

March 5, 2012

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

Dear Ms Walli:

Re: Welland Hydro-Electric System Corp.
EB-2011-0415
Application to the Ontario Energy Board for 2012 Smart
Meter Cost Recovery effective May 1, 2012

Please find enclosed two copies of Welland Hydro's response to
VECC interrogatories in the above Smart Meter Cost Recovery
application in addition to an electronic version.

Yours very truly,



Wayne Armstrong
Director of Finance
Tel: (905)732-1381 Ext 234
Fax: (905)732-0123
warmstrong@wellandhydro.com

**Welland Hydro-Electric Systems Corp.
2012 Smart Meter Cost Recovery
EB-2011-0415**

Response – VECC Interrogatories

VECC Question # 1

Reference: Smart Meter Model

Preamble: Welland Hydro completed the Smart Meter Model (Appendix C) provided by the OEB to arrive at the proposed Smart Meter Incremental Rate Rider and the proposed Smart Meter Disposition Rate Rider. Both rate riders are per metered customer per month.

- a) Please provide a copy of the Smart Meter Model by customer class.

Response:

See Appendix A and B attached.

- b) Please recast Tables 3, 5 and 7 by customer class based on the revised models. Reconcile to Tables 3, 5 and 7.

Response:

See Appendix C,D,E,F attached.

- c) Please provide a table that summarizes the total Smart Meter Rate Adder Revenue collected by customer class.

Response:

See Appendix G and H attached.

Welland has split the Smart Meter Revenue collected by customer class based on the percentage of customers as these amounts have not been recorded by customer class. This may be slightly in favour of the residential class but Welland Hydro believes that the amount is not material.

- d) Please provide a new Part C to Appendix F, Welland Hydro Smart Meter – Revenue Requirement Rate Rider, to provide the details of the Revenue Requirement Rate Rider based on Smart Meter Costs by customer class.

Response:

See Board Staff Interrogatory Response - Appendix D

- e) Please provide a new Appendix J, Welland Hydro Smart Meter – Disposition Rate Rider, to compare to Appendix H and Appendix I, to provide the details on the Disposition Rate Rider based on Smart Meter Costs by customer class.

Response:

See Board Staff Interrogatory Response – Appendix C

VECC Question # 2

Reference: Introduction: Table 3, Page 8 & Table 5, Page 11

Preamble: Welland Hydro proposes uniform smart meter rate riders based on the number of metered customers (21,520).

- a) Please provide the rationale for this approach.

Response:

See Board Staff Interrogatory Response #8

VECC Question # 3

Reference: Introduction, Page 6

Preamble: Welland Hydro provides a comparison of smart meter capital costs in the previous applications to the current application.

- a) Please explain further the changes in workforce automation that reflect additions to systems including meter changes live in the field, operational data storage (ODS) and web presentment that result in an increase in the 2012 forecast.

Response:

Welland Hydro would like to point out that the 2012 forecast included on page 6 of the summary is a forecast of smart meter capital expenditures to the end of 2011. It is simply referring to the fact that it is a 2012 rate application. No additional capital costs will be charged to smart meters in 2012.

The increase in Work Force Automation-Software of \$15,800 is for a product from North Star called Mcare which was installed in 2011 and was not included in Welland's 2010 forecasted capital expenditures. This product is used extensively for processing service orders (such as meter changes and turn offs) relating to smart meters using mobile tablets (live in the field). The forecasted expenditure for this category matched the final actual amount included in the models submitted during interrogatories.

Forecasted expenditures for Workforce Automation-Hardware were reduced from \$57,633 to an actual of \$41,737. As indicated in Response to Board Staff interrogatory 6a this was the result of a delay in the installation of Web Presentment which should have been classified as software in the original application. As this software is now being installed in early 2012 it will not be charged to smart meter capital. The software (North Star - Customer Connect) is being installed to meet the requirements of the Provincial Government to provide time of use data to customers within 24 hours. This expenditure was not included in Welland's 2010 estimate of total smart meter capital requirements. The balance of the increase in this category from the original 2010 forecast is related to two items. The first is the cost of the mobile tablets used in Mcare (\$14,440) with the balance related to the purchase of four handheld Intermec devices purchased during the mass installation of smart meters in the field.

- b) Please explain the reason for the reduced three phase meter costs and collector costs.

Response:

The original Advance Metering Capital Plan was for Welland to have one dedicated and one shared TGB. The agreement signed with Sensus called for only one TGB and eliminated the shared collector. Since that time, Sensus has installed a Metro (smaller version of TGB) with the capital cost at their expense and installation costs at Welland Hydro's.

Smart Meter & Installation costs in 2010 were based on purchasing three phase meters from a different vendor. Welland identified a second source for these meters and delayed purchases until 2011 to take advantage of the savings.

VECC Question # 4

Reference: Introduction, Page 6

Preamble: Welland Hydro indicates the current vendor provided an initial estimate of \$170,000 for modifications to connect the MDM/R and implement time of use billing.

a) Please confirm the current vendor.

Welland's current CIS vendor is Harris-North Star. The vendor who provided the quote to convert the previous billing system was COS Computer Systems. This vendor does not have the resources to attempt such a massive and ongoing (MDMR Version 7.2 followed by Version 8.0) project and was ruled out for the most part on that basis.

VECC Question # 5

Reference: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 19

Preamble: The Guidelines state, "The Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation."

a) Please comment.

Response:

Welland Hydro has identified saving related to 2012 Meter Reading costs of \$84,039 as detailed in Appendix D of the original application. However, these have been offset by incremental costs increases resulting in a net incremental annual operating expense of \$36,961 due to smart meters.

Welland Hydro believes that this is a conservative amount and is concerned that the approach it has taken in this application may result in issues in comparing its 2009 approved Cost of Service Application without smart meters to its 2013 Cost of Service Application with smart meters. Examples of such items are as follows:

- 1) Welland Hydro has not included any of the conversion costs related to the billing portion of the new CIS in this rate application. Welland is aware other utilities have split out incremental CIS capital costs related to smart meters/time of use. As a result, they could be recovering amortization costs in their Smart Meter Revenue Requirement Rider which Welland has not included in this rate application.
- 2) As indicated in response to Board Staff Interrogatory #10 the management of the communication systems has increased the workload of its meter staff to the point where Welland Hydro has outsourced locates previously performed by current staff. The outside sourcing began in August 2011 and total costs for 2011 were \$37,000. Expected costs for 2012 are approximately \$70,000. Welland has not included these incremental costs in this rate application. Training and meter technician time related to smart meters and their communication will be an ongoing expense for Welland Hydro.
- 3) As indicated in response to Board Staff Interrogatory #10 Welland Hydro has replaced approximately 650 stale smart meters. No labour costs for these replacements were included in this application and the meters were replaced under warranty. However, the vendor has advised Welland Hydro that the warranty period for the mass installation has expired and they will no longer be replacing meters free of charge. Welland Hydro has been advised to expect approximately 1% stale meters to occur each year. Under IFRS, Welland can no longer pool assets and will be required to expense previously capitalized amounts which are not fully depreciated in 2012. No expenses related to the replacement of stale meters have been included in this application.
- 4) The move to Time of Use Billing required the addition of one additional person in the billing department (Dec/11) to maintain the complex relationship between the MDMR, ODS, and the billing system all of which is related to smart meters. Welland has charged 75% of this position to incremental costs. No overtime costs related to the conversion to the new CIS or smart meter related software, testing of 7.0 and 7.2 versions of the MDMR with 8.0 to come, and testing for conversion to TOU billing were included in this application. Welland is aware that education and training costs will continue for the billing department on an ongoing basis.

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Ontario Energy Board Smart Meter Model

Choose Your Utility:

Welland Hydro-Electric System Corp.
Wellington North Power Inc.

Application Contact Information

Name: Wayne Armstrong
Title: Director of Finance
Phone Number: 905-732-1381 Ext 234
Email Address: warmstrong@wellandhydro.com
We are applying for rates effective: May 1, 2012
Last COS Re-based Year: 2009

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

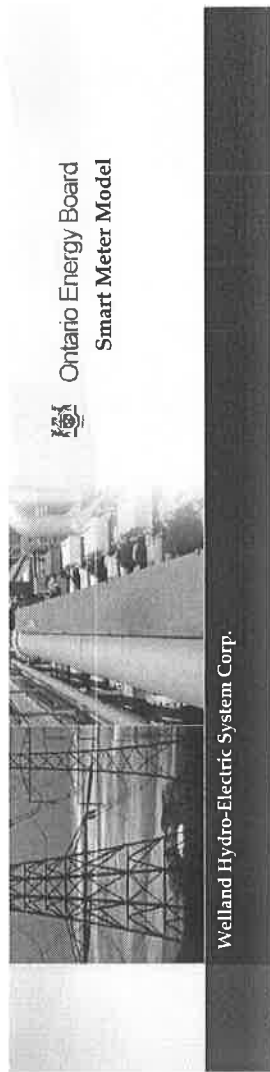
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While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results. The use of any models and spreadsheets does not automatically imply Board approval. The onus is on the distributor to prepare, document and support its application. Board-issued Excel models and spreadsheets are offered to assist parties in providing the necessary information so as to facilitate an expeditious review of an application. The onus remains on the applicant to ensure the accuracy of the data and the results.

[illegible]

[illegible]



	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	46.7%	43.3%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	100.0%	100.0%	100.0%	100.0%	40.0%	40.0%	40.0%
Preferred Shares					100.0%	100.0%	100.0%
Total							
Cost of Capital Parameters							
Deemed Short-term Debt Rate	6.25%	6.25%	6.25%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	9.0%	9.0%	9.00%	7.62%	7.62%	7.62%	7.62%
Target Return on Equity (ROE)				8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares				7.54%	7.52%	7.52%	7.52%
WACC							
	7.63%	7.63%	7.59%	7.54%	7.52%	7.52%	7.52%
Working Capital Allowance							
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
(% of the sum of Cost of Power + controllable expenses)							
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates							
(expressed as expected useful life in years)							
Smart Meters - years	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	25	25	25	25	25	25	25
- rate (%)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
CCA Rates							
Smart Meters - CCA Class							
Smart Meters - CCA Rate							
Computer Equipment - CCA Class							
Computer Equipment - CCA Rate							
General Equipment - CCA Class							
General Equipment - CCA Rate							
Applications Software - CCA Class							
Applications Software - CCA Rate							

Assumptions

¹ Planned smart meter installations occur evenly throughout the year.

² Fiscal calendar year (January 1 to December 31) used.

³ Amortization is done on a straight line basis and has the "half-year" rule applied.



Ontario Energy Board Smart Meter Model

Welland Hydro-Electric System Corp.

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,068,335	\$ 2,135,157	\$ 2,313,336
Capital Additions during year (from Smart Meter Costs)	-	-	-	-	66,822	178,179	-
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 2,068,335	\$ 2,135,157	\$ 2,313,336	\$ 2,313,336
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 68,945	\$ 209,061	\$ 357,344
Amortization expense during year	-	-	-	-	140,116	148,283	154,222
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 68,945	\$ 209,061	\$ 357,344	\$ 511,566
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,999,391	\$ 1,926,096	\$ 1,955,992
Closing Balance	\$ -	\$ -	\$ -	\$ 1,999,391	\$ 1,926,096	\$ 1,955,992	\$ 1,801,770
Average Net Book Value	\$ -	\$ -	\$ -	\$ 999,695	\$ 1,962,743	\$ 1,941,044	\$ 1,878,981
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 25,105	\$ 25,105	\$ 38,386
Capital Additions during year (from Smart Meter Costs)	-	-	-	-	-	13,281	-
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 25,105	\$ 25,105	\$ 38,386	\$ 38,386
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,511	\$ 7,532	\$ 13,881
Amortization expense during year	-	-	-	-	5,021	6,349	7,677
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 2,511	\$ 7,532	\$ 13,881	\$ 21,558
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 22,595	\$ 17,574	\$ 24,505
Closing Balance	\$ -	\$ -	\$ -	\$ 22,595	\$ 17,574	\$ 24,505	\$ 16,828
Average Net Book Value	\$ -	\$ -	\$ -	\$ 11,297	\$ 20,084	\$ 21,039	\$ 20,667
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 4,194	\$ 11,092	\$ 25,623
Capital Additions during year (from Smart Meter Costs)	-	-	-	-	6,898	14,531	-

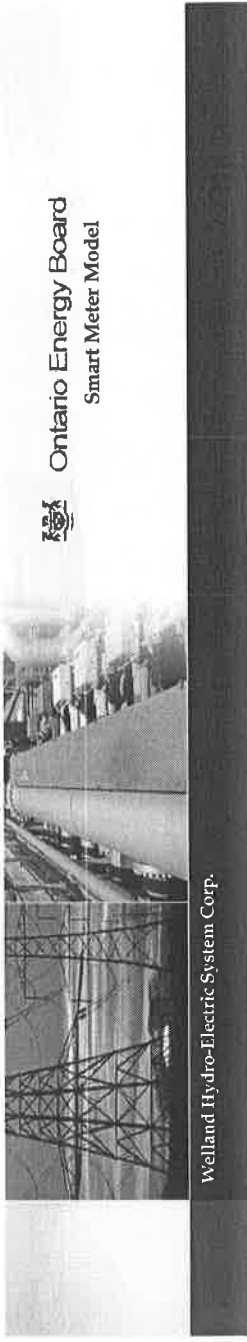
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ 4,194	\$ 11,092	\$ 25,623	\$ 25,623
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ 419	\$ 1,948	\$ 5,620
Amortization expense during year	\$ -	\$ -	\$ 419	\$ 1,529	\$ 3,672	\$ 5,125
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 1,948	\$ 5,620	\$ 10,744
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ 3,775	\$ 9,144	\$ 20,004
Closing Balance	\$ -	\$ -	\$ 3,775	\$ 9,144	\$ 20,004	\$ 14,879
Average Net Book Value	\$ -	\$ -	\$ 1,887	\$ 6,459	\$ 14,574	\$ 17,441
Net Fixed Assets - Tools and Equipment						
Gross Book Value						
Opening Balance	\$ -	\$ -	\$ 182,165	\$ 182,165	\$ 182,165	\$ 189,232
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 7,067	\$ -
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ 182,165	\$ 182,165	\$ 189,232	\$ 189,232
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ 9,108	\$ 27,325	\$ 45,895
Amortization expense during year	\$ -	\$ -	\$ 9,108	\$ 18,217	\$ 18,570	\$ 18,923
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ 9,108	\$ 27,325	\$ 45,895	\$ 64,818
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ 173,057	\$ 154,840	\$ 143,337
Closing Balance	\$ -	\$ -	\$ 173,057	\$ 154,840	\$ 143,337	\$ 124,414
Average Net Book Value	\$ -	\$ -	\$ 86,528	\$ 163,949	\$ 149,089	\$ 133,876
Net Fixed Assets - Other Equipment						
Gross Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ 1,959	\$ 1,959	\$ 1,959
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 1,959	\$ -	\$ -	\$ -
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ 1,959	\$ 1,959	\$ 1,959	\$ 1,959
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ 39	\$ 118	\$ 196
Amortization expense during year	\$ -	\$ -	\$ 39	\$ 78	\$ 78	\$ 78
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ 39	\$ 118	\$ 196	\$ 274
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ 1,920	\$ 1,841	\$ 1,763
Closing Balance	\$ -	\$ -	\$ 1,920	\$ 1,841	\$ 1,763	\$ 1,685
Average Net Book Value	\$ -	\$ -	\$ 960	\$ 1,881	\$ 1,802	\$ 1,724



Ontario Energy Board
Smart Meter Model

Welland Hydro-Electric System Corp.

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 999,695	\$ 1,962,743	\$ 1,941,044	\$ 1,378,881
Computer Hardware	\$ -	\$ -	\$ -	\$ 11,297	\$ 20,084	\$ 21,039	\$ 20,567
Computer Software	\$ -	\$ -	\$ -	\$ 1,887	\$ 6,459	\$ 14,574	\$ 17,441
Tools & Equipment	\$ -	\$ -	\$ -	\$ 86,528	\$ 163,949	\$ 149,089	\$ 133,876
Other Equipment	\$ -	\$ -	\$ -	\$ 960	\$ 1,881	\$ 1,802	\$ 1,724
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 1,100,368	\$ 2,155,116	\$ 2,127,548	\$ 2,052,589
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ 12,973	\$ 10,815	\$ 87,943	\$ 58,632	\$ 135,817	\$ 162,986
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ 1,946	\$ 1,622	\$ 13,191	\$ 8,795	\$ 20,373	\$ 24,448
Incremental Smart Meter Rate Base	\$ -	\$ 1,946	\$ 1,622	\$ 1,113,560	\$ 2,163,911	\$ 2,147,921	\$ 2,077,036
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 44,542	\$ 86,556	\$ 85,917	\$ 83,081
Deemed Long Term Debt	\$ -	\$ 973	\$ 865	\$ 586,846	\$ 1,211,790	\$ 1,202,836	\$ 1,163,140
Equity	\$ -	\$ 973	\$ 758	\$ 482,171	\$ 865,564	\$ 859,168	\$ 830,815
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ 1,946	\$ 1,622	\$ 1,113,560	\$ 2,163,911	\$ 2,147,921	\$ 2,077,036
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 592	\$ 1,151	\$ 1,143	\$ 1,105
Deemed Long Term Debt	\$ -	\$ 61	\$ 54	\$ 44,718	\$ 92,338	\$ 91,686	\$ 88,631
Equity	\$ -	\$ 88	\$ 68	\$ 38,622	\$ 69,332	\$ 68,819	\$ 66,548
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ 148	\$ 122	\$ 83,932	\$ 162,821	\$ 161,618	\$ 156,285
Operating Expenses							
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 12,973	\$ 10,815	\$ 87,943	\$ 58,632	\$ 135,817	\$ 162,986
Computer Hardware	\$ -	\$ -	\$ -	\$ 68,945	\$ 140,116	\$ 148,283	\$ 154,222
Computer Software	\$ -	\$ -	\$ -	\$ 2,511	\$ 5,021	\$ 6,349	\$ 7,677
Tools & Equipment	\$ -	\$ -	\$ -	\$ 419	\$ 1,529	\$ 3,672	\$ 5,125
Other Equipment	\$ -	\$ -	\$ -	\$ 39	\$ 18,217	\$ 18,570	\$ 18,923
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ 81,022	\$ 164,961	\$ 176,952	\$ 186,026
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ 13,121	\$ 10,937	\$ 252,897	\$ 386,414	\$ 474,387	\$ 505,296
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ 12,973	\$ 10,815	\$ 87,943	\$ 58,632	\$ 135,817	\$ 162,986
Amortization Expense	\$ -	\$ -	\$ -	\$ 81,022	\$ 164,961	\$ 176,952	\$ 186,026
Interest Expense	\$ -	\$ 61	\$ 54	\$ 45,310	\$ 93,480	\$ 92,799	\$ 89,736
Net Income for Taxes/PILs	\$ -	\$ 88	\$ 68	\$ 38,622	\$ 69,332	\$ 68,819	\$ 66,548
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ 49.51	\$ 34.35	\$ 6,525.09	\$ 9,748.95	\$ 13,693.03	\$ 18,618.84
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ 13,171	\$ 10,972	\$ 259,422	\$ 396,163	\$ 488,080	\$ 523,915



Welland Hydro-Electric System Corp.

For PILs Calculation

UCC - Smart Meters

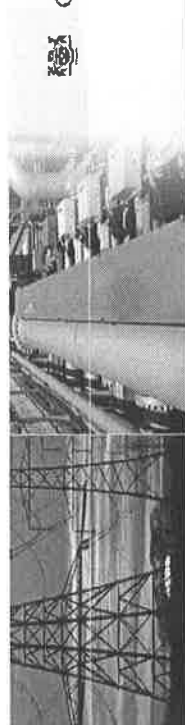
	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,985,601.60	\$ 1,890,902.59	\$ 1,910,682.22
Capital Additions	\$ -	\$ -	\$ -	\$ 2,068,335.00	\$ -	\$ 178,175.00	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ 2,052,423.60	\$ 2,069,081.59	\$ 1,910,682.22
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 2,068,335.00	\$ -	\$ 189,085.50	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 1,004,167.50	\$ 33,411.00	\$ 1,979,992.09	\$ 1,910,682.22
Reduced UCC	\$ -	\$ -	\$ 0	\$ 47	\$ 47	\$ 47	\$ 47
CCA Rate Class	\$ 0	\$ 0	\$ 0	\$ 8%	\$ 8%	\$ 8%	\$ 8%
CCA	\$ -	\$ -	\$ -	\$ 82,733.40	\$ 161,521.01	\$ 189,399.37	\$ 182,854.59
Closing UCC	\$ -	\$ -	\$ -	\$ 1,985,601.60	\$ 1,890,902.59	\$ 1,910,682.22	\$ 1,757,827.65

UCC - Computer Equipment

	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 14,649.50	\$ 3,449.00	\$ 13,906.00
Capital Additions Computer Hardware	\$ -	\$ -	\$ -	\$ 25,105.00	\$ -	\$ 13,281.00	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ 4,194.00	\$ 6,698.00	\$ 14,531.00	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 29,299.00	\$ 21,547.50	\$ 31,261.00	\$ 13,906.00
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 14,649.50	\$ 3,449.00	\$ 13,906.00	\$ -
Reduced UCC	\$ -	\$ -	\$ 0	\$ 52	\$ 52	\$ 52	\$ 52
CCA Rate Class	\$ 0	\$ 0	\$ 0	\$ 100%	\$ 100%	\$ 100%	\$ 100%
CCA	\$ -	\$ -	\$ -	\$ 14,649.50	\$ 18,098.50	\$ 17,355.00	\$ 13,906.00
Closing UCC	\$ -	\$ -	\$ -	\$ 14,649.50	\$ 3,449.00	\$ 13,906.00	\$ -

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 165,711.60	\$ 132,569.28	\$ 112,415.72
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ 182,165.00	\$ -	\$ 7,067.00	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ 1,959.00	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 184,124.00	\$ 165,711.60	\$ 139,636.28	\$ 112,415.72
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 92,062.00	\$ -	\$ 3,533.50	\$ -
Reduced UCC	\$ -	\$ -	\$ 0	\$ 8	\$ 8	\$ 8	\$ 8
CCA Rate Class	\$ 0	\$ 0	\$ 0	\$ 20%	\$ 20%	\$ 20%	\$ 20%
CCA	\$ -	\$ -	\$ -	\$ 18,412.40	\$ 33,142.32	\$ 27,220.56	\$ 22,483.14
Closing UCC	\$ -	\$ -	\$ -	\$ 165,711.60	\$ 132,569.28	\$ 112,415.72	\$ 89,932.58



Ontario Energy Board Smart Meter Model

Welland Hydro-Electric System Corp.

PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
INCOME TAX							
Net Income	\$ -	\$ 87.57	\$ 68.18	\$ 38,621.82	\$ 69,331.69	\$ 68,819.39	\$ 66,549.25
Amortization	-	-	-	81,021.83	164,360.88	176,951.81	186,025.76
CCA - Smart Meters	-	-	-	42,735.40	161,520.81	159,399.37	162,854.58
CCA - Computers	-	-	-	18,049.50	18,068.50	-	13,906.00
CCA - Applications Software	-	-	-	-	-	17,365.00	-
CCA - Other Equipment	-	-	-	18,417.40	33,142.32	27,220.56	22,483.14
Change in taxable income	-	-	68.18	3,045.45	21,530.73	42,706.37	63,330.28
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
Income Taxes Payable	-	31.63	22.84	1,116.82	5,930.95	10,373.84	14,388.64
ONTARIO CAPITAL TAX							
Smart Meter Hardware	-	-	-	1,989,390.50	1,926,066.10	1,955,982.00	1,801,769.60
Computer Software	-	-	-	22,594.50	17,573.50	24,505.40	16,828.20
(Including Application Software)	-	-	-	3,774.60	9,144.00	20,003.50	14,878.90
Tools & Equipment	-	-	-	173,056.75	154,840.25	149,337.40	124,414.20
Other Equipment	-	-	-	1,918.82	1,581.46	1,763.10	1,584.74
Rate Base	-	-	-	2,200,736.17	2,109,495.31	2,145,601.40	1,959,575.64
Less: Exemption	-	-	-	2,200,736.17	2,109,495.31	2,145,601.40	1,959,575.64
Deemed Taxable Capital	-	-	-	-	-	-	-
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	-	-	-	4,951.66	1,582.12	-	-
Change in Income Taxes Payable	-	31.63	22.84	1,116.82	5,920.95	10,373.84	14,388.64
Change in OCI	-	-	-	4,951.66	1,582.12	-	-
PILs	-	31.63	22.84	6,068.48	7,501.07	10,373.84	14,388.64
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
Change in Income Taxes Payable	-	49.51	34.35	1,573.43	8,166.83	13,693.03	16,618.84
Change in OCI	-	-	-	4,951.66	1,582.12	-	-
PILs	-	49.51	34.35	6,525.09	9,748.95	13,693.03	16,618.84



Ontario Energy Board

Smart Meter Model

Welland Hydro-Electric System Corp.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
2006 Q1			Jan-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	\$ -		4.14%	\$ -	\$ -		
2007 Q1	4.59%	4.72%	May-06	2006	Q2	\$ -		4.14%	\$ -	\$ -		\$ 0.27
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ -	\$ 5,258.17	4.14%	\$ -	\$ 5,258.17		\$ 0.27
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 5,258.17	\$ 5,715.48	4.59%	\$ 20.11	\$ 10,993.75		\$ 0.27
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 10,973.64	\$ 4,626.44	4.59%	\$ 41.97	\$ 15,644.05		\$ 0.27
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 15,602.08	\$ 6,104.56	4.59%	\$ 58.68	\$ 21,766.33		\$ 0.27
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 21,706.65	\$ 4,763.97	4.59%	\$ 83.03	\$ 26,553.65		\$ 0.27
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 26,470.82	\$ 6,129.46	4.59%	\$ 101.25	\$ 32,701.33		\$ 0.27
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 32,600.08	\$ 4,181.27	4.59%	\$ 124.70	\$ 36,906.05	\$ 37,212.09	\$ 0.27
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 36,781.35	\$ 6,497.33	4.59%	\$ 140.69	\$ 43,419.37		\$ 0.27
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 43,278.68	\$ 4,530.71	4.59%	\$ 165.54	\$ 47,974.93		\$ 0.27
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 47,809.39	\$ 6,454.92	4.59%	\$ 182.87	\$ 54,447.18		\$ 0.27
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 54,264.31	\$ 4,299.29	4.59%	\$ 207.56	\$ 58,771.16		\$ 0.27
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 58,563.60	\$ 6,106.41	4.59%	\$ 224.01	\$ 64,894.01		\$ 0.27
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 64,670.00	\$ 5,128.16	4.59%	\$ 247.36	\$ 70,045.53		\$ 0.27
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 69,798.17	\$ 5,849.09	4.59%	\$ 266.98	\$ 75,714.24		\$ 0.27
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 75,447.26	\$ 4,382.27	4.59%	\$ 288.59	\$ 80,118.12		\$ 0.27
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 79,829.53	\$ 6,145.13	4.59%	\$ 305.35	\$ 86,280.01		\$ 0.27
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 85,974.66	\$ 4,645.04	5.14%	\$ 368.26	\$ 90,987.95		\$ 0.27
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 90,819.69	\$ 6,408.82	5.14%	\$ 388.15	\$ 97,416.66		\$ 0.27
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 97,028.51	\$ 4,384.11	5.14%	\$ 415.61	\$ 101,828.23	\$ 67,832.25	\$ 0.27
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 101,412.62	\$ 6,607.97	5.14%	\$ 434.38	\$ 108,454.98		\$ 0.27
2012 Q2		4.29%	Feb-08	2008	Q1	\$ 108,020.60	\$ 4,909.65	5.14%	\$ 462.69	\$ 113,392.94		\$ 0.27
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 112,930.25	\$ 5,680.87	5.14%	\$ 483.72	\$ 118,994.83		\$ 0.27
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 118,511.11	\$ 5,538.45	4.08%	\$ 402.94	\$ 124,452.51		\$ 0.27
			May-08	2008	Q2	\$ 124,049.57	\$ 5,235.12	4.08%	\$ 421.77	\$ 129,706.45		\$ 0.27
			Jun-08	2008	Q2	\$ 129,284.68	\$ 4,515.03	4.08%	\$ 439.57	\$ 134,239.29		\$ 0.27
			Jul-08	2008	Q3	\$ 133,799.72	\$ 6,212.44	3.35%	\$ 373.52	\$ 140,385.67		\$ 0.27
			Aug-08	2008	Q3	\$ 140,012.15	\$ 4,350.92	3.35%	\$ 390.87	\$ 144,753.94		\$ 0.27
			Sep-08	2008	Q3	\$ 144,363.07	\$ 6,026.19	3.35%	\$ 403.01	\$ 150,792.27		\$ 0.27
			Oct-08	2008	Q4	\$ 150,389.26	\$ 5,510.79	3.35%	\$ 419.84	\$ 156,319.90		\$ 0.27
			Nov-08	2008	Q4	\$ 155,900.06	\$ 5,591.93	3.35%	\$ 435.22	\$ 161,927.21		\$ 0.27
			Dec-08	2008	Q4	\$ 161,491.99	\$ 5,099.58	3.35%	\$ 450.83	\$ 167,042.40	\$ 70,297.31	\$ 0.27
			Jan-09	2009	Q1	\$ 166,591.57	\$ 6,359.96	2.45%	\$ 340.12	\$ 173,291.65		\$ 0.27
			Feb-09	2009	Q1	\$ 172,951.53	\$ 4,689.93	2.45%	\$ 353.11	\$ 177,974.57		\$ 0.27
			Mar-09	2009	Q1	\$ 177,621.46	\$ 6,335.98	2.45%	\$ 362.64	\$ 184,320.08		\$ 0.27
			Apr-09	2009	Q2	\$ 183,957.44	\$ 4,300.21	1.00%	\$ 153.30	\$ 188,410.95		\$ 0.27
			May-09	2009	Q2	\$ 188,257.65	\$ 6,056.62	1.00%	\$ 156.88	\$ 194,471.15		\$ 0.27
			Jun-09	2009	Q2	\$ 194,314.27	\$ 4,640.43	1.00%	\$ 161.93	\$ 199,116.62		\$ 0.27
			Jul-09	2009	Q3	\$ 198,954.69	\$ 5,199.16	0.55%	\$ 91.19	\$ 204,245.04		\$ 0.27
			Aug-09	2009	Q3	\$ 204,153.85	\$ 4,739.08	0.55%	\$ 93.57	\$ 208,986.50		\$ 0.27
			Sep-09	2009	Q3	\$ 208,892.93	\$ 6,481.66	0.55%	\$ 95.74	\$ 215,470.33		\$ 0.27
			Oct-09	2009	Q4	\$ 215,374.59	\$ 5,168.73	0.55%	\$ 98.71	\$ 220,642.03		\$ 0.27
			Nov-09	2009	Q4	\$ 220,543.32	\$ 6,234.56	0.55%	\$ 101.08	\$ 226,878.97		\$ 0.27
			Dec-09	2009	Q4	\$ 226,777.89	\$ 4,153.61	0.55%	\$ 103.94	\$ 231,035.44	\$ 66,452.14	\$ 0.27
			Jan-10	2010	Q1	\$ 230,931.50	\$ 6,087.04	0.55%	\$ 105.84	\$ 237,124.38		\$ 0.27
			Feb-10	2010	Q1	\$ 237,018.54	\$ 5,102.35	0.55%	\$ 108.63	\$ 242,229.62		\$ 0.27
			Mar-10	2010	Q1	\$ 242,120.89	\$ 6,069.53	0.55%	\$ 110.97	\$ 248,301.38		\$ 0.27
			Apr-10	2010	Q2	\$ 248,190.41	\$ 4,533.47	0.55%	\$ 113.75	\$ 252,837.64		\$ 0.27
			May-10	2010	Q2	\$ 252,723.89	\$ 7,934.73	0.55%	\$ 115.83	\$ 260,774.45		\$ 1.81
			Jun-10	2010	Q2	\$ 260,658.62	\$ 18,076.73	0.55%	\$ 119.47	\$ 278,854.82		\$ 1.81
			Jul-10	2010	Q3	\$ 278,735.35	\$ 38,646.55	0.89%	\$ 206.73	\$ 317,588.63		\$ 1.81
			Aug-10	2010	Q3	\$ 317,381.90	\$ 32,788.16	0.89%	\$ 235.39	\$ 350,405.46		\$ 1.81
			Sep-10	2010	Q3	\$ 350,170.07	\$ 40,745.02	0.89%	\$ 259.71	\$ 391,174.80		\$ 1.81
			Oct-10	2010	Q4	\$ 390,915.09	\$ 90,061.74	1.20%	\$ 390.92	\$ 481,357.75		\$ 1.81
			Nov-10	2010	Q4	\$ 480,968.83	\$ 35,201.04	1.20%	\$ 480.97	\$ 516,648.84		\$ 1.81
			Dec-10	2010	Q4	\$ 516,167.87	\$ 37,736.54	1.20%	\$ 516.17	\$ 554,420.58	\$ 325,737.29	\$ 1.81
			Jan-11	2011	Q1	\$ 553,904.41	\$ 37,356.67	1.47%	\$ 678.53	\$ 591,939.61		\$ 1.81
			Feb-11	2011	Q1	\$ 591,261.08	\$ 37,138.16	1.47%	\$ 724.29	\$ 629,123.53		\$ 1.81
			Mar-11	2011	Q1	\$ 628,399.24	\$ 34,968.69	1.47%	\$ 769.79	\$ 664,137.73		\$ 1.81
			Apr-11	2011	Q2	\$ 663,367.94	\$ 34,967.77	1.47%	\$ 812.63	\$ 699,148.34		\$ 1.81
			May-11	2011	Q2	\$ 698,335.71	\$ 34,968.69	1.47%	\$ 855.46	\$ 734,159.86		\$ 2.11
			Jun-11	2011	Q2	\$ 733,304.40	\$ 45,569.85	1.47%	\$ 898.30	\$ 779,772.55		\$ 2.11
			Jul-11	2011	Q3	\$ 778,874.25	\$ 45,193.67	1.47%	\$ 954.12	\$ 825,022.05		\$ 2.11
			Aug-11	2011	Q3	\$ 824,067.93	\$ 43,132.08	1.47%	\$ 1,009.48	\$ 868,209.49		\$ 2.11
			Sep-11	2011	Q3	\$ 867,200.01	\$ 41,949.16	1.47%	\$ 1,062.32	\$ 910,211.48		\$ 2.11
			Oct-11	2011	Q4	\$ 909,149.16	\$ 43,245.49	1.47%	\$ 1,113.71	\$ 953,508.36		\$ 2.11
			Nov-11	2011	Q4	\$ 952,394.65	\$ 42,057.03	1.47%	\$ 1,166.68	\$ 995,618.36		\$ 2.11
			Dec-11	2011	Q4	\$ 994,451.68	\$ 43,441.87	1.47%	\$ 1,218.20	\$ 1,039,111.76	\$ 495,252.66	\$ 2.11



Welland Hydro-Electric System Corp.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Jan-12	2012	Q1	\$ 1,037,893.56	\$ 43,152.37	1.47%	\$ 1,271.42	\$ 1,082,317.34		\$ 2.11
			Feb-12	2012	Q1	\$ 1,081,045.92	\$ 40,583.67	1.47%	\$ 1,324.28	\$ 1,122,953.88		\$ 2.11
			Mar-12	2012	Q1	\$ 1,121,829.60	\$ 43,381.94	1.47%	\$ 1,374.00	\$ 1,166,385.54		\$ 2.11
			Apr-12	2012	Q2	\$ 1,165,011.54	\$ 41,982.35	1.47%	\$ 1,427.14	\$ 1,208,421.03		\$ 2.11
			May-12	2012	Q2	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Jun-12	2012	Q2	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Jul-12	2012	Q3	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Aug-12	2012	Q3	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Sep-12	2012	Q3	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Oct-12	2012	Q4	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Nov-12	2012	Q4	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89		
			Dec-12	2012	Q4	\$ 1,206,993.89		0.00%	\$ -	\$ 1,206,993.89	\$ 174,497.17	
Total Funding Adder Revenues Collected						\$ 1,206,993.89			\$ 30,287.01	\$ 1,237,280.90	\$ 1,237,280.90	



Ontario Energy Board
Smart Meter Model

Welland Hydro-Electric System Corp.

This worksheet calculates the interest on OM&A and amortization/depreciation expense, based on monthly data.

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2008 Q1	0.00%	0.00%	Jan-08	2008	Q1	\$ -				0.00%	-	-
2008 Q2	4.14%	4.68%	Feb-08	2008	Q1					0.00%	-	-
2008 Q3	4.59%	5.05%	Mar-08	2008	Q1					0.00%	-	-
2008 Q4	4.59%	4.72%	Apr-08	2008	Q2					4.14%	-	-
2007 Q1	4.59%	4.72%	May-08	2008	Q2					4.14%	-	-
2007 Q2	4.59%	4.72%	Jun-08	2008	Q2					4.14%	-	-
2007 Q3	4.59%	5.18%	Jul-08	2008	Q3					4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-08	2008	Q3					4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-08	2008	Q3					4.59%	-	-
2008 Q2	4.08%	5.16%	Oct-08	2008	Q4					4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-08	2008	Q4					4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-08	2008	Q4					4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1		\$ 2,272.73		2,272.73	4.59%	-	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	2,272.73			2,272.73	4.59%	8.69	8.69
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	2,272.73			2,272.73	4.59%	8.69	17.39
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2		\$ 4,333.40		6,606.13	4.59%	8.69	26.08
2010 Q1	0.55%	4.34%	May-07	2007	Q2		6,606.13		6,606.13	4.59%	25.27	51.35
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2		6,606.13		6,606.13	4.59%	25.27	76.62
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3		6,606.13	\$ 3,201.18	9,807.31	4.59%	25.27	101.88
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3		9,807.31		9,807.31	4.59%	37.51	139.40
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3		9,807.31	\$ 3,165.23	12,972.54	4.59%	37.51	176.91
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4		12,972.54		12,972.54	5.14%	55.57	232.48
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4		12,972.54		12,972.54	5.14%	55.57	288.04
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4		12,972.54		12,972.54	5.14%	55.57	343.61
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1		12,972.54		12,972.54	5.14%	55.57	399.17
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1		12,972.54		12,972.54	5.14%	55.57	454.74
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1		12,972.54		12,972.54	5.14%	55.57	510.31
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2		12,972.54	\$ 3,199.34	16,171.88	4.08%	44.11	554.41
			May-08	2008	Q2		16,171.88		16,171.88	4.08%	54.98	609.40
			Jun-08	2008	Q2		16,171.88		16,171.88	4.08%	54.98	664.38
			Jul-08	2008	Q3		16,171.88	\$ 3,283.24	19,455.12	3.35%	45.15	709.53
			Aug-08	2008	Q3		19,455.12		19,455.12	3.35%	54.31	763.84
			Sep-08	2008	Q3		19,455.12		19,455.12	3.35%	54.31	818.15
			Oct-08	2008	Q4		19,455.12	\$ 3,583.81	23,038.94	3.35%	54.31	872.46
			Nov-08	2008	Q4		23,038.94	\$ 188.09	23,227.02	3.35%	64.32	936.78
			Dec-08	2008	Q4		23,227.02	\$ 560.58	23,787.60	3.35%	64.84	1,001.62
			Jan-09	2009	Q1		23,787.60	\$ 5,659.24	36,168.67	2.45%	48.57	1,050.19
			Feb-09	2009	Q1		36,168.67	\$ 6,211.51	49,162.01	2.45%	73.91	1,124.09
			Mar-09	2009	Q1		49,162.01	\$ 23,817.10	79,730.94	2.45%	100.37	1,224.47
			Apr-09	2009	Q2		79,730.94	\$ 5,304.27	91,787.04	1.00%	66.44	1,290.91
			May-09	2009	Q2		91,787.04	\$ 7,148.27	105,687.14	1.00%	76.49	1,367.40
			Jun-09	2009	Q2		105,687.14	\$ 11,097.19	123,536.16	1.00%	88.07	1,455.47
			Jul-09	2009	Q3		123,536.16	\$ 3,770.96	134,058.97	0.55%	56.62	1,512.09
			Aug-09	2009	Q3		134,058.97	\$ 3,153.24	143,964.04	0.55%	61.44	1,573.54
			Sep-09	2009	Q3		143,964.04	\$ 2,168.54	152,884.42	0.55%	65.98	1,639.52
			Oct-09	2009	Q4		152,884.42	\$ 4,107.51	163,743.77	0.55%	70.07	1,709.59
			Nov-09	2009	Q4		163,743.77	\$ 3,722.11	174,217.73	0.55%	75.05	1,784.64
			Dec-09	2009	Q4		174,217.73	\$ 11,783.16	192,752.73	0.55%	79.85	1,864.49
			Jan-10	2010	Q1		192,752.73	\$ 16,005.92	222,505.40	0.55%	88.34	1,952.84
			Feb-10	2010	Q1		222,505.40	\$ 15,769.89	252,022.03	0.55%	101.98	2,054.82
			Mar-10	2010	Q1		252,022.03	\$ 2,372.31	268,141.09	0.55%	115.51	2,170.33
			Apr-10	2010	Q2		268,141.09	\$ 2,149.18	284,037.02	0.55%	122.90	2,293.23
			May-10	2010	Q2		284,037.02	\$ 2,150.10	299,933.88	0.55%	130.18	2,423.41
			Jun-10	2010	Q2		299,933.88	\$ 2,149.18	315,829.81	0.55%	137.47	2,560.88
			Jul-10	2010	Q3		315,829.81	\$ 2,260.26	331,842.83	0.89%	234.24	2,795.12
			Aug-10	2010	Q3		331,842.83	\$ 2,149.18	347,738.77	0.89%	246.12	3,041.24
			Sep-10	2010	Q3		347,738.77	\$ 4,299.29	365,784.80	0.89%	257.91	3,299.14
			Oct-10	2010	Q4		365,784.80	\$ 2,149.18	381,680.73	1.20%	365.78	3,664.93
			Nov-10	2010	Q4		381,680.73	\$ -	395,427.48	1.20%	381.68	4,046.61
			Dec-10	2010	Q4		395,427.48	\$ 7,170.39	416,344.83	1.20%	395.43	4,442.04
			Jan-11	2011	Q1		416,344.83	\$ 2,470.26	433,569.89	1.47%	510.02	4,952.06
			Feb-11	2011	Q1		433,569.89	\$ 3,699.99	452,015.87	1.47%	531.12	5,483.18
			Mar-11	2011	Q1		452,015.87	\$ 5,225.00	471,987.77	1.47%	553.72	6,036.90
			Apr-11	2011	Q2		471,987.77	\$ 3,164.30	489,898.07	1.47%	578.19	6,615.08
			May-11	2011	Q2		489,898.07	\$ 8,769.14	513,413.21	1.47%	600.13	7,215.21
			Jun-11	2011	Q2		513,413.21	\$ 4,405.32	532,564.53	1.47%	628.93	7,844.14
			Jul-11	2011	Q3		532,564.53	\$ 3,533.10	550,843.63	1.47%	652.39	8,496.53
			Aug-11	2011	Q3		550,843.63	\$ 6,094.42	571,684.05	1.47%	674.78	9,171.32
			Sep-11	2011	Q3		571,684.05	\$ 9,475.39	595,905.45	1.47%	700.31	9,871.63
			Oct-11	2011	Q4		595,905.45	\$ 8,856.95	620,510.39	1.47%	729.98	10,601.61
			Nov-11	2011	Q4		620,510.39	\$ 10,173.35	645,429.74	1.47%	760.13	11,361.74
			Dec-11	2011	Q4		645,429.74	\$ 68,937.94	729,113.68	1.47%	790.65	12,152.39
			Jan-12	2012	Q1		729,113.68	\$ 13,121.21	757,737.06	1.47%	893.16	13,045.55
			Feb-12	2012	Q1		757,737.06	\$ 18,653.21	781,892.45	1.47%	928.23	13,973.78
			Mar-12	2012	Q1		781,892.45	\$ 13,121.21	820,515.83	1.47%	970.07	14,943.85
			Apr-12	2012	Q2		820,515.83	\$ 13,121.21	849,139.21	1.47%	1,005.13	15,948.98
			May-12	2012	Q2		849,139.21	\$ 13,121.21	877,762.59	0.00%	-	15,948.98
			Jun-12	2012	Q2		877,762.59	\$ 13,121.21	906,385.98	0.00%	-	15,948.98
			Jul-12	2012	Q3		906,385.98	\$ 13,121.21	935,008.36	0.00%	-	15,948.98
			Aug-12	2012	Q3		935,008.36	\$ 13,121.21	963,832.74	0.00%	-	15,948.98
			Sep-12	2012	Q3		963,832.74	\$ 13,121.21	992,258.11	0.00%	-	15,948.98
			Oct-12	2012	Q4		992,258.11	\$ 13,121.21	1,020,879.49	0.00%	-	15,948.98
			Nov-12	2012	Q4		1,020,879.49	\$ 13,121.21	1,049,502.86	0.00%	-	15,948.98
			Dec-12	2012	Q4		1,049,502.86	\$ 13,121.21	1,078,126.23	0.00%	-	15,948.98
							\$ 469,165.23	\$ 608,961.00	\$ 1,078,126.23			



This worksheet calculates the Smart Meter Disposition Rider and the Smart Meter Incremental Revenue Requirement Rate Rider, if applicable. This worksheet also calculates any new Smart Meter Funding Adder that a distributor may wish to request. However, please note that in many 2011 IRM decisions, the Board noted that current funding adders will cease on April 30, 2011 and that the Board's expectation is that distributors will file for a final review of prudence at the earliest opportunity. The Board also noted that the SMFA is a tool designed to provide advance funding and to mitigate the anticipated rate impact of smart meter costs when recovery of those costs is approved by the Board. The Board observed that the SMFA was not intended to be compensatory (return on and of capital) on a cumulative basis over the term the SMFA was in effect. The SMFA was initially designed to fund future investment, and not fully fund prior capital investment. Distributors that seek a new SMFA should provide evidence to support its proposal. This would include documentation of where the distributor is with respect to its smart meter deployment program, and reasons as to why the distributor's circumstances are such that continuation of the SMFA is warranted. Press the "UPDATE WORKSHEET" button after choosing the applicable adders/riders.

Check if
applicable

☐ Smart Meter Funding Adder (SMFA)

☒ Smart Meter Disposition Rider (SMDR)

☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

The SMDR is calculated based on costs to December 31, 2011

The SMIRR is calculated based on the incremental revenue requirement associated with the recovery of capital related costs to December 31, 2012 and associated OM&A.

	2006	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ 13,170.89	\$ 10,971.57	\$ 259,421.90	\$ 386,163.09	\$ 483,080.10	\$ 523,915.13	\$ 1,691,722.69
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ 343.61	\$ 658.01	\$ 862.87	\$ 2,577.54	\$ 7,710.35	\$ -	\$ 12,152.39
☒ Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ 343.61	\$ 658.01	\$ 862.87	\$ 2,577.54	\$ 7,710.35	\$ -	\$ 12,152.39
☐ Sheet 8B (Interest calculated on average annual balances)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SMFA Revenues (from Sheet 8)	\$ 36,781.35	\$ 64,631.28	\$ 65,178.95	\$ 64,339.93	\$ 322,972.91	\$ 483,989.15	\$ 169,100.33	\$ 1,206,993.89
SMFA Interest (from Sheet 8)	\$ 430.74	\$ 3,200.97	\$ 5,116.36	\$ 2,112.21	\$ 2,764.38	\$ 11,263.51	\$ 5,396.84	\$ 30,287.01
Net Deferred Revenue Requirement	\$ -	\$ 37,212.09	\$ 54,317.75	\$ 193,832.64	\$ 73,003.35	\$ 537.80	\$ 349,417.96	\$ 466,594.19
Number of Metered Customers (average for 2012 test year)							20016	

Calculation of Smart Meter Disposition Rider (per metered customer per month)

Years for collection or refunding	1
Deferred Incremental Revenue Requirement from 2006 to December 31, 2011 plus Interest on OM&A and Amortization	\$ 1,179,959.95
SMFA Revenues collected from 2006 to 2012 test year (inclusive)	\$ 1,237,280.90
Plus Simple Interest on SMFA Revenues	\$ 57,320.94
Net Deferred Revenue Requirement	\$ 0.24

Match

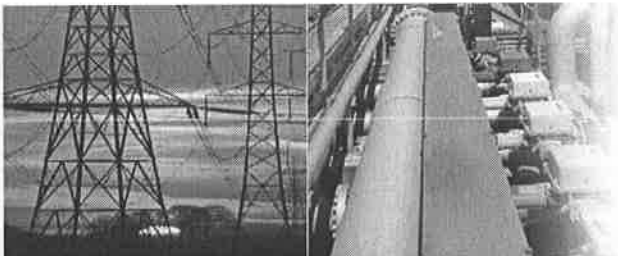
SMDR	May 1, 2012 to April 30, 2013	\$ -
Check: Forecasted SMDR Revenues		\$ 57,646.08

Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)

Incremental Revenue Requirement for 2012	\$ 523,915.13
SMIRR	\$ 2.18
Check: Forecasted SMIRR Revenues	\$ 523,616.56

Match

V 2.17



Ontario Energy Board Smart Meter Model

Choose Your Utility:

Welland Hydro-Electric System Corp.
Wellington North Power Inc.

Application Contact Information

Name: Wayne Armstrong

Title: Director of Finance

Phone Number: 905-732-1381 Ext 234

Email Address: warmstrong@wellandhydro.com

We are applying for rates effective: May 1, 2012

Last COS Re-based Year: 2009

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

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While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results. The use of any models and spreadsheets does not automatically imply Board approval. The onus is on the distributor to prepare, document and support its application. Board-issued Excel models and spreadsheets are offered to assist parties in providing the necessary information so as to facilitate an expeditious review of an application. The onus remains on the applicant to ensure the accuracy of the data and the results.



Ontario Energy Board Smart Meter Model

Welland Hydro-Electric System Corp.

Distributors must enter all incremental costs related to their smart meter program and all revenues recovered to date in the applicable tabs except for those costs (and associated revenues) for which the Board has approved on a final basis, i.e. capital costs have been included in rate base and OM&A costs in revenue requirement.

For 2012, distributors that have completed their deployments by the end of 2011 are not expected to enter any capital costs. However, for OM&A, regardless of whether a distributor has deployments in 2012, distributors should enter the forecasted OM&A for 2012 for all smart meters in service.

Smart Meter Capital Cost and Operational Expense Data

Smart Meter Installation Plan

Actual/Planned number of Smart Meters installed during the Calendar Year

	2005	2007	2008	2009	2010	2011	2012 and later	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Residential								
General Service < 50 kW								
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)								
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed								
Actual/Planned number of GS > 50 kW meters installed								
Other (please identify)								
Total Number of Smart Meters installed or planned to be installed								

1 Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

- 1.1.1 Smart Meters (may include new meters and modules, etc.)
- 1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)
- 1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)
- 1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)

Total Advanced Metering Communications Devices (AMCD)

1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)

- 1.2.1 Collectors
- 1.2.2 Repeaters (may include radio licence, etc.)
- 1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)

Total Advanced Metering Regional Collector (AMRC) (includes LAN)

Asset Type

Asset type must be selected to enable calculations.

- Smart Meter
- Smart Meter
- Computer Hardware
- Computer Software

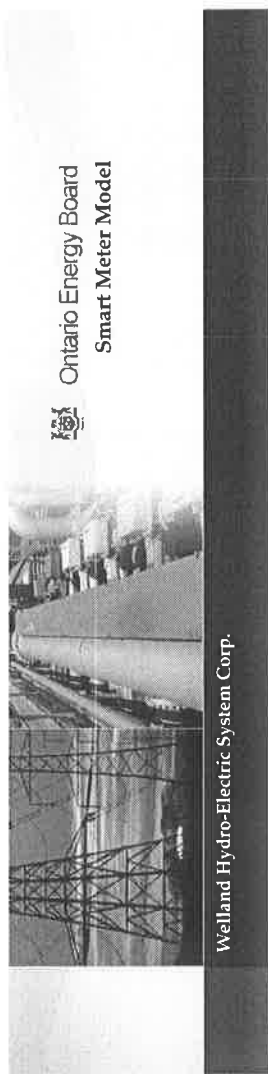
Asset Type

- Tools & Equipment
- Other Equipment

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Smart Meter								
Smart Meter								
Computer Hardware								
Computer Software								
Tools & Equipment								
Other Equipment								

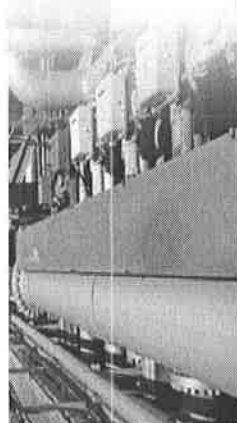
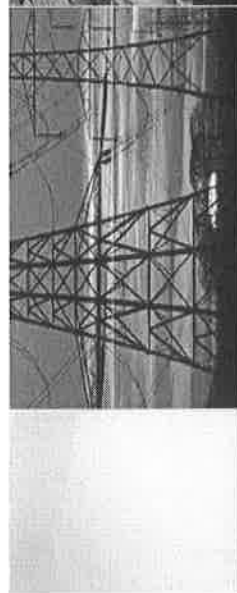
1.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O Reg 425/06

[illegible]



	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure ¹							
Deemed Short-term Debt Capitalization	50.0%	50.0%	53.3%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	46.7%	52.7%	56.0%	56.0%	56.0%
Deemed Equity Capitalization				43.3%	40.0%	40.0%	40.0%
Preferred Shares				100.0%	100.0%	100.0%	100.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters							
Deemed Short-term Debt Rate	6.25%	6.25%	6.25%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	6.0%	9.00%	9.00%	7.62%	7.62%	7.62%	7.62%
Target Return on Equity (ROE)				8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares				7.52%	7.52%	7.52%	7.52%
WACC	7.53%	7.63%	7.53%	7.54%	7.52%	7.52%	7.52%
Working Capital Allowance							
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
(% of the sum of Cost of Power + controllable expenses)							
Taxes/PILs							
Aggregate Corporate Income Tax Rate							
Capital Tax (until July 1st, 2010)	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates							
(expressed as expected useful life in years)							
Smart Meters - years	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	25	25	25	25	25	25	25
- rate (%)	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
CCA Rates							
Smart Meters - CCA Class							
Smart Meters - CCA Rate				47	47	47	47
				8%	8%	8%	8%
Computer Equipment - CCA Class							
Computer Equipment - CCA Rate				52	52	52	52
				100%	100%	100%	100%
General Equipment - CCA Class							
General Equipment - CCA Rate				8	8	8	8
				20%	20%	20%	20%
Applications Software - CCA Class							
Applications Software - CCA Rate							

Assumptions
¹ Planned smart meter installations occur evenly throughout the year.
² Fiscal calendar year (January 1 to December 31) used.
³ Amortization is done on a straight line basis and has the "half-year" rule applied.



Ontario Energy Board Smart Meter Model

Welland Hydro-Electric System Corp.

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 108,931	\$ 108,931	\$ 113,294	\$ 442,048
Capital Additions during year (from Smart Meter Costs)	-	-	-	-	4,363	328,754	-
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 108,931	\$ 113,294	\$ 442,048	\$ 442,048
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 3,631	\$ 11,039	\$ 29,550
Amortization expense during year	-	-	-	3,631	7,408	18,511	29,470
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 3,631	\$ 11,039	\$ 29,550	\$ 59,020
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 105,300	\$ 102,255	\$ 412,498
Closing Balance	\$ -	\$ -	\$ -	\$ 105,300	\$ 102,255	\$ 412,498	\$ 383,028
Average Net Book Value	\$ -	\$ -	\$ -	\$ 52,650	\$ 103,778	\$ 257,377	\$ 397,763
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,192	\$ 2,192	\$ 3,351
Capital Additions during year (from Smart Meter Costs)	-	-	-	2,192	-	1,159	-
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 2,192	\$ 2,192	\$ 3,351	\$ 3,351
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 219	\$ 658	\$ 1,212
Amortization expense during year	-	-	-	219	438	554	670
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
Closing Balance	\$ -	\$ -	\$ -	\$ 219	\$ 658	\$ 1,212	\$ 1,882
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,973	\$ 1,534	\$ 2,139
Closing Balance	\$ -	\$ -	\$ -	\$ 1,973	\$ 1,534	\$ 2,139	\$ 1,469
Average Net Book Value	\$ -	\$ -	\$ -	\$ 986	\$ 1,754	\$ 1,837	\$ 1,804
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 366	\$ 968	\$ 2,237
Capital Additions during year (from Smart Meter Costs)	-	-	-	366	602	1,269	-

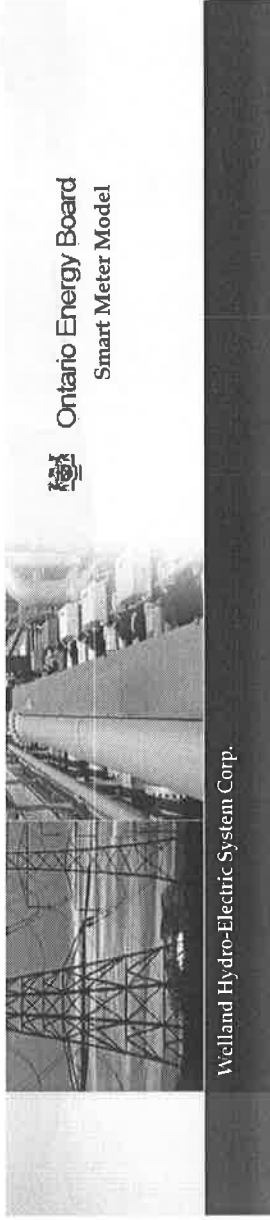
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 366	\$ 968	\$ 2,237	\$ 2,237
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 37	\$ 170	\$ 491
Amortization expense during year	\$ -	\$ -	\$ -	\$ 37	\$ 133	\$ 321	\$ 447
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 37	\$ 170	\$ 491	\$ 938
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 329	\$ 798	\$ 1,747
Closing Balance	\$ -	\$ -	\$ -	\$ 329	\$ 798	\$ 1,747	\$ 1,299
Average Net Book Value	\$ -	\$ -	\$ -	\$ 165	\$ 564	\$ 1,272	\$ 1,523

Net Fixed Assets - Tools and Equipment

Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 15,904	\$ 15,904	\$ 15,904	\$ 16,521
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 617	\$ -
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 15,904	\$ 15,904	\$ 16,521	\$ 16,521
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 795	\$ 2,386	\$ 4,007
Amortization expense during year	\$ -	\$ -	\$ -	\$ 795	\$ 1,590	\$ 1,621	\$ 1,652
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 795	\$ 2,386	\$ 4,007	\$ 5,659
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 15,109	\$ 15,109	\$ 13,518	\$ 12,514
Closing Balance	\$ -	\$ -	\$ -	\$ 15,109	\$ 13,518	\$ 12,514	\$ 10,862
Average Net Book Value	\$ -	\$ -	\$ -	\$ 7,554	\$ 14,314	\$ 13,016	\$ 11,688

Net Fixed Assets - Other Equipment

Gross Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 171	\$ 171	\$ 171
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 171	\$ -	\$ -	\$ -
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 171	\$ 171	\$ 171	\$ 171
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 3	\$ 10	\$ 17
Amortization expense during year	\$ -	\$ -	\$ -	\$ 3	\$ 7	\$ 7	\$ 7
Retirements/Removals (if applicable) Closing Balance	\$ -	\$ -	\$ -	\$ 3	\$ 10	\$ 17	\$ 24
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 168	\$ 161	\$ 154
Closing Balance	\$ -	\$ -	\$ -	\$ 168	\$ 161	\$ 154	\$ 147
Average Net Book Value	\$ -	\$ -	\$ -	\$ 84	\$ 164	\$ 157	\$ 150



Ontario Energy Board
Smart Meter Model

Welland Hydro-Electric System Corp.

Average Net Fixed Asset Values (from Sheet 4)	2006	2007	2008	2009	2010	2011	2012 and Later
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 103,778	\$ 257,377	\$ 397,763
Computer Hardware	\$ -	\$ -	\$ -	\$ 52,650	\$ 1,754	\$ 1,837	\$ 1,804
Computer Software	\$ -	\$ -	\$ -	\$ 986	\$ 1,754	\$ 1,837	\$ 1,804
Tools & Equipment	\$ -	\$ -	\$ -	\$ 165	\$ 564	\$ 1,272	\$ 1,523
Other Equipment	\$ -	\$ -	\$ -	\$ 7,554	\$ 14,314	\$ 13,016	\$ 11,688
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 61,439	\$ 120,573	\$ 273,659	\$ 412,929
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ 1,097	\$ 915	\$ 7,440	\$ 4,959	\$ 11,490	\$ 13,789
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ 165	\$ 137	\$ 1,116	\$ 744	\$ 1,724	\$ 2,068
Incremental Smart Meter Rate Base	\$ -	\$ 165	\$ 137	\$ 62,555	\$ 121,317	\$ 275,383	\$ 414,997
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 2,502	\$ 4,853	\$ 11,015	\$ 16,600
Deemed Long Term Debt	\$ -	\$ 82	\$ 73	\$ 32,967	\$ 67,937	\$ 154,214	\$ 232,398
Equity	\$ -	\$ 82	\$ 64	\$ 27,086	\$ 48,527	\$ 110,153	\$ 165,999
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ 165	\$ 137	\$ 62,555	\$ 121,317	\$ 275,383	\$ 414,997
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 33	\$ 65	\$ 147	\$ 221
Deemed Long Term Debt	\$ -	\$ 5	\$ 5	\$ 2,512	\$ 5,177	\$ 11,751	\$ 17,709
Equity	\$ -	\$ 7	\$ 6	\$ 2,170	\$ 3,887	\$ 8,823	\$ 13,296
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ 13	\$ 10	\$ 4,715	\$ 9,128	\$ 20,721	\$ 31,226
Operating Expenses							
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 1,097	\$ 915	\$ 7,440	\$ 4,959	\$ 11,490	\$ 13,789
Computer Hardware	\$ -	\$ -	\$ -	\$ 3,631	\$ 7,408	\$ 18,511	\$ 29,470
Computer Software	\$ -	\$ -	\$ -	\$ 219	\$ 438	\$ 554	\$ 670
Tools & Equipment	\$ -	\$ -	\$ -	\$ 37	\$ 133	\$ 321	\$ 447
Other Equipment	\$ -	\$ -	\$ -	\$ 795	\$ 1,580	\$ 1,621	\$ 1,682
Total Amortization Expense In Year	\$ -	\$ -	\$ -	\$ 4,665	\$ 9,577	\$ 21,014	\$ 32,246
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ 1,110	\$ 925	\$ 16,840	\$ 23,664	\$ 53,225	\$ 77,261
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ 1,097	\$ 915	\$ 7,440	\$ 4,959	\$ 11,490	\$ 13,789
Amortization Expense	\$ -	\$ -	\$ -	\$ 4,665	\$ 9,577	\$ 21,014	\$ 32,246
Interest Expense	\$ -	\$ 5	\$ 5	\$ 2,545	\$ 5,241	\$ 11,898	\$ 17,930
Net Income for Taxes/PILs	\$ -	\$ 7	\$ 6	\$ 2,170	\$ 3,887	\$ 8,823	\$ 13,296
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ 4.19	\$ 2.91	\$ 117.57	\$ 259.24	\$ 1,524.34	\$ 2,860.15
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ 1,114	\$ 928	\$ 16,958	\$ 23,923	\$ 54,750	\$ 80,122



For PILs Calculation

UCC - Smart Meters

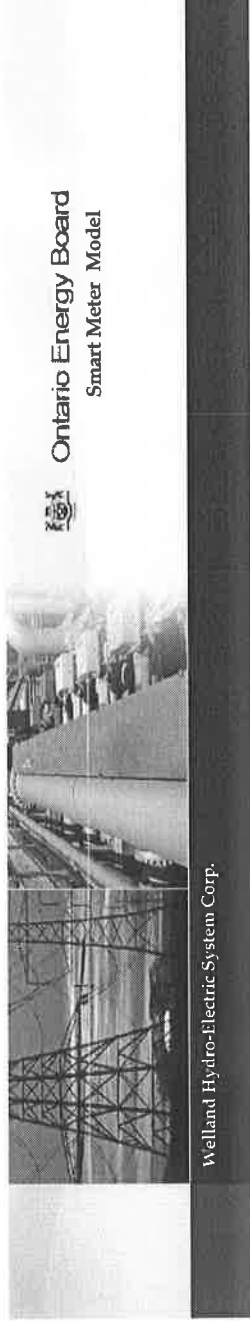
	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ 108,931.00	\$ 104,573.76	\$ 100,396.34	\$ 407,968.47
Capital Additions	-	-	-	-	4,363.00	328,754.00	-
Retirements/Removals (if applicable)	-	-	-	-	-	-	-
UCC Before Half Year Rule	-	-	-	\$ 108,931.00	\$ 108,936.76	\$ 429,150.34	\$ 407,968.47
Half Year Rule (1/2 Additions - Disposals)	-	-	-	\$ 54,465.50	\$ 2,181.50	\$ 164,377.00	\$ -
Reduced UCC	-	-	-	\$ 54,465.50	\$ 106,755.26	\$ 284,773.34	\$ 407,968.47
CCA Rate Class	0	0	0	47	47	47	47
CCA Rate	0%	0%	0%	8%	8%	8%	8%
CCA	-	-	-	\$ 4,357.24	\$ 8,540.42	\$ 21,181.87	\$ 32,637.48
Closing UCC	\$ -	\$ -	\$ -	\$ 104,573.76	\$ 100,396.34	\$ 407,968.47	\$ 375,330.99

UCC - Computer Equipment

	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,279.00	\$ 301.00	\$ 1,214.00
Capital Additions	-	-	-	\$ 2,192.00	-	\$ 1,159.00	\$ -
Retirements/Removals (if applicable)	-	-	-	\$ 386.00	\$ 602.00	\$ 1,269.00	\$ -
UCC Before Half Year Rule	-	-	-	\$ 2,558.00	\$ 1,881.00	\$ 2,729.00	\$ 1,214.00
Half Year Rule (1/2 Additions - Disposals)	-	-	-	\$ 1,279.00	\$ 301.00	\$ 1,214.00	\$ -
Reduced UCC	-	-	-	\$ 1,279.00	\$ 1,580.00	\$ 1,515.00	\$ 1,214.00
CCA Rate Class	0	0	0	52	52	52	52
CCA Rate	0%	0%	0%	100%	100%	100%	100%
CCA	-	-	-	\$ 1,279.00	\$ 1,580.00	\$ 1,515.00	\$ 1,214.00
Closing UCC	\$ -	\$ -	\$ -	\$ 1,279.00	\$ 301.00	\$ 1,214.00	\$ -

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012 and later
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 14,467.50	\$ 11,574.00	\$ 9,814.50
Capital Additions	-	-	-	\$ 15,904.00	-	\$ 617.00	\$ -
Retirements/Removals (if applicable)	-	-	-	\$ 171.00	-	-	\$ -
UCC Before Half Year Rule	-	-	-	\$ 16,075.00	\$ 14,467.50	\$ 12,191.00	\$ 9,814.50
Half Year Rule (1/2 Additions - Disposals)	-	-	-	\$ 8,037.50	\$ 14,467.50	\$ 308.50	\$ -
Reduced UCC	-	-	-	\$ 8,037.50	\$ 14,467.50	\$ 11,882.50	\$ 9,814.50
CCA Rate Class	0	0	0	8	8	8	8
CCA Rate	0%	0%	0%	20%	20%	20%	20%
CCA	-	-	-	\$ 1,607.50	\$ 2,893.50	\$ 2,376.50	\$ 1,962.90
Closing UCC	\$ -	\$ -	\$ -	\$ 14,467.50	\$ 11,574.00	\$ 9,814.50	\$ 7,851.60



Welland Hydro-Electric System Corp.

PILS Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and Inter Forecast
INCOME TAX							
Net Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Computers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in taxable income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Less: Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in OCT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	29.02%	27.50%	24.24%	22.72%
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in OCT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board

Smart Meter Model

Welland Hydro-Electric System Corp.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
2008 Q1			Jan-06	2008	Q1	\$ -		0.00%	\$ -	\$ -		
2008 Q2	4.14%	4.68%	Feb-06	2008	Q1	\$ -		0.00%	\$ -	\$ -		
2008 Q3	4.59%	5.05%	Mar-06	2008	Q1	\$ -		0.00%	\$ -	\$ -		
2008 Q4	4.59%	4.72%	Apr-06	2008	Q2	\$ -		4.14%	\$ -	\$ -		
2007 Q1	4.59%	4.72%	May-06	2008	Q2	\$ -		4.14%	\$ -	\$ -		\$ 0.27
2007 Q2	4.59%	4.72%	Jun-06	2008	Q2	\$ -	\$ 444.83	4.14%	\$ -	\$ 444.83		\$ 0.27
2007 Q3	4.59%	5.18%	Jul-06	2008	Q3	\$ 444.83	\$ 483.52	4.59%	\$ 1.70	\$ 930.06		\$ 0.27
2007 Q4	5.14%	5.18%	Aug-06	2008	Q3	\$ 928.36	\$ 391.56	4.59%	\$ 3.55	\$ 1,323.47		\$ 0.27
2008 Q1	5.14%	5.18%	Sep-06	2008	Q3	\$ 1,319.92	\$ 516.44	4.59%	\$ 5.05	\$ 1,841.40		\$ 0.27
2008 Q2	4.08%	5.18%	Oct-06	2008	Q4	\$ 1,836.35	\$ 403.03	4.59%	\$ 7.02	\$ 2,246.40		\$ 0.27
2008 Q3	3.35%	5.43%	Nov-06	2008	Q4	\$ 2,239.38	\$ 518.54	4.59%	\$ 8.57	\$ 2,766.49		\$ 0.27
2008 Q4	3.35%	5.43%	Dec-06	2008	Q4	\$ 2,757.92	\$ 353.73	4.59%	\$ 10.55	\$ 3,122.20	\$ 3,148.09	\$ 0.27
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 3,111.65	\$ 549.67	4.59%	\$ 11.90	\$ 3,673.22		\$ 0.27
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 3,661.32	\$ 383.29	4.59%	\$ 14.00	\$ 4,058.61		\$ 0.27
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 4,044.61	\$ 546.08	4.59%	\$ 15.47	\$ 4,606.16		\$ 0.27
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 4,590.69	\$ 363.71	4.59%	\$ 17.56	\$ 4,971.06		\$ 0.27
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 4,954.40	\$ 516.59	4.59%	\$ 18.95	\$ 5,489.95		\$ 0.27
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 5,471.00	\$ 433.84	4.59%	\$ 20.93	\$ 5,925.76		\$ 0.27
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 5,904.83	\$ 477.91	4.59%	\$ 22.59	\$ 6,405.33		\$ 0.27
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 6,382.74	\$ 370.73	4.59%	\$ 24.41	\$ 6,777.88		\$ 0.27
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 6,753.47	\$ 519.87	4.59%	\$ 25.83	\$ 7,299.17		\$ 0.27
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 7,273.34	\$ 392.96	5.14%	\$ 31.15	\$ 7,697.46		\$ 0.27
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 7,666.31	\$ 542.18	5.14%	\$ 32.84	\$ 8,241.33		\$ 0.27
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 8,208.49	\$ 370.89	5.14%	\$ 35.16	\$ 8,614.54	\$ 5,738.51	\$ 0.27
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 8,579.38	\$ 559.03	5.14%	\$ 36.75	\$ 9,175.15		\$ 0.27
2012 Q2	4.29%	4.29%	Feb-08	2008	Q1	\$ 9,138.40	\$ 415.35	5.14%	\$ 39.14	\$ 9,592.89		\$ 0.27
2012 Q3	4.29%	4.29%	Mar-08	2008	Q1	\$ 9,553.75	\$ 472.13	5.14%	\$ 40.92	\$ 10,066.81		\$ 0.27
2012 Q4	4.29%	4.29%	Apr-08	2008	Q2	\$ 10,025.89	\$ 468.55	4.08%	\$ 34.09	\$ 10,528.52		\$ 0.27
			May-08	2008	Q2	\$ 10,494.43	\$ 442.88	4.08%	\$ 35.68	\$ 10,973.00		\$ 0.27
			Jun-08	2008	Q2	\$ 10,937.32	\$ 381.97	4.08%	\$ 37.19	\$ 11,356.47		\$ 0.27
			Jul-08	2008	Q3	\$ 11,319.28	\$ 525.56	3.35%	\$ 31.60	\$ 11,876.45		\$ 0.27
			Aug-08	2008	Q3	\$ 11,844.85	\$ 368.08	3.35%	\$ 33.07	\$ 12,246.00		\$ 0.27
			Sep-08	2008	Q3	\$ 12,212.93	\$ 509.81	3.35%	\$ 34.09	\$ 12,756.83		\$ 0.27
			Oct-08	2008	Q4	\$ 12,722.74	\$ 466.21	3.35%	\$ 35.52	\$ 13,224.46		\$ 0.27
			Nov-08	2008	Q4	\$ 13,188.94	\$ 473.07	3.35%	\$ 36.82	\$ 13,698.83		\$ 0.27
			Dec-08	2008	Q4	\$ 13,662.01	\$ 431.42	3.35%	\$ 38.14	\$ 14,131.57	\$ 5,947.06	\$ 0.27
			Jan-09	2009	Q1	\$ 14,093.43	\$ 538.04	2.45%	\$ 28.77	\$ 14,660.24		\$ 0.27
			Feb-09	2009	Q1	\$ 14,631.47	\$ 395.07	2.45%	\$ 29.87	\$ 15,056.41		\$ 0.27
			Mar-09	2009	Q1	\$ 15,026.54	\$ 536.02	2.45%	\$ 30.68	\$ 15,593.24		\$ 0.27
			Apr-09	2009	Q2	\$ 15,562.56	\$ 363.79	1.00%	\$ 12.97	\$ 15,939.32		\$ 0.27
			May-09	2009	Q2	\$ 15,926.35	\$ 512.38	1.00%	\$ 13.27	\$ 16,452.00		\$ 0.27
			Jun-09	2009	Q2	\$ 16,438.73	\$ 392.57	1.00%	\$ 13.70	\$ 16,845.01		\$ 0.27
			Jul-09	2009	Q3	\$ 16,831.31	\$ 439.84	0.55%	\$ 7.71	\$ 17,278.86		\$ 0.27
			Aug-09	2009	Q3	\$ 17,271.15	\$ 400.92	0.55%	\$ 7.92	\$ 17,679.99		\$ 0.27
			Sep-09	2009	Q3	\$ 17,672.07	\$ 548.34	0.55%	\$ 8.10	\$ 18,228.51		\$ 0.27
			Oct-09	2009	Q4	\$ 18,220.41	\$ 437.27	0.55%	\$ 8.35	\$ 18,666.03		\$ 0.27
			Nov-09	2009	Q4	\$ 18,657.68	\$ 527.44	0.55%	\$ 8.55	\$ 19,193.66		\$ 0.27
			Dec-09	2009	Q4	\$ 19,185.11	\$ 361.39	0.55%	\$ 8.79	\$ 19,545.29	\$ 5,621.75	\$ 0.27
			Jan-10	2010	Q1	\$ 19,536.50	\$ 514.96	0.55%	\$ 8.95	\$ 20,060.41		\$ 0.27
			Feb-10	2010	Q1	\$ 20,051.46	\$ 431.65	0.55%	\$ 9.19	\$ 20,492.30		\$ 0.27
			Mar-10	2010	Q1	\$ 20,483.11	\$ 513.47	0.55%	\$ 9.39	\$ 21,005.98		\$ 0.27
			Apr-10	2010	Q2	\$ 20,996.59	\$ 383.53	0.55%	\$ 9.62	\$ 21,389.73		\$ 0.27
			May-10	2010	Q2	\$ 21,380.11	\$ 671.27	0.55%	\$ 9.80	\$ 22,061.18		\$ 1.81
			Jun-10	2010	Q2	\$ 22,051.38	\$ 1,529.27	0.55%	\$ 10.11	\$ 23,590.76		\$ 1.81
			Jul-10	2010	Q3	\$ 23,580.65	\$ 3,269.45	0.89%	\$ 17.49	\$ 26,867.59		\$ 1.81
			Aug-10	2010	Q3	\$ 26,850.10	\$ 2,773.84	0.89%	\$ 19.91	\$ 29,643.84		\$ 1.81
			Sep-10	2010	Q3	\$ 29,623.93	\$ 3,448.98	0.89%	\$ 21.97	\$ 33,092.89		\$ 1.81
			Oct-10	2010	Q4	\$ 33,070.91	\$ 7,618.26	1.20%	\$ 33.07	\$ 40,722.24		\$ 1.81
			Nov-10	2010	Q4	\$ 40,689.17	\$ 2,977.96	1.20%	\$ 40.69	\$ 43,707.82		\$ 1.81
			Dec-10	2010	Q4	\$ 43,667.13	\$ 3,182.46	1.20%	\$ 43.67	\$ 46,903.26	\$ 27,556.95	\$ 1.81
			Jan-11	2011	Q1	\$ 46,859.59	\$ 3,160.33	1.47%	\$ 57.40	\$ 50,077.32		\$ 1.81
			Feb-11	2011	Q1	\$ 50,019.92	\$ 3,141.84	1.47%	\$ 61.27	\$ 53,223.03		\$ 1.81
			Mar-11	2011	Q1	\$ 53,161.76	\$ 2,958.31	1.47%	\$ 65.12	\$ 56,185.18		\$ 1.81
			Apr-11	2011	Q2	\$ 56,120.06	\$ 2,958.23	1.47%	\$ 68.75	\$ 59,147.04		\$ 1.81
			May-11	2011	Q2	\$ 59,078.29	\$ 2,958.31	1.47%	\$ 72.37	\$ 62,108.97		\$ 2.11
			Jun-11	2011	Q2	\$ 62,036.60	\$ 3,855.15	1.47%	\$ 75.99	\$ 65,957.74		\$ 2.11
			Jul-11	2011	Q3	\$ 65,891.75	\$ 3,823.33	1.47%	\$ 80.72	\$ 69,795.79		\$ 2.11
			Aug-11	2011	Q3	\$ 69,715.07	\$ 3,648.92	1.47%	\$ 85.40	\$ 73,449.39		\$ 2.11
			Sep-11	2011	Q3	\$ 73,363.99	\$ 3,548.84	1.47%	\$ 89.87	\$ 77,002.71		\$ 2.11
			Oct-11	2011	Q4	\$ 76,912.84	\$ 3,658.51	1.47%	\$ 94.22	\$ 80,665.57		\$ 2.11
			Nov-11	2011	Q4	\$ 80,571.35	\$ 3,557.97	1.47%	\$ 98.70	\$ 84,228.02		\$ 2.11
			Dec-11	2011	Q4	\$ 84,129.32	\$ 3,675.13	1.47%	\$ 103.06	\$ 87,907.50	\$ 41,897.72	\$ 2.11



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Jan-12	2012	Q1	\$ 87,804.44	\$ 3,650.63	1.47%	\$ 107.56	\$ 91,562.64		\$ 2.11
			Feb-12	2012	Q1	\$ 91,455.08	\$ 3,433.33	1.47%	\$ 112.03	\$ 95,000.43		\$ 2.11
			Mar-12	2012	Q1	\$ 94,888.40	\$ 3,670.06	1.47%	\$ 116.24	\$ 98,674.70		\$ 2.11
			Apr-12	2012	Q2	\$ 98,558.46	\$ 3,551.65	1.47%	\$ 120.73	\$ 102,230.84		\$ 2.11
			May-12	2012	Q2	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Jun-12	2012	Q2	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Jul-12	2012	Q3	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Aug-12	2012	Q3	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Sep-12	2012	Q3	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Oct-12	2012	Q4	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Nov-12	2012	Q4	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11		
			Dec-12	2012	Q4	\$ 102,110.11		0.00%	\$ -	\$ 102,110.11	\$ 14,762.23	
Total Funding Adder Revenues Collected						\$ 102,110.11			\$ 2,562.21	\$ 104,672.32	\$ 104,672.32	



Ontario Energy Board
Smart Meter Model

Welland Hydro-Electric System Corp.

This worksheet calculates the interest on OM&A and amortization/depreciation expense, based on monthly data.

Account 1558 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2008 Q1	0.00%	0.00%	Jan-08	2008	Q1	\$ -				0.00%	-	-
2008 Q2	4.14%	4.68%	Feb-08	2008	Q1	-			-	0.00%	-	-
2008 Q3	4.59%	5.05%	Mar-08	2008	Q1	-			-	0.00%	-	-
2008 Q4	4.59%	4.72%	Apr-08	2008	Q2	-			-	4.14%	-	-
2007 Q1	4.59%	4.72%	May-06	2006	Q2	-			-	4.14%	-	-
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	-			-	4.14%	-	-
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	-			-	4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-			-	4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-			-	4.59%	-	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-			-	4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-			-	4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-			-	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	-	\$ 192.27		192.27	4.59%	-	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	192.27			192.27	4.59%	0.74	0.74
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	192.27			192.27	4.59%	0.74	1.47
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	192.27	\$ 366.60		558.87	4.59%	0.74	2.21
2010 Q1	0.55%	4.34%	May-07	2007	Q2	558.87			558.87	4.59%	2.14	4.34
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	558.87			558.87	4.59%	2.14	6.48
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	558.87	\$ 270.82		829.69	4.59%	2.14	8.62
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	829.69			829.69	4.59%	3.17	11.79
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	829.69	\$ 267.77		1,097.46	4.59%	3.17	14.97
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	1,097.46			1,097.46	5.14%	4.70	19.67
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	1,097.46			1,097.46	5.14%	4.70	24.37
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	1,097.46			1,097.46	5.14%	4.70	29.07
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	1,097.46			1,097.46	5.14%	4.70	33.77
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	1,097.46			1,097.46	5.14%	4.70	38.47
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	1,097.46			1,097.46	5.14%	4.70	43.17
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	1,097.46	\$ 270.66		1,368.12	4.08%	3.73	46.90
			May-08	2008	Q2	1,368.12			1,368.12	4.08%	4.65	51.55
			Jun-08	2008	Q2	1,368.12			1,368.12	4.08%	4.65	56.21
			Jul-08	2008	Q3	1,368.12	\$ 277.70		1,645.88	3.35%	3.82	60.03
			Aug-08	2008	Q3	1,645.88			1,645.88	3.35%	4.59	64.62
			Sep-08	2008	Q3	1,645.88			1,645.88	3.35%	4.59	69.21
			Oct-08	2008	Q4	1,645.88	\$ 303.19		1,949.06	3.35%	4.59	73.81
			Nov-08	2008	Q4	1,949.06	\$ 15.91		1,964.98	3.35%	5.44	79.25
			Dec-08	2008	Q4	1,964.98	\$ 47.42		2,012.40	3.35%	5.49	84.74
			Jan-09	2009	Q1	2,012.40	\$ 478.76	\$ 390.42	2,881.58	2.45%	4.11	88.84
			Feb-09	2009	Q1	2,881.58	\$ 525.49	\$ 390.42	3,797.49	2.45%	5.88	94.73
			Mar-09	2009	Q1	3,797.49	\$ 2,014.90	\$ 390.42	6,202.81	2.45%	7.75	102.48
			Apr-09	2009	Q2	6,202.81	\$ 446.73	\$ 390.42	7,041.96	1.00%	5.17	107.65
			May-09	2009	Q2	7,041.96	\$ 604.73	\$ 390.42	8,037.11	1.00%	5.87	113.52
			Jun-09	2009	Q2	8,037.11	\$ 938.51	\$ 390.42	9,366.34	1.00%	6.70	120.22
			Jul-09	2009	Q3	9,366.34	\$ 319.02	\$ 390.42	10,075.78	0.55%	4.29	124.51
			Aug-09	2009	Q3	10,075.78	\$ 266.76	\$ 390.42	10,732.96	0.55%	4.62	129.13
			Sep-09	2009	Q3	10,732.96	\$ 183.46	\$ 390.41	11,306.83	0.55%	4.92	134.05
			Oct-09	2009	Q4	11,306.83	\$ 347.49	\$ 390.41	12,044.73	0.55%	5.18	139.23
			Nov-09	2009	Q4	12,044.73	\$ 314.89	\$ 390.41	12,750.02	0.55%	5.52	144.75
			Dec-09	2009	Q4	12,750.02	\$ 990.84	\$ 390.41	14,137.27	0.55%	5.84	150.59
			Jan-10	2010	Q1	14,137.27	\$ 1,354.08	\$ 798.08	16,289.43	0.55%	6.48	157.07
			Feb-10	2010	Q1	16,289.43	\$ 1,334.11	\$ 798.08	18,421.63	0.55%	7.47	164.54
			Mar-10	2010	Q1	18,421.63	\$ 200.60	\$ 798.08	19,420.40	0.55%	8.44	172.98
			Apr-10	2010	Q2	19,420.40	\$ 161.82	\$ 798.08	20,400.30	0.55%	8.90	181.88
			May-10	2010	Q2	20,400.30	\$ 161.82	\$ 798.08	21,380.27	0.55%	9.35	191.23
			Jun-10	2010	Q2	21,380.27	\$ 161.82	\$ 798.08	22,360.17	0.55%	9.80	201.03
			Jul-10	2010	Q3	22,360.17	\$ 191.72	\$ 798.08	23,349.98	0.89%	16.58	217.62
			Aug-10	2010	Q3	23,349.98	\$ 161.82	\$ 798.08	24,329.87	0.89%	17.32	234.93
			Sep-10	2010	Q3	24,329.87	\$ 363.71	\$ 798.08	25,491.68	0.89%	18.04	252.98
			Oct-10	2010	Q4	25,491.68	\$ 181.82	\$ 798.08	26,471.59	1.20%	25.49	278.47
			Nov-10	2010	Q4	26,471.59	\$ -	\$ 798.08	27,269.68	1.20%	26.47	304.94
			Dec-10	2010	Q4	27,269.68	\$ 606.81	\$ 798.08	28,674.37	1.20%	27.27	332.21
			Jan-11	2011	Q1	28,674.37	\$ 209.74	\$ 1,751.17	30,635.28	1.47%	35.13	367.34
			Feb-11	2011	Q1	30,635.28	\$ 313.01	\$ 1,751.17	32,699.47	1.47%	37.53	404.87
			Mar-11	2011	Q1	32,699.47	\$ 442.10	\$ 1,751.17	34,892.74	1.47%	40.06	444.92
			Apr-11	2011	Q2	34,892.74	\$ 267.70	\$ 1,751.17	36,911.61	1.47%	42.74	487.67
			May-11	2011	Q2	36,911.61	\$ 741.86	\$ 1,751.17	39,404.64	1.47%	45.22	532.88
			Jun-11	2011	Q2	39,404.64	\$ 372.66	\$ 1,751.17	41,528.49	1.47%	48.27	581.15
			Jul-11	2011	Q3	41,528.49	\$ 298.90	\$ 1,751.17	43,578.56	1.47%	50.87	632.03
			Aug-11	2011	Q3	43,578.56	\$ 515.58	\$ 1,751.17	45,845.31	1.47%	53.38	685.41
			Sep-11	2011	Q3	45,845.31	\$ 801.81	\$ 1,751.16	48,398.07	1.47%	56.18	741.57
			Oct-11	2011	Q4	48,398.07	\$ 834.05	\$ 1,751.16	50,983.29	1.47%	59.29	800.86
			Nov-11	2011	Q4	50,983.29	\$ 860.65	\$ 1,751.16	53,595.10	1.47%	62.45	863.31
			Dec-11	2011	Q4	53,595.10	\$ 5,832.06	\$ 1,751.16	61,178.32	1.47%	65.65	928.97
			Jan-12	2012	Q1	61,178.32	\$ 1,110.04	\$ 2,667.17	64,975.53	1.47%	74.94	1,003.91
			Feb-12	2012	Q1	64,975.53	\$ 1,578.04	\$ 2,667.17	69,240.73	1.47%	79.60	1,083.50
			Mar-12	2012	Q1	69,240.73	\$ 1,110.04	\$ 2,667.17	73,037.94	1.47%	84.82	1,168.32
			Apr-12	2012	Q2	73,037.94	\$ 1,110.04	\$ 2,667.17	76,835.15	1.47%	89.47	1,257.80
			May-12	2012	Q2	76,835.15	\$ 1,110.04	\$ 2,667.17	80,632.36	0.00%	-	1,257.80
			Jun-12	2012	Q2	80,632.36	\$ 1,110.04	\$ 2,667.17	84,429.58	0.00%	-	1,257.80
			Jul-12	2012	Q3	84,429.58	\$ 1,110.04	\$ 2,667.17	88,226.77	0.00%	-	1,257.80
			Aug-12	2012	Q3	88,226.77	\$ 1,110.04	\$ 2,667.17	92,023.88	0.00%	-	1,257.80
			Sep-12	2012	Q3	92,023.88	\$ 1,110.04	\$ 2,667.16	95,821.18	0.00%	-	1,257.80
			Oct-12	2012	Q4	95,821.18	\$ 1,110.04	\$ 2,667.16	99,618.37	0.00%	-	1,257.80
			Nov-12	2012	Q4	99,618.37	\$ 1,110.04	\$ 2,667.16	103,415.57	0.00%	-	1,257.80
			Dec-12	2012	Q4	103,415.57	\$ 1,110.04	\$ 2,667.16	107,212.77	0.00%	-	1,257.80
						\$ 39,690.77	\$ 67,522.00	\$ 107,212.77				



This worksheet calculates the Smart Meter Disposition Rider and the Smart Meter Incremental Revenue Requirement Rate Rider. If applicable, this worksheet also calculates any new Smart Meter Funding Adder that a distributor may wish to request. However, please note that in many 2011 IRRA decisions, the Board noted that current funding adders will cease on April 30, 2011 and that the Board's expectation is that distributors will file for a final review of prudence at the earliest opportunity. The Board also noted that the SMFA is a tool designed to provide advance funding and to mitigate the anticipated rate impact of smart meter costs when recovery of those costs is approved by the Board. The Board observed that the SMFA was not intended to be compensatory (return on and of capital) on a cumulative basis over the term the SMFA was in effect. The SMFA was initially designed to fund future investment, and not fully fund prior capital investment. Distributors that seek a new SMFA should provide evidence to support its proposal. This would include documentation of where the distributor is with respect to its smart meter deployment program, and reasons as to why the distributor's circumstances are such that continuation of the SMFA is warranted. Press the "UPDATE WORKSHEET" button after choosing the applicable adders/riders.

Check if applicable

- ☐ Smart Meter Funding Adder (SMFA)
- ☒ Smart Meter Disposition Rider (SMOR)
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

The SMOR is calculated based on costs to December 31, 2011

The SMIRR is calculated based on the incremental revenue requirement associated with the recovery of capital related costs to December 31, 2012 and associated O&M&A.

	2006	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ 1,113.73	\$ 928.25	\$ 16,957.99	\$ 23,923.13	\$ 54,749.54	\$ 80,121.58	\$ 177,794.21
Interest on Deferred and forecasted O&M&A and Amortization Expense (Sheet 8A/8B)	\$ -	\$ 29.07	\$ 55.67	\$ 65.86	\$ 181.62	\$ 596.75	\$ 928.97	\$ 928.97
(Check one of the boxes below)								
☒ Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ 29.07	\$ 55.67	\$ 65.86	\$ 181.62	\$ 596.75	\$ 928.97	\$ 928.97
☐ Sheet 8B (Interest calculated on average annual balances)								
SMFA Revenues (from Sheet 8)	\$ 3,111.65	\$ 5,467.72	\$ 5,514.05	\$ 5,443.07	\$ 27,323.09	\$ 40,944.85	\$ 14,305.67	\$ 102,110.11
SMFA Interest (from Sheet 8)	\$ 36.44	\$ 270.79	\$ 433.01	\$ 178.68	\$ 233.86	\$ 952.87	\$ 456.66	\$ 2,662.21
Net Deferred Revenue Requirement	\$ -	\$ 3,148.09	\$ 4,595.71	\$ 11,402.09	\$ 3,452.20	\$ 13,448.57	\$ 65,359.35	\$ 74,050.85
Number of Metered Customers (average for 2012 test year)							1692	

Calculation of Smart Meter Disposition Rider (per metered customer per month)

Years for collection or refunding	1
Deferred Incremental Revenue Requirement from 2006 to December 31, 2011	\$ 98,601.60
plus Interest on O&M&A and Amortization	
SMFA Revenues collected from 2006 to 2012 test year (inclusive)	\$ 104,572.32
Plus Simple Interest on SMFA Revenues	
Net Deferred Revenue Requirement	\$ 6,070.72
SMOR May 1, 2012 to April 30, 2013	\$ 0.30
Check: Forecasted SMOR Revenues	\$ 6,091.20

Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)

Incremental Revenue Requirement for 2012	\$ 80,121.58
SMIRR	\$ 3.95
Check: Forecasted SMIRR Revenues	\$ 80,200.80

Table 3: Calculation of Revenue Requirement - Revised

Rate Base	Total	Residential	GS<50
Net Fixed Assets	\$2,465,517	\$2,052,589	\$412,929
Working Capital Allowance	26,516	24,448	2,067
Incremental Smart Meter Rate Base	\$2,492,033	\$2,077,037	\$414,996
Revenue Requirement			
Short Term Interest	1,326	1,105	221
Long Term Interest	106,340	88,631	17,709
Return on Equity	79,845	66,548	13,297
OM & A	176,775	162,986	13,789
Amortization	218,272	186,026	32,246
Grossed-Up PILS	21,479	18,619	2,860
Total	\$604,037	\$523,915	\$80,122

Table 5: Smart Meter Disposition Rate Rider - Revised

	Total	Residential	GS<50
Revenue Requirement 2007	\$14,285	\$13,171	\$1,114
Revenue Requirement 2008	11,900	10,972	928
Revenue Requirement 2009	276,380	259,422	16,958
Revenue Requirement 2010	420,086	396,163	23,923
Revenue Requirement 2011	542,829	488,080	54,749
Interest on OM & A Deferred Accounts	13,082	12,152	930
Total Revenue Requirement	\$1,278,562	\$1,179,960	\$98,602
Smart Meter Rate Adder Revenue	\$1,309,104	\$1,206,994	\$102,110
Carrying Costs	\$32,849	\$30,287	\$2,562
Smart Meter True Up	-\$63,391	-\$57,321	-\$6,070
Metered Customers	21,708	20,016	1,692
Smart Meter Disposition Rate Rider	-\$0.24	-\$0.24	-\$0.30

Table 7 Combined Bill Impact By Customer Class-Based on Uniform Rate Rider-Revised

Customer Class	Current Monthly Bill*	2012 IRM	Smart Meter Disposition Rider	Smart Meter Revenue Requirement Rider	HST Smart Meter Riders	OCEBA Smart Meter Riders & HST	Change \$	Change %
Residential	\$109.86	-\$1.95	-\$0.24	\$2.32	\$0.27	-\$0.24	\$0.16	0.15%
GS<50 kW**	\$255.82	-\$2.11	-\$0.24	\$2.32	\$0.27	-\$0.24	\$0.00	0.00%
GS>50 kW	\$1,676.86	-\$21.81	\$0.00	\$0.00	\$0.00	\$0.00	-\$21.81	-1.30%
Large Use	\$515,862.15	-\$4,395.33	\$0.00	\$0.00	\$0.00	\$0.00	-\$4,395.33	-0.85%
Unmetered	\$67.00	-\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.01	-0.01%
Sentinel Lights	\$17.34	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.02	0.12%
Street Lights	\$11.82	-\$0.07	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.07	-0.59%

* See 2012 IRM Rate Application EB-2011-0202

** Adjusted for Board Staff Interrogatory #2

Table 8 Combined Bill Impact By Customer Class - Based on Estimated Capital Cost By Class-Revised

Customer Class	Current Monthly Bill*	2012 IRM	Smart Meter Disposition Rider	Smart Meter Revenue Requirement Rider	HST Smart Meter Riders	OCEBA Smart Meter Riders & HST	Change \$	Change %
Residential	\$109.86	-\$1.95	-\$0.24	\$2.18	\$0.25	-\$0.22	\$0.02	0.02%
GS<50 kW**	\$255.82	-\$2.11	-\$0.30	\$3.95	\$0.47	-\$0.41	\$1.60	0.63%
GS>50 kW	\$1,676.86	-\$21.81	\$0.00	\$0.00	\$0.00	\$0.00	-\$21.81	-1.30%
Large Use	\$515,862.15	-\$4,395.33	\$0.00	\$0.00	\$0.00	\$0.00	-\$4,395.33	-0.85%
Unmetered	\$67.00	-\$0.01	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.01	-0.01%
Sentinel Lights	\$17.34	\$0.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.02	0.12%
Street Lights	\$11.82	-\$0.07	\$0.00	\$0.00	\$0.00	\$0.00	-\$0.07	-0.59%

* See 2012 IRM Rate Application EB-2011-0202

** Adjusted for Board Staff Interrogatory #2

Welland Hydro Electric System Corp.
 Smart Meter Funding & Interest
 Forecasted Amount As at April 30, 2012

Current Smart Meter Cost/Month \$2.11

Cost/Day $\$2.11/\text{Mth} \times 12 \text{ Mth} / 365 \text{ Days}$ \$0.06937

Customer By Class	Dec/11	Jan/12
Residential	19,905	20,016
GS<50	1,687	1,692
GS>50	171	171
Large Use	1	1
	<u>21,764</u>	<u>21,880</u>

Smart Meter Revenue

December 31, 2011 Actual \$1,125,698

January 2012 Forecast
 $21764 \times \$0.06937/\text{day} \times 31\text{days}$ \$46,803

February 2012 Forecast
 $21880 \times \$0.06937/\text{day} \times 29\text{days}$ \$44,017

March 2012 Forecast
 $21880 \times \$0.06937/\text{day} \times 31\text{days}$ \$47,052

April 2012 Forecast
 $21880 \times \$0.06937/\text{day} \times 30\text{days}$ \$45,534

Total Forecasted Funding Adder Apr/2012 \$1,309,104

Total Forecasted Interest Apr/2012 \$32,849

\$1,341,953

Welland Hydro Electric System Corp.
Smart Meter Disposition Rider
By Customer Class

Total Forecasted Funding Adder & Interest April 30/12 \$1,341,953

Customer Classes Effectuated

		%	\$
Residential	20,016	92.2%	\$1,237,281
GS<50	1,692	7.8%	<u>\$104,672</u>
	<u>21,708</u>	100.0%	<u>\$1,341,953</u>