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November 16, 2009

#### **BY COURIER**

Public Interest Advocacy Centre 34 King Street East, Suite 1102 TORONTO, ON M5C 2X8 Attn: Michael Buonaguro

#### Re: EB Number: EB-2009-0267 Kitchener-Wilmot Hydro Inc. Response to VECC Interrogatories 2010 Electricity Distribution Rates, Licence No. ED-2002-0573

Dear Mr. Buonaguro:

On August 31, 2009, Kitchener-Wilmot Hydro Inc., referred to herein as KW Hydro, filed its application for 2010 electricity distribution rates and, subsequently, on October 26, 2009, VECC submitted its interrogatories to KW Hydro as per the Board's Procedural Order #1 dated October 15, 2009. KW Hydro now submits its responses to those interrogatories.

Note that KW Hydro will be submitting an Addendum to its 2010 rate application to adjust its LRAM and SSM claim (Exhibit 10) to comply with certain recent decisions of the Board.

Should you require any further information or clarification of any of the above, kindly contact the writer.

Respectfully submitted,

Original Signed by

J. Van Ooteghem, P.Eng.

President & CEO

cc All Intervenors



Jerry Van Ooteghem President & C.E.O Tel: (519) 745-4771 Fax: (519) 571-9338

November 16, 2009

#### **BY COURIER**

Econalysis Consulting Services Inc. 34 King Street East, Suite 1102 TORONTO, ON M5C 2X8 Attn: William Harper

#### Re: EB Number: EB-2009-0267 Kitchener-Wilmot Hydro Inc. Response to VECC Interrogatories 2010 Electricity Distribution Rates, Licence No. ED-2002-0573

Dear Mr. Harper:

On August 31, 2009, Kitchener-Wilmot Hydro Inc., referred to herein as KW Hydro, filed its application for 2010 electricity distribution rates and, subsequently, on October 26, 2009, VECC submitted its interrogatories to KW Hydro as per the Board's Procedural Order #1 dated October 15, 2009. KW Hydro now submits its responses to those interrogatories.

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### PUBLIC INTEREST ADVOCACY CENTRE LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC

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Michael Buonaguro Counsel for VECC (416) 767-1666

October 26, 2009

VIA MAIL and E-MAIL

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge St. Toronto, ON M4P 1E4

Dear Ms. Walli:

#### Re: Vulnerable Energy Consumers Coalition (VECC) EB-2009-0267 Kitchener-Wilmot Hydro Inc. – 2010 Electricity Distribution Rate Application

Please find enclosed the interrogatories of the Vulnerable Energy Consumers Coalition (VECC) in the above-noted proceeding. Thank you.

Yours truly,

Michael Buonaguro Counsel for VECC Encl.

#### **KITCHENER-WILMOT HYDRO INC. - 2010 RATE APPLICATION**

#### (EB-2009-0267)

#### VECC'S INTERROGATORIES (ROUND #1)

#### GENERAL

#### Question #1

**Reference:** Exhibit 1, page 8

a) Please update the OM&A cost comparison to include the 2008 data which was released by the Board in September 2009.

#### **Response**

### KW Hydro's standing in its cohort group remains unchanged. The table is updated below. Cohort averages for 2007 were also corrected.

Cohort Groupings	Total OM&A				
	2005-2008				
By Distribution Company	4 Year Avg.	2007	2008		
Barrie Hydro Distribution Inc.	\$128	\$124	\$149		
Kitchener-Wilmot Hydro Inc.	\$146	\$149	\$149		
Cambridge and North Dumfries Hydro Inc.	\$165	\$172	\$184		
Oshawa PUC Networks Inc.	\$165	\$172	\$170		
Waterloo North Hydro Inc.	\$179	\$179	\$177		
Oakville Hydro electricity Distribution Inc.	\$188	\$189	\$163		
Newmarket – Tay Power Distribution Ltd.	\$192	\$186	\$200		
Brantford Power Inc.	\$199	\$217	\$206		
Whitby Hydro Electric Corporation	\$199	\$214	\$205		
Guelph Hydro Electric Systems Inc.	\$200	\$213	\$207		
Burlington Hydro Inc.	\$201	\$189	\$202		
Milton Hydro Distribution Inc.	\$207	\$198	\$209		
Halton Hills Hydro Inc.	\$226	\$220	\$244		
Average for Cohort Group	\$184	\$186	\$190		

#### Question #2

**Reference:** Exhibit 1, pages 9-11

a) Please provide tables similar to Table 1 and Table 2 but covering Kitchener-Wilmot's System Reliability Indicators as prescribed by the OEB.

#### <u>Response</u>

See Board Staff interrogatory #4 a)

#### Question #3

**Reference:** Exhibit 1, page 32

a) Please describe the activities of Kitchener Energy Services Inc.

#### <u>Response</u>

Kitchener Energy Services Inc. is an inactive company. To date, this company does not participate in any business activities.

#### Question #4

**Reference:** Exhibit 1, page 53

a) Please confirm that Kitchener-Wilmot is not, itself, an embedded utility.

#### <u>Response</u>

Confirmed

#### Question #5

**Reference:** Exhibit 1, page 56

a) Please provide a schedule setting out the specific instances where the Application does not follow the OEB's Filing Requirements.

#### <u>Response</u>

• A copy of the 2008 Annual Report and Management Discussion and Analysis (2.2.3) of the results were not provided for KW Hydro's parent company, Kitchener Power Corporation. This data is available and can be provided

- For Purchases of Non-Affiliate Services (2.5.6), KW Hydro did not provide the annual dollar amounts related to purchases by vendor and transaction for the 2009 Bridge and 2010 Test years as these amounts are unknown
- Appendix 2N Depreciation Expense was not completed
- Appendix 2S Smart Meters was not completed

#### Question #6

**Reference:** Exhibit 1, page 68

a) What impact, if any, does Kitchener-Wilmot's change in accounting policy for the recognition of actuarial gains and losses have on the proposed 2010 revenue requirement?

#### <u>Response</u>

Post Retir	ement Ber	efit Exper	nse - Amor	tiza	tion of Actu	ıari	al Gains and	d Lo	<u>osses</u>				
Amortizat	tion (Gains	) Losses:			<u>2008</u>		<u>2009</u>		<u>2010</u>				
Actual PB	O as at Jan	uary 1		\$	3,915,151	\$	4,024,983	\$	4,168,271				
10% of PE	30 as at Jar	nuary 1		\$	391,515	\$	402,498	\$	416,827				
Accumula	ted (Gains)	Losses as	at Jan 1	-\$	1,373,765	-\$	1,275,540	-\$	1,178,535				
Total (Ga	in) Loss in	Excess of	10%	-\$	982,250	-\$	873,042	-\$	761,708				
Expected A	verage Rem	aining Serv	ice Life (yrs)	)	10		9		8				
Amortizat	tion for Cu	rrent Year		-\$	98,225	-\$	97,005	-\$	95,213				
Unamortiz	ed (Gain) Lo	oss as at D	Dec 31	-\$	1,275,540	-\$	1,178,535	-\$	1,083,322				
As a resul	t of the cha	ange in acc	ounting po	blicy	/ to the Cor	rido	or Method i	n 2	008, under t	his metho	b		
1/10 th of	the excess	of all accu	umulated (	gaiı	ns)/losses o	or (\$	5982,250 x 1	/10	) = )\$98,225 a	amortized	gain		
was recog	nized as a	reduction	to Post Ret	tire	ment Bene	fit E	Expense for	200	08 fiscal yea	r, \$97,005 \	was		
recognize	d as a redu	ction to ex	pense in 2	2009	9, and \$95,2	13 ۱	will be reco	gni	zed in 2010.				
Under the	Under the old accounting method, the full amount of the current year's Actuarial Gain of \$1,032,190 would have been												
recognize	recognized and recorded as a reduction to the Post Retirement Benefit Expense for 2008 with no amortization												
in the foll	owing yea	rs. Theref	ore, if we h	nad	not change	d tł	ne accounti	ng	policy, the P	BO expens	se for 2010	and thus	
the Rever	he Revenue Requirement would have been \$95,213 higher, in the absence of amortized actuarial gains.												

#### b) Is this change consistent with the OEB's regulatory accounting requirements?

#### <u>Response</u>

Yes. Both methods are permitted by the CICA Handbook and are compliant with the OEB Accounting Procedures Handbook.

#### RATE BASE

#### Question #7

**Reference:** Exhibit 2, pages 36 and 50-51

a) Please provide a schedule that sets out the derivation of each of the four 2010 Cost of Power values shown on page 51. In doing so, please set out the volumes and rates assumed for each.

#### **Response**

Electricity - Commodity	2010 Forecasted	2010			
Class per Load Forecast	Metered kWhs	Loss Factor		2010	
Residential	650,038,341	1.0320	670,839,568	\$0.0607	\$40,733,379
GS<50	235,461,608	1.0320	242,996,379	\$0.0607	\$14,754,740
GS>50	884,051,506	1.0320	912,341,154	\$0.0607	\$55,397,355
Large User	71,682,604	1.0053	72,062,522	\$0.0607	\$4,375,636
Street Lighting	16,689,726	1.0320	17,223,797	\$0.0607	\$1,045,829
Unmetered Scattered Load	3,287,380	1.0320	3,392,576	\$0.0607	\$205,997
TOTAL	1,861,211,165		1,918,855,997		\$116,512,936
Transmission - Network		Volume			
Class per Load Forecast		Metric		2010	
Residential		kWh	670,839,568	\$0.0045	\$3,018,778
GS<50		kWh	242,996,379	\$0.0039	\$947,686
GS>50		kW	2,231,346	\$2.0315	\$4,532,979
Large User		kW	140,928	\$1.9094	\$269,088
Street Lighting		kW	46,815	\$1.2354	\$57,835
Unmetered Scattered Load		kWh	3,392,576	\$0.0039	\$13,231
TOTAL					\$8,839,598

<u>Transmission -</u> Connection	Volume			
Class per Load Forecast	Metric		2010	
Residential	kWh	670,839,568	\$0.0014	\$939,175
GS<50	kWh	242,996,379	\$0.0013	\$315,895
GS>50	kW	2,231,346	\$0.6918	\$1,543,645
Large User	kW	140,928	\$0.6502	\$91,631
Street Lighting	kW	46,815	\$0.4207	\$19,695
Unmetered Scattered Load	kWh	3,392,576	\$0.0013	\$4,410
TOTAL				\$2,914,453

<u>Wholesale Market</u> Service					
Class per Load Forecast				2010	
Residential		kWh	670,839,568	\$0.0052	\$3,488,366
GS<50		kWh	242,996,379	\$0.0052	\$1,263,581
GS>50		kWh	912,341,154	\$0.0052	\$4,744,174
Large User		kWh	72,062,522	\$0.0052	\$374,725
Street Lighting		kWh	17,223,797	\$0.0052	\$89,564
Unmetered Scattered Load		kWh	3,392,576	\$0.0052	\$17,641
TOTAL					\$9,978,051
Rural Rate Assistance					
Class per Load Forecast				2010	
Residential			650,038,341	\$0.0013	\$845,050
GS<50			235,461,608	\$0.0013	\$306,100
GS>50			884,051,506	\$0.0013	\$1,149,267
Large User			71,682,604	\$0.0013	\$93,187
Street Lighting			16,689,726	\$0.0013	\$21,697
Unmetered Scattered Load			3,287,380	\$0.0013	\$4,274
TOTAL					\$2,419,575
	2010				
4705-Power Purchased 4708-Charges-WMS 4714-Charges-NW 4716-Charges-CN	\$116,512,936 \$12,397,626 \$8,839,598 \$2,914,453				

b) Please confirm that the calculation of Power Purchase costs for 2010 (page 51) excludes deliveries to customers (embedded utilities and retail customers) who are Market Participants and billed directly by the IESO.

140,664,613

#### <u>Response</u>

TOTAL

#### Confirmed

c) Please confirm that, based on Kitchener-Wilmot's proposed average cost of capital (7.62%), the 2010 return associated with working capital allowance is approximately \$1.8 M, excluding tax implications. Based on the materiality of the figure, why didn't Kitchener-Wilmot undertake a lead lag study (page 50)?

It is confirmed that based on the proposed average cost of capital of 7.62% and the 2010 return associated with a working capital allowance of \$23,297,338 is \$1,775,257. Due to tight timelines and scarce resources associated with our 2010 rate submission, KW Hydro opted for the Board Approved 15% of the cost of power and controllable expenses approach, in lieu of a time-consuming lead lag study. However, KW Hydro is committed to conduct a lead lag study prior to filing our next Cost of Service rate application currently scheduled for 2014.

#### Question #8

#### Reference: Exhibit 2, pages 221 and 375

a) Does the proposed capital spending for 2010 include any spending to provide information technology systems and support in response to the Green Energy Act? If yes, please identify the specific projects and the 2010 proposed spending.

#### **Response**

No, there is no proposed IT capital spending in the 2010 capital budget for the GEGEA. Since the regulations were not yet available at the time filing, KW Hydro could not reasonably estimate any required expenditures

#### Question #9

**Reference:** Exhibit 2, page 296

a) Are all new residential services provided by underground facilities? If not, where are the capital expenditures for new overhead services captured in this section?

#### <u>Response</u>

### Municipal bylaws have required all new residential subdivisions since 1965 to be serviced with underground facilities.

 b) Please provide a schedule that sets out the number of new residential services installed in the years 2006-2010 inclusive and the associated costs. Please separate out overhead and underground services, if applicable.

Year	# Services	Costs
2006	1445	\$ 610,545
2007	1435	\$ 643,397
2008	1431	\$ 681,221
2009	890	\$ 450,000
2010	840	\$ 450,000

c) Please provide a schedule that sets out the number of new commercial/industrial services installed annually in the years 2006-2010 inclusive and the associated costs.

#### <u>Response</u>

The cost centre at the bottom of Exhibit 2, Page 296 captures the costs of ducts and cables installed for new industrial/commercial services and for upgrades to existing industrial/commercial services.

<u>Year</u>	New	<u>Upgrades</u>	Costs
2006	29	20	\$ 280,799
2007	26	18	\$ 384,271
2008	25	16	\$ 306,500
2009	15	15	\$ 270,000
2010	18	15	\$ 234,000 *

\* A calculation error was discovered during this review. The estimated cost for 2010 should have been \$270,000.

#### Question #10

**Reference:** Exhibit 2, pages 282, 294 and 304

 a) Please explain the reason for the significant increase in spending on Replacement of Pole Line Assets from 2008 (\$802 k) to 2009 and 2010 (\$1,382 k and \$1,464 k respectively).

#### <u>Response</u>

Please refer to Exhibit 2, pages 213 & 214. KW Hydro will need to ramp up expenditures for pole replacements to keep the fleet from aging and adversely affecting reliability.

#### Question #11

Reference:
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- i) Exhibit 2, pages 284, 295 and 305
- ii) Exhibit 2, pages 286, 297, 307
- iii) Exhibit 2, pages 287, 297, 308

 a) Please explain the significant increase in spending on Underground – System Expansion to Supply New Development in 2009 and 2010 versus 2008 (Reference (i)), particularly in light of the recent economic downturn discussed on page 356.

#### **Response**

Please refer to Exhibit 2, pages 295 and 305. The majority of the spending increase is driven by two large multi-year trunk feeder reinforcements that are underway in 2009 and 2010:

- i) Installation of the ducts, cables and pole lines that will connect the new Wilmot Transformer Station (a.k.a. 9TS) to the existing distribution system. These must be completed when the station goes into service in 2010.
- ii) Reinforcement of the feeders supplying power to the downtown core of Kitchener. This area of Kitchener continues to redevelop despite the economic slowdown and the extra feeder capacity will need to be in place by the time the economy recovers and the pace of redevelopment accelerates.
- b) Please explain the significant increase in spending on New Underground Residential Distribution in 2009 and 2010 versus 2008 (Reference (ii)), particularly in light of the recent economic downturn and the anticipated reduction in new housing starts in 2009 and 2010 relative to 2008, per page 357.

#### <u>Response</u>

The following are the actual number of lots and townhouse units serviced in 2006, 2007 and 2008 and the forecast numbers for 2009 and 2010, together with the associated costs.

	Residential	Townhouse	URD
	Lots	Units	Servicing
Year	<b>Serviced</b>	<b>Serviced</b>	Costs
2006	1804	220	\$ 4,332,235
2007	1329	336	\$ 3,293,587
2008	574	144	\$ 1,611,299
2009	800	250	\$ 2,240,000
2010	600	200	\$ 1,940,000

The following is a comparison of the number of residential lots serviced and residential services connected in 2006, 2007 and 2008 together with the resulting impact on the inventory of vacant lots available for sale to builders.

	Residential Lots	Residential Services	Vacant Lot
<u>Year</u>	Serviced	Connected	Inventory
2006	1804	1445	+359
2007	1329	1435	-106
2008	574	1431	-857

In 2008, developers took a wait and see approach to the economy, slowing down the pace of new lot development and drawing down existing inventories of serviced lots. At the same time, demand for new houses remained strong. Given the downturn in the local economy, it is reasonable to expect that the demand for new homes will abate in 2009 and 2010. However, our feeling is that the developers overreacted and cut too deep in 2008 and that the creation of new lots will rebound slightly in 2009 before returning to 2008 levels in 2010.

The forecast spending on URD servicing in 2009 and 2010 does in fact represent approximately a 50% reduction in new housing starts, adjusted slightly for the impact of changes in vacant lot inventories.

c) Please explain the significant increase in Replacement of Primary UG Cable in 2009 and 2010 versus 2008 (Reference (iii)).

#### <u>Response</u>

The primary cable in feeder 4M27 has failed repeatedly over the last few years. In the fall of 2008, we began a two year project to replace the cable, spreading the cost over three fiscal years.

d) Why was there no spending in 2008 on "Rebuild Transformer Vaults due to Age/Condition"?

#### <u>Response</u>

KW Hydro inspects the condition of its underground transformer vaults and pull boxes (manholes) on a regular basis. Structural defects are repaired and are charged to maintenance.

Sometimes, the structural deterioration is such that either the entire structure or major structural elements such as the walls and/or roof must be replaced rather than repaired. Such replacement constitutes a significant increase of the service life of the structure and requires significant expenditures. These expenditures are capitalized.

All reactive maintenance performed in 2008 was charged to maintenance rather than capitalized.

#### Question #12

- Reference:
   i)
   Exhibit 2, pages 276, 289, 299, 309
   ii)
   Exhibit 2, pages 289, 299, and 310
- a) Please explain the material increase in spending on Overhead Transformer Purchases from 2007 and 2008 to 2009 and 2010 (Reference (i)).

#### **Response**

The numbers that were reported on Overhead Transformer purchases in the rate application for 2007 (\$109,356) and 2008 (\$53,650) were the amounts *actually* paid through new purchases within the year. However, these payables only show what was purchased and not the amount that was issued out from inventory (which is a different OEB account). The Purchasing Department budgets "purchases" for this budget category based on the previous year's usage, rather than the payables amounts.

There was no material increase in Overhead Transformer purchases in any of the years 2007 – 2010

b) Please explain the significant increase in spending on Revenue Meters in 2010 relative to 2008 and 2009 (Reference (ii)).

#### **Response**

Please refer to Exhibit 2, page 220. The 2010 budget includes funding to begin installing mass memory interval meters with communications modules at the General Service >50 kW customers.

#### Question #13

Reference:	i) Exhibit 2, Appendix C
	ii) Exhibit 2, Appendix B, page 213

a) Please confirm that the capital spending amounts reported in Appendix C are net of capital contributions.

#### <u>Response</u>

### The capital spending amounts in Appendix B & C of Exhibit 2 are gross capital dollars, before reductions for contributed capital.

b) Please provide a schedule that sets out the capital spending categories (per the categories used in Appendix C) that attract capital contributions and for the each of the years 2007 to 2010 provide the total spending, the capital contributions and the spending net of capital contributions for each category.

#### See table below. 2009 & 2010 Contributed Capital values by budget item number are estimated based on the averages of 2007 & 2010.

		\$\$ Spent per	Contributed		
Year 200	7	Appendix C	Capital	Net Capital	
3-07-1	Miscellaneous Overhead Distribution	2,202,066	\$39,387	\$2,162,679	
3-07-2	System Expansion to Supply New Developmen	1,241,075	(\$28,186)	\$1,269,261	
3-07-3	<b>Relocations-Roadway Mofication Projects</b>	413,709	\$97,378	\$316,331	
3-07-4	Single-Phase Pole Line Rebuilds	126,215	\$67,775	\$58,440	
4-07-1	Miscellaneous Underground Distribution	755,904	\$111,431	\$644,473	
4-07-2	Residential Underground Services	634,397	\$38,204	\$596,193	
4-07-3	Large Commercial & Industrial Services	384,271	\$466,334	(\$82,063)	
4-07-4	Residential Underground Distribution	3,293,587	\$2,946,864	\$346,723	
<b>4-07-6</b>	Relocations-Road Rebuilding Projects	305,636	\$0	\$305,636	
5-07-2	Underground Residential Areas	1,052,003	\$1,420,354	(\$368,351)	
7-07-1	Meters	468,307	\$2,813	\$465,494	
		10,877,170	5,162,355	5,714,815	
Year 200	8				
3-08-1	Miscellaneous Overhead Distribution	860.600.00	\$193,476	\$667,124	
3-08-2	System Expansion to Supply New Developmen	635,380,00	\$38,062	\$597,318	
3-08-3	Relocations-Roadway Mofication Projects	602 795 00	\$282 577	\$320,218	
3-08-4	Single-Phase Pole Line Rebuilds	80 158 00	\$103 957	(\$23,799)	
1-08-1	Miscellaneous Underground Distribution	1 059 780 00	\$87,803	\$971 977	
4-08-3	Large Commercial & Industrial Services	306 500 00	\$865,357	(\$558,857)	
4-08-4	Residential Underground Distribution	1 611 200 00	\$1 734 355	(\$123,056)	
4-00-4	Polocations-Poad Pobuilding Projects	407 080 00	¢1,734,555 ¢444,944	(\$26,864)	
5-02-2	Underground Posidential Areas	407,300.00 816 021 00	\$737.007	\$70,824	
7-09-1	Motors	361 664 00	\$11,057	\$75,024	
7-00-1	metera	\$6,743,077	\$4,498,583	\$2,244,494	
Vear 200	0		\$2 800 000		%
3-XX-1	Miscellaneous Overhead Distribution	400 000	\$70,893	\$329 107	2 53%
3-XX-2	System Expansion to Supply New Developmen	450,000	\$4 201	\$445 799	0 15%
3-2 2-3	Relocations-Roadway Mofication Projects	500,000	\$114 349	\$385,651	4 08%
3-22-4	Single-Phase Pole Line Rebuilds	250,000	\$50 733	\$199,267	1 81%
4-yy-1	Miscellaneous Underground Distribution	400,000	\$57 545	\$342 455	2.06%
4-1 1-2	Residential Underground Services	450,000	\$10.361	\$439 639	0.37%
4-11-2	Large Commercial & Industrial Services	270,000	\$395 774	(\$125,774)	14 13%
4-4 4-4	Residential Underground Distribution	2 240 000	\$1 338 919	\$901.081	47 82%
4-x x-6	Relocations-Road Rebuilding Projects	150,000	\$138.440	\$11 560	4 94%
5-22-2	Underground Residential Areas	477 000	\$614 583	(\$137 583)	21 95%
7-xx-1	Meters	291 000	\$4 203	\$286 797	0 15%
		5,878,000	2,800,000	3,078,000	
Year 201	0		\$2,800,000		%
3-XX-1	Miscellaneous Overhead Distribution	400.000	\$70.893	\$329.107	2,53%
3-XX-2	System Expansion to Supply New Developmen	450.000	\$4.201	\$445.799	0.15%
3-xx-3	Relocations-Roadway Mofication Projects	700.000	\$114.349	\$585.651	4.08%
3-xx-4	Single-Phase Pole Line Rebuilds	687.600	\$50.733	\$636.867	1,81%
4-xx-1	Miscellaneous Underground Distribution	400.000	\$57.545	\$342.455	2.06%
4-xx-2	Residential Underground Services	450.000	\$10.361	\$439.639	0.37%
4-xx-3	Large Commercial & Industrial Services	234,000	\$395,774	(\$161,774)	14.13%
4-xx-4	Residential Underground Distribution	1.940.000	\$1,338,919	\$601,081	47.82%
4-xx-6	Relocations-Road Rebuilding Projects	350,000	\$138,440	\$211,560	4.94%

**Underground Residential Areas** 5-x x-2 7-xx-1 Meters

724,000 \$4,203 \$719,797 6,835,600 2,800,000 4,035,600

500,000

\$614,583

(\$114,583)

21.95%

0.15%

.

When contributed capital is initially received, the amount is recorded in the customer deposit liability account in the general ledger. The monies are then transferred and recognized as contributed capital as a credit (contra) to the cost of the capital asset when the construction of the asset has been substantially completed (more than 90% complete or has been put into service). Some assets (or capital jobs) span more than one calendar year to complete and therefore in any year, amounts recorded in contributed capital represent completed jobs or capital expenditures spanning several years.

Thus contributed capital recorded in a particular year may not be directly correlated with the capital expenditures incurred for that year.

As an example in the following schedule, in the year 2008, for Budget category 4-08-3 Large Commercial & Industrial Services, the amount of \$865,357 recorded as contributed capital represents 13 capital projects which were started over the years 2006 ~ 2008 and completed in 2008. This exceeds the construction costs incurred during 2008 for this asset category and thus the resulting net capital cost is a credit of \$558,857.

c) What is the total assumed level of spending (both gross and net of capital contributions) include for 2009 and 2010 for system expansion and connections associated with renewable energy generation (Reference (ii))?

#### <u>Response</u>

There is no specific allowance for renewable energy generation included in the 2009 and 2010 capital budgets as the Regulations were not yet released at the time of filing. KW Hydro is not anticipating significant expenditures for system expansion and connections due to the restriction on farm land use and setbacks. Also KW Hydro has three-phase circuits available nearby for most locations in the City and has plans to upgrade much of the distribution system in Wilmot Township as part of the planned voltage conversion for the area.

# Since an LDC is responsible for funding the first \$90,000/MW under the GEGEA, it is expected that there will be little contributed capital associated with these projects.

d) What "contribution", if any, has Kitchener-Wilmot assumed It will receive pursuant to Ontario Regulation 330/09 to help offset the costs to local ratepayers of costs related to the connection of renewable energy generation in 2009 and 2010?

### KW Hydro is not assuming any contribution for renewable energy projects in its service area

- e) Does the proposed capital budget for 2010 assuming any connections of renewable energy generation under the FIT or MicroFit Programs? If not, why not? If yes, please address the following:'
  - How much spending is included and where is it reported in Appendix C?
  - How many new connections/accounts are assumed for 2010?
  - How are the anticipated additional revenues from these accounts due to the new MicroFit rates being implemented by the OEB captured in the revenue forecast discussed in Exhibit 3?

#### <u>Response</u>

The 2010 capital budget is anticipating that there will be some new connections for FIT and microFit but KW Hydro's costs will be minimal. Most services can accommodate renewable generation behind the meter without any change of service; and where changes are required, the cost will be the responsibility of the owner. Additional revenues from FIT and microFIT accounts are not included in Exhibit 3 as take-up is expected to start off slowly until customers become more familiar with the program

#### LOAD FORECAST & OPERATING REVENUE

#### Question #14

**Reference:** Exhibit 3, page 2

a) Please provide a schedule setting out the rates and volumes by customer class supporting the 2010 test year revenues reported in Table 1. Please include in the schedule the Embedded Distributor and Stand-by charges included under "Other Distribution Charges".

#### **Response**

The rates and volumes by customer class supporting the 2010 test year revenues are included in #14 c).

The \$70,145 in Embedded Distributor charges and \$0 in Stand-by charges are included under "Other Distribution Charges".

- b) Please clarify whether the rates used in part (a) included:
  - Charges for LV recovery
  - Smart Meter charges
  - Discounts for transformer ownership where applicable.

- KW Hydro does not pay LV charges; therefore no LV Recovery is included in rates
- The transformer ownership allowance is included in Table 1
- Smart Meter charges are not included
- c) Please reconcile the 2010 revenues reported here by class with those set out in Table 24 (page 51).

#### **Response**

Clerical errors occurred in Table 24 of Exhibit 3 when updating the Excel sheets in the word document. The correct 2010 revenue is reflected in the following table.

	2010 Throughput Revenue at Proposed 2010 Rates										
	Variable Fixed Rate Rate		Number of Customers	kWh / kW Sales	Fixed Charge	Variable Charge	Base Revenue				
Residential	\$ 12.05	\$ 0.0162	78,139	650,038,341	\$ 11,298,899	\$10,507,872	\$ 21,806,772				
GS < 50	\$ 25.17	\$ 0.0125	7,484	235,461,608	\$ 2,260,467	\$ 2,933,723	\$ 5,194,190				
GS > 50	\$ 232.71	\$ 3.7221	1,003	2,231,346	\$ 2,800,898	\$ 8,305,403	\$ 11,106,300				
Large User	\$14,195.83	\$ 1.8968	2	140,928	\$ 340,700	\$ 267,307	\$ 608,007				
Street Lighting	\$ 0.78	\$ 4.4012	23,299	46,815	\$ 218,079	\$ 206,044	\$ 424,123				
Unmetered Scattered Load	\$ 8.34	\$ 0.0125	820	3,287,380	\$ 82,066	\$ 41,057	\$ 123,123				
Total 2010 T	hroughput Rev	venue	\$ 17,001,108	\$22,261,407	\$ 39,262,515						
2010 Throug	Jhput Revenue	Requiremer			\$ 39,262,515						
Total 2010 R	evenue Deficie	ency					\$0				

#### Question #15

- Reference: Exhibit 3, pages 8-9 and Appendix C
- a) What is the definition and source for the population variable used in the regression analysis?

#### **Response**

Population is the total number of people inhabiting in a country, city, or any district or area.

The population data used in the regression analysis is collected from the Region of Waterloo Planning, Housing and Community Services Department.

b) If the data source for "population" does not provide monthly values, what is the frequency of the historical data and how were the monthly values established?

	Population
1976	142,427
1981	150,659
1986	161,749
1991	181,389
1996	192,250
2001	205,265
2006	221,765
Annual Growth Rate in Population	
1976 ~ 1981	1.13%
1981 ~ 1986	1.43%
1986 ~ 1991	2.32%
1991 ~ 1996	1.17%
1996 ~ 2001	1.32%
2001 ~ 2006	1.56%
Monthly Growth Rate in Population	
1976 ~ 1981	0.09%
1981 ~ 1986	0.12%
1986 ~ 1991	0.19%
1991 ~ 1996	0.10%
1996 ~ 2001	0.11%
2001 ~ 2006	0.13%

#### **Population**

#### The frequency of the historical data is every five years (see above table). The monthly values were generated by applying compound monthly growth rate for that time period.

c) Appendix C sets out the regression models and results assuming one or more of the proposed explanatory variables are excluded from the modeling. What other model specifications with different explanatory variables did Kitchener-Wilmot test? Please provide the results for any such models in a format similar to that used in Appendix C.

#### <u>Response</u>

#### See Board Staff Interrogatory #5.

d) Please explain why population as opposed to customer count was used as an explanatory variable.

#### <u>Response</u>

### Using the population returned better R-square results and therefore higher reliability.

e) Please provide any other recent projections of Ontario GDP growth for 2009 and 2010 that Kitchener-Wilmot is aware of and compare the year over year growth rates with those prepared by the Ontario Ministry of Finance (per page 9).

#### <u>Response</u>

On October 22, 2009 the Ontario Minister of Finance provided a fall update to the 2009 Ontario Economic Outlook and Fiscal Review. In this review the 2009 GDP was updated from -2.5% to -3.5% and the 2010 GDP was updated from 2.3% to 2.0%

#### Question #16

#### **Reference:** Exhibit 3, page 18

a) Given that residential uses include lighting, cooking and refrigeration, why is it reasonable to assume that the Residential class is 100% weather sensitive (Table 15)?

The 100% weather sensitive factor for the Residential class was determined by Hydro One Networks as a part of Cost Allocation Informational filing, which was based on the 2006 Appliance Saturation survey conducted jointly by the LDCs in Kitchener, Waterloo and Cambridge. Since KW Hydro has not yet had the chance to generate its own weather sensitivity factor, Hydro One's weather sensitivity factor is considered to be the best available result that KW Hydro can utilize.

b) Based on Kitchener-Wilmot's appliance saturation survey (Exhibit 7, page 4) and the analysis Hydro One Networks undertook of Kitchener-Wilmot's load, what proportion of its residential load is associated with space conditioning (i.e, heating and cooling) requirements?

#### **Response**

Based on the appliance saturation survey undertaken by KW Hydro, 57.4% of its customers had central air conditioning and 17.9% of its customers had electric heat.

c) Please re-do Tables 6 through 11 assuming that the Residential and GS<50 classes are 50% weather sensitive. Note: The purpose of this question is to test the sensitivity of the results in Table 11 to the assumptions regarding class weather sensitivity.

#### **Response**

A 50% weather sensitivity factor for the Residential and GS<50 rates classes is not a reasonable estimate given the fact that the weather sensitivity factor for GS>50 is 64% based on Hydro One's report. However, the revised tables are presented below:

Weather Normalization Factor By Class

	2004 Actual		2005 Actual		2006 Actual		2007 Actual		2008 Actual	
Consumption	1,947,483,902	100%	2,040,872,519	100%	1,917,735,012	100%	1,918,190,356	100%	1,877,404,166	100%
Residential (kWh)	593,383,986	30.47%	640,475,237	31.38%	624,196,150	32.55%	639,510,859	33.34%	638,167,356	33.99%
GS<50 (kWh)	222,837,922	11.44%	234,287,434	11.48%	231,128,009	12.05%	233,685,645	12.18%	233,464,130	12.44%
GS>50 (kWh)	881,507,867	45.26%	918,952,852	45.03%	860,411,209	44.87%	866,794,206	45.19%	838,013,719	44.64%
Large User (kWh)	234,737,963	12.05%	232,058,404	11.37%	181,975,799	9.49%	157,680,777	8.22%	146,928,777	7.83%
Street Lighting (kWh)	15,016,164	0.77%	15,098,592	0.74%	15,290,722	0.80%	15,541,491	0.81%	17,542,402	0.93%
Unmetered Scattered Load (kWh)					4,733,123	0.25%	4,977,378	0.26%	3,287,782	0.18%
Weather Normalization Factor	100.87%	0.87%	98.51%	-1.49%	100.59%	0.59%	99.77%	-0.23%	100.28%	0.28%
Residential (kWh)	100.87%	0.87%	98.52%	-1.48%	100.58%	0.58%	99.78%	-0.22%	100.27%	0.27%
GS<50 (kWh)	100.87%	0.87%	98.52%	-1.48%	100.58%	0.58%	99.78%	-0.22%	100.27%	0.27%
GS>50 (kWh)	101.12%	1.12%	98.10%	-1.90%	100.74%	0.74%	99.72%	-0.28%	100.35%	0.35%
Large User (kWh)	100.00%	0	100.00%	0	100.00%	0	100%	0	100%	0
Street Lighting (kWh)	100.00%	0	100.00%	0	100.00%	0	100%	0	100%	0
Unmetered Scattered Load (kWh)					100.00%	0	100%	0	100%	0

#### Table 7

#### Summary of Throughput Revenue — Weather Normalized

	2006 Board Approved	2006 Actual - Normalized	2006 Actual- Normalized vs. 2006 Board Approved	2007 Actual - Normalized	2007 Actual- Normalized vs. 2006 Actual- Normalized	2008 Actual - Normalized	2008 Actual- Normalized vs. 2007 Actual- Normalized
			%		%		%
Throughput Revenue (\$)	32,397,153	32,896,773	1.54	33,043,011	0.44	33,370,888	0.99
Fixed Charge	13,984,193	14,338,107	2.53	14,680,541	2.39	14,934,945	1.73
Variable Charge	18,412,960	18,558,666	0.79	18,362,471	-1.06	18,435,943	0.40
Throughput Revenue (Volumes)							
kWh	837,545,505	865,003,327	3.28	876,252,850	1.30	877,272,673	0.12
kW	2,777,057	2,747,947	-1.05	2,654,089	-3.42	2,610,741	-1.63

#### Details of Throughput Revenue — Weather Normalized

	2006 Actual	Weather Normalization Factor	2006 Actual - Normalized	2007 Actual	Weather Normalization Factor	2007 Actual - Normalized	2008 Actual	Weather Normalization Factor	2008 Actual - Normalized
Throughput Revenue (\$)	32,780,795		32,896,773	33,087,304		33,043,011	33,317,184		33,370,888
Fixed Charge	14,338,107		14,338,107	14,680,541		14,680,541	14,934,945		14,934,945
Residential	8,317,289	100%	8,317,289	8,663,498	100%	8,663,498	8,841,865	100%	8,841,865
GS<50	2,209,414	100%	2,209,414	2,173,457	100%	2,173,457	2,216,599	100%	2,216,599
GS>50	2,867,839	100%	2,867,839	2,852,334	100%	2,852,334	2,846,071	100%	2,846,071
Large User	670,708	100%	670,708	655,837	100%	655,837	682,669	100%	682,669
Street Lighting	201,330	100%	201,330	210,792	100%	210,792	222,939	100%	222,939
USL	71,528	100%	71,528	124,623	100%	124,623	124,803	100%	124,803
Variable Charge	18,442,688		18,558,666	18,406,763		18,362,471	18,382,238		18,435,943
On kWh	10,033,712		10,091,493	9,912,585		9,890,873	9,986,106		10,012,989
Residential (kWh)	7,893,738	100.58%	7,939,385	7,805,584	99.78%	7,788,412	7,865,141	100.27%	7,886,377
GS<50 (kWh)	2,098,389	100.58%	2,110,523	2,063,199	99.78%	2,058,660	2,091,650	100.27%	2,097,297
USL(kWh)	41,585	100.00%	41,585	43,801	100.00%	43,801	29,315	100.00%	29,315
On kW	8,408,976		8,467,173	8,494,179		8,471,597	8,396,133		8,422,954
GS>50 (kW)	7,862,566	100.74%	7,920,763	8,018,872	99.72%	7,996,291	7,760,712	100.35%	7,787,533
Large User (kW)	355,569	100.00%	355,569	331,119	100.00%	331,119	424,243	100.00%	424,243
Street Lighting (kW)	190,841	100.00%	190,841	144,188	100.00%	144,188	211,178	100.00%	211,178
Throughput Revenue	e (Volumes)								
kWh	860,057,282		865,003,327	878,173,882		876,252,850	874,919,268		877,272,673
kW	2,730,876		2,747,947	2,660,528		2,654,089	2,603,043		2,610,741
Unit Revenue									
\$/Customer or Connection (on									
Fixed Charge)	138.25		138.25	138.47		138.47	138.47		138.47
Charge)	0.0117		0.0117	0.0113		0.0113	0.0114		0.0114
\$/kW (on Variable Charge)	3.0792		3.0813	3,1927		3,1919	3.2255		3,2263
Consumption									
Residential (kWh)	624,196,150	100.58%	627,805,662	639,510,859	99.78%	638,103,935	638,167,356	100.27%	639,890,408
GS<50 (kWh)	231.128.009	100.58%	232.464.543	233.685.645	99.78%	233.171.537	233.464.130	100.27%	234.094.483
GS>50 (kW)	2,306,337	100.74%	2,323,408	2,286,676	99.72%	2,280,237	2,227,288	100.35%	2,234,986
Large User (kW)	381,847	100.00%	381,847	330,481	100.00%	330,481	329,862	100.00%	329,862
Street Lighting (kW)	42,692	100.00%	42,692	43,371	100.00%	43,371	45,893	100.00%	45,893
USL (kWh)	4,733,123	100.00%	4,733,123	4,977,378	100.00%	4,977,378	3,287,782	100.00%	3,287,782
Number of Customer Connections	rs or								
Residential	72,866		72,866	74,392		74,392	75,847		75,847
GS<50	7,049		7,049	7,198		7,198	7,337		7,337
GS>50	1,021		1,021	1,005		1,005	1,007		1,007
Large User	4		4	4		4	4		4
Street Lighting	21,993		21,993	22,599		22,599	22,840		22,840
USL	781		781	818		818	820		820

Variance Analysis of Throughput Revenue — Weather Normalized

	2006 Board Approved	2006 Actual - Normalized	2006 Actual- Normalized vs. 2006 Board Approved	2007 Actual - Normalized	2007 Actual- Normalized vs. 2006 Actual- Normalized	2008 Actual - Normalized	2008 Actual- Normalized vs. 2007 Actual- Normalized
			%		%		%
Throughput Revenue (\$)	32,397,153	32,896,773	1.54	33,043,011	0.44	33,370,888	0.99
Fixed Charge	13,984,193	14,338,107	2.53	14,680,541	2.39	14,934,945	1.73
Residential	7,965,624	8,317,289	4.41	8,663,498	4.16	8,841,865	2.06
GS<50	2,050,723	2,209,414	7.74	2,173,457	-1.63	2,216,599	1.98
GS>50	2,957,015	2,867,839	-3.02	2,852,334	-0.54	2,846,071	-0.22
Large User	681,991	670,708	-1.65	655,837	-2.22	682,669	4.09
Street Lighting	129,009	201,330	56.06	210,792	4.70	222,939	5.76
USL	199,831	71,528	-64.21	124,623	74.23	124,803	0.15
Variable Charge	18,412,960	18,558,666	0.79	18,362,471	-1.06	18,435,943	0.40
On kWh	9,673,034	10,091,493	4.33	9,890,873	-1.99	10,012,989	1.23
Residential (kWh)	7,548,754	7,939,385	5.17	7,788,412	-1.90	7,886,377	1.26
GS<50 (kWh)	1,944,644	2,110,523	8.53	2,058,660	-2.46	2,097,297	1.88
USL (kWh)	179,636	41,585	-76.85	43,801	5.33	29,315	-33.07
On kW	8,739,926	8,467,173	-3.12	8,471,597	0.05	8,422,954	-0.57
GS>50 (kW)	7,984,297	7,920,763	-0.80	7,996,291	0.95	7,787,533	-2.61
Large User (kW)	673,531	355,569	-47.21	331,119	-6.88	424,243	28.12
Street Lighting (kW)	82,098	190,841	132.46	144,188	-24.45	211,178	46.46
Throughput Revenue (Volumes)	•						
kWh	837,545,505	865,003,327	3.28	876,252,850	1.30	877,272,673	0.12
kW	2,777,057	2,747,947	-1.05	2,654,089	-3.42	2,610,741	-1.63
Unit Revenue							
\$/Customer or Connection (on Fixed Charge)	140.88	138.25	-1.87	138.47	0.17	138.47	0.00
\$/kWh (on Variable Charge)	0.0115	0.0117	1.01	0.0113	-3.25	0.0114	1.12
\$/kW (on Variable Charge)	3.1472	3.0813	-2.09	3.1919	3.59	3.2263	1.08
Consumption							
Residential (kWh)	611,363,405	627,805,662	2.69	638,103,935	1.64	639,890,408	0.28
GS<50 (kWh)	217,315,826	232,464,543	6.97	233,171,537	0.30	234,094,483	0.40
GS>50 (kW)	2,266,174	2,323,408	2.53	2,280,237	-1.86	2,234,986	-1.98
Large User (kW)	470,044	381,847	-18.76	330,481	-13.45	329,862	-0.19
Street Lighting (kW)	40,839	42,692	4.54	43,371	1.59	45,893	5.81
USL (kWh)	8,866,274	4,733,123	-46.62	4,977,378	5.16	3,287,782	-33.95

Variance Analysis of Throughput Revenue — Weather Normalized vs. Actual

	2006 Board Approved	2006 Actual	2006 Actual - Normalized	2006 Actual- Normalized vs. 2006 Actual	2007 Actual	2007 Actual - Normalized	2007 Actual- Normalized vs. 2007 Actual	2008 Actual	2008 Actual - Normalized	2008 Actual- Normalized vs. 2008 Actual
				%			%			%
Throughput Revenue (\$)	32,397,153	32,780,795	32,896,773	0.35	33,087,304	33,043,011	-0.13	33,317,184	33,370,888	0.16
Fixed Charge	13,984,193	14,338,107	14,338,107	0.00	14,680,541	14,680,541	0.00	14,934,945	14,934,945	0.00
Residential	7,965,624	8,317,289	8,317,289	0.00	8,663,498	8,663,498	0.00	8,841,865	8,841,865	0.00
GS<50	2,050,723	2,209,414	2,209,414	0.00	2,173,457	2,173,457	0.00	2,216,599	2,216,599	0.00
GS>50	2,957,015	2,867,839	2,867,839	0.00	2,852,334	2,852,334	0.00	2,846,071	2,846,071	0.00
Large User	681,991	670,708	670,708	0.00	655,837	655,837	0.00	682,669	682,669	0.00
Street Lighting	129,009	201,330	201,330	0.00	210,792	210,792	0.00	222,939	222,939	0.00
USL	199,831	71,528	71,528	0.00	124,623	124,623	0.00	124,803	124,803	0.00
Variable Charge	18,412,960	18,442,688	18,558,666	0.63	18,406,763	18,362,471	-0.24	18,382,238	18,435,943	0.29
On kWh	9,673,034	10,033,712	10,091,493	0.58	9,912,585	9,890,873	-0.22	9,986,106	10,012,989	0.27
Residential (kWh)	7,548,754	7,893,738	7,939,385	0.58	7,805,584	7,788,412	-0.22	7,865,141	7,886,377	0.27
GS<50 (kWh)	1,944,644	2,098,389	2,110,523	0.58	2,063,199	2,058,660	-0.22	2,091,650	2,097,297	0.27
USL (kWh)	179,636	41,585	41,585	0.00	43,801	43,801	0.00	29,315	29,315	0.00
On kW	8,739,926	8,408,976	8.467.173	0.69	8,494,179	8.471.597	-0.27	8.396.133	8,422,954	0.32
GS>50 (kW)	7 984 297	7 862 566	7 920 763	0.74	8 018 872	7 996 291	-0.28	7 760 712	7 787 533	0.35
Large User (kW)	673,531	355,569	355,569	0.00	331,119	331,119	0.00	424,243	424,243	0.00
Street Lighting (kW)	82.098	190.841	190.841	0.00	144,188	144,188	0.00	211.178	211.178	0.00
Throughput Revenue (V	olumes)		,			,		,	,	
kWh	837,545,505	860,057,282	865,003,327	0.58	878,173,882	876,252,850	-0.22	874,919,268	877,272,673	0.27
kW	2,777,057	2,730,876	2,747,947	0.63	2,660,528	2,654,089	-0.24	2,603,043	2,610,741	0.30
Unit Revenue										
\$/Customer or Connection (on Fixed Charge)	140.88	138.25	138.25	0.00	138.47	138.47	0.00	138.47	138.47	0.00
\$/kWh (on Variable Charge)	0.0115	0.0117	0.0117	0.00	0.0113	0.0113	0.00	0.0114	0.0114	0.00
\$/kW (on Variable Charge)	3.1472	3.0792	3.0813	0.07	3.1927	3.1919	-0.02	3.2255	3.2263	0.02
Consumption										
Residential (kWh)	611,363,405	624,196,150	627,805,662	0.58	639,510,859	638,103,935	-0.22	638,167,356	639,890,408	0.27
GS<50 (kWh)	217,315,826	231,128,009	232,464,543	0.58	233,685,645	233,171,537	-0.22	233,464,130	234,094,483	0.27
GS>50 (kW)	2,266,174	2,306,337	2,323,408	0.74	2,286,676	2,280,237	-0.28	2,227,288	2,234,986	0.35
Large User (kW)	470,044	381,847	381,847	0.00	330,481	330,481	0.00	329,862	329,862	0.00
Street Lighting (kW)	40,839	42,692	42,692	0.00	43,371	43,371	0.00	45,893	45,893	0.00
USL (kWh)	8,866,274	4,733,123	4,733,123	0.00	4,977,378	4,977,378	0.00	3,287,782	3,287,782	0.00

#### Summary of Consumption and Customer Addition — Weather Normalized

	2004 Actual - Normalized	2005 Actual - Normalized	2005 Actual- Normalized vs. 2004 Actual- Normalized	2006 Board Approved	2006 Actual - Normalized	2006 Actual- Normalized vs. 2006 Board Approved	2006 Actual- Normalized vs. 2005 Actual- Normalized	2007 Actual - Normalized	2007 Actual- Normalized vs. 2006 Actual- Normalized	2008 Actual - Normalized	2008 Actual- Normalized vs. 2007 Actual- Normalized
# of Customers or Connections											
Residential	69,405	71,490	2,085	69,405	72,866	3,461	1,376	74,392	1,526	75,847	1,455
GS<50	6,816	6,916	100	6,796	7,049	253	133	7,198	149	7,337	139
GS>50	1,058	1,077	19	1,058	1,021	-37	-56	1,005	-16	1,007	2
Large User	4	4	0	4	4	0	0	4	0	4	0
Street Lighting	21,173	21,457	284	21,173	21,993	820	536	22,599	606	22,840	241
USL				826	781	-45	781	818	37	820	2
Average Consumption											
Residential (kWh per Customer)	8,624	8,826	202	8,809	8,616	-193	-210	8,578	-38	8,437	-141
GS<50 (kWh per Customer)	32,978	33,374	396	31,977	32,978	1,001	-396	32,394	-584	31,906	-488
GS>50 (kW per Customer)	2,173	2,135	-38	2,142	2,276	134	141	2,269	-7	2,219	-49
Large User (kW per Customer)	115,107	111,437	-3,670	117,511	95,462	-22,049	-15,975	82,620	-12,842	82,466	-155
Street Lighting (kW per Connection)	1.9710	1.9643	0	1.9288	1.9412	0	0	1.9192	0	2.0093	0
USL (kWh per Connection)				10,734	6,060	-4,674	6,060	6,085	24	4,009	-2,075

#### Question #17

**Reference:** Exhibit 3, pages 31& 33 and page 10 (lines 9-11)

 Please provide a schedule that sets out annual population growth and annual growth in residential and GS<50 customers for each of the years in the period 2001-2008.

#### <u>Response</u>

	Population	Residential Customer	GS<50 Customer
	Growth	Growth	Growth
2001	<b>1.56%</b>	0.93%	0.31%
2002	1.56%	2.18%	0.02%
2003	<b>1.56%</b>	2.81%	2.04%
2004	1.56%	2.78%	1.69%
2005	<b>1.56%</b>	3.00%	1.47%
2006	<b>1.56%</b>	1.92%	1.92%
2007	1.56%	2.09%	2.11%
2008	1.56%	1.96%	1.93%

b) Please provide the assumed population growth for 2009 and 2010. Does the observed relationship between population and customer growth (per part (a)) and the assumed population growth for 2009 and 2010 support a 1.5% increase in residential customer in 2009 and 2010?

#### <u>Response</u>

The assumed population growth for 2009 and 2010 is 1.56%. Up to September 30, 2009, the number of residential customers has increased by 590, equating to a 1% annual growth rate.

c) Please reconcile the forecast increased level of spending on system expansion in 2009 and 2010 relative to 2008 as set out in Exhibit 2 with the reduction in growth rate for new residential and GS<50 customers over the same period.

#### **Response**

The increased spending on system expansion in 2009 and 2010 is largely a result of two large multi-year system reinforcements that are underway in 2009 and 2010:

- i) Construction of the new Wilmot Transformer Station (a.k.a. 9TS) and installation of the ducts, cables and pole lines that will connect the new station to the existing distribution system. This project was commenced before the start of the current economic downturn and will be placed into service in 2010.
- ii) Reinforcement of the feeders supplying power to the downtown core of Kitchener. This area of Kitchener continues to redevelop despite the economic slowdown and the extra feeder capacity will need to be in place by the time the economy recovers and the pace of redevelopment accelerates.
- d) Please provide the actual customer count for the Residential, GS<50 and GS</li>
   >50 classes for the most recent month available.

#### <u>Response</u>

#### See Energy Probe Interrogatory #10

e) Please provide a Table that contrasts Kitchener-Wilmot's calculation of 2007 conservation savings with that estimated by Enerspectrum for both the Residential and the GS<50 classes.

#### <u>Response</u>

2007 Energy Savings for LRAM (in kWh)										
	Reside	ential	GS < 50							
	KW Hydro	Enerspectrum	KW Hydro	Enerspectrum						
Third Tranche	3,375,183	2,760,795	3,806,193	1,124,034						
OPA Programs	18,858,000	18,498,315	9,000	361,034						
Total	22,233,183	21,259,110	3,815,193	1,485,068						

f) Why did Kitchener-Wilmot use its own internal estimates of CDM savings as opposed to those developed by Enerspectrum in its load forecast methodology?

The load forecast was developed before the Enerspectrum report was completed and the numbers were not updated with Enerspectrum's estimates.

#### Question #18

**Reference:** Exhibit 3, page 35

a) Given the "promising turn around in 2010" (line 10), why isn't the average use for the GS>50 class forecast to increase over 2009 levels?

#### **Response**

The City of Kitchener's economy has traditionally been manufacturing based. Many jobs have been lost through the recent recession and there have been numerous plant closures. The Canadian dollar continues to remain high, causing problems for exporting manufacturers. There may be a "promising turn around" in the economy but KW Hydro is not convinced that its manufacturing sector will rebound to the point where average consumption will increase.

#### Question #19

**Reference:** Exhibit 3, page 37

a) Are any of the Large Users registered as Market Participants with the IESO? If yes, what % of the class' sales in 2010 do they account for?

#### **Response**

No

#### Question #20

**Reference:** Exhibit 3, page 46

a) Given that Kitchener-Wilmot is rejecting the Hydro One Networks weather normalization results as being too aggressive – why is it reasonable to use HON's estimate of percent of weather sensitive load in the development of the forecast (as per page 18)?

Since KW Hydro does not have ability to generate its own weather sensitivity factor, Hydro One's weather sensitive factor is the best available result that KW Hydro can utilize. In terms of weather normalized average consumption, KW Hydro does have the historical data to test the results in Hydro One's report.

#### Question #21

**Reference:** Exhibit 3, page 57

a) Please provide a schedule that for each line item in Table 28 sets outs either i) the source of the data with page references to elsewhere in the Application or ii) how the result was calculated using the values from other lines in the table.

#### <u>Response</u>

The items for which the reference is apparent are not listed (i.e. deemed rates). References below refer to items numbers 1 to 16 in the list.

- (1) Total kilometers of overhead line comes from our Engineering Department
- (2) Length of Line Specific
- (3) Length of Line Shared
- (4) Average load wheeled Specific Line = Meter Data
- (5) Average load wheeled Shared Line = Meter Data
- (6) Depreciation Rate = OEB depreciation factors
- (7) Total fixed asset value = Total Fixed Asset value before WIP (from the FA schedules) for 2009 and 2010 divided by 2
- (8) Capital Cost of Line Total of Capital Cost of 1830, 1835 & (1855 \* 7.4%) for 2009 and 2010 divided by 2. KW Hydro tracks overhead and underground services separately and based the split of 1855 based on the average split of the two in 1855. Total Capital Cost is reduced by Contributed Capital amounts
- (9) Operating Costs Total of 5020, 5025, 5120, 5125, 5130 & 5135 from the 2010 Trial Balance
- (10) Accumulated Depreciation same methodology as Capital Cost of Line only using the depreciation amounts.
- (11) General Administration Costs Accounts 5305 5695 plus 6105 (Property Taxes)
- (12) Administration Costs specific to Overhead ((7 / 1) \* (8 / 7)) \* 1
- (13) Utilization Factor Specific 2 / 1
- (14) Utilization Factor Shared (3 / 1) \* (4 / 5)

- (15) Specific Line
  - **Depreciation Expense= ((8 / 1) \* 6) \* 1)) \* 13**
  - Return on Assets = ((8 10) \* 13) \* Rate of Return before Tax
  - Administration Costs = (9 + 12) \* 13
- (16) Shared Line
  - Depreciation Expense= ((8 / 1) \* 6) \* 1)) \* 14
  - Return on Assets = ((8 10) \* 14) \* Rate of Return before Tax
  - Administration Costs = (9 + 12) \* 14
- b) How does the calculation in Table 28 incorporate consideration of Billing & Collection costs and Community Relations costs?

#### <u>Response</u>

## Billing, collection and community relations costs are included in the General Administration factor

c) Does Table 28 assign a portion of General Plant cost to the Embedded Distributor? If not, why not?

#### <u>Response</u>

#### The costs are based on the balances of 1830, 1835 and pro-rata 1855

d) Does Table 28 include any metering costs (i.e., for metering assets) in the determination of the rate? If not, why not?

#### <u>Response</u>

Meter assets are not built into the formula in the determination of the rate; however, meter reading expenses are. There is one meter owned by KW Hydro

#### Question #22

**Reference:** Exhibit 3, page 61

a) Why is it reasonable to maintain the Standby Charge at its current level as opposed to increasing it by the overall average increase in distribution rates for 2010?

KW Hydro's current Rate Order regarding Standby charges states "Monthly Rate – Applicable Customer Class Distribution Volumetric Rate - \$/kW of contracted amount". No change is therefore required as any changes in volumetric distribution rates will be automatically reflected in the Standby Charge

#### Question #23

**Reference:** Exhibit 3, page 62

a) Did Kitchener-Wilmot offer a Winter Warmth program over the 2008-2009 winter period?

#### <u>Response</u>

#### Yes. It is locally known as the "Heat Bank" program

b) Given the Board's September 28, 2009 update regarding the Low Income Energy Assistance Program initiative, is the assumption regarding reduced late payment revenues in 2010 still appropriate? Please explain.

#### **Response**

#### See Energy Probe interrogatory #17 c)

#### Question #24

**Reference:** Exhibit 3, page 63

a) With respect to the proposed Collection of Account Charge – No Disconnection, please explain more fully why the collection team is making field visits to customers and what happens if no payment is received at the time of the visit.

#### <u>Response</u>

KW Hydro will make two field visits as a customer nears disconnection due to nonpayment. The first is to hand deliver the Termination Notice, which gives the customer official notice that payment is required within 7 calendar days in order to avoid disconnection of service. The second visit will occur on the 8<sup>th</sup> calendar day following the first field visit if the customer has not yet made payment on the account. During this visit, the Collector will knock on the customer's door and attempt personal contact before disconnecting the customer's service. If no payment is made at this point, electricity service to the residence will be disconnected.

In many cases, customers are waiting until the Collector's second visit to pay the account at the door, rather than contacting the office for payment arrangements or paying the account prior to the visit.

The need for this charge is due to the fact that KW Hydro incurs additional costs due to the second collections visit. The rationale is that, if there was a charge for the second visit, that customers would instead come to the office to make the payment in order to avoid the charge, rather than wait for the Collection Officer to come to the door to receive it personally.

b) Please provide a table similar to Table 32 setting out the derivation of the \$30 proposed charge.

#### **Response**

		Spec	cific S	ervice Cha	rges					
	Generic Rates and Model for Deriving LDC Specific Rates									
	LDC Name:			Kitchener-Wilmot Hydro Inc.						
Specific Service Charge Description:				\$30 Collect	ion of Account C	harge - No Dis	connection			
				Rate/Amount	Hours/Units	O/T Factor	Calculated Cost			
L	Direct Labour (inside	staff) Straigh	ıt Time	28.30	0.5		\$14.15			
Α	Direct Labour (inside				\$0.00					
В	Direct Labour (field s	taff) Straight	Time				\$0.00			
0	Direct Labour (field s	taff) Overtim	e		0	0	\$0.00			
U	Other Labour (Specif	y)					\$0.00			
R	Payroll Burden %			40%			\$5.66			
		Total Labou	r Cost				\$19.81			
0	Small Vehicle Time			15.00	0.5		\$7.50			
т	Large Vehicle Time						\$0.00			
н	Other:	Material					\$0.00			
E		Contract					\$0.00			
R		Other								
		Total Other					\$7.50			
Total Cost							\$27.31			
	Specific Service Cha	st \$5		\$30.00						

#### See table below

#### **OPERATING COSTS**

#### Question #25

Reference: Exhibit 4, pages 6-11

a) Given the Board's September 28, 2009 update regarding the Low Income Energy Assistance Program initiative, is the budgeted LEAP amount required for 2010? If yes, why?

#### <u>Response</u>

#### See Energy Probe interrogatory #17 c)

b) The discussion of 2007 Other Payroll Increases makes reference to two new positions being filled during the year. However the variance attributed to this category is only \$1,000 for 2007. Please reconcile.

#### **Response**

In 2007, the President retired and the Vice President of Operations was promoted to the President's position. The Vice President of Operations position was not refilled. The savings generated by the reduction of one employee offset the payroll increases generated by the three senior management promotions, creating a variance of only \$1,000

c) The discussion of 2009 Other Payroll Increases makes reference to filling three vacant positions from the previous year. However, 2008 does not show any reduction due to vacant positions. Please reconcile.

#### **Response**

#### See School Energy Coalition Interrogatory #5a and 5b

d) Why isn't Kitchener-Wilmot recording the transition costs associated with IFRS in a deferral account as directed by the Board in EB-2008-0408 (page 27)?

#### **Response**

#### See Energy Probe interrogatory #21 b)

e) Historical increases in overtime are attributed to a buoyant economy and storm damage. Given recent economic conditions and assumptions regarding normal weather, why aren't overtime levels forecast to be lower in 2009 and 2010 versus 2008?

#### **Response**

The vacant positions have not yet been filled and overtime is still required as needed from our staff. For additional detail, see SEC Interrogatory #4

#### Question #26

Reference: Exhibit 4, pages 8 and 27-28

a) The discussion on pages 27-28 regarding Accounts 5005 and 5625 suggest a decrease in construction activities in 2009 relative to 2008. However, the discussion on page 8 suggests that the labour split between OM&A and capital will be roughly the same in 2009 and 2010 as it was in 2008. Please reconcile.

#### **Response**

KW Hydro has not budgeted for a decrease in capital expenditures; however, a decrease in billable construction work is expected due to decreased development activity, thus reducing the recovery of administration costs.

#### Question #27

**Reference:** Exhibit 4, pages 32-33

 a) Please provide a schedule that sets out the "costs" of providing Street Lighting capital and maintenance services to the City and the Township in 2008, 2009 and 2010.

#### <u>Response</u>

The cost split for 2009 and 2010 has been calculated using 2008 actuals.
#### **Street Lighting Expenses**

Expense	2008 Actual	2009 Bridge	2010 Test
Labour Outside	213,327	226,947	231,486
Labour O/H- Outside	137,185	145,944	148,862
Material Inventory	268,751	285,910	291,628
Material O/H	42,049	44,734	45,629
Outside Contracting	86,996	92,551	94,402
Material Credits	(28,948)	(30,797)	(31,413)
Vehicle O/H	95,777	101,893	103,930
Supervision	7,516	7,996	8,156
Direct Purchases	<b>15,802</b>	16,811	17,147
Engineering O/H	64,992	69,141	70,524
Administration	83,579	88,916	90,694
Amortization	3,880	4,128	4,211
Rental	6,430	6,841	6,977
Deposits	(72,700)	(77,342)	(78,889)
Total	924,635	983,672	1,003,345

b) Does the net revenue from the provision of these services contribute as an offset to Kitchener-Wilmot's revenue requirement for its regulated utility business?

#### **Response**

#### Yes

#### Question #28

Reference: Exhibit 4, pages 34-35

a) Do the one time regulatory costs for the 2010 Rebasing Application include any allowance for OEB-specific costs or intervenor costs? If yes, where are they captured in the budget?

#### <u>Response</u>

#### See Board Staff Interrogatory #14

b) Please provide the assumptions underlying the anticipated requirement for \$165,000 in consulting and legal costs.

#### **Response**

The \$165,000 is broken down as such:

Legal - Written Hearing:\$40,000Rate Consultant:\$30,000Asset Management Consultant:\$40,000LRAM/SSM Consultant:\$15,000Intervenors:\$40,000

An oral hearing was not anticipated. If KW Hydro's rate application goes to an oral hearing, costs are expected to increase to \$120,000 for Legal Fees and \$45,000 for the Rates Consultant

#### Question #29

**Reference:** Exhibit 4, page 54

 a) Please provide a schedule that sets out the calculation of the 2010 depreciation expense for Accounts #1815 and #1850 based on the depreciation rates on page 54 and the 2010 opening asset balances and additions as shown in Exhibit 2, Table 16.

#### **Response**

					2010	
		2009			Incremental	2010
		Depreciation	2010 Capital	Depreciation	Depreciation	Depreciation
Account	Account Description	Expense	Additions	Rate	Expense	Expense
1815	Transformer Station Equipment - Normally Primary above 50 kV	989,635	15,201,162	2.5%	380,029	1,369,664
1850	Line Transformers	2,016,727	2,480,865	4%	99,235	2,115,961

#### Question #30

**Reference:** Exhibit 4, pages 65-66

a) Do the tax rates used for 2010 reflect the May 2009 budget changes that, effective July 1, 2010, reduce the small business tax rate from 5.5% to 4.5% and eliminate the small business tax deduction surtax? If not, please provide an updated tax calculation.

#### Response

No, the tax rates did not include the above reductions. See Energy Probe Interrogatory #36

#### COST OF CAPITAL

#### Question #31

**Reference:** Exhibit 5, pages 4-7

a) If Kitchener-Wilmot Hydro wanted to pay off its current long-term debt are there any impediments to it borrowing from a third party such as a commercial bank? For example, would it require the "guarantee" or "permission" of its shareholders to undertake such borrowing?

#### **Response**

The Corporation's Shareholders Agreement would require shareholder approval of any contract, commitment, or transactions that would increase the Debt/Equity ratio of the Corporation to greater than 55% Debt/45% Equity of the consolidated book value of the Corporation and its subsidiaries.

Due to the recent and on-going 'credit crunch' and tight liquidity experienced in the financial markets over the past year, commercial banks may be unable or reluctant to provide the Corporation with a \$71M loan, and, even if they were able, would require security interest in our assets (which are currently unsecured and unencumbered), possible guarantees from our shareholders, as well as various restrictive financial covenants. In the long run, this may restrict the Corporation's ability to borrow for future requirements and increase its financing costs.

b) If the response to part (a) is yes, is there any reason to expect these impediments would prevent it from undertaking 3<sup>rd</sup> party borrowing? For example, if a "guarantee" was required from the shareholders, is there any reason to expect such a guarantee could not/would not be provided?

#### **Response**

### The Corporation's shareholders have no desire to redeem their Promissory Note, thus it cannot be assumed that such a guarantee would be provided.

c) What is the basis for the 6% debt rate for 2008 as shown on page 6 and discussed on page 7?

#### <u>Response</u>

The interest rate charged by KW Hydro's shareholders is equal to the OEB deemed long-term debt rate. KW Hydro's deemed debt rate was set in 2006 at 6%, where it remains until rebasing is complete in 2010.

d) Why does Kitchener-Wilmot believe the Board's deemed long-term debt rate applies in its circumstance when the debt is not callable on demand by the shareholders or, for that matter, callable within one year?

#### <u>Response</u>

Shareholders may "demand" repayment upon 18 months written notice. The promissory notes have no maturity date (not locked in for a specified number of years with a termination date and fixed interest rate), but rather the interest rate varies with the deemed long term interest rate established by the OEB from time to time.

#### **REVENUE DEFICIENCY**

#### Question #32

#### Reference: Exhibit 6

 a) Please reconcile the total of Other Revenue and Other Distribution Charges reported here (\$1,795,440) with the total for Other Revenue reported in Exhibit 3, Table #31 (\$1,740,295).

#### <u>Response</u>

#### See reconciliation below

#### **Other Revenue Reconciliation**

Exhibit 3 Table 37	Other Revenue	1,740,295
Ado Deduc	d: Embedded Distributor t: Gain on Disposition of Utility Property *	70,145 (15,000)
Exhibit 6	Other Revenue & Other Distribution Charges	1,795,440

- \* Account 4355 Gain on Disposition of Utility Property of \$30,000 forecast for 2010. Revenue offset is at 50%
- b) Please reconcile the total Distribution Expense reported here in Table 1 (\$25,386,819) with the total reported in Exhibit 4, Table 1 (\$25,476,819).

#### <u>Response</u>

### The difference is \$90,000 in charitable donations not deductible as OM&A expense for rate-making purposes but part of KW Hydro's OM&A.

c) Please reconcile the OM&A costs reported in Table 5 with those reported in Exhibit 4, Table 1. There appears to be a discrepancy of \$90,000.

#### **Response**

#### See answer to the previous question.

 Please reconcile the 2010 Distribution Revenue at 2009 rates reported in Tables 4 and 5.

#### <u>Response</u>

See reconciliation below

#### 2010 Distribution Revenue at 2009 Rate Reconciliation

Exhibit 6 Table 4	Total 2010 Throughput Revenue	33,105,250
Add: Deduct:	Embedded Distributor Transformation Ownership Allowance	70,145 (426,772)
Exhibit 6 Table 5	2010 Test Distribution Revenue	32,748,623

e) Please revise Table 4 so that it sets out the 2010 revenue at 2009 rates (net of transformer ownership allowances, smart meter adder and SSS Administration charges) that would actually be received from each customer class. For those customer classes where some/all customers receive a transformer ownership discount, the relevant kWs and the "discounted" rate should be used in the calculation. Please show the full (i.e., unrounded) rates applied to each customer class along with the kWs eligible/not eligible for the transformer ownership allowance by class and the associated revenues based on 2009 rates for each that would actually be received. Please also show the resulting fixed and variable revenue portions for each class.

#### **Response**

2010 Throughput Revenue at Proposed 2010 Rates									
	Fixed Rate	Variable         Number of         kWh / kW           Fixed Rate         Rate         Customers         Sales         Fixed Charge		Variable Charge	Base Revenue				
Residential	\$ 12.05	\$ 0.0162	78,139	650,038,341	\$	11,298,899	\$10,507,872	\$ 21,806,772	
GS < 50	\$ 25.17	\$ 0.0125	7,484	235,461,608	\$	2,260,467	\$ 2,933,723	\$ 5,194,190	
GS > 50	\$ 232.71	\$ 3.7221	1,003	2,231,346	\$	2,800,898	\$ 8,305,403	\$ 11,106,300	
Large User	\$14,195.83	\$ 1.8968	2	140,928	\$	340,700	\$ 267,307	\$ 608,007	
Street Lighting	\$ 0.78	\$ 4.4012	23,299	46,815	\$	218,079	\$ 206,044	\$ 424,123	
Unmetered Scattered Load	\$ 8.34	\$ 0.0125	820	3,287,380	\$	82,066	\$ 41,057	\$ 123,123	
Total 2010 Throughput Revenue					\$	17,001,108	\$22,261,407	\$ 39,262,515	
2010 Throughput Revenue Requirement								\$ 39,262,515	
Total 2010 Revenue Deficiency								\$0	

 Please provide a schedule that sets out the derivation by class of the \$32,748,623 value for Distribution Revenue reported in Table 5.

#### **Response**

Table 5 Reconciliation by Class								
						Transformer		
				Variable		Ownership		
	Fib	ked Charge		Charge		Allowance	Ba	se Revenue
Residential	\$	8,954,729	\$	7,995,472	\$	-	\$	16,950,201
GS < 50	\$	2,260,467	\$	2,119,154	\$	-	\$	4,379,622
GS > 50	\$	2,800,898	\$	7,854,784		(426,772)	\$	10,228,910
Large User	\$	340,700	\$	201,753	\$	-	\$	542,452
Street Lighting	\$	218,079	\$	205,743	\$	-	\$	423,821
USL	\$	123,886	\$	29,586	\$	-	\$	153,472
Embedded Distributor							\$	70,145
Total 2010 Throughput Revenue	\$	14,698,758	\$	18,406,492	-\$	426,772	\$	32,748,623

g) Based on the responses to the first round of interrogatories from all parties please prepare a schedule that sets out all the adjustments/revisions that Kitchener-Wilmot Hydro has acknowledged as being required to the currently requested 2010 revenue requirement and the impact of each.

#### **Response**

- Remove LEAP donations (decrease distribution expenses \$46,976)
- Remove Rebasing Expenses for Hearings and move to deferral account (decrease distribution expenses \$74,000)
- Remove IFRS expenses to deferral account (decrease distribution expenses \$43,000)
- Gross up revenue from Street Lighting and adjust rate of return (increase revenue offset \$29,916)
- Increase revenue for Specific Service Charges to annual figure (increase revenue offset \$11,113)
- Decrease PILS for new tax rates effective July 1, 2010 \$18,750
- Decrease Ontario Capital Tax \$111,085
- Increase Apprentice Tax Credit \$75,000
- Record Co-operative Education Tax Credit \$6,000

#### **COST ALLOCATION**

#### Question #33

#### **Reference:**

i) Exhibit 7, pages 3-8

ii) 2006 Cost Allocation Run Model – Initial and TOA Removed

- a) There are a number of Inconsistencies in the 2007 Cost Allocation Run With the Transformer Ownership Allowance (TOA) Removed :
  - The overall Revenue Requirement is the same as the Initial 2007 Run (\$34,712,648). However the Revenue Requirement should be lower (i.e., reduced by the amount of the TOA - \$969,968). Upon inspection it appears that the cost of TOA was added back in at Sheet I3, Cell F18. This adjustment should not have been made.
  - The Miscellaneous Revenues are lower in the TOA Removed Run whereas they should be the same as in the Initial Run.
  - The Total Distribution Revenue are higher in the TOA Removed Run whereas they should be lower – by the amount of the TOA. Similarly, in the TOA Removed Run, the Distribution Revenues for those classes receiving the TOA should be lower than in the Initial Run by an amount equal to the TOA received.

Please provide a revised 2006 TOA Removed Run that corrects these points.

#### <u>Response</u>

See file provided on CD named KitchenerWilmot\_VECC\_IRR\_Q33\_20091119.xls

#### Question #34

Reference: i) Exhibit 7, page 3 and pages 8-10 ii) 2010 Cost Allocation Model Run

- a) Please provide a schedule that sets out for each customer class the following values as used in the 2007 Cost Allocation filing and the 2010 Cost Allocation filing:
  - The kWh consumption (per Sheet I6)
  - The 12 CP value (per Sheet I8)
  - The 4 NCP value (per Sheet I8)

#### **Response**

	2007 Cost Allocation Informational Filing									
	Total	Residential	GS < 50 kW	GS > 50 kW	Large Use	Street Light	USL	Embedded Distributor	Standby	
kWh Consumption	2,051,707,754	626,794,613	230,373,119	902,090,593	235,982,075	15,467,628	8,866,834	19,684,922	12,447,970	
12 CP	3,703,999	1,305,799	391,742	1,556,978	350,399	25,084	12,143	38,204	23,650	
4 NCP *	1,457,353	524,679	156,604	584,335	142,528	14,398	4,133	16,033	14,643	
			20	10 Cost Allocat	ion Model					
	Total	Residential	GS < 50 kW	GS > 50 kW	Large Use	Street Light	USL	Embedded Distributor	Standby	
kWh Consumption '	1,861,211,165	650,038,341	235,461,608	884,051,506	71,682,604	16,689,726	3,287,380	-	-	
12 CP	3,418,467	1,354,222	400,395	1,525,843	106,438	27,066	4,502	-	-	
4 NCP *	1,337,212	544,136	160,063	572,650	43,295	15,536	1,532	-	-	
*Classification NCP Load Data Provider	from									

b) How did Kitchener-Wilmot adjust the demand allocation factors in order to account for the transfer of Large Users to the GS>50 class between 2006 and 2010?

#### **Response**

KW Hydro used the 2010 forecasted number of customers from the load forecast

c) With respect to page 9, why does Kitchener-Wilmot believe that the Embedded Distributor class cannot be accurately reflected in the model?

#### <u>Response</u>

#### See Board Staff Interrogatory #22

d) Please reconcile the \$39,490,515 Base Distribution Revenue Requirement for 2010 (Table 2 and Sheet O1) with the results in Exhibit 6, Table 1 which suggest that the value should be \$38,835,743 (\$38,905,888 - \$70,145), when the transformer ownership allowance is excluded per the Board's filing directions.

#### <u>Response</u>

Base Revenue Requirement per Table 2	\$ 39,490,515
Transformer Ownership Allowance	(426,772)
Standard Supply Service Administration	(228,000)
Exhibit 6, Table 1 Base Revenue Requirement	\$ 38,835,743

e) Please reconcile the Miscellaneous Revenues used in Reference (ii), Sheet O1 with the Miscellaneous Revenues set out in Exhibit 3.

#### **Response**

Other Revenue per Exhibit 3, Table 31	\$ 1,740,295
Transformer Ownership Allowance	(426,772)
Embedded Distributor	70,145
50% Gain on Disposal of Fixed Assets	(15,000)
Standard Supply Service Administration	(228,000)
Miscellaneous Revenue Sheet O1	\$ 1,140,668

f) Please provide the full Excel Model for the 2010 Cost Allocation Run supporting the "Before the Proposed Adjustments" case {i.e., results in 88.55% for Residential}.

#### **Response**

#### Attached on CD File name -KitchenerWilmot\_VECC\_IRR\_Q34F\_20091119.xls

g) Please describe how the Revenues by Customer Class in Table 2 were determined for the column "Test Year Revenue Assuming Current Revenue to Cost Ratios".

#### **Response**

#### See Exhibit 6, Table 4 on page 7 of the 2010 Rate Application

h) Why is Kitchener-Wilmot proposing to increase the revenue to cost ratio for residential above the lower end of the Board's recommended range when the Board concluded in its EB-2007-0667 Report that there are "factors that currently limit or otherwise affect the ability or desirability of moving immediately to a cost allocation framework that might, from a theoretical perspective, be considered ideal (page 2) and that "a range approach is preferred" (page 4)?

#### <u>Response</u>

# KW Hydro rationale was to try to move approximately 50% closer to revenue to cost unity. The residential rate class was moved just over that figure.

 i) Has Kitchener-Wilmot made any improvements or changes to the Cost Allocation model used for 2010 (as opposed to that used for the 2007 filing) to address the data and methodology concerns noted by the Board in its EB-2007-0667 Report (pages 5-6)?

#### Response

Yes - KW Hydro has:

- Conducted an analysis on its compliance with USoA to ensure the greater detail required for all purposes (internal and external)
- Begun the installation of Smart Meters in its service territory
- Analyzed and adjusted the number of connections used for the Street Lighting rate class
- Removed the Standby and Embedded Distributor rate classes from the analysis, which are difficult to model and skew the results

j) Please reconcile the proposed revenues by class as set out in Table 2 with those in Exhibit 8, Table 2.

#### <u>Response</u>

#### The difference is \$228,000 of Standard Supply Administration revenue

k) Please reconcile the total of Distribution Costs, Customer Related Costs and General & Administration costs reported in Sheet O1 (\$14,650,976) with the total Operating Costs, excluding Amortization Expense, reported in Exhibit 4, Table 1.

#### <u>Response</u>

### The difference is \$90,000 in charitable donations not allowed for rate making purposes but expenses that do form part of KW Hydro's OM&A

 Please confirm that Kitchener-Wilmot has (implicitly) incorporated the transformer allowance into the 2010 Cost Allocation run by reducing the Miscellaneous Revenue and that this results in the "cost" of the allowance being allocated to all customer classes. If this is not the case, please explain how the "cost" of the transformer allowance is recovered.

#### <u>Response</u>

### It would appear that the transformer allowance has been incorporated by reducing the Miscellaneous Revenue

m) Why are the Standard Service Supply Administration revenues included in the Distribution Revenues in Sheet O1 (\$39,490,515 – per Exhibit 8, page 4) as opposed to being included in Miscellaneous Revenues?

#### <u>Response</u>

#### The Board instructed LDCs to report Standard Supply Service Administration revenues in account 4080, which is Distribution revenue.

- n) Provide a revised 2010 Cost Allocation Run where:
  - Miscellaneous Revenues are \$1,795,440 (i.e., Total Miscellaneous Revenues from Exhibit 3, including Embedded Distributor revenues)
  - Base Distribution Revenues are \$38,835,743
  - Base Distribution Revenues by class are based on the revenue proportions derived from Question #32 part (e) (i.e., 2010 revenues at existing rates net of the TOA).

#### **Response**

Attached on CD File name -KitchenerWilmot\_VECC\_IRR\_Q34N\_20091119.xls

#### RATE DESIGN

#### Question #35

**Reference:** Exhibit 8, pages 1-5

 a) Please reconfirm that in EB-2007-0067 (page 12) the Board set the ceiling for the Monthly Service Charge at 120% of the calculated MSC based on avoided costs plus allocated customer costs. Please revise Table 3 accordingly.

#### **Response**

#### Confirmed

Comparison of Current and Proposed Monthly Fixed Charges with the Floor and Ceiling						
Class	Existing Fixed Rates	Proposed Fixed Rates	Floor of Fixed Rates	Ceiling of Fixed Rates		
Residential	9.55	12.05	3.96	4.75		
GS<50 kW	25.17	25.17	6.18	7.42		
GS>50 kW	232.71	232.71	39.32	47.18		
Large Use	14,195.83	14,195.83	114.27	137.12		
Street Lighting	0.78	0.78	0.00	0.00		
USL	12.59	8.34	(0.030)	(0.036)		

b) What mark-up (\$/kW) would be required to the GS>50 volumetric rate in order to recover the TOA discount offered to customers in this class from all customers in the class?

#### <u>Response</u>

\$0.19 per kW or 5%

#### Question #36

**Reference:** Exhibit 8, pages 6-9

a) Please confirm that for 2008 the OEB approved a reduction in Kitchener-Wilmot's Retail Network Service rates of 18% when the utility had only requested a 12% reduction (page 6, lines 20-25).

#### <u>Response</u>

#### Confirmed

b) Please confirm that if Line Connection Rates apply to 92.1% of Kitchener-Wilmot's load and Transformation Connection Rates apply to only 7.9% of its load then the average decrease for Connection charges in 2009 is only 0.5%. If this is the case, does Kitchener-Wilmot's proposed 22% reduction in Retail Connection charges need to be revised?

#### **Response**

KW Hydro plans to revise the proposed reduction in Retail Transmission rates when the Board issues Hydro One's rate order for rates effective January 1, 2010

#### Question #37

**Reference:** Exhibit 8, page 27

- a) Based on a recent 12 consecutive months of actual billing data, please indicate the percentage of total residential customers that:
  - Consume less than 100 kWh per month
  - Consume 100 -> 250 kWh per month
  - Consume 250 -> 500 kWh per month
  - Consume 500 -> 750 kWh per month
  - Consume 750 -> 1000 kWh per month
  - Consume 1000 -> 1500 kWh per month
  - Consume 1500 -> 2000 kWh per month
  - Consume more than 2000 kWh per month

#### <u>Response</u>

See table below

Min		Max	Percentage
	0	100	0.69%
	101	250	5.08%
	251	500	25.21%
	<b>501</b>	750	30.76%
	751	1000	<b>18.96%</b>
	1001	<b>1500</b>	14.05%
	1501	2000	3.51%
	2001	above	1.74%
Totals			100.00%

Monthly Residential Consumption Aug 01, 2008 to Jul 31, 2009

#### SMART METER FUNDING ADDING

#### Question #38

**Reference:** Exhibit 9, Appendix B and C

<u>Preamble:</u> Kitchener-Wilmot Hydro Inc. has entered into an AMI procurement and services contract with Sensus Metering Systems Inc. The effective date of the contract is June 23, 2009. One Hundred percent (100%) of Kitchener-Wilmot Hydro's total number of smart meters will be acquired from Sensus for the initial mass deployment of smart meters.

 a) Provide Support/details of the Residential SM <u>Unit costs</u> (procurement and installation).

#### <u>Response</u>

#### Per its Baseline filing with the OEB, KW Hydro expects to install 77,000 Residential and 7,600 GS < 50 kW Smart Meters. Based on its total costs of \$14,539,972, the unit cost per Smart Meter will be \$160

b) Provide Support/details of the Residential SM AMI, communications and back office costs (procurement and installation).

#### <u>Response</u>

#### See Exhibit 9 Table 10 of the 2010 rate filing

#### Question #39

Reference: Exhibit 9, page 23 Tables 8-11 Appendix B and Appendix C

a) Provide a cash flow projection showing SM rate adder revenue and SM expenditures by Month for the 2009 and 2010 rate year.

#### **Response**

		Capital Costs	<b>Funding Adder</b>	Net Cash
<b>Balance For</b>	ward December 31, 2008	(329,970)	704,908	374,937.78
Jan	2009	(106,957)	26,481	294,461.83
Feb	2009	(659,034)	18,727	(345,845.17)
Mar	2009	(338,044)	26,729	(657,159.58)
Apr	2009	(38,644)	18,892	(676,911.47)
Мау	2009	(262,066)	92,198	(846,779.60)
June	2009	(421,435)	50,662	(1,217,552.03)
July	2009	(488,413)	71,141	(1,634,823.24)
Aug	2009	(823,302)	50,662	(2,407,463.25)
Sept	2009	(1,158,192)	71,141	(3,494,513.76)
Oct	2009	(1,493,082)	50,662	(4,936,933.06)
Nov	2009	(1,827,971)	71,141	(6,693,762.86)
Dec	2009	(2,162,861)	50,662	(8,805,961.45)
Jan	2010	(398,588)	71,141	(9,133,408.04)
Feb	2010	(452,029)	50,662	(9,534,775.05)
Mar	2010	(505,471)	71,141	(9,969,104.21)
Apr	2010	(558,912)	50,662	(10,477,353.80)
Мау	2010	(612,353)	71,141	(11,018,565.52)
June	2010	(623,041)	50,662	(11,590,944.65)
July	2010	(633,730)	71,141	(12,153,532.89)
Aug	2010	(645,876)	50,662	(12,748,746.71)
Sept	2010	-	71,141	(12,677,605.30)
Oct	2010	-	50,662	(12,626,943.03)
Nov	2010	-	71,141	(12,555,801.62)
Dec	2010	-	50,662	(12,505,139.35)
Total		(14,539,970)	2,034,831	(12,505,139)

b) Provide a copy of the OEB Worksheet for calculation of the 2009 and 2010 revenue requirements related to SM.

#### **Response**

Attached

## Sheet 2. Smart Meter Capital Cost and Operational Expense Data

assume calendar year installation Fildh.	2008	2009	2010	Total
Planned number of Residential smart meters to be installed	Actual 1,974	Forecasted 39,648	Forecasted 35,378	77,000
Planned number of General Service Less Than 50 kW smart meters		3,587	4,013	7,600
Planned Meter Installation (Residential and Less Than 50 kW only)	1,974	43,235	39,391	84,600
Percentage of Completion	2%	53%	100%	
Planned number of General Service Greater Than 50 kW smart meters	-	-	-	
Planned / Actual Meter Installations	1,974	43,235	39,391	84,600
Other Unit Installation Plan:	2008	2009	2010	Total
Planned number of Collectors to be installed	Actual	Forecasted 4	Forecasted	4
Planned number of Repeaters to be installed				-
Other : Please specify				
				-
				-
				-

#### **Capital Costs**

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)	Asset Type				
		2008 Actual	2009 Forecasted	2010 Forecasted	Total
1.1.1 Smart Meter	Smart Meter \$	149,100	\$ 6,543,000	\$ 3,110,000	\$ 9,802,100
may include new meters and modules, etc.					
1.1.2 Installation Cost	Smart Meter \$	81,946	\$ 944,000	\$ 609,000	\$ 1,634,946
may include socket kits plus shipping, labour, benefits, vehicle, etc.	Comp Hard				¢
may include fieldworker handhelds, barcode hardware, etc.	Comp. Hard.				φ -
1.1.3b Workforce Automation Software may include fieldworker handhelds, barcode hardware, etc.	Comp. Soft.				\$-
Total Advanced Metering Communication Device (AMCD)	\$	231,046	\$ 7,487,000	\$ 3,719,000	\$ 11,437,046
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)					
		2008 Actual	2009 Forecasted	2010 Forecasted	Total
1.2.1 Collectors	Smart Meter \$	-	\$ 540,000	\$ -	\$ 540,000
1.2.2 Repeaters	Smart Meter				\$-
nay moude radio incence, etc.					
1.2.3 Installation may include meter seals and rings, collector computer hardware, etc.	Smart Meter				\$-
Tatal Advanced Metering Regional Collector (AMRC) (includes LAN)	-		\$ 540,000	¢ .	\$ 540.000
	<u>_*</u>	-	\$ 340,000	φ -	\$ 340,000
1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)		0000	0000	0010	Tatal
		2008 Actual	Forecasted	Forecasted	Iotai
1.3.1 Computer Hardware	Comp. Hard. §		\$ 235,000	\$-	\$ 235,000
1.3.2 Computer Software	Comp. Soft.	98,926	\$ 71,074	\$-	\$ 170,000
1.3.3 Computer Software Licence & Installation (includes hardware & software)	Comp. Soft. \$	-	\$-	\$-	\$-
may include AS/400 disc space, backup & recovery computer, UPS, etc Total Advanced Metering Control Computer (AMCC)	\$	98,926	\$ 306,074	\$-	\$ 405,000
1.4 WIDE AREA NETWORK (WAN)		2008	2009	2010	Total
		Actual	Forecasted	Forecasted	
1.4.1 Activation Fees	Tools & Equip				\$ -
Total Wide Area Network (WAN)	\$	-	\$ -	\$ -	\$ -

#### Sheet 2. Smart Meter Capital Cost and Operational Expense Data

	1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY		2008	2009	2'	2010	То	otal
			Actual	Forecasted	Fore	ecasted		
	1.5.1 Customer equipment (including repair of damaged equipment)	Other Equip.				d,	\$	-
	1.5.2 AMI Interface to CIS	Comp. Soft.		\$ 28,926	\$	69,974	\$	98,900
	1.5.3 Professional Fees	Comp. Soft.				ę	\$	-
	1.5.4 Integration	Comp. Soft.				ę	\$	-
	1.5.5 Program Management	Comp. Soft.	\$-	\$ 100,000	\$	100,000	\$	200,000
	1.5.6 Other AMI Capital	Comp. Soft.		\$ 1,318,000	\$	541,026	\$1,	,859,026
	Total Other AMI Capital Costs Related To Minimum Functionality		\$-	\$ 1,446,926	\$	711,000	\$2,	,157,926
Tot	al Capital Costs		\$ 329,972	\$ 9,780,000	\$ 4	4,430,000	\$14,	,539,972

#### Sheet 2. Smart Meter Capital Cost and Operational Expense Data

#### O M & A

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

	20	008		2009	2	010	Total
	Ac	tual	Fc	precasted	Fore	ecasted	
2.1.1 Maintenance may include meter revertigation costs etc.						1	-
Total Incremental AMI Operation Expenses	\$	-	\$	-	\$	- 9	; -
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN) 2.2.1 Maintenance						4	6 -
Total Advanced Metering Regional Collector (AMRC) (includes LAN)	\$	-	\$	-	\$	- 4	ş -
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC) 2.3.1 Hardware Maintenance may include server support, etc						4	s -
2.3.2 Software Maintenance may include maintenance support, etc.						9	6 -
Total Advanced Metering Control Computer (AMCC)	\$	•	\$	-	\$	- 9	; -
2.4 WIDE AREA NETWORK (WAN)							
2.4.1 WIDE AREA NETWORK (WAN) may include serial to Ethernat hardware, etc.	\$	-	\$	150,000	\$	440,000	590,000
Total Incremental Other Operation Expenses	\$	-	\$	150,000	\$	440,000	590,000
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY 2.5.1 Business Process Redesign						9	š -
2.5.2 Customer Communication may include project communication. etc.	\$		\$	33,000	\$	24,000	57,000
2.5.3 Program Management						9	-
2.5.4 Change Management						9	- 6
2.5.5 Administration Cost						9	- 6
2.5.6 Other AMI Expenses	\$	-	\$	400,000	\$	259,500	659,500
Total 2.5 Other AMI OM&A Costs Related To Minimum Functionality	\$	-	\$	433,000	\$	283,500	5 716,500
Total O M & A Costs	\$	-	\$	583,000	\$	723,500	1,306,500

Assumptions: 1. Planned meter installations occur evenly through the year. 2. Year assumed January to December 3. Amortization is straight line and has half year rule applied in first year

	2006 EDR Data Information	2007	2008	2009	2010	2011	Later	
Rate Base								
Deemed Short Term Debt % Deemed Debt (from 2006 EDR Sheet "3-2 COST OF CAPITAL (Input)* Cell C 18) Deemed Equity (from 2006 EDR Sheet "3-2 COST OF CAPITAL (Input)* Cell C 19)	55% 45%	55% 45%	0% 57.5% 42.5%	0% 60% 40%	4% 56% 40%	4% 56% 40%	4% 56% 40%	
Deemed Short Term Debt Rate% Weighted Debt Rate (from 2006 EDR Sheet "3-2 COST OF CAPITAL (Input)" Cell C 25) Proposed ROE (from 2006 EDR Sheet "3-2 COST OF CAPITAL (Input)" Cell E 32)	6.00% 9.00%	6.00% 9.00%	0.00% 6.00% 9.00%	0.00% 6.00% 8.01%	1.13% 7.62% 8.01%	1.13% 7.62% 8.01%	1.13% 7.62% 8.01%	
Weighted Average Cost of Capital	7.35%	7.35%	7.28%	6.80%	7.52%	7.52%	7.52%	
Working Capital Allowance %	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	
2006 EDR Tax Rate Corporate Income Tax Rate (from 2006 PILs Sheet "Test Year PILs,Tax Provision" Cell D 14)	36.12%	36.12%	33.50%	33.00%	32.00%	30.50%	29.00%	
Capital Data:	2006	2007	2008	2009	2010	2011	Later	Total
Smart Meter Computer Hardware Computer Software Tools & Equipment Other Equipment	Audited Actual \$ - \$ - \$ - \$ - \$ - \$ -	Audited Actual           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -	Actual \$ 231,046 \$ - \$ 98,926 \$ - \$ - \$ -	Forecasted           \$ 7,487,000           \$ 235,000           \$ 1,518,000           \$ -           \$ 540,000	\$ 3,719,000 \$ - \$ 711,000 \$ - \$ - \$ -	Forecasted           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -	Forecasted           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -           \$         -	\$ 11,437,046 \$ 235,000 \$ 2,327,926 \$ - \$ 540,000
Total Capital Costs	\$ - -	\$ - -	\$ 329,972	\$ 9,240,000 540,000.00	\$ 4,430,000	\$ - -	\$ - -	\$13,999,972 540,000.00
Operating Expense Data:	2006 Audited Actual	2007 Audited Actual	2008 Actual	2009 Forecasted	2010 Forecasted	2011 Forecasted	Later Forecasted	Total
2.1 Advanced Metering Centrol Collector (AMCC)     2.2 Advanced Metering Centrol Computer (AMCC)     2.4 Advanced Metering Control Computer (AMCC)     2.4 Wide Area Network (WAN)     2.5 Other AMI OM&A Costs Related To Minimum Functionality     Total O M & A Costs	s - s - s - s - s -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ 150,000 \$ 433,000 \$ 583,000	\$ - \$ - \$ 440,000 \$ 283,500 \$ 723,500	3 5 5 5 5 5 5 5 5 5 5 5 5 5	\$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ - \$ 590,000 \$ 716,500 \$ 1,306,500
Per Mater Cost Split	- Por Motor	- betalled	-	- % of Invest	-	-	-	-
Smart meter including installation Computer Hardware Costs Computer Software Costs Tools & Equipment Other Equipment Smart meter incremental operating expenses Total Smart Meter Capital Costs per meter	\$ 135.19 \$ 2.78 \$ 27.52 \$ - \$ 6.38 \$ 15.44 \$ 187.31	84,600 84,600 84,600 84,600 84,600 84,600	11,437,046         235,000         2,327,926         5         540,000         1,306,500         15,846,472	72% 1% 15% 0% 3% 8% 100%				
Depression Potes	2006	2007 Audited Astuck	2008	2009	2010	2011	Later	
Smart Meter (years) Computer Hardware (years) Computer Software (years) Tools & Equipment (years) Other Equipment (years)	15 3 3 10 25	15 3 3 10 25	15 3 3 10 25	15 3 3 10 25	15 3 3 10 25	15 3 3 10 25	15 3 3 10 25	
CCA Rates	2006 Audited Actual	2007 Audited Actual	2008 Actual	2009 Forecasted	2010 Forecasted	2011 Forecasted	Later Forecasted	
Smart Meter	47 8%	47 8%	47 8%	47 8%	47 8%	47 8%	47 8%	
CCA Class Computer Equipment	45 45%	50 55%	50 55%	50 55%	50 55%	50 55%	50 55%	
CCA Class General Equipment	8 20%	8 20%	8 20%	8 20%	8 20%	8 20%	8 20%	

#### Sheet 4. Smart Meter Rev Req Calc

Average Asset Values	2008	2009	2010	2011
Net Fixed Assets Smart Meters Net Fixed Assets Computer Hardware Net Fixed Assets Computer Software Net Fixed Assets Tools & Equipment Net Fixed Assets Other Equipment Total Net Fixed Assets	Actual           \$ 111,672.09           \$ -           \$ 41,219.30           \$ 264,600.00           \$ 417,491.39           \$ 417,491.39	Forecasted           \$ 3,84,359.33           \$ 97,916.67           \$ 95,564.91           \$ 518,400.00           \$ 4,546,240.91           \$ 4,546,240.91	Forecasted           \$ 8,985,622.95           \$ 156,666,67           \$ 80,357.89           \$ -           \$ 496,800.00           \$ 9,719,447.51	Forecasted           \$ 10,14,636,57           \$ 26,012,28           \$ 26,012,28           \$ -           \$ 10,724,182,18
Working Capital Operation Expense Working Capital %	\$- \$-\$-	\$ 583,000.00 \$ 87,450.00 \$ 87,450.00	\$ 723,500.00 \$ 108,525.00 \$ 108,525.00	\$ - \$ - \$ -
Smart Meters included in Rate Base	\$ 417,491.39	\$ 4,633,690.91	\$ 9,827,972.51	\$ 10,724,182.18
Return on Rate Base Deemed Short Term Debt % Deemed Long Term Debt % Deemed Equity %	0.0% 57.5% \$ 240,057.55 42.5% <u>\$ 177,433.84</u> <u>\$ 417,491.39</u>	0.0% 60.0% \$ 2,780,214.55 40.0% \$ 1.853,476.36 \$ 4,633,690.91	4.0% 56.0% \$ 5,503,664.60 40.0% \$ 3.831,189.00 \$ 9,434,853.61	4.0% 56.0% \$ 6,005,542.02 40.0% \$ 4.289,672.87 \$ 10,295,214.89
Deemed Short Term Debt Rate% Weighted Debt Rate (3. LDC Assumptions and Data) Proposed ROE (3. LDC Assumptions and Data) Return on Rate Base	0.0% 6.0% \$ 14,403.45 9.0% <u>\$ 15,969.05</u> <u>\$ 30,372.50</u> \$ 30,372.50	0.0% 6.0% \$ 166,812.87 8.0% <u>\$ 148,463.46</u> <u>\$ 315,276.33</u> \$ 315,276.33	1.1%         7.6%         \$ 419,379.24           8.0%         \$ 314,888,24         \$ 734,267.48           \$ 734,267.48         \$ 734,267.48	1.1% 7.6% \$ 457,622.30 8.0% <u>\$ 343,602.80</u> <u>\$ 801,225.10</u> \$ 801,225.10
Operating Expenses Incremental Operating Expenses (3. LDC Assumptions and Data)	\$ -	\$ 583,000.00	\$ 723,500.00	\$ -
Amortization Expenses Amortization Expenses - Smart Meters Amortization Expenses - Computer Hardware Amortization Expenses - Computer Software Amortization Expenses - Tools & Equipment Amortization Expenses - Other Equipment <b>Total Amortization Expenses</b>	\$ 7,701.52 \$ 16,487.72 \$ 10,800.00 \$ 34,989.24	\$ 264,969.71 \$ 39,166.67 \$ 44,821.05 \$ - \$ 21,600.00 \$ 370,557.43	\$ 638,503,05 \$ 78,333,33 \$ 56,866,67 \$ - \$ 21,600,00 \$ 795,103,05	\$ 762,469.71 \$ 78,333.33 \$ 52,024.56 \$ 21,600.00 \$ 914,427.61
Revenue Requirement Before PILs	\$ 65,361.74	\$ 1,268,833.76	\$ 2,252,870.53	\$ 1,715,652.71
Calculation of Taxable Income Incremental Operating Expenses Depreciation Expenses Interest Expense Taxable Income For PILs	\$ 34,989.24 -\$ 14,403.45 \$ 15,969.05	-\$ 583,000.00 -\$ 370,557.43 -\$ 166,812.87 \$ 148,463.46	-\$ 723,500.00 -\$ 795,103.05 -\$ 419,379.24 \$ 314,888.24	\$ -\$ 914,427.61 -\$ 457,622.30 \$ 343,602.80
Grossed up PILs (5. PILs)	-\$ 19,204.58	\$ 8,068.94	\$ 79,714.23	-\$ 418,993.88
Revenue Requirement Before PILs Grossed up PILs (5. PILs) Revenue Requirement for Smart Meters	\$ 65,361.74 -\$ 19,204.58 <b>\$ 46,157.16</b>	\$ 1,268,833.76 <u>\$ 8,068,94</u> <b>\$ 1,276,902.70</b>	\$ 2,252,870.53 \$ 79,714.23 \$ 2,332,584.76	\$ 1.715,652.71 -\$ 418,993.88 <b>\$ 1,296,658.83</b>

### **PILs Calculation**

		2008		2009		2010		2011		
INCOME TAX		Actual		Forecasted		Forecasted		Forecasted		
Net Income	\$	15,969.05	\$	148,463.46	\$	314,888.24	\$	-		
Amortization	\$	34,989.24	\$	370,557.43	\$	795,103.05	\$	-		
CCA - Smart Meters	-\$	9,241.83	-\$	317,224.31	-\$	740,086.37	-\$	829,639.46		
CCA - Computers	-\$	27,204.74	-\$	123,617.13	-\$	139,797.97	-\$	62,909.09		
CCA - Other Equipment	-\$	54,000.00	-\$	97,200.00	-\$	77,760.00	-\$	62,208.00		
Change in taxable income	-\$	39,488.28	-\$	19,020.55	\$	152,346.95	-\$	954,756.54		
Tax Rate (3. LDC Assumptions and Data)		33.50%		33.00%		32.00%		30.50%		
Income Taxes Payable	-\$	13,228.57	-\$	6,276.78	\$	48,751.02	-\$	291,200.75		
ONTARIO CAPITAL TAX										
Smart Meters	\$	223,344.19	\$	7,445,374.47	\$	10,525,871.43	\$	9,763,401.71		
Computer Hardware	\$	-	\$	195,833.33	\$	117,500.00	\$	39,166.67		
Computer Software	\$	82,438.60	\$	108,691.23	\$	52,024.56	\$			
Tools & Equipment	\$	-	\$	-	\$	-	\$	-		
Other Equipment	\$	529,200.00	\$	507,600.00	\$	486,000.00	\$	464,400.00		
Rate Base	\$	305,782.79	\$	7,749,899.03	\$	10,695,395.99	\$	9,802,568.38		
Less: Exemption	\$	-	\$	-	\$	-	\$	-		
Deemed Taxable Capital	\$	305,782.79	\$	7,749,899.03	\$	\$ 10,695,395.99		9,802,568.38		
Ontario Capital Tax Rate		0.225%		0.225%		0.075%		0.000%		
Net Amount (Taxable Capital x Rate)	\$	688.01	\$	17,437.27	\$	8,021.55	\$	-		

#### Gross Up

	PI	Ls Payable		PILs Payable		PILs Payable	PILs Payable			
Change in Income Taxes Payable	Payable -\$ 13,228.57 -\$ 6,276.78 \$ 48,751.02 -\$									
Change in OCT	\$	688.01	\$	17,437.27	\$	8,021.55	\$	\$-		
PIL's	-\$	12,540.56	\$	11,160.49	\$	56,772.57	-\$	291,200.75		
	(	Gross Up		Gross Up		Gross Up		Gross Up		
		33.50%			30.50%					
	G	rossed Up								
		PILs	Grossed Up PILs			rossed Up PILs	Gr	ossed Up PILs		
Change in Income Taxes Payable	-\$	19,892.59	-\$ 9,368.33 \$ 71,692.68 -\$					418,993.88		
Change in OCT	\$	688.01	\$	17,437.27	\$	8,021.55	\$	-		
PIL's	-\$	19,204.58	\$	8,068.94	\$	79,714.23	-\$	418,993.88		

#### Sheet 6. Avg Net Fixed Assets &UCC

### Smart Meter Average Net Fixed Assets

-		2008	200	9		2010	2011
Net Fixed Assets - Smart Meters	Ł	Actual	Foreca	sted		Forecasted	Forecasted
Opening Capital Investment	\$	-	\$ 231,	045.71	\$	7,718,045.71	\$ 11,437,045.71
Capital Investment (3. LDC Assumptions and Data)	\$	231,045.71	\$ 7,487,	00.00	\$	3,719,000.00	\$ -
Closing Capital Investment	\$	231,045.71	\$ 7,718,	045.71	\$ 1	1,437,045.71	\$ 11,437,045.71
Opening Accumulated Amortization	\$	-	\$7,	701.52	\$	272,671.24	\$ 911,174.29
Amortization (15 Years Straight Line)	\$	7,701.52	\$ 264,	969.71	\$	638,503.05	\$ 762,469.71
Closing Accumulated Amortization	\$	7,701.52	\$ 272,	671.24	\$	911,174.29	\$ 1,673,644.00
Opening Net Fixed Assets	\$	-	\$ 223,	344.19	\$	7,445,374.47	\$ 10,525,871.43
Closing Net Fixed Assets	\$	223,344.19	\$ 7,445,	374.47	\$1	10,525,871.43	\$ 9,763,401.71
Average Net Fixed Assets	\$	111,672.09	\$ 3,834,	359.33	\$	8,985,622.95	\$ 10,144,636.57
		2008	200	9		2010	2011
Net Fixed Assets - Computer Hardware	Ł	Actual	Foreca	sted		Forecasted	Forecasted
Opening Capital Investment	\$	-	\$	-	\$	235,000.00	\$ 235,000.00
Capital Investment (3. LDC Assumptions and Data)	\$	-	\$ 235,	00.00	\$	-	\$ -
Closing Capital Investment	\$	-	\$ 235,	00.00	\$	235,000.00	\$ 235,000.00
Opening Accumulated Amortization	\$	-	\$	-	\$	39,166.67	\$ 117,500.00
Amortization (3 Years Straight Line)	\$	-	\$ 39,	166.67	\$	78,333.33	\$ 78,333.33
Closing Accumulated Amortization	\$	-	\$ 39,	166.67	\$	117,500.00	\$ 195,833.33
Opening Net Fixed Assets	\$	-	\$	-	\$	195,833.33	\$ 117,500.00
Closing Net Fixed Assets	<u>\$</u>	-	\$ 195,	833.33	\$	117,500.00	\$ 39,166.67
Average Net Fixed Assets	\$	-	\$ 97,	916.67	\$	156,666.67	\$ 78,333.33
		2008	200	9		2010	2011
Net Fixed Assets - Computer Software	Ł	Actual	Foreca	sted		Forecasted	Forecasted
Opening Capital Investment	\$	-	\$ 98,	926.32	\$	170,000.00	\$ 170,000.00
Capital Investment (3. LDC Assumptions and Data)	\$	98,926.32	\$71,	073.68	\$	-	\$ -
Closing Capital Investment	\$	98,926.32	\$ 170,	00.00	\$	170,000.00	\$ 170,000.00
Opening Accumulated Amortization	\$	-	\$ 16,·	487.72	\$	61,308.77	\$ 117,975.44
Amortization Year 1 (3 Years Straight Line)	\$	16,487.72	\$ 44,	821.05	\$	56,666.67	\$ 52,024.56
Closing Accumulated Amortization	\$	16,487.72	\$ 61,	308.77	\$	117,975.44	\$ 170,000.00
Opening Net Fixed Assets	\$	-	\$ 82,-	438.60	\$	108,691.23	\$ 52,024.56
Closing Net Fixed Assets	\$	82,438.60	\$ 108,	691.23	\$	52,024.56	\$ -
Average Net Fixed Assets	\$	41,219.30	\$ 95,	564.91	\$	80,357.89	\$ 26,012.28
		2008	200	9		2010	2011
Net Fixed Assets - Tools & Equipment	Ł	Actual	Foreca	sted		Forecasted	Forecasted
Opening Capital Investment	\$	-	\$	-	\$	-	\$ -
Capital Investment (3. LDC Assumptions and Data)	<u>\$</u>	-	\$	-	\$	-	\$ -
Closing Capital Investment	\$	-	\$	-	\$	-	\$ -
Opening Accumulated Amortization	\$	-	\$	-	\$	-	\$ -
Amortization Year 1 (10 Years Straight Line)	\$	-	\$	-	\$	-	\$ -
Closing Accumulated Amortization	\$	-	φ	-	\$	-	\$ -
Opening Net Fixed Assets	\$	-	\$	-	\$	-	\$ -
Closing Net Fixed Assets	\$	-	\$	-	\$	-	\$ -

#### Sheet 6. Avg Net Fixed Assets &UCC

Average Net Fixed Assets	\$	-	\$	-	\$	-	\$	-		
Net Fixed Assets - Other Equipment	Ł	2008 Actual		2009 Forecasted	2010 Forecasted		2009 2010 ecasted Forecasted F		2011 Forecasted	
Opening Capital Investment Capital Investment (3, LPC Assumptions and Data)	\$	<u>-</u> 540.000.00	\$	540,000.00	\$	540,000.00	\$	540,000.00		
Closing Capital Investment	\$	540,000.00	\$	540,000.00	\$	540,000.00	\$	540,000.00		
Opening Accumulated Amortization Amortization Year 1 (25 Years Straight Line)	\$	-	\$ \$	10,800.00	\$ \$	32,400.00	\$ \$	54,000.00		
Closing Accumulated Amortization	\$	10,800.00	\$	32,400.00	\$	54,000.00	\$	75,600.00		
Opening Net Fixed Assets	\$	-	\$	529,200.00	\$	507,600.00	\$	486,000.00		
Closing Net Fixed Assets Average Net Fixed Assets	\$ \$	529,200.00 264,600.00	\$ \$	507,600.00 518,400.00	\$ \$	486,000.00 496,800.00	\$ \$	464,400.00 475,200.00		

#### For PILs Calculation

UCC -	Smart	Meters
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Audited         Actual         Forecasted         Forecasted         Forecasted           Opening UCC         \$             21.04.37.15         \$             7.487.00.00         \$             7.788.00.08         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.00         \$             7.789.00.00         \$             7.789.00.00         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.789.00.05         \$             7.799.75         \$             70.070.498.21         \$             7.709.499.27         \$             70.70.498.21         \$             7.709.498.21         \$             7.709.498.21         \$             7.709.498.21         \$             7.709.498.21         \$             7.709.498.21         \$             7.709.775         \$             70.70.498.21         \$             9.29.039.486         \$             7.731.579.57         \$             7.073.698         \$             7.92.65         \$             7.073.698         \$             7.92.65         \$             7.073.698         \$             7.92.65         \$             7.073.698         \$             7.92.65         \$             7.073.698         \$             7.92.65         \$             7.	UCC - Smart Meters			2008	2009	2010		2011
Opening UCC         \$ <td< td=""><td></td><td>Audited</td><td>I</td><td>Actual</td><td>Forecasted</td><td>Forecasted</td><td></td><td>Forecasted</td></td<>		Audited	I	Actual	Forecasted	Forecasted		Forecasted
Capital Additions       \$         231,045.71 \$         7,487,000.00 \$         \$             3,719,000.00 \$             3,719,000.00 \$        \$             231,045.71 \$        7,709,803.88 \$             11,15,522.86 \$             3,965,303.88 \$             9,251,079,57 \$             10,370,493.21 \$             47 47 47 47             47 47	Opening UCC	-	\$	-	\$ 221,803.88	\$ 7,391,579.57	\$ 1	10,370,493.21
UCC Before Hait Year Rule Hait Year Rule (1/2 Additions - Disposals) Reduced UCC CCA Rate Class CCA Rate Class CCA Rate Class         \$             21,415,71         \$             7,708,803,88         \$             91,1110,579,57         \$             10,370,493,21           CAC Rate Class CCA Rate Class         \$             21,5522,86         \$             3,436,500.00         \$             18,352,800.00         \$             8,955,000.00         \$             13,552,286         \$             3,436,500.00         \$             14,77         \$             7,708,803,88         \$             9,251,079,57         \$             10,370,493,21         \$             7,40,080,37         \$             9,290,493,21         \$             7,40,080,37         \$             629,693,468         \$             7,778,757         \$             10,370,493,21         \$             9,40,853,75         \$             10,370,493,21         \$             9,40,853,75         \$             11,522,286         \$             3,940,853,75         \$             10,370,493,21         \$             9,40,853,75         \$             10,370,493,21         \$             9,40,853,75         \$             10,370,493,21         \$             9,40,853,75         \$             10,370,493,21         \$             9,40,853,75         \$             10,370,493,21         \$             9,40,851,75         \$             10,370,493,21         \$             7,721,58         \$             254,178,13         \$             11,380,16         \$             15,320,217,57         \$             10,370,493,21         \$             14,380,16	Capital Additions	_	\$	231,045.71	\$ 7,487,000.00	\$ 3,719,000.00	\$	-
Half Year Rule (1/2 Additions - Disposals)       \$ 1.15,522.86       \$ 3.743,500.00       \$ 1.659,500.00       \$	UCC Before Half Year Rule		\$	231,045.71	\$ 7,708,803.88	\$ 11,110,579.57	\$ 1	10,370,493.21
Reduced UCC CCA Rate Class         \$ 115,522.86         \$ 3,965,303.88         \$ 9,251,079.57         \$ 10,370,493.21           CCA Rate Class         47         4	Half Year Rule (1/2 Additions - Disposals)		\$	115,522.86	\$ 3,743,500.00	\$ 1,859,500.00	\$	-
CCA Rate Class       47       47       47       47       47         CCA Rate       8% <t< td=""><td>Reduced UCC</td><td></td><td>\$</td><td>115,522.86</td><td>\$ 3,965,303.88</td><td>\$ 9,251,079.57</td><td>\$ 1</td><td>10,370,493.21</td></t<>	Reduced UCC		\$	115,522.86	\$ 3,965,303.88	\$ 9,251,079.57	\$ 1	10,370,493.21
CCA Rate CCA         8%	CCA Rate Class			47	47	47		47
CCA Closing UCC         \$ 9,241.83         \$ 17,224.31         \$ 740,086.37         \$ 829,639.46           Closing UCC         \$ 221,803.88         \$ 7,391,579.57         \$ 10,370,493.21         \$ 9,540,853.75           UCC - Computer Equipment         2008         2009         2010         2011           Audited         Actual         Forecasted         Forecasted         Forecasted           Opening UCC         \$ 98,926.32         \$ 71,721.58         \$ 254,178.13         \$ 114,380.16           Capital Additions Computer Hardware         \$ 98,926.32         \$ 77,795.26         \$ 254,178.13         \$ 114,380.16           CCA Rate Class         \$ 49,463.16         \$ 243,768.42         \$ 254,178.13         \$ 114,380.16           CCA Rate Class         \$ 55%         \$ 55%         \$ 55%         \$ 55%           CCA Rate Class         \$ 5,27,202.82         \$ 254,178.13         \$ 114,380.16         \$ 51,471.07           UCC - General Equipment         \$ 55%         \$ 55%         \$ 55%         \$ 55%         \$ 55%           CCA Rate         \$ - \$ \$ 486,000.00         \$ 388,800.00         \$ 311,040.00         \$ 249,040.00         \$ 388,800.00         \$ 311,040.00           Coc Beter al Equipment         \$ 5 40,000.00         \$ 486,000.00         \$ 388,800.00         \$	CCA Rate	_		8%	8%	8%		8%
Closing UCC         \$ 221,803.88 \$ 7,391,579.57 \$ 10,370,493.21 \$ 9,540,853.75           UCC - Computer Equipment         2008         2009         2010         2011           Audited         Actual         Forecasted	CCA	_	\$	9,241.83	\$ 317,224.31	\$ 740,086.37	\$	829,639.46
UCC - Computer Equipment         2008         2009         2010         2011           Opening UCC         Audiled         Actual         Forecasted         Forecasted         Forecasted         Forecasted           Capital Additions Computer Hardware         \$         \$         71,721.58         \$         254,178.13         \$         114,380.16           Capital Additions Computer Software         \$         98,926.32         \$         71,073.68         \$         <	Closing UCC	-	\$	221,803.88	\$ 7,391,579.57	\$ 10,370,493.21	\$	9,540,853.75
CCC - Computer Equipment         Z000         Z000         Z010         Z011           Audited         Actual         Forecasted         Forec	UCC - Computer Equipment			2009	2000	2010		2011
Addited         Actual         Forecasted         Forecasted         Forecasted         Forecasted           Opening UCC         Capital Additions Computer Software         \$         -         \$         235,000.00         \$         -         \$ <td></td> <td>A</td> <td></td> <td>2006</td> <td>2009</td> <td>2010</td> <td></td> <td>2011</td>		A		2006	2009	2010		2011
Opening UCC       \$ <ul> <li>Capital Additions Computer Hardware</li> <li>Capital Additions Computer Software</li> <li>S</li> <lis< l<="" td=""><td></td><td>Audited</td><td>1</td><td>Actual</td><td>Forecasted</td><td>Forecasted</td><td></td><td>Forecasted</td></lis<></ul>		Audited	1	Actual	Forecasted	Forecasted		Forecasted
Capital Additions Computer Hardware       \$       -       \$       235,000.00       \$       -       \$       -         Capital Additions Computer Software       \$       98,926.32       \$       71,073.68       \$       - <td< td=""><td>Opening UCC</td><td>-</td><td>\$</td><td>-</td><td>\$ 71,721.58</td><td>\$ 254,178.13</td><td>\$</td><td>114,380.16</td></td<>	Opening UCC	-	\$	-	\$ 71,721.58	\$ 254,178.13	\$	114,380.16
Capital Additions Computer Software       \$ 98,926.32       \$ 71,073.68       \$ - \$ - \$       -         UCC Before Half Year Rule       \$ 398,926.32       \$ 71,073.68       \$ - \$ - \$       -         Half Year Rule (1/2 Additions - Disposals)       \$ 49,463.16       \$ 123,036.84       \$ - \$ - \$       -         Reduced UCC       \$ 49,463.16       \$ 224,758.42       \$ 254,178.13       \$ 114,380.16         CCA Rate Class       50       50       50       50       50         CCA Rate       \$ 71,721.58       \$ 254,178.13       \$ 114,380.16       \$ 51,471.07         UCC - General Equipment       \$ 2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted         Opening UCC       \$ - \$ 486,000.00       \$ 388,800.00       \$ 311,040.00         Capital Additions Other Equipment       \$ 540,000.00       \$ 486,000.00       \$ 388,800.00       \$ 311,040.00         S 449,000.00       \$ 486,000.00       \$ 388,800.00       \$ 311,040.00       \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	Capital Additions Computer Hardware		\$	-	\$ 235,000.00	\$ -	\$	-
UCC Before Half Year Rule       \$ 98,926.32 \$ 377,795.26 \$ 254,178,13 \$ 114,380.16         Half Year Rule (1/2 Additions - Disposals)       \$ 49,463.16 \$ 153,036.84 \$ - \$	Capital Additions Computer Software	-	\$	98,926.32	\$ 71,073.68	\$ -	\$	-
Half Year Rule (1/2 Additions - Disposals)       \$ 49,463.16 \$ 153,036.84 \$ - \$ -         Reduced UCC       \$ 49,463.16 \$ 123,036.84 \$ - \$         CCA Rate Class       50 50 50 50         CCA Rate       55% 55% 55% 55%         CCA       \$ 27,204.74 \$ 123,617.13 \$ 139,797.97 \$ 62,909.09         \$ 71,721.58 \$ 254,178.13 \$ 114,380.16 \$ 51,471.07         UCC - General Equipment       2008 2009 2010 2011         Audited       Actual       Forecasted       Forecasted         Forecasted       Forecasted       Forecasted       Forecasted         Copening UCC       \$ - \$ - \$ - \$       -       -         Copening UCC       \$ - \$ 486,000.00 \$ 388,800.00 \$ 311,040.00       \$ 540,000.00 \$ - \$ - \$ - \$       -         Copening UCC       \$ - \$ \$ - \$ - \$ - \$       -       -         Capital Additions Tools & Equipment       \$ 540,000.00 \$ - \$ - \$ - \$       -       -         UCC Before Half Year Rule       \$ 540,000.00 \$ - \$ - \$ - \$ - \$       -       -         Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00 \$ - \$ - \$ - \$ - \$       -       -         Reduced UCC       \$ 270,000.00 \$ - \$ - \$ - \$ - \$       -       -       -         CCA Rate Class       8 8 8 8 8       8       8       8       20%       20%	UCC Before Half Year Rule	-	\$	98,926.32	\$ 377,795.26	\$ 254,178.13	\$	114,380.16
Reduced UCC       \$ 49,463.16 \$ 224,758.42 \$ 254,178.13 \$ 114,380.16         CCA Rate Class       50       50       50         CCA Rate       55%       55%       55%       55%         CCA       \$ 17,721.58 \$ 254,178.13 \$ 114,380.16 \$ 50,000       \$ 123,617.13 \$ 139,797.97 \$ 62,209.09         Closing UCC       \$ 71,721.58 \$ 254,178.13 \$ 114,380.16 \$ 51,471.07         UCC - General Equipment       2008       2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted         Opening UCC       \$ - \$ 486,000.00 \$ 388,800.00 \$ 311,040.00       \$ 311,040.00       \$ 311,040.00         Capital Additions Tools & Equipment       \$ 540,000.00 \$ - \$ - \$ - \$ - \$       \$ - \$       \$ - \$         UCC Before Half Year Rule       \$ 540,000.00 \$ 486,000.00 \$ 388,800.00 \$ 311,040.00       \$ 311,040.00       \$ 311,040.00         Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00 \$ - \$ - \$ - \$ - \$       \$ - \$       \$ - \$         Reduced UCC       8 8 8       8       8       8       8         CCA Rate       20%       20%       20%       20%       20%         CCA Rate       \$ 54,000.00 \$ 388,800.00 \$ 311,040.00       \$ 248,832.00       \$ 311,040.00       \$ 248,832.00         Cosing UCC	Half Year Rule (1/2 Additions - Disposals)	_	\$	49,463.16	\$ 153,036.84	\$ -	\$	-
CCA Rate Class       50       50       50       50         CCA Rate       55%       55%       55%       55%       55%       55%         CCA Rate       \$27,204.74       \$123,617.13       \$139,797.97       \$62,909.09       \$1,471.07         UCC - General Equipment         Quota Actual       \$2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted         S 486,000.00       \$388,800.00       \$311,040.00         Copening UCC         Capital Additions Tools & Equipment         Copering UCC         Capital Additions - Disposals)       \$311,040.00         Reduced UCC         Reduced UCC       \$270,000.00       \$486,000.00       \$388,800.00       \$311,040.00         \$270,000.00       \$486,000.00       \$388,800.00       \$311,040.00         \$270,000.00       \$486,000.00       \$388,800.00       \$311,040.00         \$270,000.00       \$486,000.00       \$388,800.00       \$311,040.00         \$270,000.00       \$486,000.00       \$388,800.00       \$311,040.00       \$311,040.00	Reduced UCC	-	\$	49,463.16	\$ 224,758.42	\$ 254,178.13	\$	114,380.16
CCA Rate CCA       55%       55%       55%       55%         Closing UCC       \$ 27,204.74       \$ 123,617.13       \$ 113,797.97       \$ 62,909.09         UCC - General Equipment       \$ 71,721.58       \$ 254,178.13       \$ 114,380.16       \$ 51,471.07         UCC - General Equipment       2008       2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted         Capital Additions Tools & Equipment       \$ - \$ - \$ - \$ - \$       \$ -       \$ -         CCC Before Half Year Rule       \$ 540,000.00       \$ 388,800.00       \$ 311,040.00         Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00       \$ 486,000.00       \$ 388,800.00       \$ 311,040.00         CCA Rate Class       8       8       8       8       8         CCA Rate       20%       20%       20%       20%       20%       20%         CCA Rate Class       8       8       8       8       8       8       20%	CCA Rate Class			50	50	50		50
CCA       \$ 27,204.74 \$ 123,617.13 \$ 139,797.97 \$ 62,909.09         Closing UCC       \$ 71,721.58 \$ 254,178.13 \$ 114,380.16 \$ 51,471.07         UCC - General Equipment       2008       2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted       Forecasted         Opening UCC       \$ - \$ 486,000.00 \$ 388,800.00 \$ 311,040.00       \$ 311,040.00       \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	CCA Rate	-		55%	55%	55%		55%
Closing UCC       \$ 71,721.58 \$ 254,178.13 \$ 114,380.16 \$ 51,471.07         UCC - General Equipment       2008       2009       2010       2011         Audited       Actual       Forecasted       Forecasted       Forecasted         Opening UCC       \$ - \$ 486,000.00 \$ 388,800.00 \$ 311,040.00         Capital Additions Tools & Equipment       \$ - \$ - \$ - \$ - \$       -         UCC Before Half Year Rule       \$ 540,000.00 \$ 486,000.00 \$ 388,800.00 \$ 311,040.00         Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00 \$ - \$ - \$ - \$       -         Reduced UCC       \$ 270,000.00 \$ 486,000.00 \$ 388,800.00 \$ 311,040.00         CCA Rate Class       8 8 8 8       8         CCA Rate       20%       20%       20%       20%         CO%       20%       20%       20%       20%       20%       20%         Cosing UCC       \$ 486,000.00 \$ 388,800.00 \$ 311,040.00       \$ 348,800.00 \$ 311,040.00       \$ 311,040.00       \$ 320,000	CCA	_	\$	27,204.74	\$ 123,617.13	\$ 139,797.97	\$	62,909.09
UCC - General Equipment         2008         2009         2010         2011           Audited         Actual         Forecasted         Forecasted         Forecasted         Forecasted           Opening UCC         \$         486,000.00         \$         388,800.00         \$         311,040.00           Capital Additions Tools & Equipment         \$         -         \$         -         \$         -           UCC Before Half Year Rule         \$         540,000.00         \$         388,800.00         \$         311,040.00           CARate Class         \$         -         \$         >         \$         311,	Closing UCC	-	\$	71,721.58	\$ 254,178.13	\$ 114,380.16	\$	51,471.07
Audited       Actual       Forecasted       Forecasted       Forecasted         Opening UCC       \$       486,000.00       \$       388,800.00       \$       311,040.00         Capital Additions Tools & Equipment       \$       -       \$       486,000.00       \$       388,800.00       \$       311,040.00         UCC Before Half Year Rule       \$       540,000.00       \$       -       \$       -       \$         UCC Before Half Year Rule       \$       540,000.00       \$       486,000.00       \$       388,800.00       \$       311,040.00         Keduced UCC       \$       270,000.00       \$       -       \$       -       \$         CCA Rate Class       8       8       8       8       8       8       8       8       8       8       20% <td>UCC - General Equipment</td> <td></td> <td></td> <td>2008</td> <td>2009</td> <td>2010</td> <td></td> <td>2011</td>	UCC - General Equipment			2008	2009	2010		2011
Opening UCC       S       486,000.00       \$       388,800.00       \$       311,040.00         Capital Additions Tools & Equipment       \$       -       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$		Audited	4		Forecasted	Forecasted		Forecasted
Opening UCC       \$       -       \$       486,000.00       \$       388,800.00       \$       311,040.00         Capital Additions Tools & Equipment       \$       -       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       \$       311,040.00       \$       \$       311,040.00       \$       \$       311,040.00       \$       \$       311,040.		Addited		Actual	1 Orceasieu	rorceasted		rorecasica
Capital Additions Tools & Equipment       \$       -       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       311,040.00       \$       \$       311,040.00       \$       311,040.00       \$       \$       311,040.00       \$       \$       311,040.00       \$       \$       \$	Opening UCC	_	\$	-	\$ 486,000.00	\$ 388,800.00	\$	311,040.00
Capital Additions Other Equipment       \$ 540,000.00       \$ - \$ - \$ - \$ - \$       -       \$ - \$ - \$ - \$ - \$       -       -       -       -       \$ - \$ - \$ - \$ - \$ - \$       -       -       -       -       -       \$ - \$ - \$ - \$ - \$       -       -       \$ - \$ - \$ - \$ - \$ - \$       -       -       \$ - \$ - \$ - \$ - \$ - \$       -	Capital Additions Tools & Equipment		\$	-	\$ -	\$ -	\$	-
UCC Before Half Year Rule       \$ 540,000.00 \$ 486,000.00 \$ 388,800.00 \$ 311,040.00         Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00 \$ - \$ - \$ - \$         Reduced UCC       \$ 270,000.00 \$ 486,000.00 \$ 388,800.00 \$ 311,040.00         CCA Rate Class       8 8 8       8         CCA Rate       20%       20%       20%         CCA       \$ 54,000.00 \$ 388,800.00 \$ 311,040.00       \$ 311,040.00         CCA Rate       8 8       8       8         CCA Rate       8       8       8         CCA       \$ 54,000.00 \$ 388,800.00 \$ 311,040.00       \$ 62,208.00         CCA       \$ 388,800.00 \$ 388,800.00 \$ 311,040.00       \$ 248,832.00	Capital Additions Other Equipment	-	\$	540,000.00	\$ -	\$ -	\$	-
Half Year Rule (1/2 Additions - Disposals)       \$ 270,000.00       \$ - \$       \$ - <td>UCC Before Half Year Rule</td> <td>-</td> <td>\$</td> <td>540,000.00</td> <td>\$ 486,000.00</td> <td>\$ 388,800.00</td> <td>\$</td> <td>311,040.00</td>	UCC Before Half Year Rule	-	\$	540,000.00	\$ 486,000.00	\$ 388,800.00	\$	311,040.00
Reduced UCC       \$ 270,000.00       \$ 486,000.00       \$ 388,800.00       \$ 311,040.00         CCA Rate Class       8       8       8       8       8       8       8       20% <t< td=""><td>Half Year Rule (1/2 Additions - Disposals)</td><td>-</td><td>\$</td><td>270,000.00</td><td>\$ -</td><td>\$ -</td><td>\$</td><td>-</td></t<>	Half Year Rule (1/2 Additions - Disposals)	-	\$	270,000.00	\$ -	\$ -	\$	-
CCA Rate Class     8     8     8     8       CCA Rate     20%     20%     20%       CCA     \$     54,000.00     \$     97,200.00     \$     62,208.00       Closing UCC     \$     486,000.00     \$     388,800.00     \$     311,040.00     \$     248,832.00	Reduced UCC	-	\$	270,000.00	\$ 486,000.00	\$ 388,800.00	\$	311,040.00
CCA Rate       20%       20%       20%         CCA       \$ 54,000.00       \$ 97,200.00       \$ 77,760.00       \$ 62,208.00         Closing UCC       \$ 486,000.00       \$ 388,800.00       \$ 311,040.00       \$ 248,832.00	CCA Rate Class			8	8	8		8
CCA         \$ 54,000.00         \$ 97,200.00         \$ 77,760.00         \$ 62,208.00           Closing UCC         \$ 486,000.00         \$ 388,800.00         \$ 311,040.00         \$ 248,832.00	CCA Rate	-		20%	20%	20%		20%
Closing UCC \$ 486,000.00 \$ 388,800.00 \$ 311,040.00 \$ 248,832.00		_	\$	54,000.00	\$ 97,200.00	\$ 77,760.00	\$	62,208.00
	Closing UCC	-	\$	486,000.00	\$ 388,800.00	\$ 311,040.00	\$	248,832.00

#### Smart Meter Funding Adder

	Opening	Fun	d Adder	Int. Rate	Interest		Clo	osing
Jan-06	\$-	\$	-	6.00%	\$	-	\$	-
Feb-06	\$-	\$	-	6.00%	\$	-	\$	-
Mar-06	\$-	\$	-	6.00%	\$	-	\$	-
Apr-06	\$-	\$	-	4.14%	\$	-	\$	-
May-06	\$-	-\$	24,226	4.14%	\$	-	-\$	24,226
Jun-06	-\$ 24,226	-\$	17,854	4.14%	-\$	84	-\$	42,164
Jul-06	-\$ 42,164	-\$	24,906	4.59%	-\$	161	-\$	67,230
Aug-06	-\$ 67,230	-\$	18,257	4.59%	-\$	257	-\$	85,744
Sep-06	-\$ 85,744	-\$	25,015	4.59%	-\$	328	-\$	111,087
Oct-06	-\$ 111,087	-\$	18,300	4.59%	-\$	425	-\$	129,812
Nov-06	-\$ 129,812	-\$	25,102	4.59%	-\$	497	-\$	155,410
Dec-06	-\$ 155,410	-\$	18,255	4.59%	-\$	594	-\$	174,259
Jan-07	-\$ 174,259	-\$	25,254	4.59%	-\$	667	-\$	200,180
Feb-07	-\$ 200,180	-\$	18,299	4.59%	-\$	766	-\$	219,244
Mar-07	-\$ 219,244	-\$	25,357	4.59%	-\$	839	-\$	245,440
Apr-07	-\$ 245,440	-\$	18,378	4.59%	-\$	939	-\$	264,756
May-07	-\$ 264,756	-\$	25,369	4.59%	-\$	1,013	-\$	291,138
Jun-07	-\$ 291,138	-\$	18,360	4.59%	-\$	1,114	-\$	310,611
Jul-07	-\$ 310,611	-\$	25,590	4.59%	-\$	1,188	-\$	337,389
Aug-07	-\$ 337,389	-\$	18,511	4.59%	-\$ ¢	1,291	-\$	357,191
Sep-07	-\$ 357,191	-⊅ ¢	20,002	4.59%	-⊅ ¢	1,300	-⊅	364,139
Nov-07	-\$ 304,139	-⊅ _¢	25 712	5.14%	p c	1,045		404,302
Dec-07	-\$ 431 747	-\$	18 489	5 14%	-φ -\$	1 849	-\$	452 085
Jan-08	-\$ 452.085	-\$	25,912	4 08%	-\$	1,537	-\$	479 534
Feb-08	-\$ 479.534	-\$	18,493	4.08%	-\$	1,630	-\$	499.657
Mar-08	-\$ 499,657	-\$	26,080	4.08%	-\$	1,699	-\$	527,436
Apr-08	-\$ 527,436	-\$	18,697	3.35%	-\$	1,472	-\$	547,606
May-08	-\$ 547,606	-\$	26,293	3.35%	-\$	1,529	-\$	575,428
Jun-08	-\$ 575,428	-\$	18,788	3.35%	-\$	1,606	-\$	595,822
Jul-08	-\$ 595,822	-\$	26,320	3.35%	-\$	1,663	-\$	623,806
Aug-08	-\$ 623,806	-\$	18,711	3.35%	-\$	1,741	-\$	644,258
Sep-08	-\$ 644,258	-\$	26,347	3.35%	-\$	1,799	-\$	672,404
Oct-08	-\$ 672,404	-\$	18,770	3.35%	-\$	1,877	-\$	693,051
Nov-08	-\$ 693,051	-\$	26,338	3.35%	-\$	1,935	-\$	721,324
Dec-08	-\$ 721,324	-\$	18,826	3.35%	-\$ ¢	2,014	-\$	742,164
Jan-09 Feb 00	- 7 742,104 770,160	-⊅ ¢-	20,401	2.45%	-⊅ ¢-	1,515	-⊅	770,160
Mar-09	-\$ 790,100	-φ _¢	26 720	2.45%	-φ _\$	1,572	-φ _¢	818 803
Anr-09	-\$ 818 803	-φ -\$	18 892	2.45%	-φ -\$	682	-φ -\$	838 377
May-09	-\$ 838.377	-\$	92,198	1.00%	-\$	699	-\$	931,274
Jun-09	-\$ 931,274	-\$	98,117	1.00%	-\$	776	-\$	1.030.167
Jul-09	-\$ 1,030,167	-\$	69,942	0.55%	-\$	472	-\$	1,100,582
Aug-09	-\$ 1,100,582	-\$	99,233	0.55%	-\$	504	-\$	1,200,319
Sep-09	-\$ 1,200,319	-\$	70,041	0.55%	-\$	550	-\$	1,270,911
Oct-09	-\$ 1,270,911	\$	-	0.55%	-\$	583	-\$	1,271,493
Nov-09	-\$ 1,271,493	\$	-	0.55%	-\$	583	-\$	1,272,076
Dec-09	-\$ 1,272,076	\$	-	0.55%	-\$	583	-\$	1,272,659
Jan-10	-\$ 1,272,659	\$	-	0.55%	-\$	583	-\$	1,273,242
Feb-10	-\$ 1,273,242	\$	-	0.55%	-\$	584	-\$	1,273,826
Mar-10	-\$ 1,273,826 \$ 1,274,410	\$ ¢	-	0.55%	-⊅ ¢	584	-⊅ ¢-	1,274,410
Apr-10 Mov 10	-\$ 1,274,410 \$ 1,274,004	¢ D	-	0.55%	-⊅ ¢-	504	-⊅	1,274,994
Jun-10	-\$ 1 275 578	Ф \$	-	0.55%	-\$	585	φ- -\$	1 276 163
Jul-10	-\$ 1,276 163	\$	_	0.55%	-\$	585	-\$	1.276 748
Aug-10	-\$ 1,276.748	\$	-	0.55%	-\$	585	-\$	1,277.333
Sep-10	-\$ 1.277.333	\$	-	0.55%	-\$	585	-\$	1.277.918
Oct-10	-\$ 1,277,918	\$	-	0.55%	-\$	586	-\$	1,278,504
Nov-10	-\$ 1,278,504	\$	-	0.55%	-\$	586	-\$	1,279,090
Dec-10	-\$ 1,279,090	\$	-	0.55%	-\$	586	-\$	1,279,676
Jan-11	-\$ 1,279,676	\$	-	0.55%	-\$	587	-\$	1,280,263
Feb-11	-\$ 1,280,263	\$	-	0.55%	-\$	587	-\$	1,280,849
Mar-11	-\$ 1,280,849	\$	-	0.55%	-\$	587	-\$	1,281,437
Apr-11	-\$ 1,281,437	\$	-	0.55%	-\$	587	-\$	1,282,024
way-11	-\$ 1,282,024	\$	-	0.55%	-\$	588	-\$	1,282,611
JUN-11	-\$ 1,282,611 \$ 1,282,100	9 6	-	0.55%	-⊅ ₽	288	-\$ ¢	1,283,199
Aug-11	\$ 1 282 787	¢	-	0.00%	φ. .\$	500	-φ _¢	1 28/ 276
Sen-11	-\$ 1 28/ 376	¢		0.00%	-\$	580	φ- 2	1 284 965
Oct-11	-\$ 1 284 965	\$	_	0.55%	-\$	580	÷.	1 285 553
Nov-11	-\$ 1,285.553	\$	-	0.55%	-\$	589	-\$	1,286.143
Dec-11	-\$ 1,286.143	\$	-	0.55%	-\$	589	-\$	1,286.732
Jan-12	-\$ 1,286,732	\$	-	0.55%	-\$	590	-\$	1,287,322
Feb-12	-\$ 1,287,322	\$	-	0.55%	-\$	590	-\$	1,287,912
Mar-12	-\$ 1,287,912	\$	-	0.55%	-\$	590	-\$	1,288,502
Apr-12	-\$ 1,288,502	\$	-	0.55%	-\$	591	-\$	1,289,093
May-12	-\$ 1 289 093	S	-	0.55%	-\$	591	-\$	1 289 684

	Approved Deferral and Variance Accounts	CWIP Account
	Prescribed Interest	Prescribed Interest
	Rate (per the Bankers'	Rate (per the DEX
	Acceptances-3 months	Mid Term Corporate
	Plus 0.25 Spread)	Bond Index Yield 2)
Q2 2006	4.14	4.68
Q3 2006	4.59	5.05
Q4 2006	4.59	4.72
Q1 2007	4.59	4.72
Q2 2007	4.59	4.72
Q3 2007	4.59	5.18
Q4 2007	5.14	5.18
Q1 2008	5.14	5.18
Q2 2008	4.08	5.18
Q3 2008	3.35	5.43
Q4 2008	3.35	5.43
Q1 2009	2.45	6.61
Q2 2009	1.00	6.61
03 2000	0.55	5.67

#### LRAM/SSM CLAIM

#### <u>Response</u>

#### NOTE ADDENDUM FILED FOR ADJUSTED LRAM & SSM CLAIM

Note: VECC finds that the supporting details for the LRAM and SSM claims (kWh/kW savings and load impacts at an individual measure level) are inadequate compared to all other LRAM/SSM claims it has reviewed over past year. As a result the scope of VECC's questions has been significantly increased.

#### Question #40

**Reference:** Exhibit 10, Page 4

<u>Preamble:</u> Enerspectrum Group has calculated Kitchener-Wilmot Hydro's LRAM claim to be \$674,100 (\$157,778 for third tranche expenditures and \$516,322 for OPA programs) and the SSM claim to be \$158,074 (applies only to third-tranche expenditures) for a total of the two claims of \$832,174.

- a) Provide a schedule for the *Residential Sector and GS<50 kW* CDM programs that breaks down <u>by measure</u> the components of the LRAM claim and the total kWh and kW <u>for each year</u> 2005-2009 (including showing separately carry forward of prior years' savings)
  - i. Third tranche Programs
  - ii. OPA Funded programs
  - iii. Other e.g. Rate funded programs.

#### <u>Response</u>

A revised schedule is attached. This new schedule breaks down the Residential sector and GS < 50kW Class by measure and the total kWh and kW for each year from 2005-2009

							CDM Loa	d Impacts by	Class and	Program											
		NE	Т	GRC	DSS	N	T	GRO	DSS	NE	Т	GRO	SS	NE	T	GR	OSS	NE	т	GRC	DSS
Class	Year	200	<u> 06</u>	200	<u>06</u>	<u>20</u>	<u>07</u>	20	<u>07</u>	200	08	200	<u>08</u>	20	<u>09</u>	20	09	Total kWh	Total kW	Total kWh	Total kW
Program	Implemented	kWh	<u>kW</u>	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW				
Third Tranche																					
RESIDENTIAL																					
Fuel Switching (Residential)	2006					1,212,920	82.47	1,732,743	117.81	1,212,920	82.47	1,732,743	117.81	1,212,920	82.47	1,732,743	117.81	3,638,760	247.40	5,198,229	353.43
Fall Discount Coupon Program	2005	290.800	28.94	320.792	32.15	290.800	28.94	320,792	32.15	290.800	28.94	320.792	32.15	290.800	28.94	320.792	32.15	1.163.199	115.74	1.283.167	96.45
Ceiling Ean		5.092	0.17	5 657	0.19	5 092	0.17	5 657	0.19	5.092	0.17	5 657	0.19	5.092	0.17	5 657	0.19	20 367	0.68	22,630	0.57
		121.072	2.00	124 525	2.11	121.072	2.80	124 525	2.11	121.072	2.90	124 525	2.11	121.072	2.80	124 525	2.11	494 390	11 21	E28,000	0.37
CFL 15W		121,072	2.80	134,525	3.11	121,072	2.80	134,525	3.11	121,072	2.80	134,525	3.11	121,072	2.80	134,525	3.11	484,289	11.21	538,099	9.34
Indoor Light Timers		4,531	0.14	5,035	0.16	4,531	0.14	5,035	0.16	4,531	0.14	5,035	0.16	4,531	0.14	5,035	0.16	18,125	0.58	20,139	0.48
SLED 5W		35,198	0.00	37,050	0.00	35,198	0.00	37,050	0.00	35,198	0.00	37,050	0.00	35,198	0.00	37,050	0.00	140,790	0.00	148,200	0.00
SLED Mini		4,456	0.00	4,691	0.00	4,456	0.00	4,691	0.00	4,456	0.00	4,691	0.00	4,456	0.00	4,691	0.00	17,825	0.00	18,764	0.00
Outdoor Timers		5,512	0.00	6,124	0.00	5,512	0.00	6,124	0.00	5,512	0.00	6,124	0.00	5,512	0.00	6,124	0.00	22,046	0.00	24,496	0.00
Programmable Thermostat - Space Cooling		25.199	25.82	27,999	28.69	25.199	25.82	27,999	28.69	25.199	25.82	27.999	28.69	25.199	25.82	27,999	28.69	100.796	103.27	111.995	86.06
Programmable Thermostat - Space Heating		89 740	0.00	99 711	0.00	89 740	0.00	99 711	0.00	89 740	0.00	99 711	0.00	89 740	0.00	99 711	0.00	358 961	0.00	398 845	0.00
Energy Conservation Kits	2005	626 524	20 50	707 260	42.00	626 524	20 50	707 260	42.00	626 524	20 50	707 260	42.00	626 524	20 50	707 260	42.00	2 546 126	159.39	2 929 040	121.09
	2005	42.769	0.00	47 520	1.10	42 769	0.00	47 5 200	1.10	42 769	0.00	47 520	1.10	42 769	0.00	47 520	1 10	171.072	2.06	100.080	2 20
CFL 15W		42,708	0.99	47,520	1.10	42,708	0.99	47,520	1.10	42,708	0.99	47,520	1.10	42,708	0.99	47,520	1.10	1/1,0/2	5.90	190,080	5.50
Showerhead		540,000	38.60	600,000	42.89	540,000	38.60	600,000	42.89	540,000	38.60	600,000	42.89	540,000	38.60	600,000	42.89	2,160,000	154.42	2,400,000	128.68
Weatherstripping		53,766	0.00	59,740	0.00	53,766	0.00	59,740	0.00	53,766	0.00	59,740	0.00	53,766	0.00	59,740	0.00	215,064	0.00	238,960	0.00
GENERAL SERVICE (< 50 kW Demand)																					
Low Income Program - Social Housing Lighting	2006					92,439	24.72	132,056	35.31	92,439	24.72	132,056	35.31	92,439	24.72	132,056	35.31	277,317	74.16	396,167	105.94
Refigerator Replacement	2007							-		18 576	1.89	20 640	2.10	18 576	1.89	20 640	2.10	37 152	3.78	41 280	4.20
SHSC Energy Management	2005	22.176	12.42	26.962	14.02	22.176	12.42	26.962	14.02	20,570	12.42	26,640	14.02	22,176	12.42	26,010	14.02	122 706	5170	147 451	44.77
Matia Datata	2005	33,170	13.45	30,803	14.52	33,170	13.45	30,803	14.52	33,170	13.45	30,803	14.52	33,170	13.45	30,803	14.52	132,700	33.73	147,431	44.77
Motion Detector		17,101	0.00	19,001	0.00	17,101	0.00	19,001	0.00	17,101	0.00	19,001	0.00	17,101	0.00	19,001	0.00	68,403	0.00	76,003	0.00
Smart Thermostat		13,029	13.35	14,477	14.83	13,029	13.35	14,477	14.83	13,029	13.35	14,477	14.83	13,029	13.35	14,477	14.83	52,116	53.40	57,907	44.50
T8 Fixtures		3.047	0.08	3,385	0.09	3.047	0.08	3.385	0.09	3.047	0.08	3.385	0.09	3.047	0.08	3.385	0.09	12.187	0.33	13.541	0.27
Cool Shops	2006			- ,		764 002	170.60	055 115	162.00	764 002	120.60	055 115	162.00	764 002	120.60	055 115	162.00	2 202 277	200 01	2 965 246	496.01
	2000					704,032	129.00	555,115	102.00	704,032	129.00	555,115	102.00	704,032	125.00	555,115	102.00	2,232,211	300.01	2,803,340	480.01
11W CFL						11,902	2.40	14,877	3.00	11,902	2.40	14,877	3.00	11,902	2.40	14,877	3.00	35,705	7.20	44,631	9.00
15W CFL						482,274	97.93	602,843	122.41	482,274	97.93	602,843	122.41	482,274	97.93	602,843	122.41	1,446,822	293.80	1,808,528	367.24
LED Exit Sign						269.917	29.27	337,396	36.59	269.917	29.27	337.396	36.59	269.917	29.27	337,396	36.59	809.750	87.82	1.012.187	109.77
· ·																		,		_,,	
GENERAL SERVICE (> 50 kW Demand)																					
Lighting Retrofit	2007									3,877,147	727.86	5,538,782	1,039.80	3,877,147	727.86	5,538,782	1,039.80	7,754,294	1455.72	11,077,563	2079.60
In House Retrofit Program: Windows Replacement	2006					175,000	0.00	250,000	0.00	175,000	0.00	250,000	0.00	175,000	0.00	250,000	0.00	525,000	0.00	750,000	0.00
Main Office Lighting	2007									157.351	33.00	174.834	36.67	157.351	33.00	174.834	36.67	314.701	66.00	349.668	73.33
Garage Heating	2007									880.000	420.00	1 257 142	627 14	880.000	420.00	1 257 142	627.14	1 760 000	979.00	2 514 296	1254 20
	2007					500.000	200.00	744 200	420 57	500,000	439.00	1,237,143	420.57	500,000	435.00	1,237,143	420.57	1,700,000	878.00	2,514,280	1234.23
In House Retrotit Program: Fuel Switching (Boiler Replacement)	2006					500,000	300.00	/14,286	428.57	500,000	300.00	/14,286	428.57	500,000	300.00	/14,286	428.57	1,500,000	900.00	2,142,857	1285./1
Municipal Building Lighting	2005	284,202	39.14	406,003	55.91	284,202	39.14	406,003	55.91	284,202	39.14	406,003	55.91	284,202	39.14	406,003	55.91	1,136,809	156.56	1,624,014	167.74
UNMETERED SCATTERED LOAD																					
LED Traffic Lights	2007									1,587,209	8.20	2,267,442	11.71	1,587,209	8.20	2,267,442	11.71	3,174,419	16.40	4,534,884	23.43
														10,509,447				26,252,769		35,753,951	
																		15.743.323			
OPA Programs																					
Besidential																					
OPA Conservation Programs																					
Every Kilowatt Counts (spring)	2006	2,186,426	14.25	2,429,362	15.83	2,186,426	14.25	2,429,362	15.83	2,186,426	14.25	2,429,362	15.83	2,186,426	14.25	2,429,362	15.83	8,745,704	57.00	9,717,449	47.50
	2006, 2007,	166 648	170 69	185 164	189.66	651 878	489 25	1 108 820	878 74	939 014	721 11	1 609 096	1 232 66	939 014	721 11	1 609 096	1 232 66	2 696 553	2102.16	4 512 176	3293.56
Cool Savings Rebate Program	2008	100,010	170.05	105,101	105.00	001,070	105.25	1,100,020	020.21	555,011	/21.11	1,005,050	1,252.00	555,011	/21.11	1,005,050	1,252.00	2,050,555	2102.10	4,512,170	5255.50
Secondary Fridge Retirement Pilot	2006	89,510	20.29	99,456	22.54	89,510	20.29	99,456	22.54	89,510	20.29	99,456	22.54	89,510	20.29	99,456	22.54	358,041	81.16	397,823	67.63
Every Kilowatt Counts (fall)	2006	3,547,045	53.37	3,941,161	59.30	3,547,045	53.37	3,941,161	59.30	3,547,045	53.37	3,941,161	59.30	3,547,045	53.37	3,941,161	59.30	14,188,181	213.48	15,764,645	177.90
Great Refrigerator Roundun	2007. 2008					154,921	16.73	389.222	41.57	425,934	42.96	979.890	98.67	425,934	42.96	979.890	98.67	1.006.788	102.66	2.349.002	238,91
Every Kilowatt Counts	2007	1	1	1		2,122,201	81 48	3.008 135	117 98	2.096 465	73.84	2,961 342	104.08	2.096.465	73.84	2,961 342	104.08	6.315 130	229.16	8,930 818	326.14
nonkenvor®	2007 2000	1	1	1		2,122,201	0.00	5,000,155	117.50	2,000,400	167.27	2,331,342	185.05	2,050,405	167.27	2,501,542	185.05	0,010,100	334 52	0,000,010	371 70
	2007, 2008	1	1	1		000 (50	0.00	7 533 450	4 470 00	002.050	10/.2/	7 533 453	103.03	0	107.27	0	103.03	4 005 343	334.33	45.044.060	3/1./0
Summer Savings	2007					902,659	501.48	7,522,159	4,178.98	902,659	501.48	7,522,159	4,178.98	0	0.00	0	0.00	1,805,318	1002.95	15,044,319	8357.95
Every Kilowatt Counts Power Savings Event	2008									718,039	48.01	1,004,545	97.06	712,137	46.26	993,813	93.87	1,430,176	94.26	1,998,359	190.93
General Service<50kW																					
OPA Conservation Programs																					
Affordable Housing – Pilot	2007					13.965	3.56	13.965	3.56	13.965	3.56	13.965	3.56	13.965	3.56	13.965	3.56	41.895	10.68	41.895	10.68
Social Housing - Pilot	2007	1	1	1		191.260	22.50	191,260	22.50	191.260	22.50	191.260	22.50	191,260	22.50	191,260	22.50	573.779	67.50	573.779	67.50
Energy Efficiency Assistance for Houses – Dilet	2007					155,200	22.50	155,200	22.50	155,200	22.50	155,200	22.50	155,200	22.50	155,200	22.50	467 429	97.05	467 439	97.05
Ellergy Elliciency Assistance for Houses – Pilot	2007					155,805	52.55	155,805	52.55	133,805	32.35	155,805	32.35	155,805	32.35	155,805	32.33	407,420	37.03	407,428	57.05
Summer Sweepstakes	2008										2.82		8.06		0.00		0.00	U	2.82	0	8.06
High Performance New Construction	2008									4,560	2.00	6,515	2.86	4,560	2.00	6,515	2.86	9,121	4.00	13,030	5.72
General Service>50kW to 4,999kW																					
OPA Conservation Programs	1	1	1	1								1	1								
	2006, 2007,	1	2044.45	1			F 0 12 13		F 0/2 /2		F 0/2 25	1	F 0 · · · · -		0.00		0.00		43435 55		10007 07
Demand Response 1	2008	1	3041.18	1	4,444.80		5,043.49		5,043.49		5,043.97	1	5,044.17		0.00		0.00	0	13128.63	0	10087.66
Demand Response 3	2008	1		1							1,268.66	1	1,268,66		0.00		0.00	n	1268 66	0	1268 66
Other Demand Response	2007 2009	1	1	1			410 50		410 50		A6A 1E	1	164 15		0.00		0.00		882 64	0	882 64
Carter Denialiu Respuise	2007, 2008	1	1	1		8.000	419.50	0.055	419.50	690.056	404.13	068.050	404.15	600.056	207.00	068.050	424.27	1 260 472	503.04	1.040.000	003.04
Electricity Retrotit Incentive Program	2007, 2008	1	1	1		8,060	2.90	8,955	3.22	080,056	297.64	968,950	424.27	680,056	297.64	968,950	424.27	1,308,172	598.1/	1,946,855	851.//
	-	L										I	1					0	0.00	0	0.00
Unmetered Scattered Load																		0	0.00	0	0.00
OPA Conservation Programs	1	1	1	1								1	1					0	0.00	0	0.00
Renewable Energy Standard Offer Program (RESOP)	2007, 2008	1				5,719	5.44	5,719	5.44	5,719	5.44	5,719	5.44	5,719	5.44	5,719	5.44	17,156	16.32	17,156	16.32

b) Provide a Schedule that provides the details of the calculation of the SSM claim for the Residential and GS<50 kW classes.

<u>Response</u>

See attached

#### SSM Amounts by Class and Program

Class	Total Costs \$	Total Benefits \$	Net Benefits \$ NPV	Benefits/Cost Ratio	SSM Amount S
Program		Ť			· · · · · · · · · · · · · · · · · · ·
Third Tranche					
RESIDENTIAL					
Fuel Switching (Residential)	\$164,220.00	\$707,371.35	\$543,151.35	4.31	\$27,157.57
Fall Discount Coupon Program	\$62,591.63	\$232,124.18	\$169,532.55	3.71	\$8,476.63
Residential Education	\$74,569.00	\$0.00	-\$74,569.00	0.00	-\$3,728.45
Energy Conservation Kits	\$16,297.03	\$404,132.77	\$387,835.74	24.80	\$19,391.79
EnerGuide for Houses (REEP)	\$21,733.00	\$0.00	-\$21,733.00	0.00	-\$1,086.65
Low Income Residential Education (WWOW)	\$3 <i>,</i> 000.00	\$0.00	-\$3,000.00	0.00	-\$150.00
School Energy Conservation Kits	\$17,575.00	\$0.00	-\$17,575.00	0.00	-\$878.75
GENERAL SERVICE (< 50 kW Demand)					
Low Income Program - Social Housing	\$10,260,00	¢71 911 97	¢11 551 97	2 1 2	\$577 5Q
Lighting Definerator Deple correct	\$10,200.00	\$21,011.07 \$10,916.61	\$11,551.67	2.15	\$377.39 \$4E 92
Refigerator Replacement	\$10,900.00	\$19,010.01	\$910.01	1.05	242.05 \$4 5 47 16
Cool Shops	\$15,200.02 \$110 E02 00	\$104,204.05 \$200 947 52	390,943.23 6390 354 63	7.00	\$4,547.10 \$14.012.72
Commercial Customer Education	\$119,592.90	\$399,647.55 ¢0.00	\$260,254.05	5.54	\$14,012.75 \$400.12
	Ş8,002.42	\$0.00	-30,002.42	0.00	-3400.12
GENERAL SERVICE (> 50 kW Demand)					
Key Account Seminars & Education	\$6,661.00	\$0.00	-\$6,661.00	0.00	-\$333.05
Energy Management Workshops	\$10,643.00	\$0.00	-\$10,643.00	0.00	-\$532.15
Lighting Retrofit Program					
(commercial/industrial)	\$922,151.96	\$1,488,761.48	\$566,609.52	1.61	\$28,330.48
In-House Retroit Program: LED Sign	\$18,443.00	Ş0.00	-\$18,443.00	0.00	-\$922.15
In House Retrofit Prorgram: Windows	\$20 207 E0	¢101 175 27	\$74 067 97	2 5 7	\$2 749 20
Replacement	\$29,207.30	3104,173.37	\$74,907.07	5.57	ŞS,740.55
(Boiler Replacement)	\$137.640.00	\$449,240.80	\$311,600.80	3.26	\$15,580.04
Main Office Lighting	\$59.720.00	\$64.414.49	\$4.694.49	1.08	\$234.72
Garage Heating	\$130,866,79	\$726.696.60	\$595.829.81	5.55	\$29.791.49
Municipal Building Lighting Program	\$52.848.00	\$97.823.74	\$44.975.74	1.85	\$2.248.79
			, ,		, ,
UNMETERED SCATTERED LOAD					
LED Traffic Lights	\$561,600.00	\$1,119,228.03	\$557,628.03	1.99	\$27,881.40
TOTALS	\$2,459,783.05	\$5,939,648.89	\$3,479,865.84		\$173,993.29

c) Provide a reconciliation of the Residential and GS<50 kW Sectors kWh savings and LRAM and SSM amounts in the Schedules in the responses to parts a) and b) with those shown in Exhibit 10, page 6, Table 1, Columns 1 and 2.

#### **Response**

#### See below e)

d) Provide the as filed Carrying Cost Calculation/Schedule for the Residential and GS<50 kW classes' LRAM and (Separately) SSM claim.

#### **Response**

Note calculation is based on Addendum filed. The carrying charges calculated below are based on the methodology used by Hydro Ottawa Limited in EB-2008-0188. KW Hydro has calculated carrying charges to April 30, 2010 as follows: interest has been applied to the ending balance of the 2007 LRAM and SSM for one half on 2007, all of 2008 & 2009 and one-third of 2010. The calculation of the carrying costs uses the Board's prescribed interest rates as shown below:

LRAM Carrying C	Charges										
	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Total
	5.14%	5.14%	4.08%	3.35%	3.35%	2.45%	1.00%	0.55%	0.55%	0.55%	
Residential	13,902	9,268	7,357	6,041	6,041	4,418	1,803	992	992	992	51,804
GS<50 kW	891	594	471	387	387	283	116	64	64	64	3,319
GS>50 kW	1,752	1,168	927	761	761	557	227	125	125	125	6,528
USL	740	493	391	321	321	235	96	53	53	53	2,756
	17,284	11,523	9,147	7,510	7,510	5,492	2,242	1,233	1,233	1,233	64,407
SSM Carrying Ch	arges										
	Q4 2007	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Total
	5.14%	5.14%	4.08%	3.35%	3.35%	2.45%	1.00%	0.55%	0.55%	0.55%	
Residential	1,264	843	669	549	549	402	164	90	90	90	4,710
GS<50 kW	483	322	255	210	210	153	63	34	34	34	1,799
GS>50 kW	2,008	1,339	1,063	873	873	638	260	143	143	143	7,484
USL	717	478	379	311	311	228	93	51	51	51	2,670
	4,472	2,981	2,366	1,943	1,943	1,421	580	319	319	319	16,663

 e) Provide a schedule that shows the derivation of the Residential and GS<50kW Rate riders based on the kWh savings breakdown and carrying costs provided in response to parts a)-d) of this IR. Reconcile this with Exhibit 10, page 6, Table 1.

#### <u>Response</u>

	2010 Test Year - LRAM and SSM Rider												
								Four	Three				
								Year	Year	Number	Rate		
	Amount	s (2005 ~	Billing					Rate	Rate	of Years	Rider to		
	20	07)	Units (2008)		Rate Riders				Rider	to Use	Use		
Rate Class	LRAM	SSM			LRAM SSM Total				Total	(2 or 3)	Total		
					\$/unit	\$/unit	\$/unit	\$/unit	\$/unit		\$/unit		
					(kWh or	(kWh or	(kWh or	(kWh or	(kWh or		(kWh or		
	\$	\$		Metrics	kW)	kW)	kW)	kW)	kW)	3	kW)		
Residential	540,944.26	49,182.13	638,167,356	kWh	0.0008	0.0001	0.0009	0.0002			0.0002		
GS<50 kW	34,654.26	18,783.20	233,464,130	kWh	0.0001	0.0001	0.0002	0.0001			0.0001		
GS>50 kW	68,160.48	78,146.56	2,227,288	kW	0.0306	0.0351	0.0657	0.0164			0.0164		
USL	28,777.84	27,881.40	3,287,782	kWh	0.0088	0.0085	0.0172	0.0043			0.0043		
Total	672,536.84	173,993.29											

#### Note the following table is updated with KW Hydro's re-file of Exhibit 10.

f) The EnerSpectrum Report, page 5 states "Attachment E summarizes individual technology TRC (NPV) values by program". Clarify whether this is an error and/or provide a copy of Schedule E

#### **Response**

See attached tables

#### Assumptions by program

Program:	Energy Conservation Kit										
Description:	15W	CFL	Efficient Sh	owerheads	Weathers	tripping	Summ	nary			
Table Applied:	Reside	ntial	Reside	ential	Reside	ntial					
Number of Units:	1,10	00	1,1	00	11	C					
Start Year:	200	5	2005		2005						
Incremental Costs:	\$1,980.00		\$6,93	0.00	\$2,97	0.00	\$11,880.00				
Discount Factor:	7.52	.%	7.5	2%	7.52	.%					
LDC Costs:							\$4,41	7.03			
	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(3)</sup>	LRAM <sup>(3)</sup>					
Element No.:	16	24	25	45	61	61 61					
EE Technology Life:	4	8	12	2	25						
Free Ridership Rate:	109	6	10%		109	%					

(1) OEB Assumptions and Measures Tables - September 8, 2005

(2) OPA Assumptions and Measures Tables - Pebruary 5, 2009

(3) OPA Assumptions and Measures Tables used as no equivalent measure exists on OEB tables

#### Assumptions by program

Program:	Fall Discount Coupon Program																	
Description:	Ceiling	g Fan	15W	CFL	Indoor Lig	Indoor Light Timer		Outdoor Timer		ights - 5W	LED Xmas Li	ghts - Mini	Pstat - Space Cooling		Pstat - Space Heating		Summ	nary
Table Applied:	Reside	ential	Resid	ential	Residential		Residential Residentia		Residential		Residential		Residential		Residential			
Number of Units:	63	3	3,1	14	23	3	149	9	65	0	650		176		68	3		
Start Year:	200	)5	20	05	200	)5	200	15	200	)5	200	)5	200	)5	200	)5		
Incremental Costs:	\$2,664	4.90	\$5,60	)5.20	\$414	.00	\$2,682.00		\$1,235.00		\$1,235.00		\$9,504.00		\$3,672.00		\$27,01	2.10
Discount Factor:	7.52	2%	7.5	2%	7.52%		7.52	.%	7.52	!%	7.52	2%	7.52	!%	7.52	2%		
LDC Costs:																	\$35,57	9.53
	SSM <sup>(3)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(3)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(4)</sup>	LRAM <sup>(2)</sup>		
Element No.:	90	)	16	24	38	3	22	40	22	35	23	36	55		56	5		
EE Technology Life:	10	)	4	8	10	)	20		30		30	)	18		18	3		
Free Ridership Rate:	109	%	10	%	109	%	109	%	5%	, D	5%	0	109	%	109	%		

(1) OEB Assumptions and Measures Tables - September 8, 2005

(2) OPA Assumptions and Measures Tables - Bebruary 5, 2009

(3) OPA Assumptions and Measures Tables used as no equivalent measure exists on OEB tables

(4) OEB Assumptions and Measures Tables used as no equivalent measure exists on OPA tables

Program:	Program: Municipal Building					
Description:	Various Lighting					
Table Applied:	Direct Input					
Number of Units:						
Start Year:	2005					
Incremental Costs:	\$52,848.00					
Discount Factor:	7.52	%				
LDC Costs:	\$104.	23				
	SSM	LRAM				
Element No.:	N/A					
EE Technology Life:	7					
Free Ridership Rate:	30%					

Program:	SHSC Energy Management										
Description:	T8 Fixt	ures	Motion D	Detector	Smart The	rmostat	Summ	nary			
Table Applied:	Reside	ntial	Reside	ential	Reside	ntial					
Number of Units:	91		91	1	91						
Start Year:	200	5	200	)5	200	5					
Incremental Costs:	\$1,638	3.00	\$2,04	7.50	\$4,914	1.00	\$8,599	9.50			
Discount Factor:	7.52	%	7.52	2%	7.52	%					
LDC Costs:							\$4,662	1.32			
	SSM <sup>(3)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(3)</sup>	LRAM <sup>(2)</sup>					
Element No.:	30		24	43	56 88						
EE Technology Life:	16		10		18						
Free Ridership Rate:	10%		10	%	109	6					

(1) OEB Assumptions and Measures Tables - September 8, 2005

(2) OPA Assumptions and Measures Tables - Pebruary 5, 2009

(3) OPA Assumptions and Measures Tables used as no equivalent measure exists on OEB tables

Program:	Cool Shops											
Description:	11W (	CFL	15W	CFL	LED Exit	Sign	Summ	nary				
Table Applied:	Comme	ercial	Comm	ercial	Comme	ercial						
Number of Units:	114	ļ	2,97	77	1,26	8						
Start Year:	200	6	200	)6	2006		2006					
Incremental Costs:	\$461.70		\$10,71	L7.20	\$108,41	.4.00	\$119,59	92.90				
Discount Factor:	7.55	%	7.55%		7.55	%						
LDC Costs:												
	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(1)</sup>	LRAM <sup>(2)</sup>	SSM <sup>(3)</sup>	LRAM <sup>(2)</sup>						
Element No.:	15		16		10							
EE Technology Life:	2		2		25							
Free Ridership Rate:	10%		11400%		10%		10%		10%			

(1) OEB Assumptions and Measures Tables - September 8, 2005

(2) OPA Assumptions and Measures Tables - Pebruary 5, 2009

(3) OPA Assumptions and Measures Tables used as no equivalent measure exists on OEB tables

Program:	LDC Fuel Sv	vitching				
Description:	Boilier Project					
Table Applied:	Direct Input					
Number of Units:						
Start Year:	2006					
Incremental Costs:	\$137,640.00					
Discount Factor:	7.55	%				
LDC Costs:						
	SSM	LRAM				
Element No.:	N/A					
EE Technology Life:	18					
Free Ridership Rate:	30%					

Program:	<b>Social Housing Lighting</b>	
Description:	Various Lighting	
Table Applied:	Direct Input	
Number of Units:		
Start Year:	2006	
Incremental Costs:	\$10,260.00	
Discount Factor:	7.55%	
LDC Costs:		
	SSM	LRAM
Element No.:	N/A	
EE Technology Life:	4	
Free Ridership Rate:	30%	

Program:	LED Traffic Lights		
Description:	Street Lighting		
Table Applied:	Direct Input		
Number of Units:			
Start Year:	2007		
Incremental Costs:	\$561,600.00		
Discount Factor:	7.61%		
LDC Costs:			
	SSM	LRAM	
Element No.:	N/A		
EE Technology Life:	20		
Free Ridership Rate:	30%		
Program:	Residential Fuel		
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Description:			
Table Applied:	Direct I	nput	
Number of Units:			
Start Year:	2007		
Incremental Costs:	\$234,600.00		
Discount Factor:	7.61%		
LDC Costs:			
	SSM LRAM		
Element No.:	N/A		
EE Technology Life:	18		
Free Ridership Rate:	30%	0	

Program:	Garage Heating		
	Gas Fired Heaters in		
Description:	Garage		
Table Applied:	Direct I	nput	
Number of Units:			
Start Year:	2007		
Incremental Costs:	\$130,866.79		
Discount Factor:	7.61%		
LDC Costs:			
	SSM	LRAM	
Element No.:	N/A		
EE Technology Life:	20		
Free Ridership Rate:	30%	/ D	

Program:	Lighting Retrofit		
	Various ligh	nting for	
Description:	large customers		
Table Applied:	Direct Input		
Number of Units:			
Start Year:	2007		
Incremental Costs:	\$922,151.96		
Discount Factor:	7.61	%	
LDC Costs:			
	SSM LRAM		
Element No.:	N/A		
EE Technology Life:	7		
Free Ridership Rate:	30%	/ 0	

Program:	Main office lighting		
Description:	T8 32W to 25W		
Table Applied:	Direct I	nput	
Number of Units:			
Start Year:	2007		
Incremental Costs:	\$59,720.00		
Discount Factor:	7.61%		
LDC Costs:			
	SSM	LRAM	
Element No.:	N/A		
EE Technology Life:	6		
Free Ridership Rate:	10%	0	

Program:	Social Housing			
Description:	Energy Star Fridges			
Table Applied:	Resider	ntial		
Number of Units:	300	)		
Start Year:	2007			
Incremental Costs:	\$18,900.00			
Discount Factor:	7.61%			
LDC Costs:				
	SSM <sup>(1)</sup> LRAM <sup>(2)</sup>			
Element No.:	2			
EE Technology Life:	19			
Free Ridership Rate:	10%	0		

(1) OEB Assumptions and Measures Tables - September 8, 2005

(2) OPA Assumptions and Measures Tables -2 February 5, 2009

## Question #41

## <u>Response</u>

## NOTE ADDENDUM FILED FOR ADJUSTED LRAM & SSM CLAIM SO THAT RESULTS AGREE WITH THE HORIZON DECISION REGARDING LRAM AND SSM (EB-2009-0158 / EB-2009-0192)

## **Reference:** Exhibit 10, page 1 of 1

<u>Preamble:</u> In addition to the requirements with respect to this Application, the Filing Requirements contain provisions relating to applications for LRAM and SSM adjustments, and Kitchener-Wilmot Hydro submits that it has relied on and complied with the LRAM/SSM provisions of the Report, the OEB's TRC Guide and the Filing Requirements in preparing this request for LRAM/SSM adjustments for the years 2005 to 2007.

a) Does Kitchener-Wilmot Hydro agree that the OEB Guidelines Section 7.5 indicate that savings and LRAM claims should be based on the "Best Available" input assumptions at the time that the LRAM claim was prepared?

## <u>Response</u>

## Amended Assumptions are based on OEB Tables for SSM Claims and OPA Tables for LRAM Claims

b) Does Kitchener-Wilmot Hydro agree that in the case estimation of 2005 -2008 KWh savings, this means using the best available 2007 and 2008 input assumptions, which were and are those of the OPA Measures and Input assumptions List? If not explain why not.

## <u>Response</u>

## Amended Assumptions are based on OEB Tables for SSM Claims and OPA Tables for LRAM Claims

- c) Confirm that the EnerSpectrum independent review of 2009 lost revenue associated with 2005 -2009 savings used the latest OPA input assumptions residential mass market measures and Affordable/Social housing (notably CFLs, Low Flow Showerheads and PTs) as demonstrated in the following OPA documents:
  - i. OPA 2007 EKC Program Calculator
  - ii. OPA 2008/2009 Measures and Assumptions list (now adopted by the OEB)

## **Response**

## Amended Assumptions are based on OPA Tables for LRAM Claims for Third Tranche Programs. OPA Programs use the following assumptions:

#	Year	Program Name	Measures & Assumptions Source(s)
1	2006	Every Kilowatt Counts (Spring)	OEB Measures & Assumptions List AND OPA
2	2006	Cool Savings	OEB Measures & Assumptions List AND OPA
3	2006	Secondary Refrigerator Retirement	OEB Measures & Assumptions List
4	2006	Every Kilowatt Counts (Autumn)	OEB Measures & Assumptions List AND OPA
5	2006	Demand Response 1	Contracted Nameplate Capacity
6	2007	Great Refrigerator Roundup	Third Party EM&V
7	2007	Cool Savings	Third Party EM&V
8	2007	Aboriginal	OEB Measures & Assumptions List AND OPA
9	2007	Every Kilowatt Counts	Third Party EM&V
10	2007	peaksaver	Ontario Power Authority
11	2007	Summer Savings	Third Party EM&V
12	2007	Affordable Housing	Ontario Energy Board Measures & Assumptions List
13	2007	Social Housing	Ontario Energy Board Measures & Assumptions List
14	2007	Energy Efficiency Assistance for Houses	Ontario Energy Board Measures & Assumptions List
15	2007	Toronto Comprehensive	Third Party EM&V and Toronto Hydro
16	2007	Electricity Retrofit Incentive	Ontario Power Authority
17	2007	Demand Response 1	Third Party EM&V
18	2007	Other Demand Response	Contracted Nameplate Capacity
19	2007	Renewable Energy Standard Offer	Contracted Nameplate Capacity

d) Provide details of the adjustments that Enerspectrum made to the 2005-2008 input values used in the Kitchener-Wilmot Hydro's Annual reports, in particular any adjustments to the above measures.

## <u>Response</u>

Enerspectrum made adjustments to some of the program savings, reducing the kWh savings where KW Hydro had overestimated. See table below.

	KWHI		Enerspe	ctrum	Difference	
	<u>Savings</u>		<u>Savir</u>	ngs	200	<u>)7</u>
CDM Program	<u>kWh</u>	<u>kW</u>	<u>kWh</u>	<u>kW</u>	<u>kWh</u>	<u>kW</u>
Fuel Switching (Residential)	2,790,236	82.47	2,425,840	82.47	364,396	0.00
Fall Discount Coupon Program	1,588,590	30.70	872,399	28.94	716,191	-1.76
Energy Conservation Kits	4,004,856	71.50	1,909,602	39.59	2,095,254	-31.91
Low Income Program - Social Housing Lighting	231,098	24.70	184,878	0.00	46,220	-24.70
Refigerator Replacement	38,850	5.10	18,576	1.89	20,274	-3.21
SHSC Energy Management	1,086,677	18.20	99,529	13.43	987,148	-4.77
Cool Shops	2,027,534	219.00	1,528,184	129.60	499,350	-89.40
Lighting Retrofit	7,151,032	727.86	3,877,147	727.86	3,273,885	0.00
In House Retrofit Program: Windows Replacement	379,167	0.00	350,000	0.00	29,167	0.00
Main Office Lighting	236,025	33.00	157,351	33.00	78,674	0.00
Garage Heating	1,320,000	439.00	880,000	439.00	440,000	0.00
In House Retrofit Program: Fuel Switching (Boiler Replacement)	1,083,333	300.00	1,000,000	300.00	83,333	0.00
Municipal Building Lighting	947,340	39.14	852,607	39.14	94,733	0.00
LED Traffic Lights		0.00	1,587,209	8.20	1,023,547	8.20
Total	25,495,494	1,991	15,743,323	1,843	9,752,171	-148

# e) Provide a Copy of the 2006 and 2007 OPA Every Kilowatt Counts Program Calculators.

## <u>Response</u>

#	Year	Program Name	Measures & Assumptions Source(s)
1	2006	Every Kilowatt Counts (Spring)	OEB Measures & Assumptions List AND OPA
2	2006	Cool Savings	OEB Measures & Assumptions List AND OPA
3	2006	Secondary Refrigerator Retirement	OEB Measures & Assumptions List
4	2006	Every Kilowatt Counts (Autumn)	OEB Measures & Assumptions List AND OPA
5	2006	Demand Response 1	Contracted Nameplate Capacity
6	2007	Great Refrigerator Roundup	Third Party EM&V
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8	2007	Aboriginal	OEB Measures & Assumptions List AND OPA
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12	2007	Affordable Housing	Ontario Energy Board Measures & Assumptions List
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17	2007	Demand Response 1	Third Party EM&V
18	2007	Other Demand Response	Contracted Nameplate Capacity
19	2007	Renewable Energy Standard Offer	Contracted Nameplate Capacity

## Results were taken from OPA Spreadsheet. OPA Programs used the following assumptions:

f) Confirm whether Kitchener-Wilmot Hydro reported to the OPA on the 2006 and 2007 EKC campaigns using Mass Market measures assumptions (particularly CFLs) specified in the OPA 2006 and 2007 EKC Program Calculators.

## <u>Response</u>

## KW Hydro did not have to report to the OPA

g) Confirm whether or not the LRAM claim for 2005, 2006, 2007 and 2008 related to third tranche programs is based on using the OEB Guide values for CFLs, showerheads and PTs, or the OPA 2007 EKC Calculator or OPA 2008/2009 Measures values.

## **Response**

## Amended Assumptions are based on OEB Tables for SSM Claims and OPA Tables for LRAM Claims

 h) Confirm whether the 2006-2008 claim for OPA programs is based on the OPA 2008 Measures and input assumptions for CFLs, Low Flow Showerheads and PTs.

## **Response**

## Results were taken from OPA Spreadsheet. OPA Programs used the following assumptions:

#	Year	Program Name	Measures & Assumptions Source(s)
1	2006	Every Kilowatt Counts (Spring)	OEB Measures & Assumptions List AND OPA
2	2006	Cool Savings	OEB Measures & Assumptions List AND OPA
3	2006	Secondary Refrigerator Retirement	OEB Measures & Assumptions List
4	2006	Every Kilowatt Counts (Autumn)	OEB Measures & Assumptions List AND OPA
5	2006	Demand Response 1	Contracted Nameplate Capacity
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18	2007	Other Demand Response	Contracted Nameplate Capacity
19	2007	Renewable Energy Standard Offer	Contracted Nameplate Capacity

i) With respect to the SSM Claim, does Kitchener-Wilmot Hydro agree that the Board's Guidelines indicate that Assumptions used from the beginning of any year will be those assumptions in existence in the immediately prior year? For example, if any input assumptions change in 2007, those changes should apply for SSM purposes from the beginning of 2008 onwards until changed again. Provide the rationale for using the recently published OPA assumptions and measures list for all programs/projects, and how these align with section 7.3 of the Board's Guideline as quoted above.

## <u>Response</u>

## Amended Assumptions are based on OEB Tables for SSM Claims and OPA Tables for LRAM Claims

## Question #42

- **References:** Exhibit 10, page 10 and Appendix A, Enerspectrum Report, pages 9-20, Attachments A, B and C
- a) Provide a Table in the format below that shows for each of the Residential Programs for each year, which source(s) of input assumptions underpin the claimed kWh and kW savings. (Note entries below are illustrative only).
  Indicate for OPA- Funded Programs whether the 2007 Every Kilowatt Counts (EKC) Calculator or the OPA Measures for 2008 was used.

## <u>Response</u>

## **OPA Program Assumptions**

#	Year	Program Name	Measures & Assumptions Source(s)
1	2006	Every Kilowatt Counts (Spring)	OEB Measures & Assumptions List AND OPA
2	2006	Cool Savings	OEB Measures & Assumptions List AND OPA
3	2006	Secondary Refrigerator Retirement	OEB Measures & Assumptions List
4	2006	Every Kilowatt Counts (Autumn)	OEB Measures & Assumptions List AND OPA
5	2006	Demand Response 1	Contracted Nameplate Capacity
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18	2007	Other Demand Response	Contracted Nameplate Capacity
19	2007	Renewable Energy Standard Offer	Contracted Nameplate Capacity

LRAM Claim	Third tranche Incl. 2006 Carryover	Rate funded	OPA Funded	Verification(s)
2006	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2006	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2007	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2008	OPA Measures	OPA Measures	OPA Measures	EnerSpectrum
SSM Claim				
2006	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2006	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2007	OEB Guide	OEB Guide	OPA EKC Calculator	EnerSpectrum
2008	OPA Measures		OPA Measures	EnerSpectrum

- b) Provide a complete list by measure by year of the input assumptions used to prepare the Residential and GS<50kW kWh and kW load impacts in the Enerspectrum Report Exhibit 10, Pages 9-20 and associated LRAM and SSM claims. In particular provide the detailed input assumptions for all mass market measures including CFLs and PTs.
  - i. kWh and kW savings
  - ii. Free ridership
  - iii. Cost of measure
  - iv. Measure life
  - v. Source(s)/authority(ies) for assumption(s).

## <u>Response</u>

## See response to Question #40 (f)

## Question #43

**Reference:** Exhibit 10, pages 9-20-EnerSpectrum Report and Attachments A, B and C.

 a) Confirm/correct/complete the following Input Assumptions and kWh savings Comparison Table (based on Exhibit 10 Enerspectrum Report Attachments A, B and C) in the format below for Residential Mass Market measures and Social Housing. Include any missing programs related to CFLs, PTs and Seasonal Lights:

Program	Efficient Measure	Participants As filed	As Filed unit kw savings	Free Ridership	Net Kwh Per	OPA <u>2007</u> EKC	Free Ridership	Adjusted Net kwh OPA 2008
			assumption		Filed LRAM Claim	Calc or 2008 Measure		Measures List
2005						3 2131		
Residential								
Third Tranche	CFIs 13/15w		106.7	10%		43	30%	
2006								
Residential								
Third Tranche	CFIs 13/15w		106.7	10%		43	30%	
OPA EKC Spring	E Star CFI		104	10%		43	30%	
	PTs		216	10%		159	10%	
OPA EKC Fall	E Star CFI 15w		104	10%		43	30%	
	PTs		216	10%		55	54%	
OPA EKC Fall	SLED Xmas Lights		45	5%		43	30%	
OTHER	CFLs							
GS<50KW	CEIe 12/15.		106.7	10%		43	30%	
Social Housing	CFIs 13/15w		100.7	1076		43	200/	
Affordable/Social Housing	CFIS 13/13W		100.7	10%		43	30%	
Residential TOTAL 2006 kwh								
GS<50kw TOTALkwh								
2007								
Third Tranche	13/15 watt CFL		109.0	10%		43	30%	
EKC 2007	E Star CFI 15w		43	30%		43	30%	
	E Star CFL 20w+		62	22%		43	30%	
Cool Savings	PTs		55	54%		55	64%	
UTHER Desidential TOTAL	CFLs							
2007 kwh								
Third Tranche	CEIs 13/15w		106.7	10%		43	30%	
Social Housing	5116 10/10			1070			5070	
OPA Affordable/Social	CFIs 13/15w		106.7	10%		43	30%	
GS<50kw								
2008								
Residential								
Third Tranche	CFIs 13/15w		106.7	10%		43	30%	
OPA Cool Savings Rebate	PTs		54	54%		54	64%	
OTHER	CFLs							
TOTAL 2008 kwh								
CUMULATIVE KWH								

## <u>Response</u>

## See response to Question #40 (f)

 b) Provide a revised version of the schedules provided in response to VECC IR #40 parts a and b) adjusted to reflect the OPA 2008/2009 measures and input assumptions list for CFLs and PTs provided in part a) of this IR.

## <u>Response</u>

## See Addendum

c) Adjust the as filed Carrying costs to reflect the revised LRAM and SSM amounts resulting from the answer to part b).

## Question #44

**Reference**: Exhibit 10, page 6, Table 1

a) Provide the revised kWh, LRAM/SSM Rate rider calculations using the complete set of updated OPA assumptions from the 2008/2009 Measures List for the Residential and GS<50 kW Sector LRAM/SSM claims.</p>

## <u>Response</u>

## See Addendum

 b) Provide Revised Bill impacts using the complete set of updated OPA assumptions from the 2008/2009 Measures List for the Residential Sector LRAM/SSM claims.

## **Response**

## See Addendum

c) Comment on the timing/implementation of the Rate riders given the above revisions

## <u>Response</u>

## See Addendum

## Question #45

## Reference: No Reference

 a) Provide a copy of the Residential Sector/Mass market (and If applicable Social Housing Sector) Report(s) that Kitchener-Wilmot Hydro provided to OPA, including the detailed breakdown of measures, unit savings, participants and other assumptions.

## <u>Response</u>

## KW Hydro did not provide any of the requested materials to the OPA

b) Provide any correspondence from OPA confirming its acceptance of the Report(s).

## **Response**

KW Hydro was unsuccessful in receiving additional information from the OPA on its calculation methods; however, KW Hydro can provide a copy of the OPA's Final Evaluation Report of the 2007 Every Kilowatt Counts Program prepared by Navigant Consulting Inc. dated June 17, 2008;