



Cooperative Hydro Embrun Inc.
821 Notre-dame Street
Embrun, ON
K0A 1W1

June 28, 2012

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

Re: Smart Meter Prudence Review Application EB-2012-0094

Dear Ms. Walli:

Please find enclosed the reply to Board Staff and VECC's submissions by Cooperative Hydro Embrun Inc. ("Cooperative Hydro Embrun") for a Smart Meter Prudence Review Application, to be effective May 1, 2012.

This document is being filed pursuant to the Board's e-Filing Services.

Yours Truly,

A handwritten signature in black ink, appearing to be 'Benoit Lamarche', written in a cursive style.

Benoit Lamarche
General Manager



Cooperative Hydro Embrun Inc.

**Smart Meter Prudence Review
Reply Submission
EB-2012-0094**

Rates Effective: May 1, 2012

Date Filed: June 28, 2012

**Cooperative Hydro Embrun Inc.
821 Notre-dame Street
Embrun, ON
K0A 1W1**

Reply Submission

INTRODUCTION

Cooperative Hydro Embrun Inc. ("CHEI") is a licensed electricity distributor that is rate regulated by the Ontario Energy Board (the "Board") under the Ontario Energy Board Act, 1998. CHEI filed a stand-alone application (the "Application") with the Board, received on March 16, 2012, seeking Board approval for the disposition and recovery of costs related to smart meter deployment, offset by Smart Meter Funding Adder ("SMFA") revenues collected from May 1, 2006 to April 30, 2012. CHEI requested approval of proposed Smart Meter Disposition Riders ("SMDRs") and Smart Meter Incremental Revenue Requirement Rate Riders ("SMIRRs") effective May 1, 2012. The Application is based on the Board's policy and practice with respect to recovery of smart meter costs.

The Board issued its Letter of Direction and Notice of Application and Hearing on April 13, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") requested and was granted intervenor status and cost award eligibility. No letters of comment were received. The Notice of Application and Hearing established that the Board would consider the Application by way of a written hearing and established timelines for discovery and submissions.

Board staff posed interrogatories to CHEI on May 22, 2012, and VECC filed interrogatories on May 23, 2012. CHEI filed its responses to all interrogatories on May 31, 2012.

Board staff filed their submission with the Board Secretary on June 18, 2011. VECC filed their submission with the Board Secretary on June 20, 2011. This reply submission reflects CHEI response to those submissions by Board staff and VECC.

Costs beyond Minimum functionality

Board staff noted that in its Application CHEI had included capital costs for 12 smart meters for the GS>50 kW customer class, which are costs beyond minimum functionality. Board staff submitted that CHEI had provided the cost per meter but that the record on the nature and justification of these costs was insufficient. Board staff noted that some of this information only came to light in responses to interrogatories, and therefore Board staff suggested that CHEI provide additional information in its reply submission to provide clarity, specifically on the increased costs of the smart meters for the GS > 50 kW class (over three times that of GS < 50 kW smart meters as shown in the above table) and on how the smart meter deployment to GS < 50 kW relates to CHEI's overall smart meter implementation plan.

VECC concurred with Board staff with respect to this issue.

While CHEI recognized that the installation of smart meters for GS>50kW customers was technically beyond minimal functionality, it decided it was the only prudent course of action and not to do so may be a bad decision. The three key factors were:

- Changing out meters so they could be read remotely while leaving out the GS>50 kW which would be required to be read manually could result in a grossly inefficient meter reading operation.
- Some of the GS>50kW customers have loads which could potentially fall into the GS<50kW customer class for any month(s) in the year, it made no sense to wait to replace the existing meter with a smart meter only when the customer designation actually changed.
- Providing the GS>50kW customers with a smart meter would provide these customers with peak and energy-saving opportunities consistent with the Government's CDM objectives.

Inclusion of 2012 Costs and Demand for Customer Growth

Board staff noted that in the Smart Meter Model, CHEI had shown 12 Residential and GS<50 kW smart meter installations, and a further 14 smart meter installations forecasted for 2012, however no smart meter capital costs for procurement and installation were shown.

Board staff submitted that CHEI should revise the Smart Meter Model and the proposed SMDRs and SMIRRs to align the capital costs with the years in which the smart meters were installed.

VECC concurred with Board staff with respect to this issue.

CHEI has complied with this request and respectfully submits an updated model, as attached.

The following are the resultant recalculated rate riders requested.

Rate Class	SMDR		SMIRR
	One Year Recovery		
Residential	(\$0.63)		\$1.44
General Service Less than 50 kW	\$6.46		\$4.20
General Service Greater than 50 kW	\$32.51		\$14.30

Cost Allocation & Calculation of Smart Meter Rate Riders

VECC submitted that CHEI be directed to provide the information as requested in VECC Interrogatory #3 as part of its Reply submissions (i.e., class specific revenue requirement models and revised SMDR and SMIRR rate riders based on the proposed VECC cost allocation methodology) and that the Board should adopt these values.



Reply Submission
File Number: EB-2012-0094

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Date Filed: June 28, 2012

1 CHEI was requested and complied with Board staff's recommendation to use the Guelph
2 allocation methodology. This methodology has been accepted by the Board previously as being
3 reasonable for the purpose of cost allocation. CHEI notes that Board staffs were accepting of
4 the calculation submitted. While VECC's methodology may have merit for larger distributors,
5 CHEI does not believe the potential cross subsidization to be of material concern to its
6 customers.

7

8

All of which is respectfully submitted.



File Number:EB-2012-0094

Tab: 1
Schedule: 2

Date Filed: June 28, 2012

Attachment 1 of 1

Revised Smart Meter Model



Ontario Energy Board

Smart Meter Model

V 2.17

Choose Your Utility:

COLLUS Power Corporation

Cooperative Hydro Embrun Inc.

Application Contact Information

Name:

BENOIT LAMARCHE

Title:

MANAGER

Phone Number:

613-443-5110

Email Address:

embrunhydro@magma .ca

We are applying for rates effective:

May 1, 2012

Last COS Re-based Year

2011

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.

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.



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.

		2006	2007	2008	2009	2010	2011	2012 and later	Total
Smart Meter Capital Cost and Operational Expense Data		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Smart Meter Installation Plan									
Actual/Planned number of Smart Meters installed during the Calendar Year									
Residential		0	0	0	1,755	22	9	10	1796
General Service < 50 kW		0	0	0	152	3	3	4	162
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)		0	0	0	1907	25	12	14	1958
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed		0.00%	0.00%	0.00%	97.40%	98.67%	99.28%	100.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed		0	0	0	0	12	0	0	12
Other (please identify)		0	0	0	0	0	0	0	0
Total Number of Smart Meters installed or planned to be installed		0	0	0	1907	37	12	14	1970
1 Capital Costs									
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)									
Asset Type									
Asset type must be selected to enable calculations									
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
		0	0	0	217,493	14,803	1,754	2,141	\$ 236,191
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter				33,904	2,640			\$ 36,544
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)		\$ -	\$ -	\$ -	\$ 251,397	\$ 17,443	\$ 1,754	\$ 2,141	\$ 272,735
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
Asset Type									
1.2.1 Collectors	Smart Meter	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
					6,889	0	1,883		\$ 8,772
1.2.2 Repeaters (may include radio licence, etc.)									\$ -
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Tools & Equipment				2,542	1,663			\$ 4,205
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)		\$ -	\$ -	\$ -	\$ 9,430	\$ 1,663	\$ 1,883	\$ -	\$ 12,977

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

1.3.1 Computer Hardware

1.3.2 Computer Software

1.3.3 Computer Software Licences & Installation (includes hardware and software)
(may include AS/400 disk space, backup and recovery computer, UPS, etc.)

Total Advanced Metering Control Computer (AMCC)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
								\$	-
								\$	-
								\$	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-

1.4 WIDE AREA NETWORK (WAN)

1.4.1 Activation Fees

Total Wide Area Network (WAN)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
								\$	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-

1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY

1.5.1 Customer Equipment (including repair of damaged equipment)

1.5.2 AMI Interface to CIS

1.5.3 Professional Fees

1.5.4 Integration

1.5.5 Program Management

1.5.6 Other AMI Capital

Total Other AMI Capital Costs Related to Minimum Functionality

Total Capital Costs Related to Minimum Functionality

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
								\$	-
								\$	-
								\$	-
Smart Meter				28,705				\$	28,705
								\$	-
								\$	-
	\$ -	\$ -	\$ -	28,705	\$ -	\$ -	\$ -	\$	28,705
	\$ -	\$ -	\$ -	289,532	\$ 19,106	\$ 3,638	\$ 2,141	\$	314,417

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

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

1.6.2 Costs for deployment of smart meters to customers other than residential and small general service

1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

Total Capital Costs Beyond Minimum Functionality

Total Smart Meter Capital Costs

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
Computer Software								\$	-
Applications Software								\$	-
								\$	-
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-
	\$ -	\$ -	\$ -	289,532	\$ 19,106	\$ 3,638	\$ 2,141	\$	314,417

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

2.1.1 Maintenance (may include meter reverification costs, etc.)

Total Incremental AMCD OM&A Costs

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

2.2.1 Maintenance

Total Incremental AMRC OM&A Costs

2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

2.3.1 Hardware Maintenance *(may include server support, etc.)*

2.3.2 Software Maintenance *(may include maintenance support, etc.)*

Total Incremental AMCC OM&A Costs

2.4 WIDE AREA NETWORK (WAN)

2.4.1 WAN Maintenance

Total Incremental AMRC OM&A Costs

2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.5.1 Business Process Redesign

2.5.2 Customer Communication (may include project communication, etc.)

2.5.3 Program Management

2.5.4 Change Management (may include training, etc.)

2.5.5 Administration Costs

(please specify)

Total Other AMI OM&A Costs Related to Minimum Functionality

TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

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

2.6.2 Costs for deployment of smart meters to customers other than residential and small general service

2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

[illegible]

3 Aggregate Smart Meter Costs by Category

[illegible]



Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization			0.0%	0.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	56.7%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%
Preferred Shares							
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters							
Deemed Short-term Debt Rate			0.00%	0.00%	2.07%	2.07%	2.07%
Long-term Debt Rate (actual/embedded/deemed) ²	6.25%	6.25%	6.25%	6.25%	5.87%	5.87%	5.87%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	9.00%	9.85%	9.85%	9.85%
Return on Preferred Shares							
WACC	7.63%	7.63%	7.53%	7.44%	7.31%	7.31%	7.31%
Working Capital Allowance							
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
<i>(% of the sum of Cost of Power + controllable expenses)</i>							
Taxes/PILs							
Aggregate Corporate Income Tax Rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%
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	2	2	2	2	2	2	2
- rate (%)	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
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	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

CCA Rates

Smart Meters - CCA Class	1	47	47	47	47	47	47
Smart Meters - CCA Rate	4%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	45	50	50	52	52	50	50
Computer Equipment - CCA Rate	45%	55%	55%	100%	100%	55%	55%
General Equipment - CCA Class	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class	12	12	12	12	12	12	12
Applications Software - CCA Rate	100%	100%	100%	100%	100%	100%	100%

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.



	2006	2007	2008	2009	2010	2011
Net Fixed Assets - Smart Meters						
Gross Book Value						
Opening Balance		\$ -	\$ -	\$ -	\$ 286,991	\$ 304,434
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 286,991	\$ 17,443	\$ 3,638
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ 286,991	\$ 304,434	\$ 308,071
Accumulated Depreciation						
Opening Balance		\$ -	\$ -	\$ -	-\$ 9,566	-\$ 29,280
Amortization expense during year	\$ -	\$ -	\$ -	-\$ 9,566	-\$ 19,714	-\$ 20,417
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	-\$ 9,566	-\$ 29,280	-\$ 49,697
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 277,424	\$ 275,153
Closing Balance	\$ -	\$ -	\$ -	\$ 277,424	\$ 275,153	\$ 258,374
Average Net Book Value	\$ -	\$ -	\$ -	\$ 138,712	\$ 276,289	\$ 266,764
Net Fixed Assets - Computer Hardware						
Gross Book Value						
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Fixed Assets - Computer Software (including Applications Software)						
Gross Book Value						
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Net Fixed Assets - Tools and Equipment

Gross Book Value						
Opening Balance		\$ -	\$ -	\$ -	\$ 2,542	\$ 4,205
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 2,542	\$ 1,663	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ 2,542	\$ 4,205	\$ 4,205
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ -	-\$ 127	-\$ 464
Amortization expense during year	\$ -	\$ -	\$ -	-\$ 127	-\$ 337	-\$ 420
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	-\$ 127	-\$ 464	-\$ 885
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,415	\$ 3,740
Closing Balance	\$ -	\$ -	\$ -	\$ 2,415	\$ 3,740	\$ 3,320
Average Net Book Value	\$ -	\$ -	\$ -	\$ 1,207	\$ 3,077	\$ 3,530

Net Fixed Assets - Other Equipment

Gross Book Value						
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)						
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Book Value						
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



2012 and later

\$	308,071
\$	2,141
\$	310,212

-\$	49,697
-\$	20,609
-\$	70,307

\$	258,374
\$	239,905
\$	249,140

\$	-
\$	-
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\$	-
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\$	-
\$	-
\$	-

\$	4,205
\$	-
\$	4,205

\$	885
\$	420
\$	1,305

\$	3,320
\$	2,899
\$	3,110

\$	-
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\$	-

\$	-
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\$	-



Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 138,712	\$ 276,289	\$ 266,764	\$ 249,140
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ 1,207	\$ 3,077	\$ 3,530	\$ 3,110
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 139,919	\$ 279,366	\$ 270,294	\$ 252,249
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ -	\$ 139,919	\$ 279,366	\$ 270,294	\$ 252,249
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 11,175	\$ 10,812	\$ 10,090
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ 79,334	\$ 156,445	\$ 151,364	\$ 141,260
Equity	\$ -	\$ -	\$ -	\$ 60,585	\$ 111,746	\$ 108,117	\$ 100,900
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ -	\$ 139,919	\$ 279,366	\$ 270,294	\$ 252,249
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 231	\$ 224	\$ 209
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ 4,958	\$ 9,183	\$ 8,885	\$ 8,292
Equity	\$ -	\$ -	\$ -	\$ 5,453	\$ 11,007	\$ 10,650	\$ 9,939
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ -	\$ 10,411	\$ 20,422	\$ 19,758	\$ 18,439
Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 9,566	\$ 19,714	\$ 20,417	\$ 20,609
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ 127	\$ 337	\$ 420	\$ 420
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ 9,693	\$ 20,051	\$ 20,837	\$ 21,030
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ -	\$ -	\$ 20,104	\$ 40,473	\$ 40,596	\$ 39,469
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization Expense	\$ -	\$ -	\$ -	\$ 9,693	\$ 20,051	\$ 20,837	\$ 21,030
Interest Expense	\$ -	\$ -	\$ -	\$ 4,958	\$ 9,415	\$ 9,109	\$ 8,501
Net Income for Taxes/PILs	\$ -	\$ -	\$ -	\$ 5,453	\$ 11,007	\$ 10,650	\$ 9,939
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ -	\$ -	\$ 1,303.93	\$ 1,675.09	\$ 1,661.67	\$ 1,867.96
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ -	\$ -	\$ 21,408	\$ 42,148	\$ 42,257	\$ 41,337



Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

For PILs Calculation

UCC - Smart Meters

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 275,510.95	\$ 270,215.55	\$ 252,090.39
Capital Additions	\$ -	\$ -	\$ -	\$ 286,990.57	\$ 17,443.21	\$ 3,637.59	\$ 2,140.79
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 286,990.57	\$ 292,954.15	\$ 273,853.14	\$ 254,231.19
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 143,495.28	\$ 8,721.60	\$ 1,818.80	\$ 1,070.40
Reduced UCC	\$ -	\$ -	\$ -	\$ 143,495.28	\$ 284,232.55	\$ 272,034.35	\$ 253,160.79
CCA Rate Class	1	47	47	47	47	47	47
CCA Rate	4%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ 11,479.62	\$ 22,738.60	\$ 21,762.75	\$ 20,252.86
Closing UCC	\$ -	\$ -	\$ -	\$ 275,510.95	\$ 270,215.55	\$ 252,090.39	\$ 233,978.32

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	45	50	50	52	52	50	50
CCA Rate	45%	55%	55%	100%	100%	55%	55%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

UCC - General Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 2,287.48	\$ 3,326.75	\$ 2,661.40
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ 2,541.64	\$ 1,663.08	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 2,541.64	\$ 3,950.56	\$ 3,326.75	\$ 2,661.40
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 1,270.82	\$ 831.54	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 1,270.82	\$ 3,119.02	\$ 3,326.75	\$ 2,661.40
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ 254.16	\$ 623.80	\$ 665.35	\$ 532.28
Closing UCC	\$ -	\$ -	\$ -	\$ 2,287.48	\$ 3,326.75	\$ 2,661.40	\$ 2,129.12





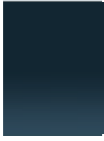
Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

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	\$ -	\$ -	\$ -	\$ 5,452.66	\$ 11,007.03	\$ 10,649.57	\$ 9,938.62
Amortization	\$ -	\$ -	\$ -	\$ 9,693.43	\$ 20,051.46	\$ 20,837.31	\$ 21,029.92
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ 11,479.62	\$ 22,738.60	\$ 21,762.75	\$ 20,252.86
CCA - Computers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ 254.16	\$ 623.80	\$ 665.35	\$ 532.28
Change in taxable income	\$ -	\$ -	\$ -	\$ 3,412.31	\$ 7,696.08	\$ 9,058.79	\$ 10,183.40
Tax Rate (from Sheet 3)	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%
Income Taxes Payable	\$ -	\$ -	\$ -	\$ 563.03	\$ 1,231.37	\$ 1,404.11	\$ 1,578.43
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ 277,424.22	\$ 275,153.28	\$ 258,374.03	\$ 239,905.37
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(Including Application Software)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ 2,414.56	\$ 3,740.32	\$ 3,319.85	\$ 2,899.38
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ 279,838.78	\$ 278,893.60	\$ 261,693.88	\$ 242,804.75
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ 279,838.78	\$ 278,893.60	\$ 261,693.88	\$ 242,804.75
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)	\$ -	\$ -	\$ -	\$ 629.64	\$ 209.17	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ 563.03	\$ 1,231.37	\$ 1,404.11	\$ 1,578.43
Change in OCT	\$ -	\$ -	\$ -	\$ 629.64	\$ 209.17	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ 1,192.67	\$ 1,440.54	\$ 1,404.11	\$ 1,578.43
Gross Up PILs							
Tax Rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ 674.29	\$ 1,465.92	\$ 1,661.67	\$ 1,867.96
Change in OCT	\$ -	\$ -	\$ -	\$ 629.64	\$ 209.17	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ 1,303.93	\$ 1,675.09	\$ 1,661.67	\$ 1,867.96





Ontario Energy Board

Smart Meter Model



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
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%	\$ -	\$ -	
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ -		4.14%	\$ -	\$ -	
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ -	\$ 226.56	4.59%	\$ -	\$ 226.56	
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 226.56	\$ 500.76	4.59%	\$ 0.87	\$ 728.19	
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 727.32	\$ 455.97	4.59%	\$ 2.78	\$ 1,186.07	
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 1,183.29	\$ 505.02	4.59%	\$ 4.53	\$ 1,692.84	
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 1,688.31	\$ 468.36	4.59%	\$ 6.46	\$ 2,163.13	
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 2,156.67	\$ 502.52	4.59%	\$ 8.25	\$ 2,667.44	\$ 2,682.08
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 2,659.19	\$ 722.24	4.59%	\$ 10.17	\$ 3,391.60	
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 3,381.43	\$ 283.21	4.59%	\$ 12.93	\$ 3,677.57	
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 3,664.64	\$ 466.05	4.59%	\$ 14.02	\$ 4,144.71	
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 4,130.69	\$ 506.86	4.59%	\$ 15.80	\$ 4,653.35	
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 4,637.55	\$ 475.79	4.59%	\$ 17.74	\$ 5,131.08	
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 5,113.34	\$ 525.13	4.59%	\$ 19.56	\$ 5,658.03	
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 5,638.47	\$ 476.77	4.59%	\$ 21.57	\$ 6,136.81	
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 6,115.24	\$ 504.31	4.59%	\$ 23.39	\$ 6,642.94	
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 6,619.55	\$ 474.37	4.59%	\$ 25.32	\$ 7,119.24	
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 7,093.92	\$ 513.57	5.14%	\$ 30.39	\$ 7,637.88	
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 7,607.49	\$ 475.14	5.14%	\$ 32.59	\$ 8,115.22	
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 8,082.63	\$ 529.00	5.14%	\$ 34.62	\$ 8,646.25	\$ 6,210.54
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 8,611.63	\$ 763.61	5.14%	\$ 36.89	\$ 9,412.13	
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	\$ 9,375.24	\$ 246.52	5.14%	\$ 40.16	\$ 9,661.92	
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 9,621.76	\$ 483.84	5.14%	\$ 41.21	\$ 10,146.81	
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 10,105.60	\$ 525.62	4.08%	\$ 34.36	\$ 10,665.58	
			May-08	2008	Q2	\$ 10,631.22	\$ 482.13	4.08%	\$ 36.15	\$ 11,149.50	
			Jun-08	2008	Q2	\$ 11,113.35	\$ 538.27	4.08%	\$ 37.79	\$ 11,689.41	
			Jul-08	2008	Q3	\$ 11,651.62	\$ 524.41	3.35%	\$ 32.53	\$ 12,208.56	
			Aug-08	2008	Q3	\$ 12,176.03	\$ 522.48	3.35%	\$ 33.99	\$ 12,732.50	
			Sep-08	2008	Q3	\$ 12,698.51	\$ 487.06	3.35%	\$ 35.45	\$ 13,221.02	
			Oct-08	2008	Q4	\$ 13,185.57	\$ 528.83	3.35%	\$ 36.81	\$ 13,751.21	
			Nov-08	2008	Q4	\$ 13,714.40	\$ 493.75	3.35%	\$ 38.29	\$ 14,246.44	
			Dec-08	2008	Q4	\$ 14,208.15	\$ 537.59	3.35%	\$ 39.66	\$ 14,785.40	\$ 6,577.40
			Jan-09	2009	Q1	\$ 14,745.74	\$ 496.65	2.45%	\$ 30.11	\$ 15,272.50	
			Feb-09	2009	Q1	\$ 15,242.39	\$ 542.53	2.45%	\$ 31.12	\$ 15,816.04	
			Mar-09	2009	Q1	\$ 15,784.92	\$ 499.50	2.45%	\$ 32.23	\$ 16,316.65	
			Apr-09	2009	Q2	\$ 16,284.42	\$ 547.71	1.00%	\$ 13.57	\$ 16,845.70	
			May-09	2009	Q2	\$ 16,832.13	\$ 501.35	1.00%	\$ 14.03	\$ 17,347.51	
			Jun-09	2009	Q2	\$ 17,333.48	\$ 1,323.28	1.00%	\$ 14.44	\$ 18,671.20	
			Jul-09	2009	Q3	\$ 18,656.76	\$ 1,820.15	0.55%	\$ 8.55	\$ 20,485.46	
			Aug-09	2009	Q3	\$ 20,476.91	\$ 2,010.23	0.55%	\$ 9.39	\$ 22,496.53	
			Sep-09	2009	Q3	\$ 22,487.14	\$ 1,831.63	0.55%	\$ 10.31	\$ 24,329.08	
			Oct-09	2009	Q4	\$ 24,318.77	\$ 2,013.82	0.55%	\$ 11.15	\$ 26,343.74	
			Nov-09	2009	Q4	\$ 26,332.59	\$ 1,842.93	0.55%	\$ 12.07	\$ 28,187.59	
			Dec-09	2009	Q4	\$ 28,175.52	\$ 2,023.66	0.55%	\$ 12.91	\$ 30,212.09	\$ 15,653.32
			Jan-10	2010	Q1	\$ 30,199.18	\$ 1,841.46	0.55%	\$ 13.84	\$ 32,054.48	
			Feb-10	2010	Q1	\$ 32,040.64	\$ 2,006.59	0.55%	\$ 14.69	\$ 34,061.92	
			Mar-10	2010	Q1	\$ 34,047.23	\$ 1,868.70	0.55%	\$ 15.60	\$ 35,931.53	
			Apr-10	2010	Q2	\$ 35,915.93	\$ 2,010.46	0.55%	\$ 16.46	\$ 37,942.85	
			May-10	2010	Q2	\$ 37,926.39	\$ 1,857.51	0.55%	\$ 17.38	\$ 39,801.28	
			Jun-10	2010	Q2	\$ 39,783.90	\$ 2,380.42	0.55%	\$ 18.23	\$ 42,182.55	
			Jul-10	2010	Q3	\$ 42,164.32	\$ 2,445.67	0.89%	\$ 31.27	\$ 44,641.26	
			Aug-10	2010	Q3	\$ 44,609.99	\$ 2,712.40	0.89%	\$ 33.09	\$ 47,355.48	
			Sep-10	2010	Q3	\$ 47,322.39	\$ 2,473.82	0.89%	\$ 35.10	\$ 49,831.31	
			Oct-10	2010	Q4	\$ 49,796.21	\$ 2,673.85	1.20%	\$ 49.80	\$ 52,519.86	
			Nov-10	2010	Q4	\$ 52,470.06	\$ 2,483.62	1.20%	\$ 52.47	\$ 55,006.15	
			Dec-10	2010	Q4	\$ 54,953.68	\$ 2,673.25	1.20%	\$ 54.95	\$ 57,681.88	\$ 27,780.63
			Jan-11	2011	Q1	\$ 57,626.93	\$ 3,701.26	1.47%	\$ 70.59	\$ 61,398.78	
			Feb-11	2011	Q1	\$ 61,328.19	\$ 2,581.79	1.47%	\$ 75.13	\$ 63,985.11	
			Mar-11	2011	Q1	\$ 63,909.98	\$ 2,587.95	1.47%	\$ 78.29	\$ 66,576.22	
			Apr-11	2011	Q2	\$ 66,497.93	\$ 2,587.47	1.47%	\$ 81.46	\$ 69,166.86	
			May-11	2011	Q2	\$ 69,085.40	\$ 2,580.69	1.47%	\$ 84.63	\$ 71,750.72	
			Jun-11	2011	Q2	\$ 71,666.09	\$ 2,592.32	1.47%	\$ 87.79	\$ 74,346.20	
			Jul-11	2011	Q3	\$ 74,258.41	\$ 2,590.42	1.47%	\$ 90.97	\$ 76,939.80	
			Aug-11	2011	Q3	\$ 76,848.83	\$ 2,585.95	1.47%	\$ 94.14	\$ 79,528.92	
			Sep-11	2011	Q3	\$ 79,434.78	\$ 2,613.45	1.47%	\$ 97.31	\$ 82,145.54	





Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest		Closing Balance	Annual amounts
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest		
			Oct-11	2011	Q4	\$ 82,048.23	\$ 2,594.05	1.47%	\$ 100.51	\$ 84,742.79	
			Nov-11	2011	Q4	\$ 84,642.28	\$ 2,594.15	1.47%	\$ 103.69	\$ 87,340.12	
			Dec-11	2011	Q4	\$ 87,236.43	\$ 2,580.72	1.47%	\$ 106.86	\$ 89,924.01	\$ 33,261.59
			Jan-12	2012	Q1	\$ 89,817.15	\$ 2,600.00	1.47%	\$ 110.03	\$ 92,527.18	
			Feb-12	2012	Q1	\$ 92,417.15	\$ 2,600.00	1.47%	\$ 113.21	\$ 95,130.36	
			Mar-12	2012	Q1	\$ 95,017.15	\$ 2,600.00	1.47%	\$ 116.40	\$ 97,733.55	
			Apr-12	2012	Q2	\$ 97,617.15	\$ 2,600.00	1.47%	\$ 119.58	\$ 100,336.73	
			May-12	2012	Q2	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Jun-12	2012	Q2	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Jul-12	2012	Q3	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Aug-12	2012	Q3	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Sep-12	2012	Q3	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Oct-12	2012	Q4	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Nov-12	2012	Q4	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	
			Dec-12	2012	Q4	\$ 100,217.15		0.00%	\$ -	\$ 100,217.15	\$ 10,859.22
Total Funding Adder Revenues Collected							\$ 100,217.15		\$ 2,807.63	\$ 103,024.78	\$ 103,024.78



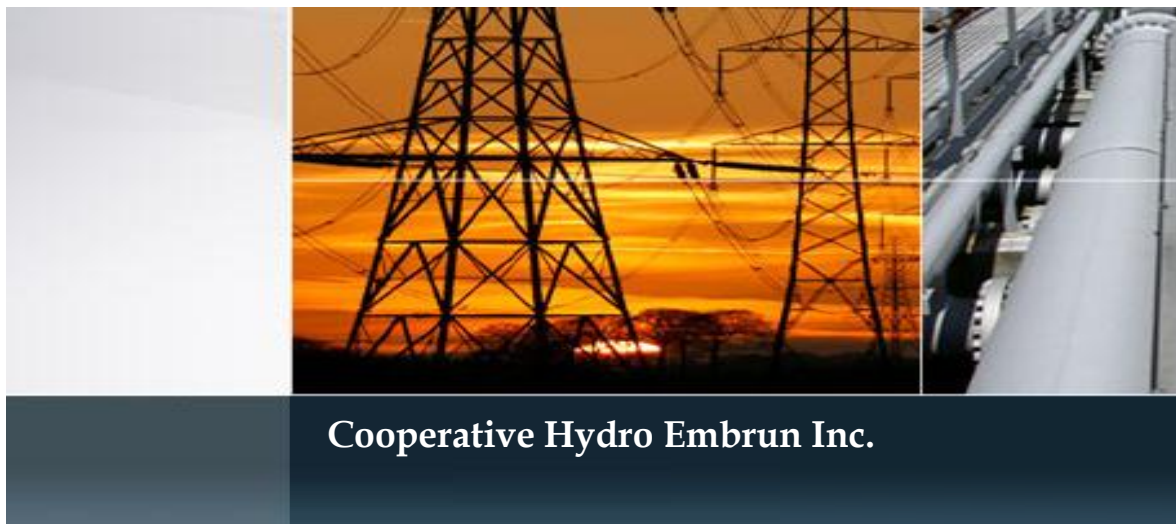
**Board Approved
Smart Meter Funding
Adder (from Tariff)**

[illegible]



**Board Approved
Smart Meter Funding
Adder (from Tariff)**

[illegible]



This worksheet calculates the interest on OM&A and amortization/depr

Account 1556 - Su

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)
2006 Q1	0.00%	0.00%	Jan-06	2006	Q1	\$ -
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	-
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	-
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	-
2007 Q1	4.59%	4.72%	May-06	2006	Q2	-
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	-
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	-
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	-
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	-
2010 Q1	0.55%	4.34%	May-07	2007	Q2	-
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	-
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	-
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	-
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	-
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	-
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	-

2011 Q4	1.47%	4.29%		Dec-07	2007	Q4	-
2012 Q1	1.47%	4.29%		Jan-08	2008	Q1	-
2012 Q2	0.00%	4.29%		Feb-08	2008	Q1	-
2012 Q3	0.00%	4.29%		Mar-08	2008	Q1	-
2012 Q4	0.00%	4.29%		Apr-08	2008	Q2	-
				May-08	2008	Q2	-
				Jun-08	2008	Q2	-
				Jul-08	2008	Q3	-
				Aug-08	2008	Q3	-
				Sep-08	2008	Q3	-
				Oct-08	2008	Q4	-
				Nov-08	2008	Q4	-
				Dec-08	2008	Q4	-
				Jan-09	2009	Q1	-
				Feb-09	2009	Q1	807.79
				Mar-09	2009	Q1	1,615.57
				Apr-09	2009	Q2	2,423.36
				May-09	2009	Q2	3,231.14
				Jun-09	2009	Q2	4,038.93
				Jul-09	2009	Q3	4,846.72
				Aug-09	2009	Q3	5,654.50
				Sep-09	2009	Q3	6,462.29
				Oct-09	2009	Q4	7,270.08
				Nov-09	2009	Q4	8,077.86
				Dec-09	2009	Q4	8,885.65
				Jan-10	2010	Q1	9,693.43
				Feb-10	2010	Q1	11,364.39
				Mar-10	2010	Q1	13,035.34
				Apr-10	2010	Q2	14,706.30
				May-10	2010	Q2	16,377.26
				Jun-10	2010	Q2	18,048.21
				Jul-10	2010	Q3	19,719.17
				Aug-10	2010	Q3	21,390.12
				Sep-10	2010	Q3	23,061.08
				Oct-10	2010	Q4	24,732.03
				Nov-10	2010	Q4	26,402.99
				Dec-10	2010	Q4	28,073.94
				Jan-11	2011	Q1	29,744.90
				Feb-11	2011	Q1	31,481.34
				Mar-11	2011	Q1	33,217.78
				Apr-11	2011	Q2	34,954.22
				May-11	2011	Q2	36,690.67
				Jun-11	2011	Q2	38,427.11
				Jul-11	2011	Q3	40,163.55
				Aug-11	2011	Q3	41,899.99
				Sep-11	2011	Q3	43,636.44
				Oct-11	2011	Q4	45,372.88
				Nov-11	2011	Q4	47,109.32
				Dec-11	2011	Q4	48,845.76

	Jan-12	2012	Q1	50,582.21
	Feb-12	2012	Q1	50,582.21
	Mar-12	2012	Q1	50,582.21
	Apr-12	2012	Q2	50,582.21
	May-12	2012	Q2	50,582.21
	Jun-12	2012	Q2	50,582.21
	Jul-12	2012	Q3	50,582.21
	Aug-12	2012	Q3	50,582.21
	Sep-12	2012	Q3	50,582.21
	Oct-12	2012	Q4	50,582.21
	Nov-12	2012	Q4	50,582.21
	Dec-12	2012	Q4	50,582.21



preciation expense, based on monthly data.

b-accounts Operating Expenses, Amortization Expenses, Carrying Charges

OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
		-	0.00%	-	-
		-	0.00%	-	-
		-	0.00%	-	-
		-	4.14%	-	-
		-	4.14%	-	-
		-	4.14%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	4.59%	-	-
		-	5.14%	-	-
		-	5.14%	-	-

50,582.21	1.47%	61.96	836.46
50,582.21	1.47%	61.96	898.42
50,582.21	1.47%	61.96	960.39
50,582.21	1.47%	61.96	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35
50,582.21	0.00%	-	1,022.35

\$

-

\$

50,582.21

\$

50,582.21



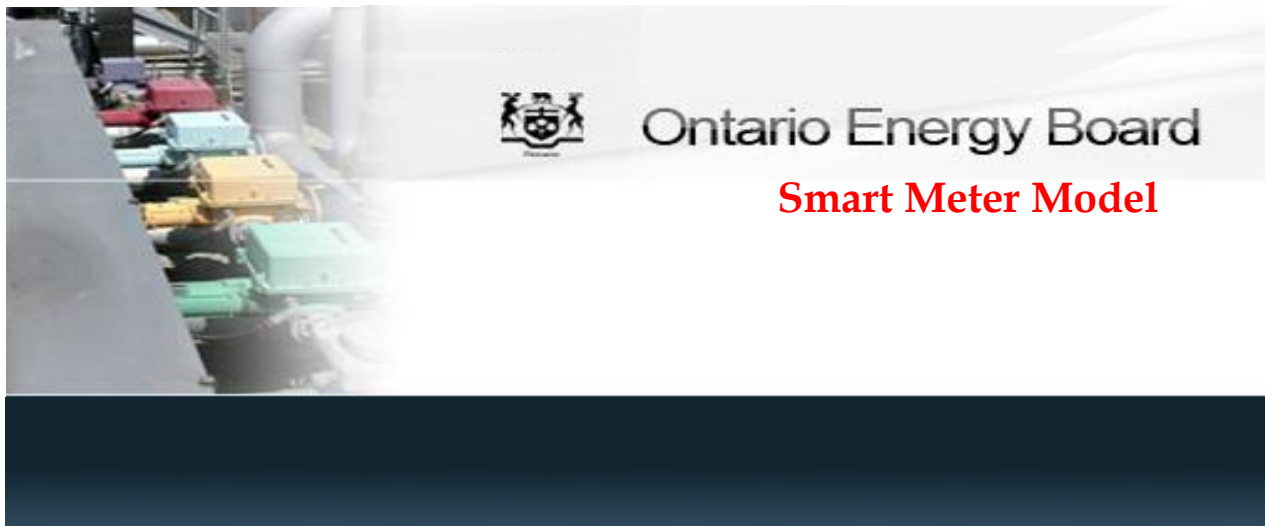


This worksheet calculates the interest on OM&A and amortization/depreciation expen

Year	OM&A (from Sheet 5)	Amortization Expense (from Sheet 5)	Cumulative OM&A and Amortization Expense
2006	\$ -	\$ -	\$ -
2007	\$ -	\$ -	\$ -
2008	\$ -	\$ -	\$ -
2009	\$ -	\$ 9,693.43	\$ 9,693.43
2010	\$ -	\$ 20,051.46	\$ 29,744.90
2011	\$ -	\$ 20,837.31	\$ 50,582.21
2012	\$ -	\$ 21,029.92	\$ 71,612.13

Cumulative Interest to 2011

Cumulative Interest to 2012



use, in the absence of monthly data.

Average Cumulative OM&A and Amortization Expense	Average Annual Prescribed Interest Rate for Deferral and Variance Accounts (from Sheets 8A and 8B)	Simple Interest on OM&A and Amortization Expenses
\$ -	4.37%	\$ -
\$ -	4.73%	\$ -
\$ -	3.98%	\$ -
\$ 4,846.72	1.14%	\$ 55.13
\$ 19,719.17	0.80%	\$ 157.26
\$ 40,163.55	1.47%	\$ 590.40
\$ 61,097.17	1.47%	\$ 898.13
		\$ 802.80
		\$ 1,700.92





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)	\$ -	\$ -	\$ -	\$ 21,408.41	\$ 42,148.22	\$ 42,257.45	\$ 41,337.31	\$ 147,151.40
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ -	\$ -	\$ 55.13	\$ 157.26	\$ 590.40		\$ 802.80
<input type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)								\$ -
<input checked="" type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)	\$ -	\$ -	\$ -	\$ 55.13	\$ 157.26	\$ 590.40		\$ 802.80
SMFA Revenues (from Sheet 8)	\$ 2,659.19	\$ 5,952.44	\$ 6,134.11	\$ 15,453.44	\$ 27,427.75	\$ 32,190.22	\$ 10,400.00	\$ 100,217.15
SMFA Interest (from Sheet 8)	\$ 22.89	\$ 258.10	\$ 443.29	\$ 199.88	\$ 352.88	\$ 1,071.37	\$ 459.22	\$ 2,807.63
Net Deferred Revenue Requirement	-\$ 2,682.08	-\$ 6,210.54	-\$ 6,577.40	\$ 5,810.22	\$ 14,524.85	\$ 9,586.27	\$ 30,478.09	\$ 44,929.41
Number of Metered Customers (average for 2012 test year)							1958	

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	\$ 106,616.88	
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 103,024.78	
Net Deferred Revenue Requirement	\$ 3,592.10	} Match
SMDR May 1, 2012 to April 30, 2013	\$ 0.15	
Check: Forecasted SMDR Revenues	\$ 3,524.40	

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

Incremental Revenue Requirement for 2012	\$ 41,337.31	} Match
SMIRR	\$ 1.76	

Check: Forecasted SMIRR Revenues

\$ 41,352.96



Cooperative Hydro Embrun Inc.

	2009	2010	2011		Total 2009 to 2011	Explanation Allocator	ID and Factors	Total	Residential	General Service Less than 50 kW
Revenue Requirement for the Historical Years	\$21,463.54	\$42,305.48	\$42,847.86		\$106,616.88					
Total Return on Capital	\$10,411.05	\$20,421.67	\$19,758.47		\$50,591.19	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
					Allocated per Class			\$50,591.19	\$38,089.94	\$9,981.93
Amortization	\$9,748.57	\$20,208.72	\$21,427.71		\$51,385.00	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
					Allocated per Class			\$51,385.00	\$38,687.60	\$10,138.56
Operating Expenses	\$0.00	\$0.00	\$0.00		\$0.00	Number of Smart Meters Installed for each Class		1,970	1,796	162
					Allocated per Class			\$0.00	\$0.00	\$0.00
Grossed-up Taxes/PILs	\$1,303.93	\$1,675.09	\$1,661.67		\$4,640.69	Revenue Requirement allocated to each Class before PILs		\$101,976.20	\$76,777.54	\$20,120.49
					Allocated per Class			\$4,640.69	\$3,493.96	\$915.63
								Total	Residential	General Service Less than 50 kW
TOTAL REVENUE REQUIREMENT					\$106,616.88			\$106,616.88	\$80,271.50	\$21,036.13
					Percentage of costs allocated to Residential and GS < 50 kW customer classes			100.00%	75.29%	19.73%
Revenue Generated from Smart Meter Funding Adder					\$103,024.78					
Revenues Generated from SMFA					\$103,024.78				\$ 93,925.13	\$ 8,472.09
Net Deferred Revenue Requirement					\$3,592.10					
					Allocated per Class			\$3,592.10	-\$13,653.63	\$12,564.04
					Number of Metered Customers	(2012)			1,796	162
					Smart Meter Disposition Rate Rider				-\$0.63	\$6.46

Smart Meter Funding Adder Revenues
Year

Residential
GS < 50 kW
Other Metered
Customer Classes

Estimated SMFA Revenues
Residential
GS < 50 kW
Other Metered
Customer Classes
Total

2006 (May 1, 2006)		1,796	162	12	\$	2,445.19	\$	220.56	\$	16.34	\$	2,682.08
	2007	1,796	162	12	\$	5,661.99	\$	510.71	\$	37.83	\$	6,210.54
	2008	1,796	162	12	\$	5,996.45	\$	540.88	\$	40.07	\$	6,577.40
	2009	1,796	162	12	\$	14,270.74	\$	1,287.23	\$	95.35	\$	15,653.32
	2010	1,796	162	12	\$	25,326.91	\$	2,284.50	\$	169.22	\$	27,780.63
	2011	1,796	162	12	\$	30,323.76	\$	2,735.22	\$	202.61	\$	33,261.59
2012 (to March 30, 2012)		1,796	162	12	\$	9,900.08	\$	892.99	\$	66.15	\$	10,859.22
					\$	93,925.13	\$	8,472.09	\$	627.56	\$	103,024.78

Rate Class	SMDR One Year Recovery	SMIRR
Residential	(\$0.63)	\$1.44
General Service Less than 50 kW	\$6.46	\$4.20
General Service Greater than 50 kW	\$32.51	\$14.30