Niagara-on-the-Lake Hydro Inc.

April 30, 2012

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
26th Floor
2300 Yonge Street
Toronto ON M4P 1E4

Via RESS, e-mail and courier

Niagara-on-the-Lake Hydro Inc. – Smart Meter Cost Recovery Application

Replies to OEB Staff and VECC Submissions - OEB Case EB-2012-0036

Dear Ms. Walli

Niagara-on-the-Lake Hydro Inc. is pleased to submit the attached replies to the OEB staff and VECC submissions in connection with case EB-2012-0036.

In addition, an updated Smart Meter Model in Excel format, reflecting adjustments referred to on Page 1 of the reply to OEB Staff is being filed via RESS. The file name is:

- NOTL_smart meter model_Reply Update_20120507.xls

Yours truly

Jim Huntingdon, President
Encl.

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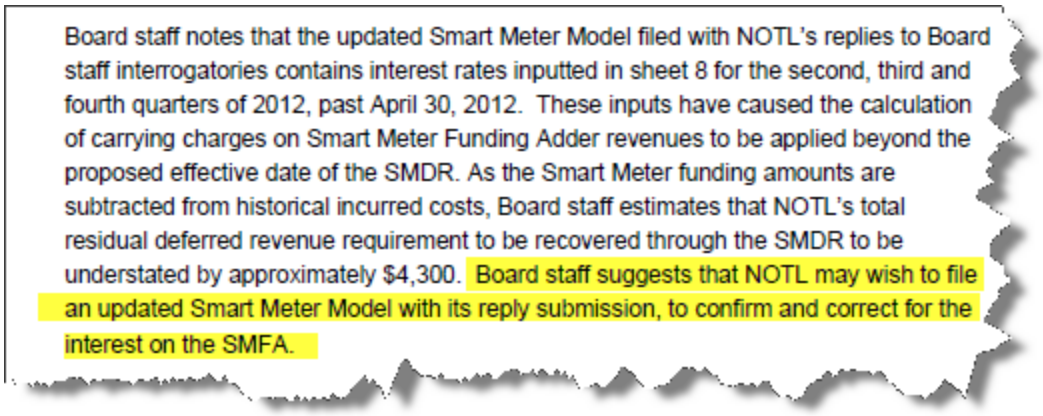
Reply to Board Staff Submission

Application for Disposition and Recovery of Costs Related to Smart Meter Deployment

Niagara-on-the-Lake Hydro Inc.
EB-2012-0036

***Updated Evidence* (Pages 3-4 of OEB staff submission)**



Board staff notes that the updated Smart Meter Model filed with NOTL's replies to Board staff interrogatories contains interest rates inputted in sheet 8 for the second, third and fourth quarters of 2012, past April 30, 2012. These inputs have caused the calculation of carrying charges on Smart Meter Funding Adder revenues to be applied beyond the proposed effective date of the SMDR. As the Smart Meter funding amounts are subtracted from historical incurred costs, Board staff estimates that NOTL's total residual deferred revenue requirement to be recovered through the SMDR to be understated by approximately $4,300. Board staff suggests that NOTL may wish to file an updated Smart Meter Model with its reply submission, to confirm and correct for the interest on the SMFA.

Reply

NOTL concurs with the staff suggestion and is filing an updated Smart Meter Model to confirm and correct for the interest on the SMFA revenues. Specifically, the interest rates for May 2012 and beyond are re-set from 1.47% to 0.00% in Sheet 8.

***Costs Beyond Minimum Functionality* (Pages 6 to 8)**

In response to VECC interrogatory #8, NOTL stated that the total contract price from Harris Computer Corporation for Northstar was $190,140 plus out-of-pocket expenses. Given the reasoning for the decision to select the Harris CIS system, Board staff questions whether smart meter deployment is the sole driver for the CIS system change. NOTL should address whether or not the CIS system upgrade costs documented in the Application are incremental to and non-duplicative of costs currently recovered in approved distribution rates, in its reply submission. Board staff submits that costs for a new CIS should not be funded by the smart meter program unless it can be clearly demonstrated that the costs are exclusively related to the smart meter program. Costs for a new CIS would typically be addressed at the distributor's next cost of service rate application.

Reply

- ***Incremental and non-duplicative***

NOTL submits that the CIS upgrade costs to accommodate the smart meter project are incremental to and non-duplicative of costs currently recovered in rates. NOTL proposes to demonstrate this by using the approved amortization expense in the most recent (2009) rebasing as a measure of capital expenses included in rates, and comparing actual capital expenses and amortization to this measure.

The approved amortization for inclusion in rates was $1,243,584 per the approved revenue requirement work form shown below:

REVENUE REQUIREMENT WORK FORM

Name of LDC: Niagara-on-the-Lake Hydro Inc.
File Number: EB-2008-0237
Rate Year: 2009

Ontario

			Utility income		
Line No.	Particulars		Application	Adjustments	Per Board Decision
	Operating Revenues:				
1	Distribution Revenue (at Proposed Rates)		$4,829,518	($251,519)	$4,577,999
2	Other Revenue	(1)	$361,622	$15,372	$376,994
3	Total Operating Revenues		$5,191,140	($236,147)	$4,954,993
	Operating Expenses:				
4	OM+A Expenses		$1,864,661	($20,520)	$1,844,141
5	Depreciation/Amortization		$1,245,184	($1,600)	$1,243,584
6	Property taxes		$33,450	$1,200	$34,650
7	Capital taxes		$15,166	$262	$15,428
8	Other expense		$ -	$ -	$ -
9	Subtotal		$3,158,461	($20,658)	$3,137,803
10	Deemed Interest Expense		$814,335	($106,981)	$707,354
11	Total Expenses (lines 4 to 10)		$3,972,796	($127,639)	$3,845,157
12	Utility income before income taxes		$1,218,344	($108,508)	$1,109,836
13	Income taxes (grossed-up)		$411,031	($59,269)	$351,762
14	Utility net income		$807,313	($49,239)	$758,073

The audited cash payments for property plant and equipment net of capital contributions since 2009 are as follows, as reported in NOTL's financial statement notes. The audited amortization expenses are also shown. This data excludes payments for the CIS upgrade and all other smart meter capital expenses and also excludes smart meter capital amortization.

Year	***Capital Cash Payments***	***Amortization Expense***
2009	$2,035,953	$1,299,342
2010	$1,227,078	$1,386,007
2011	$1,760,780	$1,428,183
3 year Average	*$1,674,603*	*$1,371,177*

Although the capital cash payments in 2010 ($1,227,078) were below the approved amortization ($1,243,584) by a small amount in that particular year, the payments on average of the 3-year period 2009 to 2011 significantly exceeded the approved amortization, as did the actual amortization. Since this payment and amortization expense information does not include the CIS upgrade for smart meters, NOTL submits that this analysis confirms that the CIS upgrade was incremental to and non-duplicative of costs currently recovered in rates.

- ***Exclusively related to the Smart Meter program***

In the reply to OEB Staff interrogatory #5, we expressed our concern with at the risk of not meeting our regulatory requirements regarding time-of-use billing with our then current CIS vendor, COS computer systems ("COS"). We also expressed concern that the necessary functional changes could be completed on time or on schedule by COS and concern about their long-term viability. For these reasons, the COS proposal to modify the existing CIS ((known as "APPX") to support the smart meter program - though the least cost at $170,000 - was not accepted.

Nonetheless, at that time, the APPX system was functioning adequately in the non-time-of-use environment and if it had not been for the need to implement time-of-use billing, NOTL had no plans to replace APPX and would have attempted to have support for APPX strengthened going forward. Therefore, NOTL submits that the capital cost that was incurred was exclusively related to the smart meter program. Without the smart meter program, no capital cost would have been incurred.

NOTL recognizes that the Harris Northstar or and other solutions considered would provide basic CIS functionality as well as smart meter functionality. Thus, it was felt to be reasonable to use the $170,000 upgrade cost estimate provided by COS as a measure of the capital cost increment associated with the smart meter functionality component.

***Cost Allocation Methodology* (Pages 8 to 9)**

Board staff believes that, due to its age, the 1860 CWMC cost allocator may no longer be a relevant proxy for allocating meter capital costs to classes with smart meters. Board staff suggests that if NOTL's CIS system is capable of identifying the meter configuration for customers in the residential and GS < 50 kW classes that it adopt an approach similar to that in Appendix G of Welland Hydro's Smart Meter Cost recovery application (EB-2011-0415). That is, NOTL could attempt to allocate capital costs to each class based on meter configurations. NOTL should address this in its reply submission.

Reply

NOTL has reviewed the Welland approach (EB-2011-0415) and is proposing a similar approach. The proposed capital cost allocation is calculated in Table 1 below based on the following rationale:

- *1.1.1 Meters (by meter type):*
  - *We were able to obtain the smart meter configuration from our CIS to determine the number of meters of each type (Form 2, Form 12, Form 3 and Polyphase) in the residential class and in the GS<50kW class;*
  - *The capital costs for each type are allocated to customer classes in proportion to the above numbers of meters.*
- *1.1.2 Installation (by vendor):*
  - *The internal cost is allocated to each meter type based on the estimated %-age of staff time spent on each type;*
  - *The internal cost allocated to each meter type is further allocated to rate classes based on the numbers of meters in each class, per 1.1.1.*
  - *For all other vendors, costs are allocated to customer classes based on the nature of the cost and whether it relates to one class or the other or all classes in general;*
- *1.1.3a through to 1.6 (by vendor):*
  - *For all vendors, costs are allocated to customer classes based on the nature of the cost and whether it relates to one class or the other or all classes in general.*

[Please note that in Table 1, the vendors listed are as per the "Addendum 9 Amended – Summary of Smart Meter Costs by Vendor", filed on February 4, 2012 as part of an application update. A copy of this Addendum is attached.]

Table 1

Niagara-on-the-Lake Hydro Inc. - Cost Allocation By Customer Class

	Total Units	Total Cost	Residential Units	Residential Cost	GS<50 Units	GS<50 Cost
1.1.1 Meters						
Form 2 meters	7,274	$ 634,122	6,598	$ 575,149	676	$ 58,973
Form 12 meters	218	$ 39,345	150	$ 27,148	68	$ 12,197
Form 3 meters	251	$ 42,665	68	$ 11,520	183	$ 31,145
Polyphase meters	335	$ 165,404	0	$ -	335	$ 165,404
Total	8,078	$ 881,536	6,816	$ 613,817	1,262	$ 267,720
% of meters	*100.0%*		*84.4%*		*15.6%*	
1.1.2 Installation						
Internal						
Form 2 meters - 56% of cost	7,274	$ 89,478	6,598	$ 81,157	676	$ 8,321
Form 12 meters - 4% of cost	218	$ 6,391	150	$ 4,410	68	$ 1,981
Form 3 meters - 15% of cost	251	$ 23,967	68	$ 6,471	183	$ 17,496
Polyphase meters - 25% of cost	335	$ 39,946	0	$ -	335	$ 39,946
Total internal		$ 159,783		$ 92,038		$ 67,745
KTI - all meters		$ 203	*84.4%*	$ 171	*15.6%*	$ 32
Olameter - 89.4% residential, remainder GS<50kW		$ 80,485	*89.4%*	$ 71,954	*10.6%*	$ 8,531
Ekstrom - 27% residential, remainder GS<50kW		$ 9,505	*27.0%*	$ 2,566	*73.0%*	$ 6,939
Greenport - all meters		$ 1,750	*84.4%*	$ 1,477	*15.6%*	$ 273
Guillevin - all meters		$ 332	*84.4%*	$ 280	*15.6%*	$ 52
Tim Maxim - All GS <50KW		$ 3,893	*0.0%*	$ -	*100.0%*	$ 3,893
Vineland Growers - all meters		$ 1,868	*84.4%*	$ 1,576	*15.6%*	$ 292
Young Utility Equipment - All GS<50kW		$ 7,148	*0.0%*	$ -	*100.0%*	$ 7,148
Autotrim - all meters		$ 292	*84.4%*	$ 246	*15.6%*	$ 46
Misc. - all meters		$ 45	*84.4%*	$ 38	*15.6%*	$ 7
		$ 265,303		$ 170,346		$ 94,956
1.1.3a Workforce Automation						
Hardware - All meters		$ 611	*84.4%*	$ 516	*15.6%*	$ 95
1.2 AMRC						
Ekstrom - part - 90% residential, remainder GS<50kW		$ 5,172	*90.0%*	$ 4,655	*10.0%*	$ 517
Ekstrom - part - 84% residential, remainder GS<50kW		$ 5,636	*84.0%*	$ 4,734	*16.0%*	$ 902
All other vendors - all meters		$ 207,787	*84.4%*	$ 175,325	*15.6%*	$ 32,462
Total Cost		$ 218,595		$ 184,714		$ 33,881
1.5 Other AMI Costs						
Total Cost - All meters		$ 253,126	*84.4%*	$ 213,581	*15.6%*	$ 39,545
1.6 Capital Cost Beyond Minimum Functionality						
Total Cost - All meters		$ 268,479	*84.4%*	$ 226,535	*15.6%*	$ 41,944
Grand Total Capital Costs		$ 1,887,650		$ 1,409,509		$ 478,141
Number of meters		8,078		6,816		1,262
Average Capital Cost per meter		$ 234		$ 207		$ 379

Based on this revised cost allocation, NOTL proposes SMDR and SMIRR riders as calculated in Table 2 and 3 below (green highlighted cells). Please note that the allocation of Smart Meter Rate Adder revenues and associated carrying charges in Table 2 is based on an estimate of revenue by class as proposed in NOTL's reply to the VECC submission[1].

[1] See Page 2 of NOTL's reply to VECC.

Table 2: Revised Cost Allocation - Smart Meter Disposition Rider ("SMDR")

Smart Meter Actual Cost Recovery Rate Rider Calculated by Rate Class	Total	Residential	%	GS < 50	%
Allocators					
Capital Expenditure	$1,887,650	$1,409,509	74.67%	$478,141	25.33%
Number of meters installed	8,078	6,816	84.38%	1,262	15.62%
Total Return (deemed interest plus return on equity)	$ 198,672	$ 148,349	74.67%	$ 50,324	25.33%
Amortization	$ 245,858	$ 183,582	74.67%	$ 62,276	25.33%
OM&A	$ 125,623	$ 105,997	84.38%	$ 19,626	15.62%
Revenue Requirement before PILs	$ 570,153	$ 437,928	76.81%	$132,225	23.19%
PILs	-$ 4,143	-$ 3,182	76.81%	-$ 961	23.19%
Total Revenue Requirement 2006 to 2011	$ 566,010	$ 434,746	76.81%	$131,264	23.19%
Smart Meter Rate Adder Revenues	-$ 344,376	($289,276)	84.00%	($55,100)	16.00%
Carrying Charge	($5,930)	($4,981)	84.00%	($949)	16.00%
Smart Meter True-up	$ 215,704	$ 140,489		$ 75,215	
Metered Customers	8,078	6,816		1,262	
Years for collection	2	2		2	
Rate Rider to Recover Smart Meter Costs	$ 1.11	$ 0.86		$ 2.48	

Table 3: Revised Cost Allocation - Smart Meter Incremental Revenue Requirement Rate Rider ("SMIRR")

Smart Meter Actual Cost Recovery Rate Rider Calculated by Rate Class	Total	Residential	%	GS < 50	%
Allocators					
Capital Expenditure	$1,887,650	$1,409,509	74.67%	$478,141	25.33%
Number of meters installed	8,078	6,816	84.38%	1,262	15.62%
Total Return (deemed interest plus return on equity)	$ 102,212	$ 76,322	74.67%	$ 25,890	25.33%
Amortization	$ 155,788	$ 116,327	74.67%	$ 39,461	25.33%
OM&A	$ 39,667	$ 33,470	84.38%	$ 6,197	15.62%
Revenue Requirement before PILs	$ 297,667	$ 226,119	75.96%	$ 71,548	24.04%
PILs	$ 7,714	$ 5,860	75.96%	$ 1,854	24.04%
Total Revenue Requirement 2006 to 2011	$ 305,381	$ 231,979	75.96%	$ 73,403	24.04%
Smart Meter Rate Adder Revenues					
Carrying Charge					
Smart Meter True-up	$ 305,381	$ 231,979	75.96%	$ 73,403	24.04%
Metered Customers	8,078	6,816		1,262	
Rate Rider to Recover Smart Meter Costs	$ 3.15	$ 2.84		$ 4.85	

Table 4 below shows the change in SMDRs and SMIRRs as a result of the revised cost allocation, as compared to the riders in NOTL's response to OEB staff interrogatories dated March 29, 2012, pages 24-25:

Table 4: Change due to Revised Cost Allocation

	Revised Cost Allocation		*2006 Cost Allocation**		*Change*
Residential	1-May-12		*1-May-12*		
Disposition Rider	$0.86		*$1.07*		*($0.21)*
Incremental Revenue Rate Rider	$2.84		*$3.06*		*($0.22)*
Smart Meter Rate Change	$3.70		*$4.14*		*($0.44)*
GS<50kW	1-May-12		*1-May-12*		
Disposition Rider	$2.48		*$1.21*		*$1.27*
Incremental Revenue Rate Rider	$4.85		*$3.63*		*$1.22*
Smart Meter Rate Change	$7.33		*$4.84*		*$2.49*
*[*per Response to OEB Staff IR, March 29, 2012}*					

***Treatment of Unaudited Costs* (Pages 10 to 11)**

Board staff notes that NOTL's unaudited 2011 costs and forecasted 2012 costs represent approximately 21% of the total costs of the smart meter deployment. Based on the capital and OM&A expenditures related to minimum functionality that NOTL has provided in the Smart Meter Model for 2011, Board staff estimates a total cost per meter of $819.60 for meters installed in 2011, significantly higher than the average per meter costs discussed earlier in this submission. Board staff suggests that NOTL address whether or not its unaudited costs for the purchase and installation of smart meters in 2011 and forecasted for 2012 show any significant variation from the cost levels established in years where audited costs are available.

In the normal course, Board staff would take no issue with NOTL's proposal, provided that NOTL is able to show that the unaudited costs in 2011 and 2012 do not significantly vary from the audited amounts, on a per meter basis. Given that the unaudited costs and forecasted costs are significantly above the 10% threshold suggested in the Filing Guidelines and appear to be significantly higher on a per meter basis than costs in prior years, Board staff believes that it would be more appropriate for the Board to approve the disposition of costs to the end of December 31, 2010. Disposition of NOTL's costs for 2011 and 2012 could be deferred to its scheduled cost of service application for 2014 rates, by which time the costs would be audited and the reasons for the increased costs could be more fully tested.

Reply

- ***Percentage unaudited and forecast***
  NOTL's 2011 external audit has now been completed and the smart meter costs as reported in the application are unchanged. Thus, the unaudited/ forecast costs are 4.9% of the total costs, i.e. significantly below the 10% threshold, as follows:

Audited costs	2006 to 2011	$1,952,394	95.1%
Unaudited/forecast costs	2012	$100,547	4.9%
Total costs		$2,052,941	100%

- ***Variation in costs***
  The mass install of primarily less expensive single phase meters was completed in 2010. The more complex installations and a majority of the more expensive polyphase meters were installed in 2011. Polyphase meters ranged in cost from $400 to $1000 compared to single phase residential meters purchased for approximately $85.

- ***Disposition of costs***
  On the basis that the 10% threshold is satisfied and the apparent variation in costs is explained as per the above, NOTL submits that it is appropriate to approve the disposition of costs up to and including 2012, i.e. without deferral of 2011 and 2012 to the scheduled cost of service application for 2014 rates.

Addendum 9 Amended[1]

Summary of Smart Meter Costs by Vendor

[1] As submitted as part of the Amendment on February 4, 2012

	A	B	K	N	O	P	Q	R	S	T	U	V	W
1					VENDORS								
2		**Smart Meter Capital Cost and Operational Expense Data**	**FROM TOTALS IN OEB MODEL**	**INTERNAL COSTS**	**Elster**	**KTI**	**AWD (Advanced Wireless Data)**	**General Electric**	**Jesstec**	**Olameter**	**American Casting**	**Max Tower**	**Ekstrom**
3				*Labour and truck costs. Meter reading savings (2012)*	*Meters*	*Meters; bluetooth handheld; collector*	*Collector*	*Meters*	*Ring meter seals*	*Mass meter installer; transceiver*	*Meter seals*	*Radio tower*	*Socket kits; meter rings*
4	**1**	**Capital Costs**											
5	**1.1**	**ADVANCED METERING COMMUNICATION DEVICE (AMCD)**											
6	1.1.1	Smart meters	$ 881,536.30	$ 3,159	$ 44,593	$ 822,305	$ -	$ 11,480	$ -	$ -	0	0	0
7	1.1.2	Installation costs	$ 265,302.59	$ 159,783	-	$ 203	$ -	0	0	$ 80,485	$ -	0	$ 9,505
8	1.1.3a	Workforce Automation Hardware	$ 611.24	0	0	$ 611	$ -	0	0	0	0	0	0
9		Subtotal	$ 1,147,450.13	$ 162,942	$ 44,593	$ 823,119	$ -	$ 11,480	$ -	$ 80,485	$ -	$ -	$ 9,505
10	**1.2**	**ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)**											
11	1.2.1	Collectors	$ 158,702.55	0	0	$ 135,277	$ -	0	0	0	0	$ 23,426	$ -
12	1.2.3	Installation	$ 59,892.78	$ 20,285	0	$ -	$ 2,481	$ -	$ 22,963	0	$ 3,190	0	$ 10,808
13		Subtotal	$ 218,595.33	$ 20,285	$ -	$ 135,277	$ 2,481	$ -	$ 22,963	$ -	$ 3,190	$ 23,426	$ 10,808
14	**1.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**											
15	1.3.3	Software licenses and installation	$ -	0	0	0	0	0	0	0	0	0	0
16		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	**1.5**	**OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY**											
18	1.5.1	Customer equipment	$ 3,224.54	0	0	0	0	0	0	0	0	0	0
19	1.5.2	AMI interface to CIS	$ 10,400.00	0	0	0	0	0	0	0	0	0	0
20	1.5.3	Professional Fees	$ 166,344.21	0	0	0	0	0	0	0	0	0	0
21	1.5.5	Program management	$ 73,157.33	$ 72,980	0	0	0	0	0	0	0	0	0
22		Subtotal	$ 253,126.08	$ 72,980	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
23	**1.6**	**CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY**											
24	1.6.3	TOU rate imp'n; CIS system upgrade; web presentment; MDMR integration	$ 268,478.91	$ 82,583	0	0	0	0	0	0	0	0	0
25		Subtotal	$ 268,478.91	$ 82,583	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
26		Total	$ 1,887,650.45	$ 338,789	$ 44,593	$ 958,395	$ 2,481	$ 11,480	$ 22,963	$ 80,485	$ 3,190	$ 23,426	$ 20,313
27	**2**	**OM&A Expenses**											
28	**2.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**											
29	2.3.2	Software maintenance	$ 71,370.71	0	0	0	0	0	0	0	0	0	0
30		Subtotal	$ 71,370.71	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
31	**2.5**	**OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY**											
32	2.5.2	Customer Communication	$ 26,384.58	$ 10,358	0	0	0	0	0	0	0	0	0
33	2.5.3	Program management	$ 13,059.35	0	0	0	0	0	0	0	0	0	0
34	2.5.4	Change management	$ -	$ -	0	0	0	0	0	0	0	0	0
35	2.5.5	Administration costs	$ 105.52	0	0	0	0	0	0	0	0	0	0
36	2.5.6	Other AMI expenses	$ 8,637.50	0	0	0	0	0	0	0	0	0	0
37		Subtotal	$ 48,186.95	$ 10,358	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	**2.6**	**OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY**											
39	2.6.3	Web presentment; ODS fees; sync operator; meter reading savings	$ 45,732.50	$ (33,420)	0	0	0	0	0	0	0	0	0
40		Subtotal	$ 45,732.50	-$ 33,420	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
41		Total	$ 165,290.16	-$ 23,062	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
42		Grand Total	$ 2,052,940.61	$ 315,728	$ 44,593	$ 958,395	$ 2,481	$ 11,480	$ 22,963	$ 80,485	$ 3,190	$ 23,426	$ 20,313

	A	B	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1															
2		**Smart Meter Capital Cost and Operational Expense Data**	**Green-Port**	**Guillevin**	**Tim Maxim**	**T's Electric**	**Vineland Growers**	**Young Utility Equipment**	**Kinetiq**	**Harris Northstar**	**Sensus**	**Iron Mountain**	**Utilassist/ UCS**	**Bell Canada**	**ITM**
3			*Disposal container rental*	*Ties and tape*	*Meter installation*	*Repairs*	*Trailer rental*	*Base adaptors*	*ODS set-up; meter fees, file processing*	*CIS upgrade; web presentment*	*TGB fees, base station service*	*Source code; Escrow account fees*	*Consulting; MDMR sync operator*	*Security Audit*	*MDMR set-up, meter loading, syncing, As2 hosting*
4	**1**	**Capital Costs**													
5	**1.1**	**ADVANCED METERING COMMUNICATION DEVICE (AMCD)**													
6	1.1.1	Smart meters	0	0	0	0	0	0	$ -	0	0	0	0	0	0
7	1.1.2	Installation costs	$ 1,750	$ 332	$ 3,893	$ -	$ 1,868	$ 7,148	0	0	0	0	0	0	0
8	1.1.3a	Workforce Automation Hardware	0	0	0	0	0	0	0	0	0	0	0	0	0
9		Subtotal	$ 1,750	$ 332	$ 3,893	$ -	$ 1,868	$ 7,148	$ -	$ -	$ -	$ -	$ -	$ -	$ -
10	**1.2**	**ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)**													
11	1.2.1	Collectors	$ -	$ -	$ -	$ -	$ -	$ -	0	0	0	0	0	0	0
12	1.2.3	Installation	0	0	0	0	0	0	0	0	0	0	0	0	0
13		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	**1.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**													
15	1.3.3	Software licenses and installation	0	0	0	0	0	0	$ -	0	0	0	0	0	0
16		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	**1.5**	**OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY**													
18	1.5.1	Customer equipment	0	0	0	$ 3,225	0	0	$ -	$ -	0	0	0	0	0
19	1.5.2	AMI interface to CIS	0	0	0	0	0	0	$ 2,000	$ 8,400	0	0	0	0	0
20	1.5.3	Professional Fees	0	0	0	0	0	0	0	$ 10,906	0	$ -	$ 134,611	$ -	$ 6,877
21	1.5.5	Program management	0	0	0	0	0	0	0	0	0	0	0	0	0
22		Subtotal	$ -	$ -	$ -	$ 3,225	$ -	$ -	$ 2,000	$ 19,306	$ -	$ -	$ 134,611	$ -	$ 6,877
23	**1.6**	**CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY**													
24	1.6.3	TOU rate imp'n; CIS system upgrade; web presentment; MDMR integration	0	0	0	0	0	0	0	$ 185,896	0	0	0	0	0
25		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 185,896	$ -	$ -	$ -	$ -	$ -
26		Total	$ 1,750	$ 332	$ 3,893	$ 3,225	$ 1,868	$ 7,148	$ 2,000	$ 205,202	$ -	$ -	$ 134,611	$ -	$ 6,877
27	**2**	**OM&A Expenses**													
28	**2.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**													
29	2.3.2	Software maintenance	0	0	0	0	0	0	0	0	$ 71,215	$ 156	$ -	0	0
30		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 71,215	$ 156	$ -	$ -	$ -
31	**2.5**	**OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY**													
32	2.5.2	Customer Communication	0	0	0	0	0	0	0	0	0	0	0	0	0
33	2.5.3	Program management	0	0	0	0	0	0	0	0	0	$ -	$ 999	$ 12,061	0
34	2.5.4	Change management	0	0	0	0	0	0	0	0	0	$ -	$ -	0	0
35	2.5.5	Administration costs	0	0	0	0	0	0	0	0	$ (844)	$ 950	$ -	0	0
36	2.5.6	Other AMI expenses	0	0	0	0	0	0	0	0	0	$ -	$ 8,638	$ -	0
37		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	-$ 844	$ 950	$ 9,636	$ 12,061	$ -
38	**2.6**	**OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY**													
39	2.6.3	Web presentment; ODS fees; sync operator; meter reading savings	0	0	0	0	0	0	$ 42,104	$ 3,622	0	$ -	$ 28,663	$ -	$ 4,764
40		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ 42,104	$ 3,622	$ -	$ -	$ 28,663	$ -	$ 4,764
41		Total	$ -	$ -	$ -	$ -	$ -	$ -	$ 42,104	$ 3,622	$ 70,371	$ 1,106	$ 38,299	$ 12,061	$ 4,764
42		Grand Total	$ 1,750	$ 332	$ 3,893	$ 3,225	$ 1,868	$ 7,148	$ 44,104	$ 208,824	$ 70,371	$ 1,106	$ 172,910	$ 12,061	$ 11,641

	A	B	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU
1													
2		**Smart Meter Capital Cost and Operational Expense Data**	**Loud Advertising**	**Local newspapers**	**Minuteman**	**Palmese Photodesign**	**Scout Services**	**Shadow Graphic**	**NOTL Community Centre**	**Hydro Ottawa**	**Lancaster Brooks LLP**	**Auto Trim**	**Misc suppliers**
3			*Smart meter booklets*	*Smart meters and TOU info*	*Customer letter copying*	*Leave-behind material*	*TOU info on bill envelopes*	*TOU banner*	*Room rental*	*TOU video*	*Legal fees*	*Vehicle decals*	*Various small items*
4	**1**	**Capital Costs**											
5	**1.1**	**ADVANCED METERING COMMUNICATION DEVICE (AMCD)**											
6	1.1.1	Smart meters	0	0	0	0	0	0	0	0	$0.00	0	0
7	1.1.2	Installation costs	0	0	0	0	0	0	0	0	0	$ 292	$ 45
8	1.1.3a	Workforce Automation Hardware	0	0	0	0	0	0	0	0	0	0	0
9		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 292	$ 45
10	**1.2**	**ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)**											
11	1.2.1	Collectors	0	0	0	0	0	0	0	0	0	0	0
12	1.2.3	Installation	0	0	0	0	0	0	0	0	0	0	$ 166
13		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 166
14	**1.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**											
15	1.3.3	Software licenses and installation	0	0	0	0	0	0	0	0	0	0	0
16		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
17	**1.5**	**OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY**											
18	1.5.1	Customer equipment	0	0	0	0	0	0	0	0	0	0	0
19	1.5.2	AMI interface to CIS	0	0	0	0	0	0	0	0	0	0	0
20	1.5.3	Professional Fees	$ -	0	0	0	0	0	0	0	$ 13,950	$ -	$ -
21	1.5.5	Program management	0	0	0	0	0	0	0	0	0	0	$ 178
22		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,950	$ -	$ 178
23	**1.6**	**CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY**											
24	1.6.3	TOU rate imp'n; CIS system upgrade; web presentment; MDMR integration	0	0	0	0	0	0	0	0	0	0	0
25		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
26		Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 13,950	$ 292	$ 389
27	**2**	**OM&A Expenses**											
28	**2.3**	**ADVANCED METERING CONTROL COMPUTER (AMCC)**											
29	2.3.2	Software maintenance	0	0	0	0	0	0	0	0	0	0	0
30		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
31	**2.5**	**OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY**											
32	2.5.2	Customer Communication	$ 2,430	$ 3,566	$ 1,094	$ 5,735	$ 1,344	$ 1,327	$ 180	$ 350	$ -	$ -	0
33	2.5.3	Program management	0	0	0	0	0	0	0	0	0	0	0
34	2.5.4	Change management	0	0	0	0	0	0	0	0	0	0	0
35	2.5.5	Administration costs	0	0	0	0	0	0	0	0	0	0	0
36	2.5.6	Other AMI expenses	0	0	0	0	0	0	0	0	0	0	0
37		Subtotal	$ 2,430	$ 3,566	$ 1,094	$ 5,735	$ 1,344	$ 1,327	$ 180	$ 350	$ -	$ -	$ -
38	**2.6**	**OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY**											
39	2.6.3	Web presentment; ODS fees; sync operator; meter reading savings	$ -	0	0	0	0	0	0	0	0	0	0
40		Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
41		Total	$ 2,430	$ 3,566	$ 1,094	$ 5,735	$ 1,344	$ 1,327	$ 180	$ 350	$ -	$ -	$ -
42		Grand Total	$ 2,430	$ 3,566	$ 1,094	$ 5,735	$ 1,344	$ 1,327	$ 180	$ 350	$ 13,950	$ 292	$ 389

Reply to VECC Submission

Application for Disposition and Recovery of Costs Related to Smart Meter Deployment

Niagara-on-the-Lake Hydro Inc.
EB-2012-0036

***Recovery of Smart Meter Costs* (Page 5 of VECC submission)**

> VECC also notes that NOTL has not met the Board's expectation that 90% or more of the costs will be audited. VECC supports Board Staff's proposal and submits that the disposition of 2011 and 2012 costs should be deferred to NOTL's next COS application.

Reply

For NOTL"s reply to this submission point by VECC, the Board is requested to refer to NOTL's reply to the OEB staff submission[1] on a similar point regarding treatment of unaudited costs.

***Cost Allocation* (Page 7)**

> VECC supports Board Staff's proposal that NOTL could attempt to allocate capital costs to each class based on meter configurations and should address this in its reply submissions.[15]
>
> VECC submits the determination of capital costs as the driver to allocate revenue requirement to each class is consistent with the methodology proposed by PowerStream in its smart meter recovery application (EB-2010-0209) and is more desirable than using the 1860 CWMC allocator. In VECC's view, using the 1860 CWMC as an allocator is a poor proxy.

Reply

For NOTL's reply to this submission point by VECC, the Board is requested to refer to NOTL's reply to the OEB staff submission[2] on a similar point regarding cost allocation methodology.

[1] *On Page 8 of 8 of the reply to the OEB Staff submission.*
[2] *On Page 4 of 8 of the reply to the OEB Staff submission.*

SFMA (Page 7)

SMFA

In NOTL's cost allocation methodology, it allocates the SMFA to the residential and GS<50 kW customer classes based on the overall percentage resulting from its cost allocation methodology.

VECC submits an SMDR that better reflects cost causality is achieved by assigning the actual revenue to each class based on the SMFA revenue collected from each customer class over time, and allocating the carrying charges on the revenue based on the assigned revenues.

VECC submits NOTL could attempt to calculate the SMFA revenues collected by customer class based on the number of accounts and allocate it on this basis in the SMDR calculation. VECC submits NOTL should address this as well in its reply submissions.

Reply

NOTL agrees with VECC's submission regarding a better reflection of cost causality. Although we do not have records of the revenue collected from each customer class, we are proposing the following approach to estimating the revenue by class:

- *A review of 2.1.5 RRR data for the years 2006 to 2011 shows that the percentages of customers in the residential/GS<50kW classes in each of those years at December 31st ranged between 83.7% residential/ 16.3% GS<50kW and 84.3% residential/15.7% GS<50kW. Because of this narrow range of variation, NOTL proposes to represent the customer numbers split as 84% residential/16% GS < 50kW.*
- *The approved smart meter rate adders in the period from May 2006 through to April 2012 were identical for the residential and GS<50kW classes ($0.24 per customer per month from May 2006 to April 2009, and $1.00 per month from May 2009 to April 2012). Thus, a reasonable estimate for the allocation of SMFA revenues and associated carrying charges is the same as the customer numbers split, i.e. 84% residential and 16% GS<50kW.*

The resulting calculation of SMDR is provided in NOTL's reply to the OEB staff submission[3].

[3] *See Table 2 on Page 6 of the reply to the OEB staff submission.*