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October 7, 2011

Kirsten Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Dear Ms. Walli,

Re: EB-2011-0054 - Hydro Ottawa Limited 2012 Cost of Service Rate Application

Enclosed are Hydro Ottawa Limited's responses to the remaining Undertakings following last week's Technical Conference. These include Undertakings LT1.2, LT1.13, LT1.14, LT2.1 and LT2.2.

Hydro Ottawa Limited will submit two (2) sets of hard copies of all the Undertakings responses with the Ontario Energy Board.

Yours truly,

Original signed by P. Hoey

Patrick Hoey
Director, Regulatory Affairs

cc EB-2011-0054 Intervenors
Violet Binette (Ontario Energy Board)
Fred Cass (Aird & Berlis)



Undertaking

Undertaking LT1.2

To respond to Energy Probe Technical Conference Question Number 8, providing revised calculations for tables 7 and 8 in Exhibit B4, Tab 2, Schedule 1 that reflect the dollar-weighted average of day sales outstanding using the midpoint of each of the DSO buckets shown, with respect to a midpoint of 8.5 days, as well as another calculation with respect to a midpoint as selected by Hydro Ottawa.

Response

Please find below the average of days sales outstanding Tables 7 and 8 from Hydro Ottawa Limited's ("Hydro Ottawa") Lead Lag Study, Exhibit B4-2-1, using the average aging days that Hydro Ottawa would use if required to use a midpoint method, as well as the midpoint tables that Energy Probe requested. In Hydro Ottawa opinion a midpoint method does not properly reflects the cash impact of average days sales outstanding.

Please note that Hydro Ottawa could further separate its aging category of more than 121 days into two separate aging categories, namely 121 to 365 days and more than 365 days. This shows that the midpoint for the more than 121 days is greater than the 150 days requested to be used by Energy Probe.

Below is the explanation of the difference between Hydro Ottawa's average aging days versus Energy Probe's mid points:

- The difference between Hydro Ottawa's and Energy Probe's calculations for the midpoint of 18 to 120 days was minimal; as a result Hydro Ottawa has adopted Energy Probe's midpoint to make the comparison easier.
- Hydro Ottawa has adopted the same midpoint formula for the 121 to 365 days as used for the other aging categories.



- 1 • For the 1 to 17 days Hydro Ottawa has chosen a conservative average day of
2 11.5. This uses the same midpoint formula used for the other aging categories
3 and reflects that a postage delay of 3 days occurs, which is recognized by the
4 Ontario Energy Board's July 2, 2010 customer service code amendments.

5

6 The following Charts represent Hydro Ottawa's average aging days.

7

8 **2009 Collection Lag – Residential and General Service Customers (\$000)**

Month	1-17 Days	18-30 Days	31-60 Days	61-90 Days	91-120 Days	121-365 Days	Over 365 Days	Total
January	\$44,143	\$4,980	\$5,024	\$1,502	\$830	\$746	\$239	\$57,465
February	44,637	3,628	5,480	977	659	885	227	56,493
March	26,991	9,793	4,024	1,983	469	854	235	44,350
April	38,880	2,221	4,519	1,273	728	733	233	48,587
May	34,920	5,264	4,306	2,050	677	812	220	48,248
June	24,224	6,141	4,488	1,589	1,089	803	212	38,547
July	33,422	3,299	3,786	1,785	902	1,042	213	44,449
August	34,636	3,173	3,777	1,549	973	1,143	202	45,453
September	42,740	5,377	3,243	1,444	652	1,102	173	54,731
October	42,037	2,387	4,161	1,341	605	946	178	51,655
November	37,811	4,304	4,059	1,464	557	839	187	49,220
December	36,023	3,154	3,802	1,560	612	729	190	46,068
Total	\$440,464	\$53,720	\$50,668	\$18,517	\$8,753	\$10,633	\$2,509	\$585,266
Mid Point of Aging Days	11.5	23.5	45.5	75.5	105.5	242.5	408.5	
Weighting Factor	75%	9%	9%	3%	1%	2%	0%	100%
Weighted Lag Time (Days)	8.65	2.16	3.94	2.39	1.58	4.41	1.75	24.88

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1 2010 Collection Lag – Residential and General Service Customers (\$000)

Month	1-17 Days	18-30 Days	31-60 Days	61-90 Days	91-120 Days	121-365 Days	Over 365 Days	Total
January	\$48,796	\$5,729	\$4,009	\$1,449	\$567	\$671	\$205	\$61,426
February	47,108	5,065	4,727	935	526	642	214	59,217
March	41,541	5,999	3,848	1,414	368	531	208	53,910
April	39,369	1,937	4,687	1,365	555	449	207	48,570
May	35,652	5,353	4,812	1,666	522	425	234	48,664
June	37,570	2,515	3,483	1,394	621	460	231	46,276
July	38,735	3,617	3,405	1,359	524	566	239	48,444
August	50,042	3,346	3,453	1,170	568	492	235	59,306
September	40,436	4,428	3,779	1,090	394	503	240	50,871
October	41,941	3,908	4,306	1,504	397	480	241	52,776
November	38,328	4,018	3,943	1,280	422	407	221	48,619
December	46,872	3,313	4,312	1,337	473	359	216	56,882
Total	\$506,390	\$49,229	\$48,764	\$15,963	\$5,937	\$5,985	\$2,691	\$634,959
Mid Point of Aging Days	11.5	23.5	45.5	75.5	105.5	242.5	408.5	
Weighting Factor	80%	8%	8%	3%	1%	1%	0%	100%
Weighted Lag Time (Days)	9.17	1.82	3.49	1.90	0.99	2.29	1.73	21.39

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3 The following Charts represent Energy Probe's requested midpoint days.

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5 2009 Collection Lag – Residential and General Service Customers (\$000)

Month	1-17 Days	18-30 Days	31-60 Days	61-90 Days	91-120 Days	Over 121 Days	Total
January	\$44,143	\$4,980	\$5,024	\$1,502	\$830	\$984	\$57,465
February	44,637	3,628	5,480	977	659	1,112	56,493
March	26,991	9,793	4,024	1,983	469	1,089	44,350
April	38,880	2,221	4,519	1,273	728	966	48,587
May	34,920	5,264	4,306	2,050	677	1,032	48,248
June	24,224	6,141	4,488	1,589	1,089	1,015	38,547
July	33,422	3,299	3,786	1,785	902	1,254	44,449
August	34,636	3,173	3,777	1,549	973	1,345	45,453
September	42,740	5,377	3,243	1,444	652	1,275	54,731
October	42,037	2,387	4,161	1,341	605	1,124	51,655
November	37,811	4,304	4,059	1,464	557	1,026	49,220
December	36,023	3,154	3,802	1,560	612	918	46,068
Total	\$440,464	\$53,720	\$50,668	\$18,517	\$8,753	\$13,143	\$585,266
Mid Point of Aging Days	8.5	23.5	45.5	75.5	105.5	150	
Weighting Factor	75%	9%	9%	3%	1%	2%	100%
Weighted Lag Time (Days)	6.40	2.16	3.94	2.39	1.58	3.37	19.84

6



1 **2010 Collection Lag – Residential and General Service Customers (\$000)**

Month	1-17 Days	18-30 Days	31-60 Days	61-90 Days	91-120 Days	Over 121 Days	Total
January	\$48,796	\$5,729	\$4,009	\$1,449	567	\$876	\$61,426
February	47,108	5,065	4,727	935	526	856	59,217
March	41,541	5,999	3,848	1,414	368	739	53,910
April	39,369	1,937	4,687	1,365	555	656	48,570
May	35,652	5,353	4,812	1,666	522	659	48,664
June	37,570	2,515	3,483	1,394	621	691	46,276
July	38,735	3,617	3,405	1,359	524	804	48,444
August	50,042	3,346	3,453	1,170	568	728	59,306
September	40,436	4,428	3,779	1,090	394	743	50,871
October	41,941	3,908	4,306	1,504	397	721	52,776
November	38,328	4,018	3,943	1,280	422	628	48,619
December	46,872	3,313	4,312	1,337	473	575	56,882
Total	\$506,390	\$49,229	\$48,764	\$15,963	\$5,937	\$8,676	\$634,959
Mid Point of Aging Days	8.5	23.5	45.5	75.5	105.5	150	
Weighting Factor	80%	8%	8%	3%	1%	1%	100%
Weighted Lag Time (Days)	6.78	1.82	3.49	1.90	0.99	2.05	17.03

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1 **Undertaking**

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3 Undertaking LT1.13

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5 To respond to Board Staff Technical Conference Question 24

6

7 **Response**

8

9 Please find Hydro Ottawa Limited's Table 3 from Exhibit I2-1-1 Smart Meters (Final)
10 updated with the 2011 bridge year costs. Hydro Ottawa has updated the 2011 data by
11 using 2011 actual data for the per meter costs and the forecast for the total year costs.
12 As mentioned in the technical conference, without the full year actual costs, the per
13 meter costs are an estimate.



1

Table 3 – Per Unit Costs

Advanced Metering Collection Device Residential and General Service < 50kW							
Costs	2006	2007	2008	2009	2010	2011	Total¹
Smart Meters	13,674,584	7,610,831	9,294,436	3,583,103	808,533	1,404,808	36,376,296
Unit Cost of Meters	140	100	111	114	130	210	130
Installation	1,716,248	2,768,647	3,359,604	2,750,851	753,115	316,893	11,665,358
Unit Cost of Installation	18	36	40	87	121	47	39
Total Capital Cost Installed Meter	15,390,832	10,379,478	12,654,040	6,333,955	1,561,648	1,721,701	48,041,654
Unit Cost Installed Meter	158	136	151	201	252	257	169
Work Force Management	838,597	9,112					847,709
Total Capital Costs	16,229,430	10,388,590	12,654,040	6,333,955	1,561,648	1,721,701	48,889,363

Advanced Metering Regional Collector							
Costs	2006	2007	2008	2009	2010	2011	Total¹
Collectors	53,473	384,929	302,372	152,591	126,137	26,512	1,046,014
Unit Cost of Collector	922	1,177	882	877	963	884	984
Installation	12,133	43,599	56,272	21,200	111,316	18,930	263,450
Unit Cost of Installation	209	133	164	122	850	631	248
Total Capital Costs Installed Collectors	65,606	428,528	358,645	173,790	237,453	45,442	1,309,464

Advanced Metering Control Computer							
Costs	2006	2007	2008	2009	2010	2011	Total¹
Computer Hardware		53,634	5,138	0	666,387	363,072	1,088,230
Computer Software		79,986	0	0	0	0	79,986
Computer Software Licence and Installation		319,638	982,788	113,462	3,033,355	416,477	4,865,719
Total Capital Costs		453,258	987,925	113,462	3,699,743	779,549	6,033,936

AMCD Demand Customers							
Costs	2006	2007	2008	2009	2010	2011	Total¹
Smart Meters	135,045	88,904	431,935	341,064	315,379	166,870	1,479,196
Unit Cost of Meters	575	649	483	440	452	521	484
Installation		30,281	139,932	143,571	175,687	45,903	535,374
Unit Cost of Installation		221	157	185	252	143	175
Total Capital Costs Installed Meter	135,045	119,185	571,867	484,635	491,065	212,773	2,014,570
Total Unit Cost Installed Meter	575	870	640	625	704	665	659

Total Capital	16,430,082	11,389,561	14,572,477	7,105,842	5,989,909	2,759,465	58,247,333
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¹ Totals may be out due to rounding



1 **Undertaking**

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3 Undertaking LT1.14

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5 To respond to VECC Technical Conference Question No. 27 and Board Staff Technical
6 Conference Question No. 25.

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8 **Response**

9
10 Please note Hydro Ottawa Limited ("Hydro Ottawa") does not propose these rates to be
11 used and has only provided them as they were requested during the Technical
12 conference. In Hydro Ottawa's opinion the Ontario Energy Board (the "Board") was clear
13 in its decision related to PowerStream Inc. that only if the distributor had the data to
14 perform a cost allocation approach should it be used. Hydro Ottawa does not have the
15 proper data to create such rates and does not feel the rates prepared as part of this
16 undertaking should be considered. Below Hydro Ottawa has included Board Staff's
17 Technical Conference question 25. In Hydro Ottawa's opinion the excerpts provided
18 illustrates Hydro Ottawa's opinion that class specific Smart Meter rates should not be
19 used.

20
21 Furthermore Hydro Ottawa would urge that the Board, either through Hydro Ottawa's
22 2012 cost of service decision or through a generic hearing, provide clear guidance as to
23 whether Local Distributor Companies ("LDC's") should be required to perform class
24 specific Smart Meter rates when they do not have the required data. This guidance
25 could create efficiencies in future cost of service rate proceedings, as all LDC's are still
26 to file final Smart Meter costs.

27
28 Board Staff Technical Conference Question 25

29
30 In its Decision (EB-2010-0209) with respect to PowerStream Inc.'s smart meter
31 disposition application in 2010, the Board stated that "the Board is mindful that



1 full cost causality should be the guiding principle.” However, the Board also noted
2 that:

3
4 *“The Board finds that a cost allocation approach based on class specific revenue*
5 *requirement calculations offset by class specific smart meter funding to be*
6 *inconsistent with previous Board decisions, and that there has been no clear*
7 *requirement to track costs by class. The Board notes that historical funding*
8 *collected from customer classes other than Residential and GS<50 kW is not*
9 *material. The Board finds that a class specific calculation of the residual amounts*
10 *for disposition of smart meter costs for each rate class is unwarranted, as there is*
11 *insufficient benefit given the additional complexity.”*

12
13 The Board also noted that a more detailed approach could, depending upon a
14 distributor’s circumstances, result in rate volatility for some customers, and
15 expressed its view that such volatility should be generally avoided.

16
17 Later in that same decision, with respect to PowerStream Inc.’s proposal for a
18 SMIRR, the Board stated:

19
20 *“The Board is mindful that a cost allocation approach for the prospective revenue*
21 *requirement should ideally be based on a class specific revenue requirement*
22 *calculation. However, the Board is concerned about distributors’ ability to track all*
23 *individual costs on a class specific basis at this point in the smart meter initiative,*
24 *given that the instructions that have been issued by the Board in the recent past*
25 *have not included this requirement. The requirements for the tracking of smart*
26 *meter related costs have evolved to the point where no class by class tracking*
27 *has been required since the initial implementation plans were filed. Furthermore,*
28 *a cost allocation methodology in a cost of service rate application is based on*
29 *reasonable cost drivers rather than tracked costs.”*
30



1 In its decision, the Board approved a methodology whereby the smart meter
2 disposition rider was calculated based on an allocation of the return on capital
3 (interest expense and return on equity) and amortization expense proportional to
4 the capital investments for each class.

5
6 The Board will entertain proposals supported by analysis for SMDRs and
7 SMIRRs based on principles of cost causality and where the distributor has the
8 necessary historical and forecasted data.

9
10 Hydro Ottawa has proposed that the Smart Meter Disposition Rider be collected
11 uniformly from all metered customers, even though there are some customers
12 (e.g. Large Users) who do not receive such meters or are not serviced by the
13 associated infrastructure investments.

14
15 Hydro Ottawa tracked the cost of the meter and the installation separately. Additionally
16 Residential costs were recorded separately from Commercial costs (Commercial meters
17 include GS < 50 kW). Demand and collector meters however were not recorded
18 separately. Demand meters are part of the Commercial grouping and collector meters
19 are part of both the Residential and the Commercial grouping.

20
21 To determine the cost of the demand and collector meters, Hydro Ottawa used general
22 assumptions such as the length of time a specific type of meter takes to be installed and
23 the average purchasing price of those meters in a given year. Hydro Ottawa used a
24 meter report to determine how many meters of each group were installed in a given year
25 by meter type. Hydro Ottawa then recalculated the cost of the meter and installation by
26 meter type for both demand and collector type meters by taking the number of meters of
27 each type and multiplying it by the hourly rate, burden rates and average purchasing
28 cost. Hydro Ottawa used this information to calculate the per meter costs by class.
29 Please note this results in all non-standard install costs or savings flowing through the
30 Residential and General Service <50KW class.

31



Please find below the per unit cost by class including meter and installation costs.

Customer Class	Per Unit Costs (\$)
Residential	145.17
General Service <50KW	371.35
General Service 50-1500KW	794.91
General Service 1500-5000 KW	1,804.27
Large Users	2,022.77

Please find below the revenue requirement by class and the over and under collection by class.

Table 1

Customer Class	Meter Cost	Software and Hardware Costs	OM&A	Interest	Total Revenue Requirement
Residential	15,418,741	1,276,437	6,327,770	(98,613)	22,924,335
General Service <50KW	3,362,862	265,200	532,441	(17,821)	4,142,683
General Service 50-1500KW	1,053,783	603,996	74,631	(7,420)	1,724,990
General Service 1500-5000 KW	41,227	-	-	(177)	41,050
Large Users	7,703	-	-	(33)	7,670
Total	19,884,316	2,145,633	6,934,842	(124,064)	28,840,728

Table 2

Customer Class	Revenue Collected to December 2011	Total Revenue Requirement	Over/Under collection	2012 average customers	To clear balance after Dec 2011	Proposed rate Rider
Residential	25,558,516	22,924,335	(2,634,181)	280,901	(0.78)	0.16
General Service <50KW	2,348,096	4,142,683	1,794,587	23,636	6.33	0.16
General Service 50-1500KW	329,537	1,724,990	1,395,452	3,313	35.10	0.16
General Service 1500-5000 KW	7,300	41,050	33,751	67	41.98	0.16
Large Users	1,137	7,670	6,533	12	45.37	0.16
Total	28,244,586	28,840,728	596,142	307,929		



1 **Undertaking**

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3 Undertaking LT2.1

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5 To advise when and where the grid promissory note, Exhibit MT1.11, was signed;
6 applicant to confirm whether it is prepared to answer this undertaking.

7

8 **Response**

9

10 Based on a review of our calendar, and to the best of Hydro Ottawa's knowledge, the
11 grid promissory note was signed on December 18th, 2009. This was at Hydro Ottawa's
12 head office in Ottawa, Ontario. As per company practice, funds are not advanced until a
13 note is signed. The first advance on this grid promissory note was December 21, 2009.



1 **Undertaking**

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3 Undertaking LT2.2

4
5 To advise why the grid promissory note, Exhibit MT1.11, was backdated; applicant to
6 confirm whether it is prepared to answer this undertaking.

7
8 **Response**

9
10 The wording of the grid promissory note referring to the effective date of January 1, 2009
11 as the date the note was signed, was an oversight error.

12
13 The interest rate clause in the grid promissory note is to provide a transparent and
14 objective method of determining the rate to be established using either an actual or
15 deemed interest rate. As the note was just being finalized when the Cost of Capital
16 report was issued, reference to this report was included to provide further clarity on the
17 “deemed interest rate” calculation.

18
19 As per Undertaking LT2.1, the grid promissory note was signed, to the best of our
20 knowledge, on December 18th, 2009. Subsequent to this, three advances have been
21 made on the note: December 21, 2009, April 30th, 2010 and July 5th, 2011. Hydro Ottawa
22 has received these funds and made interest payments as per the terms of the note.

23
24 Both parties agree and acknowledge the transactions have taken place as per the terms
25 of the grid promissory note, and that the obligations of this note are valid and binding.