771 was missing from the table. The second error was the Smart Meter Capital amounts were incorrect as (\$52,214) principle and (\$3,620) interest. The correct amounts noted in the table below are (\$58,247) and (\$3,948) respectively. These errors did not have any impact on the rate rider calculations. Please see Exhibit 9/1/2/p. 4 Table 2, the totals per column for the Principle Amount as of Dec-31, 2008 (\$1,075,273) plus Interest to Dec 31-2008 (\$148,018) equal (\$1,223,291). This total minus the Smart Meter Capital not requested for disposition of (\$62,195) equals the total in the Continuity Schedule of (\$1,285,486).

			OHL DECEMBER	R 31, 2008 REGUL	ATORY ASSETS	
				Principal		Total
			Account	Amounts as of	Interest to	Principal &
			Number	Dec-31 2008	Dec31-08	Interest
Account Description						
RSVA - Wholesale Market Service Ch	narge		1580	(578,941)	(29,042)	(607,983)
RSVA - One-time Wholesale Market	Service		1582	13,829	2,158	15,988
RSVA - Retail Transmission Network	Charge		1584	(291,326)	(23,201)	(314,526)
RSVA - Retail Transmission Connect	ion Charge		1586	(727,817)	(83,474)	(811,291)
RSVA - Power			1588	176,570	11,294	187,864
RSVA - Power GA			1588	97,771	-	97,771
	S	Sub-Totals		(1,309,914)	(122,264)	(1,432,178)
Other Regulatory Assets			1508	97,531	16,399	113,930
Retail Cost Variance Account - Retai	il		1518	(12,913)	-	(12,913)
Retail Cost Variance Account - STR			1548	(2,401)	-	(2,401)
Smart Meters Revenue and Capital			1555	(58,247)	(3,948)	(62,195)
Smart Meter Expenses			1556			-
Low Voltage			1550	98,861	7,626	106,486
Transition Costs			1570	(10,879)	(1,382)	(12,260)
Regulatory Asset Recovery			1590	64,442	(48,396)	16,045
	S	Sub-Totals		176,394	(29,701)	146,693
Total Regulatory Assets				(1,133,520)	(151,966)	(1,285,485)
Less Amount Not Claiming:			4	(50.247)	(2.0.40)	(62.405)
Smart Weters Revenue and Capital			1555	(58,247)	(3,948)	(62,195)
Peropeiler with Deferred & Verier	o Doto Dider	Coloulatio	nc			(1 222 204)
Reconcilies with Deferral & Variance	e kate kider	calculatio	115			(1,223,291)

45. Account 1550 Low Voltage

References: Exhibit 9 / 1 / 1 / p. 1, line 8

The applicant indicates at line 8 of this reference that it uses the billed method for recording entries in account 1550 'Low Voltage variance account'. All other deferral and variance accounts are accounted for using the accrual basis of accounting.

Please explain why the applicant does not follow a consistent method of accounting for all deferral and variance accounts.

Response

This issue also came up at the time of our audit and after the 2008 audited statements, OHL has been following the accrual method of accounting for the Low Voltage variance account.

46. Account 1588 RSVA Power

References: Exhibit 9 / 1 / 1 / p. 5, Table 1; Exhibit 9 / 1 / 2 / p. 4, Table 2

The balance shown for the principal amount of account 1588 in the first reference is \$176,570,

and is described as consistent with the Audited Financial Statement. The balance shown in the second reference is larger by the amount of the Global Adjustment sub-account, which is 97,771, and this amount is proposed for disposition.

- a. Please explain why the sub-account was not included in the audited amount (if that is the case).
- b. Please confirm whether or not Orangeville Hydro plans to change its calculations or proposed disposition with respect to Account 1588 in response to a bulletin related to Regulatory Accounting & Reporting of Account 1588 RSVAPower and Account 1588 Sub-account RSVAPower -- Global Adjustment, issued by the Board on October 15, 2009.

Response

- a. As mentioned in question 44, Exhibit 9 / 1 / 1// p.5, Table 1 had two errors on the 2008 Trial Balance and has been corrected in the Table below. The first error was the RSVA Power Global Adjustment amount of \$97,771 was missing from the table. This is the reason that Table 1 did not agree with the Regulatory Asset Continuity Statement. Please see the Table in Question 44 that demonstrates the corrections.
- b. No OHL does not plan change our calculations or proposed disposition with respect to Account 1588.

47. Account 1570 Qualifying Transition Costs

Ref: Exhibit 9 / 1 / 2 / p. 3

Account 1570 'Qualifying Transition Costs' was supposed to have been completely cleared in the 2006 EDR (Phase 2 Decision), and new entries have not been allowed in recent years.

Please explain why there is a balance in account 1570, and why it is being included amongst the accounts to be disposed of in this proceeding.

Response

There is a credit balance in account 1570 due to customization programming that was done to prepare for market opening where we received a PST refund. After we had an audit completed, we applied the refund to this account which after 2006 balances were transferred to account 1590.

Green Energy Plan

48. Approvals Sought

Ref: Addendum 'Green Energy Plan'; OEB Guidelines "Deemed Conditions of Licence: Distribution System Planning", G-2009-0087

To better understand the purpose of the Addendum as part of this application:

- a. Is Orangeville Hydro seeking approval of the Green Energy Plan as part of this proceeding? Please provide the specific relief being sought from the Board in this application.
- b. For each element of the plan where specific relief is requested from the Board, please describe how each of the Initiatives are in compliance with the Guidelines for Deemed Conditions of Licence regarding Distribution System Planning (G-2008-0087).
- c. Please confirm that Orangeville Hydro is not seeking approval in this proceeding for any deferral accounts as described in section II of the G-2008-0087 Guidelines.
- d. Please confirm that Orangeville Hydro is not seeking approval in this proceeding for a Funding Adder as described in section III of the guidelines.

Response

- a. OHL is applying for an order or orders seeking approval of the Green Energy Plan provided as an Addendum as part of this proceeding. Orangeville Hydro was instructed by the OEB to put our activities directly into the rate application and to include the Green Energy Plan as part of this proceeding (EB-2009-0272). OHL was instructed to supply our capital costs and expenses for the GEA so that they form part of our revenue requirement and CDM costs that would be approved by OEB for funding from OPA. OHL is requesting approval of the capital budget from 2010 to 2014 and on-going expenses of \$15,000 from 2010 to 2011. OHL has revised Table 4 Budget & Resources by removing the \$16,000 for marketing costs that are included in regular operating expenses and shifted the CIS upgrade capital amount to expenses that was in error on the Table. We have included a revised Table 4 in Appendix A
- b. In reference to the "Deemed Condition of License`: Distribution System Guidelines G-2009-0087 OHL refers the following page numbers and to points in the Guidelines where

in each element of our Green Energy Plan, where specific relief is requested, complies with the guideline.

ELEMENT	CAPITAL	EXPENSE	DESCRIPTION	G-2009-0087 REFERENCE
			Applies to 2010 - 2011	
			Capital - \$35,000 - 2010	
			Expense is \$5,000 per year for 2010 and	
			2011	Complies with page 6 last paragraph
			Details:	"Renewable Enabling Improvements"
			\$15,000 - supervisory equiptment	smart grid technologies & page 7 - 2nd
SCADA	\$ 35,000.00	\$ 10,000.00	\$20,000 computer hardware	bullet "Smart Grid Planning"
	-	· · ·		Complies with page 6 last paragraph
				"Renewable Enabling Improvements"
				smart grid technologies & page 7 - 2nd
REMOTE SENSING	\$ -		Investment will start in 2012	bullet "Smart Grid Planning"
			Applies to year 2011 only	
			Capital - \$63,000	
			Details:	Complies with page 6 last paragraph
			\$30,000 each switch (M5, 27.6 feeders)	"Renewable Enabling Improvement"
MOTORIZED SWITCHES	\$ 63,000.00		add'l 1,500 per switch	smart grid technologies
			Applies to year 2011 only	
			Capital - \$63,000	
			Details:	Page 6 last paragraph "Renewable
			\$30,000 each switch (M5, 27.6 feeders)	Enabling Improvement" smart grid
PME INSTALLS	\$ 63,000.00		add'l 1,500 per switch	technologies
			Capital - \$22,000 - 2010	
			Capital - \$44,000 - 2011	
			Details:	
			100 units @ \$205 each	
			100 units in 2010	Page 7 - 1st bullet - smart grid studies or
IN HOME CONTROLS	\$ 66,000.00		200 units in 2011	demonstration projets - for load control
			Capital - \$50,000 - 2010	
			Capital - \$100,000 - 2011	
			Details:	Page 6 - 1st bullet - "modifications or
			1/3 metering, 1/3 overhead, 1/3	additions to allow for and accommodate
			underground wires @ \$1500 per	2 way electrical flows, as opposed to
MICROFIT ENABLEMENT	\$ 150,000.00		customer	radial flow.
			Applies to 2010 - 2011	
			Capital - \$60,000 - 2010	
			Expense is \$10,000 per year for 2010 and	Page 6 - 2nd last paragraph"and the
			2011	cost of changes to a distributor's
			Details:	Customer Information System to enable
			Upgrade for modules that need to be	the automated settlement contracts
CIS UPGRADES	\$ 60,000.00	\$ 20,000.00	created for the billing system	under the Feed-in-Tariff (FIT) program
			Applies to 2010	
			Capital - \$135,000	Page 6 - 1st bullet - "modifications or
			Details:	additions to allow for and accommodate
			OHL has to pay up to \$90,000 per mW of	2 way electrical flows, as opposed to
LARGE RENEWABLES	\$ 135,000.00		generated power (1.5mW x \$90,000)	radial flow.

c. Orangeville Hydro is seeking approval in this proceeding for deferral accounts as we already incurred expenses in 2009 for costs for consultants to assist in preparation of our plan. Orangeville Hydro is not seeking approval in this proceeding for a Funding Adder as described in section III of the guidelines.

49. Capital Projects

Ref: Exhibit 2 / 3 / 2 / p. 15-16; Green Energy Plan Addendum / Budget and Resources (p. 38) There are four projects listed in Exhibit 2 under the heading of 'Green Energy Act', totalling approximately \$330,000. In the Budget and Resources table, there are six entries under Infrastructure, totalling \$352,000. The disparity of \$22,000 is also the cost of a project called In-Home Controls.

- a. Please confirm that the projects listed as 2010 capital projects in the Green Energy Plan at p. 38 are the same as those listed as additions to the rate base in Exhibit 2.
- b. Please provide a description of In-Home Controls, and explain why it is not proposed for inclusion in the rate base in Exhibit 2.

Response

- a. Please reference the response for Question 6 and Table 4 in Appendix A.
- b. The In-Home controls would manage several loads within the customer's premise not just air conditioning -- that would assist our customers in their conservation efforts. In-home controls are included in the rate base in account 1970 Load management for \$22,000. No details were provided since the amount is under OHL's materiality of \$50,000 or \$25,000 that we have explained in our application

50. Distribution System Enhancements

Ref: Exhibit 2 / 3 / 2 / p. 15-16; Addendum: Green Energy Plan / p. 23

Orangeville Hydro is proposing a project for Large Renewable Connection and a project for MicroFIT Enablement, as described in Exhibit 2.

- a. Please describe how Orangeville Hydro will determine where on its system to prepare for connection of renewable generation and MicroFIT generation.
- b. Please describe how Orangeville will determine what is necessary to "complete all the necessary distribution upgrades required to enable Renewable Generation connection to the grid", as outlined at p. 23 of the Addendum.
- c. If proposed projects serve both normal expansion/reinforcement and GEA initiatives, please allocate the benefits from the project to normal system requirements and Green Energy Act initiatives (i.e. renewable generation connections and enabling smart grid).

Response

a. Orangeville Hydro will determine where on its system to prepare for connection of renewable generation and MicroFit by the following.

MicroFIT –The Orangeville Hydro distribution system can handle the expected additional load due to MicroFit. It will be important to keep the system balanced. The remote sensors as discussed previously will play an important role in determining which phase of a feeder to connect the MicroFIT installation to which is a part of asset management.

FIT – Due to preliminary enquiries by proponents, Orangeville Hydro is aware of at least 3 & up to 14 potential FIT installations. Because the proponents discussed their plans, we are also aware of the geographic areas within our service territory where these will likely take place. The areas involve our industrial area and our "big box store area". More information will be collected and modifications to proposed plans will be addressed, once approved FIT projects are identified by the OPA.

 b. As the above projects proceed, we will have an outside agency – likely Rodan Energy & Metering Services analyze the potential impact on the proposed feeder connection. This would be performed on a project by project basis. The optimization study will provide us with an initial analysis of feeder capacity availability. Our operations department will work with the proponent to determine the best way to connect such as overhead or underground.

c. The work described in b. above is for GEA initiatives and not for normal expansion and reinforcement.

51. Coordination of Plans

Ref: Addendum: Green Energy Plan / p. 21

Please describe any specific plans that Orangeville Hydro participates in that are designed to achieve "coordination amongst distributors and transmitters" with regard to infrastructure to support renewable generation, as described at p. 21.

Response

OHL is referring to the fact that we have a good working relationship with our Hydro One Account Executive to ensure any activities do not adversely affect each others' system. Any work that is performed will take Hydro One into consideration. This will be achieved informally through continued communication and on-going review of proposed plans.

52. Smart Grid

Refs: Addendum: Green Energy Plan / p. 19

Please provide a more complete explanation of how Remote Sensing, Motorized Switches, and PME Upgrades contribute to the objective of the Smart Grid

Response

The Smart Grid enables a two way flow of data and information in the electricity system. The Smart Grid uses "sensors, monitoring, communications, automation and computers to improve flexibility, security, reliability, efficiency, and safety of electrical system" (Ontario Smart Grid Forum, February 2009). The benefits of the Smart Grid are as follows:

- Enhanced reliability of distribution system;
- Reduced outages;
- Quicker response times;
- Better integration of renewables and Distributed Generation (DG);
- Grid optimization;
- Electric vehicle support;
- More efficient use of energy infrastructure; and
- Allows consumers to make consumption choices (I.e. Demand Response).

Smart Meters automatically record when electricity is used and make Time-of-use (TOU) rates possible. TOU pricing through Smart Meters, provides Demand Response, price information, and load control to electricity consumers.

Orangeville Hydro is taking a prudent step-by-step approach to implementing a Smart Grid. In contributing to the objective of having a Smart Grid:

<u>Remote Sensors</u> will gather data from the system at strategic points. This data will include voltage and current, and system problems such as spikes, or alert us to outages. Utilizing this data will help us analyze and correct any problems on our distribution system. In the event of an outage, the sensors will alert us to the location of the outage. As more sensors are added, the outage location would be more defined. We could then use the <u>Motorized Switches</u> to isolate the system problem and re-energize other areas so that not all customers are without power for the duration of repairing the trouble. This also allows distributed generators to continue to feed into the grid in the section that is reenergized. In years to come as the Smart Grid is further developed, and there is much more distributed generation available, in the event of an outage, the remote sensors and motorized switches will work together to isolate certain areas to ensure that power is being sent to more critical loads such as hospitals, wells, & sewage plants.

<u>PME Upgrades</u> – These work similar to motorized (overhead) switches except they are for underground systems. So these would be located on our main underground feeders allowing OHL to isolate and reroute power to areas that are not being repaired or return power incrementally as the affected areas become re-energized.

53. Allocation of Green Energy Plan Initiatives

Ref: Green Energy Plan / p. 38 "Budget & Resources'

Please provide a re-organized version of the table in which expenditures would be classified with respect to whether the resources would come from a) Orangeville Hydro distribution rates, b) an affiliate of Orangeville Hydro, or c) ratepayers or taxpayers other than those in Orangeville's service area.

Response

Please see revised Table 4 in Appendix A.

APPENDIX A- GREEN ENERGY PLAN BUDGET

	REVISED TABLE 4												
Strategic Goal	Activity		Year On	ne - 2010	Year Tw	Year Two – 2011		Year Three - 2012		r – 2013	Year Five - 2014		Total Summary
			Capital	Expense	Capital	Expense	Capital	Expense	Capital	Expense	Capital	Expense	
INFRASTRUCTURE UPGRADES - Orangeville Hydro Distribution Rates													
	SCADA	RC							\$ 10,000.00	\$ 5,000.00	\$ 10,000.00	\$ 5,000.00	
		SG	\$ 35,000.00	\$ 5,000.00		\$ 5,000.00		\$ 5,000.00	\$ 10,000.00	\$ 5,000.00	\$ 10,000.00	\$ 5,000.00	
	Remote Sensing	RC									L		
		SG					\$ 30,000.00		\$ 10,000.00		\$ 10,000.00		
1	Motorized Switches	RC									l		
		SG			\$ 63,000.00		\$ 63,000.00		\$ 63,000.00		\$ 63,000.00		
	PME Installs	RC											
		SG			\$ 63,000.00		\$ 63,000.00		\$ 126,000.00		\$126,000.00		
	In Home Controls	RC	\$ 22,000.00		\$ 44,000.00		\$ 44,000.00		\$ 22,000.00		\$ 22,000.00		
		SG				1		1			1		
	MicroFIT Enablement	RC	\$ 50,000.00		\$100,000.00		\$ 100,000.00		\$ 50,000.00		\$ 50,000.00		
2&5	(small-scale renewables)	SG	1								1		
	CIS Upgrades	RC	\$ 60,000.00	\$ 10,000.00		\$ 10,000.00		\$ 10,000.00		\$ 10,000.00		\$ 10,000.00	
		SG	1										
6	Large Renewable others	RC	\$ 135,000.00										
	SMART GRID TOTAL		\$ 302,000.00	\$ 15,000.00	\$ 270,000.00	\$ 15,000.00	\$ 300,000.00	\$ 15,000.00	\$ 291,000.00	\$ 20,000.00	\$291,000.00	\$ 20,000.00	\$ 1,539,000.00

	RENEWABLE ENERGY GENERATION - Affiliate of Orangeville Hydro												
6	Large Renewable LDC - Solar Roof Panels	RC			\$ 100,000.00								
	RENEWABLE ENERGY												
	GENERATION TOTAL				\$100,000.00								\$ 100,000.00
		CONSE	RVATION D			Rate Payers, Tax	Payers Other Th	an Those in Oran	geville's Service A	rea			
	Customer / Program Analysis			\$ 15,264.00		\$ 15,721.92		\$ 16,179.84		\$ 16,637.76		\$ 17,095.68	
	Workshops & Marketing for Conservation			\$ 20,483.00		\$ 17,284.28		\$ 17,232.56		\$ 17,728.84		\$ 17,638.12	
	Education & Awareness			\$ 191,034.79		\$ 161,815.75		\$117,241.86		\$116,634.69		\$119,659.52	
	Green Energy Act - Staff Educating & Training	g		\$ 50,920.00		\$ 71,872.00		\$ 81,454.00		\$ 76,249.00		\$ 86,298.00	
4	CONSERVATION TOTAL			\$ 277,701.79		\$ 266,693.95		\$232,108.26		\$ 227,250.29		\$240,691.32	\$ 1,244,445.62

APPENDIX B-COST ALLOCATION