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

May 31, 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 our response to Board staff interrogatories in respect to the application and evidence (the "Application") submitted 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,

Benoit Lamarche
General Manager

Cooperative Hydro Embrun Inc.

Smart Meter Prudence Review

Response to Interrogatories

EB-2012-0094

Rates Effective: May 1, 2012

Date Filed: May 31, 2012

Cooperative Hydro Embrun Inc.

821 Notre-dame Street

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Coopérative Hydro Embrun Inc.

File Number: EB-2012-0094

Date Filed: May 31, 2012

Tab 1 of 2

Response to IR's

Coopérative Hydro Embrun Inc.

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Response to Board Staff IR's

General

1. Responses to Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received no letters of comment. Please confirm whether CHEI has received any letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from CHEI to the author of the letter. If confirmed, please file that reply with the Board. Please ensure that the author's contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and confirm if CHEI intends to respond.

CHEI Response:

CHEI confirms that it has not received any letters of comment with respect to this application.

Application

2. Ref: Application/Exhibit 1/Tab 1/Schedule 2/page 2 – Metered Customers

On page 2 of its application, CHEI states that it is applying for a one year Smart Meter Disposition Rate Rider of $0.14 per metered customer per month effective May 1, 2012 to April 30, 2013, and a Smart Meter Incremental Revenue Requirement Rate Rider of $1.69 per month effective May 1, 2012 until CHEI's next CoS rebasing application. Please confirm that the metered customers include only the Residential and GS < 50 KW rate classes. In the alternative, please explain.

CHEI Response:

CHEI included all metered customers in the original application. However CHEI as a result of these interrogatories has changed its original request to allocate the recovery from the affected rate classes. See responses below.

3. Ref: Application/Exhibit 1/Tab 1/Schedule 6/page 4 – Stranded Meter Costs

On page 4 of its application, CHEI states that it is planning to file a cost of service application for 2014 rates. CHEI states that stranded meter costs will be addressed in that application.

a) Please confirm that CHEI is continuing to record depreciation expenses related to stranded conventional meters. In the alternative, please explain.

CHEI Response:

CHEI confirms that it is continuing to record depreciation expenses related to stranded conventional meters.

b) Please provide CHEI's estimate of the net book value of the stranded meters as of December 31, 2013, and its derivation based on the Gross Book Value of stranded conventional meters, accumulated depreciation as of December 31, 2013, and any net salvage proceeds upon the disposal of stranded conventional meters, as discussed on page 9 of *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*, (the "Guideline") issued December 15, 2011.

CHEI Response:

1860 - Meters	
Gross Book Value - Dec 31, 2011	$79,071.94
Accumulated Depreciation - Dec 31, 2011	-$32,985.08
Net Book Value - Dec 31, 2011	$46,086.86
Depreciation - 2012	-$ 3,162.88
Depreciation - 2013	-$ 3,162.88
Estimated Net Book Value - Dec 31, 2013	$39,761.10
Estimated Salvage Value	Nil

4. Ref: Guideline G-2011-0001, page 19

On page 19 of the Guideline, the Board states:

> In considering the recovery of smart meter costs, the Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation.

Board staff notes that CHEI has not provided any discussion of operational efficiencies and cost savings that have been achieved to date. In many smart meter cost recovery applications currently before the Board, the distributor has noted meter reading savings as a result of the smart meter deployment.

Please provide support for operational efficiencies that CHEI has not realized operational efficiencies so far. Please explain if CHEI expects to realize operational efficiencies and cost savings in the future. If so, please provide CHEI's estimates as to the nature and timing of these.

CHEI Response:

CHEI confirms that there are net operational efficiencies realized from meter reading cost of approximately $5,220 which help to offset the incremental costs incurred from smart meter implementation. CHEI notes that it has elected to waive claim for recovery of operation costs in this application.

Cost Saving Smart Meter		2009		2010
		READING COST		READING COST
CONVENTIONAL METER		$ 10,320.00		
SMART METER PHONE LINE				$ 2,900.00
COLLECTOR MAINTENANCE				$ 700.00
MASS COMMUNICATION				$ 1,500.00
		$ 10,320.00		$ 5,100.00
NET COST SAVING		$ 5,220.00		

5. Ref: Application, Exhibit 1/Tab 1/Schedule 6 – Collaboration with Other Utilities

On page 2 of Exhibit 1/Tab 1/Schedule 6, CHEI states:

> In 2009 CHEI joined a cost sharing contract with other electricity distributors in the region. Under this arrangement Renfrew Hydro, Hydro 2000, Cooperative Embrun, Hawkesbury Hydro and Ottawa River Power Corporation now share many operational costs.

a) Please provide further explanation of the cost-sharing contract with other electricity distributors operating in eastern Ontario. In particular, what services and operations are shared? Are these operations outsourced to third party suppliers now?

CHEI Response:

Ottawa River Power Corporation, Hydro 2000 Inc, Hydro Hawkesbury, Renfrew Hydro and Coopérative Hydro Inc. participated together in the London Hydro Advanced Meter Infrastructure process which resulted in Elster Metering being identified as one of our ranked proponents for AMI solution.

The five LDC`s are using the AMI system consisting of an AMCD, LAN, AMRC, AMCC connections between the WAN and AMCC.

The AMI is located and operated at Ottawa River Power Corporation.

b) Is this cost-sharing arrangement solely related to smart meter deployment and operations, or is it more general to the electricity distribution operations of the involved utilities?

CHEI Response:

This cost sharing arrangement solely related to smart meter deployment and operation and CIS (software and hardware).

c) Please provide further explanation and examples of how this cost-sharing arrangement has factored into the costs for which CHEI is seeking recovery in this application.

CHEI Response:

Cooperative Hydro Embrun, as a small LDC, does not have the capability to operate their own AMI system and that is why we share the costs with other utilities. Sharing the resources with five LDC's using one server and a MAS brings the cost down.

Also Cooperative Hydro Embrun Inc. has been using Ottawa River Power for our billing for a number of years and we share the resources for the implementation of TOU. To this end we will be using the AMI (Elster MAS) of ORPC for obtaining meter readings and the CIS (Harris NorthStar) at Ottawa River Power."

6. Ref: Smart Meter Model, Version 2.17 – Smart Meter Costs

On Sheet 2 of the Smart Meter Model, CHEI shows 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 installations are shown on rows 42 (1.1.1 Smart Meters) and 44 (1.1.2 Installation Costs) for 2011 and 2012 on Sheet 2.

Please explain the absence of the capital costs for procurement and installation in 2011 and 2012 for new installed smart meters.

CHEI Response:

CHEI included in its 2010 capital costs the cost of meters purchased for installation of the meters in 2011 and 2012.

7. Ref: Smart Meter Model, Version 2.17 – Cost of Capital Parameters

CHEI has input the following Cost of Capital Parameters on sheet 3 of the Smart Meter Model:

Year	2006	2007	2008	2009	2010	2011	2012 and beyond
Deemed Short-term Debt Rate			4.47%	1.33%	2.07%	2.46%	2.08%
Long-term debt rate	6.25%	6.25%	6.10%	7.62%	5.87%	5.48%	4.41%
Return on Equity (ROE)	9.00%	9.00%	8.57%	8.01%	9.85%	9.66%	9.12%
Return on Preferred Shares							

Board staff observes that these parameters appear to correspond with the deemed Cost of Capital parameters issued by the Board for rates set through cost of service applications with rates effective May 1 in each year.

The standard policy and practice is that the Board-approved cost of capital parameters from a cost of service application apply in that year and subsequently until the distributor next rebases its rates through a cost of service application.

Board staff observes:

- In its 2006 EDR application (RP-2005-0020/EB-2005-0354), CHEI was approved a deemed debt rate of 6.25% and an ROE of 9.00%; and
- CHEI rebased its rates for the 2010 rate year (EB-2009-0132), with the Board approving the following Cost of Capital parameters in its decision in that CHEI update its cost of capital in accordance with the Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, issued December 11, 2009. This meant updating for the Cost of Capital parameters issued by the Board for rates effective May 1, 2010. The Board issued a letter to all distributors on February 24, 2010 advising of the updated parameters.

a) Please explain the cost of capital parameters chosen by CHEI for each year.

CHEI Response:

See response below.

b) In the alternative, please update CHEI's Smart Meter Model, and the derived SMDRs and SMIRRs, to reflect the approved Cost of Capital parameters applicable to CHEI.

CHEI Response:

CHEI has adjusted the model with respect to the above.

8. Ref: Smart Meter Model – Taxes/PILs Rates

CHEI has input the following rates for taxes/PILs rates on sheet 3, row 40, for the years 2006, 2007, 2008, 2009, 2010, 2011 and 2012 and beyond. These are summarized in the following table:

Year	2006	2007	2008	2009	2010	2011	2012 and beyond
Aggregate Federal and provincial income tax rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%

Please confirm that these are the tax rates corresponding to the taxes or PILs actually paid by CHEI in each of the historical years, and that CHEI forecasts it will pay for 2012. In the alternative, please explain the tax rates input and their derivation.

CHEI Response:

CHEI confirms that these are the tax rates corresponding to the taxes or PILs actually paid by CHEI in each of the historical years, and that CHEI forecasts it will pay for 2012.

9. Ref: Exhibit 1/Tab 1/Schedule 6 and Smart Meter Model – OM&A Costs

Board staff observes that CHEI has input no OM&A costs related to smart meters, either for the historical period during deployment, or for 2012 as part of the ongoing expenses related to the operations of deployed smart meters. CHEI states on page 3 of Exhibit 1/Tab 1/Schedule 6:

> CHEI has not included any OM&A costs as it is assumed to be part of regular operations. In making this decision CHEI has taken into consideration the incremental cost savings as offsets to incremental costs, i.e. meter readers.

a) Please explain how CHEI has determined the incremental cost savings and how these offset incremental OM&A expenses.

CHEI Response:

Please reference Board staff IR # 4 above.

b) Please explain how CHEI has recorded operating (i.e. non-capitalized) expenses during smart meter deployment, and for ongoing operations expenses, and how these are recovered.

CHEI Response:

CHEI has fully expensed the incremental smart meter operating costs as part of its annual financial reporting and does not intend to seek regulatory recovery of these expenditures in the future.

10. Ref: Smart Meter Model – Interest on SMFA Revenues

On sheet 8 of the Smart Meter Model, CHEI has input the prescribed interest rate of 1.47% for deferral and variance accounts into cell C49 for 2012 Q2. This results in interest being calculated for all months in the quarter (i.e. April, May and June 2012). Under CHEI's proposal for a May 1, 2012 effective date and with the cessation of the SMFA as of April 30, 2012, interest should only be calculated for April 2012. This is accomplished by entering 0% in cell C49 but the 1.47% in the unlocked cell L99 for April 2012.

Please explain CHEI's proposal. In the alternative, please provide an updated model.

CHEI Response:

This is corrected in the attached models.

11. Ref: Smart Meter Model – Interest on OM&A and Depreciation Expenses

In the Smart Meter Model Version 2.17 filed by CHEI, CHEI has relied on sheet 8B to calculate the interest on OM&A and depreciation/amortization expenses (although Board staff also observes that, on Sheet 9, CHEI has selected sheet 8A in the calculation of the SMDR; as a result, no interest charges are factored into the calculation of the SMDR). Sheet 8B calculates the interest based on the average annual balance of deferred OM&A and depreciation/amortization expenses based on the annual amounts input elsewhere in the model.

The more accurate and preferred method for calculating the interest on OM&A and depreciation/amortization expense is to input the monthly amounts from the sub-account details of Account 1556, using sheet 8A of the model. This approach is analogous to the calculation of interest on SMFA revenues on sheet 8 of the model.

a) Please re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from Account 1556 records. Innisfil should also take into account any revisions necessary as a result of its responses to any preceding interrogatories.

CHEI Response:

CHEI has adjusted the model as requested and notes that the difference in calculation methodology's are not materially different.

b) If this is not possible, please explain.

See response above.

12. Ref: Exhibit 1/Tab 1/Schedule 6 – Costs Beyond Minimum Functionality

On page 3 of Exhibit 1/Tab 1/Schedule 6, CHEI states: "CHEI has not included any OM&A costs that are beyond minimum functionality." However, on page 4 of the same exhibit, CHEI states:

> Cooperative Hydro Embrun, Hydro 2000, Ottawa River Power and Renfrew Hydro are working together to implementing TOU billing and filed a joint application for an extension to January 2012. CHEI confirms that it has been billing TOU effective February 2012.

As determined by the Board in its Decision and Order EB-2007-0063, and repeated in section 3.4 of the Guideline, TOU pricing is defined as an aspect of smart meter implementation that is "beyond minimum functionality".

How has CHEI recorded any costs for TOU pricing implementation or other aspects of "beyond minimum functionality" categories (e.g. web presentment) as defined in section 3.4 of the Guideline. If CHEI has included these costs elsewhere, please update the evidence and Smart Meter Model in compliance with the Guideline.

CHEI Response:

CHEI confirms that it has not included any costs for recovery with respect to TOU pricing implementation or other aspects of "beyond minimum functionality" categories in its capital cost claims.

These costs are being absorbed by CHEI as part of its annual financial expenditures.

13. Ref: Application – Cost Allocation

In section 3.5 of the Guideline, the Board states:

> In the Board's decision with respect to PowerStream's 2011 Smart Meter Disposition Application (EB-2011-0128), the Board approved an allocation methodology based on a class-specific revenue requirement, offset by class-specific revenues. The Board noted that this approach may not be appropriate or feasible for all distributors as the necessary data may not be readily available [footnote omitted].
>
> The Board views that, where practical and where the data is available, class-specific SMDRs should be calculated based on full cost causality. The methodology approved by the Board in EB-2011-0128 should serve as a suitable guide. A uniform SMDR would be suitable only where adequate data is not available.
>
> Recognizing that SMFA revenues have been collected from all metered customers since May 1, 2006, the Board's decision in EB-2011-0128 also addressed the treatment of smart meter adder amounts collected from customer classes for which smart meter costs were not incurred, as it related to PowerStream's smart meter deployment program. The Board directed PowerStream to allocate the smart meter adder amounts collected from the GS > 50 kW and Large Use customer classes evenly to the Residential and GS < 50 kW classes when calculating the true-up for the SMDR. The Board concluded that this approach was appropriate because the amounts involved were not significant enough to warrant a more precise allocation.[footnote omitted] However, for all customer classes for which smart meter costs have been directly incurred, the SMFA revenues plus carrying costs should be directly used as an offset to the incremental revenue requirement to determine the SMDR for that class.

CHEI does not appear to have addressed the allocation of smart meter costs to the applicable classes.

a) Please provide CHEI's proposed cost allocation. If CHEI is proposing that the SMDR and SMIRR would be uniform for all applicable classes, please provide the support for this.

CHEI Response:

Please refer to response below.

b) A common approach for cost allocation is to do the following:

- OM&A expenses have been allocated on the basis of the number of meters installed for each class.
- The Return and Amortization have been allocated on the basis of the capital costs of the meters installed for each class.
- PILs have been allocated based on the revenue requirement derived for each class before PILs.
- SMFA revenues and interest on the principal first calculated directly for the Residential and GS < 50 kW classes, with then the residual SMFA revenues and interest collected from other metered customer classes (i.e., GS 50-4999 kW and Large Use) allocated 50:50 to the Residential and GS < 50 kW classes. This approach has been used and approved in some recent cost of service applications, including that for Guelph Hydro's 2012 rates application [EB-2011-0123].

Using the attached spreadsheet taken from Guelph Hydro's draft Rate Order filing, please provide calculations for class-specific SMDRs using a more direct allocation of SMFA revenues. This should also reflect any and all revisions to Smart Meter Model, Version 2.17 made as a result of CHEI's responses to interrogatories.

CHEI Response:

CHEI has appended additional worksheets mirroring the Guelph Hydro spreadsheet, as provided by Board staff, and recalculated the SMDR and SMIRR as shown below.

Rate Class	SMDR		SMIRR
	One Year Recovery		
Residential	($0.58)		$1.45
General Service Less than 50 kW	$6.63		$4.21
General Service Greater than 50 kW	$33.08		$14.33

14. Ref: Application, Sections 8.0 and 9.0 – Cost Allocation

If CHEI has made revisions to its Smart Meter Model, Version 2.17 as a result of its responses to interrogatories, please update its proposed class-specific SMDRs.

CHEI Response:

Please see response above.

Response to Intervenor IR's

VECC Question # 1

Reference: Manager's Summary, Exhibit 1, Tab 1, Schedule 5, Page 2

Preamble: CHEI indicates its implementation of TOU rates was initially scheduled for July 2011 however the Board granted a six month extension to January 2012. CHEI was able to implement TOU rates in February 2012.

a) Please discuss the need for the TOU implementation extension to January 2012.

CHEI Response:

CHEI has attached a copy of the Board staff decision (EB-2011-0258) approving CHEI and other partners leave to delay implementation of TOU

This is summarized below:

1- Customer Transition to TOU Rates

While Cooperative Hydro Embrun has been preparing its customers for the introduction of TOU rates through published information, public meeting and bills inserts, significant customer distress is expected when customers are suddenly faced with larger bills resulting, in part, from their lack of experience in managing electricity consumption in a TOU environment. A period covering a number of billing cycles is essential to enable Cooperative Hydro Embrun to work with its customers to adapt to the new billing reality. Cooperative Hydro Embrun plans to provide parallel billing information to its customers so they can modify their pattern of energy usage and thus mitigate the impact of potential bill increases.

2- Upgrade of the AMI System of Ottawa River Power Corporation

ORPC uses the Elster AMI system to collect the customers' TOU energy usage data and deliver it to the IESO for central processing. Currently ORPC is using version 6.2, but must upgrade to version 7.5 to meet the requirements of Measurement Canada. The upgrade is planned for the summer period (July/August 2011). ORPC is carrying out the IESO implementation with us (Cooperative Hydro Embrun), Renfrew Hydro and Hydro 2000. Therefore, version 7.5 conversion from ORPC has to be coordinated with all the utilities' SIT and QT testing. When we (Renfrew, Cooperative Hydro Embrun and Hydro 2000) have completed testing the conversion of the AMI system can be undertaken and then the system must be extensively tested before full implementation of TOU pricing.

3- Upgrade of the IESO System

Cooperative Hydro Embrun will also have to re-complete SIT and QT testing after the IESO completes their system upgrade to version 7.2 that is expected in November 2011.

For these reasons, Cooperative Hydro Embrun request to the Board grant approval for a revised mandatory TOU implementation end-date of January 2012.

b) Please advise of the current status of TOU rates including the total percentage of customers billed on TOU.

CHEI Response:

CHEI – Customer on TOU Rates as of February 1st 2012

RESIDENTIAL	100%
COMMERCIAL BELOW 50kW	100%

VECC Question # 2

Reference: Smart Meter Installation, Exhibit 1, Tab 1, Schedule 6, page 2

Preamble: On Page 6, CHEI provides the program status in terms of the number of meters installed.

a) Please provide a schedule that compares the smart meter financial forecasts in CHEI's previous applications to the current application and explain any variances.

CHEI Response:

On December 15, 2006 CHEI filed to the Ontario Energy Board Smart Meter implementation cost (attached file).

The Smart Meter Implementation cost submit to the Board at that time was $329,400.00, in this application the capital cost is $314,417.00

The $ 15 000.00 difference in saving are the following:

- Web/Telephone Response System $10,000.00 in 2008
- Project Management $ 5,000.00 in 2009

CHEI has also attached to this response a copy of its 2006 Smart Meter Investment Plan as filed with the Board and its 2010 Smart Meter Deployment plan from the 2010 Cost of Service application.

b) Please complete the following table to show average costs based on meter type.

CHEI Response:

Class	Type of Meter	Quantity	Meter Cost	Average Meter Cost	Installation Cost	Average Installation Cost	Total Average Cost
Residential	Elster	1,796	$ 167,642.18	$ 93.34	$ 21,170.60	$ 11.79	$ 105.13
GS<50 kW	Elster	162	$ 43,932.68	$ 271.19	$ 5,548.02	$ 34.25	$ 305.44
GS>50kW	Elster	12	$ 11,088.06	$ 924.01	$ 1,400.25	$ 116.69	$ 1,040.69

VECC Question # 3

Reference 1: Smart Meter Model (V2_17)

Preamble: CHEI completed the Smart Meter Model provided by the OEB and used the data to arrive at the proposed Smart Meter Incremental Rate Rider and the proposed Smart Meter Disposition Rate Rider.

Reference 2: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 19

Preamble: The Guideline states, "The Board views that, where practical and where data is available, class specific SMDRs should be calculated on full cost causality."

a) Please provide the rationale for CHEI's proposed cost allocation methodology.

CHEI Response:

CHEI originally proposed a uniform allocation of costs be applied in accordance with the Boards smart meter model design. However in response to Board staffs interrogatories which recommended using the Guelph Hydro allocation model, CHEI has appended two calculation sheets calculating class specific SMDA and SMIRR rate riders based on cost causality.

b) Please complete a separate smart meter revenue requirement model by rate class.

CHEI Response:

See response above.

c) Please re-calculate the SMDR & SMIRR rate riders based on cost causality by rate class.

CHEI Response:

See response above.

d) Please provide a breakdown of the total Smart Meter Rate Adder Revenue collected by customer class.

CHEI Response:

Please reference appended sheet calculating the customer specific SMDR rate rider in the updated model.

Attachment 1 of 4

OEB Decision

Ontario Energy Board

Commission de l'énergie de l'Ontario

EB-2011-0093
EB-2011-0255
EB-2011-0258
EB-2011-0259

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF an application pursuant to section 74 of the *Ontario Energy Board Act, 1998* by Renfrew Hydro Inc., Ottawa River Power Corporation, Hydro 2000 Inc., and Cooperative Hydro Embrun Inc., seeking extensions to their mandated time-of-use pricing dates.

By delegation, before: Theodore Antonopoulos

DECISION AND ORDER

Renfrew Hydro Inc. ("Renfrew") filed an application dated April 1, 2011. Ottawa River Power Corporation ("Ottawa River") filed an application dated July 5, 2011 and Hydro 2000 Inc. ("Hydro 2000") and Cooperative Hydro Embrun Inc. ("Cooperative Embrun") filed separate applications dated July 7, 2011 (collectively "the applicants") with the Ontario Energy Board under section 74 of the *Ontario Energy Board Act, 1998* (the "Act") for licence amendments granting extensions in relation to the mandated date for the implementation of time-of-use ("TOU") pricing rates for Regulated Price Plan ("RPP") consumers. Renfrew's application was assigned file number EB-2011-0093, Ottawa River's application was assigned file number EB-2011-0255, Hydro 2000's application was assigned file number EB-2011-0259 and Cooperative Embrun's application was assigned file number EB-2011-0258. Due to the similar nature of the applications the Board has combined the applications into one proceeding pursuant to section 21(5) of the Act. This decision combines findings for all four of the subject applications.

BACKGROUND

Under cover of a letter to all Ontario electricity distributors dated August 4, 2010, the Ontario Energy Board provided its determination of mandatory dates by which each distributor must bill its RPP customers that have eligible TOU meters using TOU pricing. The Board's determination was made pursuant to sections 3.4 and 3.5 of the Standard Supply Service Code for Electricity Distributors, which requires TOU pricing for RPP consumers with eligible TOU meters, as of the mandatory date. Compliance with this Code is a condition of licence for nearly all licensed electricity distributors in Ontario.

THE APPLICATION

In its original application, Renfrew applied for an extension to its June 2011 TOU pricing date and requested a new date of October 2011. Renfrew stated the extension was necessary as a result of delays experienced implementing testing requirements for Advanced Metering Infrastructure ("AMI") integration with the customer information system. Renfrew also stated that it requested the extension to gain efficiencies by aligning with the October 2011 TOU pricing dates of Ottawa River, Hydro 2000 and Cooperative Embrun.

Following Renfrew's application, Ottawa River, Hydro 2000, and Cooperative Embrun each filed for an extension to their October 2011 mandated TOU pricing date and requested a new TOU pricing date of January 2012. The applicants each stated the extension is necessary to prepare a customer transition to TOU rates, as well as jointly upgrade their AMI system and complete testing with the Independent Electricity System Operator ("IESO") once the IESO completes its system upgrade expected in November 2011. On July 28, 2011 Renfrew filed an amendment to its application to align its requested TOU pricing date with that of the other applicants due to its existing partnership with the applicants during MDM/R integration.

The Board issued a Notice of Application for Renfrew's original application on April 13, 2011 and interrogatories and submissions on the application were invited. Board staff filed a submission on the application stating it had no issues with the request for extension. Renfrew did not reply to the submission.

On July 27, 2011, the Board issued a collective Notice of Application and Written Hearing for the Ottawa River, Hydro 2000 and Cooperative Embrun applications and

interrogatories and submissions on the applications were invited. The applicants responded to interrogatories filed by Board staff, providing more information about the delay and progress to date in implementing TOU pricing. Board staff filed a joint submission on all the applications stating it had no issues with the request for an extension. The applicants did not reply to the submission. No other parties filed interrogatories or submissions on the applications.

In the applications the distributors stated that significant customer distress is expected when customers are faced with larger bills resulting in part from a lack of experience in managing electricity consumption in a TOU environment. The applicants stated that a number of billing cycles was necessary to enable them to work with customers to adapt to the new billing reality. The applicants stated Ottawa River supplies Renfrew, Hydro 2000 and Cooperative Embrun with AMI services to collect customer's data and deliver it to the IESO for processing. The applicants stated that Ottawa River must upgrade its AMI system to version 7.5 to meet the requirements of Measurement Canada. This upgrade is to be coordinated in conjunction with Renfrew, Hydro 2000 and Cooperative Embrun and was planned for the July/August 2011 period. Once Renfrew, Hydro 2000 and Cooperative Embrun complete testing, the conversion of the AMI system could take place. In addition, the applicants stated that they would have to complete SIT and QT testing after the IESO completes their system upgrade to version 7.2 of their MDM/R system which is expected in November 2011.

In response to Board staff interrogatories, the applicants stated that the period of customer transition would be planned in conjunction with the AMI upgrade and the IESO retesting and if this customer transition period was not implemented it would not affect the requested TOU extension date. The applicants stated that due to having limited resources they would be unable to cut over to different versions of the AMI within a short period of time. The applicants also stated that the collaboration between the utilities began during the smart meter project and that the utilities share consultants, software and computer hardware.

BOARD FINDINGS

I find the applications should be granted as requested. The applicants' system upgrade and testing issues represent operational and technical barriers to implementing TOU pricing. I find that the difficulties and delays encountered to be extraordinary and unanticipated circumstances sufficient to justify an extension to the applicants'

mandated TOU pricing dates. The applicants will be exempted from the requirement to apply TOU pricing under the Standard Supply Service Code until January 31, 2012.

However, this finding should not be construed as acceptance that additional time is required to address customer transition to TOU rates. Extraordinary or unanticipated circumstances generally relate to operational or technical issues.

I expect the applicants to work diligently to implement TOU for its customers and provide the Board with timely information regarding the implementation of TOU pricing.

IT IS THEREFORE ORDERED THAT:

1. Renfrew Hydro Inc.'s distribution licence ED-2002-0577, specifically Schedule 3, List of Code Exemptions, is amended to include an exemption from the requirement to apply time-of-use pricing by a mandatory date under the Standard Supply Service Code for Electricity Distributors. This exemption will expire on January 31, 2012.

2. Ottawa River Power Corporation's distribution licence ED-2003-0033, specifically Schedule 3, List of Code Exemptions, is amended to include an exemption from the requirement to apply time-of-use pricing by a mandatory date under the Standard Supply Service Code for Electricity Distributors. This exemption will expire on January 31, 2012.

3. Hydro 2000 Inc.'s distribution licence ED-2002-0542, specifically Schedule 3, List of Code Exemptions, is amended to include an exemption from the requirement to apply time-of-use pricing by a mandatory date under the Standard Supply Service Code for Electricity Distributors. This exemption will expire on January 31, 2012.

4. Cooperative Hydro Embrun Inc.'s distribution licence ED-2002-0493, specifically Schedule 3, List of Code Exemptions, is amended to include an exemption from the requirement to apply time-of-use pricing by a mandatory date under the Standard Supply Service Code for Electricity Distributors. This exemption will expire on January 31, 2012.

DATED at Toronto, October 6, 2011

ONTARIO ENERGY BOARD

Original signed by

Theodore Antonopoulos
Manager, Electricity Rates

Attachment 2 of 4

Compare 2006 SM Forecast to Actual

FILING SUBMIT TO THE ONTARIO ENERGY BOARD ON DECEMBER 15,2006

Activity	2007	2008	2009	Totals
Meter Installations				
Residential	300	663	663	1626
Commercial	25	72	72	169
				1795

FILING SUBMIT TO THE BOARD ON MAY 31 ST 2012

Totals 2012	
1796	Residential
162	Commercial
1958	

Pilot								
Capital								
Procure 300 Meters	300	$95.00	$28,500			$ 236,191.00	Meters	
Procure 4 Alpha Meters(Collector)	4	$820.00	$3,280					
Procure 21 Meter Commercial	21	$95.00	$1,995					
Commercial Meters(Alpha)	4	$600.00	$2,400			$ 36,544.00	Meter Installation	
Upgrade Commercial Installations	20	$300.00	$6,000					
Upgrade A Base Meters	20	$35.00	$700					
Install Meters	325	$30.00	$9,750			$ 12,977.00	Procure and Install Collector	
Procure and Install Collector	1	$65,000.00	$16,250					
Server		$10,000	$2,500					
Project Management			$10,000					
Full Implementation						$ 28,705.00	Integration	
Residential Meters	663	$95.00		$62,985	$62,985			
Meter Commercial	54	$95.00		$5,130	$5,130			
Commercial Meters	16	$600.00		$9,600	$9,600			
Upgrade A Base Meters	10	$35.00		$350	$350			
Upgrade Commercial Installations	10	$300.00		$3,000	$3,000			
Meter Installation		$30.00		$22,050	$22,050			
Project Management				$5,000	$5,000			
Elster Licensing	1795	$0.50		$898	$898			
CIS Software Changes				$20,000				
Web/Telephone Response System				$10,000				
Capital Costs			$81,375	$139,013	$109,013	$329,400	$ 314,417.00	Capital Costs

Coopérative Hydro Embrun Inc.

File Number:EB-2012-0094

Tab: 1
Schedule: 3

Date Filed: May 31, 2012

Attachment 3 of 4

2006 Smart Meter Investment Plan

December 13, 2006

Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge st. 27th Floor
Toronto ON M4P 1E4

RE: Smart Meter Investment Plan
EB-2006-0246

We are pleased to report on our Smart Meter Investment Plan as follows:

Preamble

Coopérative Hydro Embrun Inc. serves 1,795 customers (1,626 residential and 169 commercial) in his service area. To date we have not expended any funds on smart metering. Reviews of metering options for our utility were investigated over the pass year. Based on the favorable reports on the Chatham-Kent pilot project involving Tantalus an in depth look was taken on their system. It appeared that it would offer an attractive solution for the Coopérative, Hawkesbury Hydro, Hydro 2000 Inc and Ottawa River Power Corporation based on cost and technical structure. Ottawa River Power Corporation sought permission from the Ministry of Energy to proceed with Tantalus with a "piggy back" arrangement with Chatham-Kent. A meeting was held by Ottawa River Power Corporation on August 2, 2006 with Roslyn Lawrence and Ron Stewart to explore this possibility but we found it was not possible to the procurement rules that have been established by the Ministry.

Based on the outcome of the CLD procurement process it was decided to look at the offerings of Elster and Trilliant. Meetings with Elster and Trilliant involving all small utilities in eastern Ontario (Hydro 2000, Ottawa River Power Corporartion, Rideau-St. Lawrence, Renfrew and Hawkesbury) were arranged. Based on pricing offered by Elster, the market share that Elster has in the province, the proximity of large neighbouring utilities that haven chosen Elster that we're currently procure some metering services from it was decided that Coopérative Hydro Embrun Inc. would move forward with Elster in 2007.

Coopérative Hydro Embrun Inc. is anxious to proceed with the implementation of smart metering within our service area. Coopérative Hydro Embrun Inc will partner with Hydro 2000, Ottawa River Power Corporartion, and Hawkesbury) and maybe other utilities to share. Based on pricing offered by other small utilities in our area to share resources and expertise that will be mutually advantageous.

More specifically the items to be addressed as requested by the filing requirements are:

1. **Distributor identification (name, name of contact person and contact information).**

   Benoit Lamarche, Manager
   Coopérative Hydro Embrun Inc.
   821 Notre-Dame Street
   Suite 200
   Embrun ON K0A 1W1
   Tel 613-443-5110 Fax 613-443-0495
   embrunhydro@hmnet.net

2. **Did you submit a Smart Meter Investment Plan ("SMIP") as part of your 2006 EDR rate application? If yes, please provide the specific place(s) in your application that outline your plan.**

   No

3. **If you have made any significant changes to your SMIP subsequent to your application please provide details of the changes (both here in general terms and as a component of the following questions).**

   N/A

4. **For the 2006 rate year, how much money has been included in the Board approved revenue requirement for the SMIP? How much is this being recovered from your customers?**

   As allowed by the OEB 30¢ of the monthly service charge per residential customer (27 cents for all classes) is currently being collected except for rate classes, sentinel lights, streetlights and un-metered scattered load.

5. **What is your SMIP in the 2006 rate year? If you do not have a SMIP in the 2006 rate year, what are your intentions for future years?**

a. 2006 – No SM implementation activity

b. 2007 – **300** residential and **25** commercial Meter Pilot Program with Elster involving installation of meters, collector and communication serviced by the the Coopérative.

c. 2008 – Subject to a successful pilot, move to full implementation with the installation of **663** residential and **72** commercial meters, software modification with Advance CIS system, web/telephone interactive system and requirements for connection to MDM/R.

d. 2009 – Completion of implementation for the Coopérative with approximately **663** residential meters and **72** commercial meters

We are unclear of the requirements at this time for the web/telephone interactive system and the MDM/R interface. Rough costs have been added to our plan but will have to be modified when actual requirements are know.

6. **Is your SMIP in the 2006 rate year a component of a multi-year plan? If so, please provide details of the total plan, broken down by year, as completely as possible.**

See following table.

Table 1 - Coopérative Smart Meter Implementation

Activity			2007	2008	2009	Totals
Meter Installations						
Residential			300	663	663	1626
Commercial			25	72	72	169
						1795
Partner	**4**					
Pilot						
Capital						
Procure 300 Meters	300	$ 95.00	$28,500			
Procure 4 Alpha Meters(Collector)	4	$ 820.00	$3,280			
Procure 21 Meter Commercial	21	$ 95.00	$1,995			
Commercial Meters(Alpha)	4	$ 600.00	$2,400			
Upgrade Commercial Installations	20	$ 300.00	$6,000			
Upgrade A Base Meters	20	$ 35.00	$700			
Install Meters	325	$ 30.00	$9,750			
Procure and Install Collector	1	$ 65,000.00	$16,250			
Server		$10,000	$2,500			
Project Management			$10,000			
Full Implementation						
Residential Meters	663	$ 95.00		$62,985	$62,985	
Meter Commercial	54	$ 95.00		$5,130	$5,130	
Commercial Meters	16	$ 600.00		$9,600	$9,600	
Upgrade A Base Meters	10	$ 35.00		$350	$350	
Upgrade Commercial Installations	10	$ 300.00		$3,000	$3,000	
Meter Installation		$ 30.00		$22,050	$22,050	
Project Management				$5,000	$5,000	
Elster Licensing	1795	$ 0.50		$898	$898	
CIS Software Changes				$20,000		
Web/Telephone Response System				$10,000		
Capital Costs			$81,375	$139,013	$109,013	$329,400
Operating						
Communication Lines	4	$ 60.00	$240	$240	$240	
Elster Support	4	$14,000	$3,500	$3,500	$3,500	
MDM/R Charges**				$10,000	$10,000	
Amortization	yrs					
Meters*	25		$2,105	$6,430	$10,754	
Hardware	5		$2,500	$4,500	$4,500	
Software	3		$5,417	$12,383	$12,682	
Annual Expense			$10,022	$23,312	$27,936	
Customer Revenue (.30 cent)	1795	0.27	$5,816	$5,816	$5,816	

7. **Specifically, and in as much detail as possible, please provide the following information for your planned implementation of the SMIP:**
   - **the number of meters installed by class and by year, both in absolute terms and as a percentage of the class;**
   - **the capital expenditures and amortization by class and by year;**
   - **the operation expenses by class and by years;**
   - **the effect of the SMIP on the level of the allowance for PILs.**

   See the table in section 6 for details on the planned implementation.

   At the time of this submission it is unknown as to the effect of the SMIP on the level of allowance for PILS, this will be determined at a later date.

8. **If you previously submitted a plan and have made changes to it, please provide a similar set of responses to question 7 for both the original plan and the changes between plans.**

   N/A

9. **With respect to funding for the SMIP, please provide comments as to whether you consider that the existing funding recovered through the 2006 rates and/or the proposed adjustment for 2007 rates is sufficient, or indicate why that funding and timing is not sufficient for your SMIP needs and what action you consider necessary to ameliorate the situation. Please ensure that these comments are as detailed and specific as possible, both with respect to the level of the funding and the timing of such a revision.**

   Coopérative Hydro Embrun Inc. will be asking the OEB for arate increase for year 2007 and beyond until all assets and operation cost are recovered.

   May 1/06 to Apr. 30/07 - Collect 0.27 cents per residential customer/month (27 cents for all classes)-
   May 1/07 to Apr. 30/08 - Increased rate to recover costs
   May 1/08 to Apr. 30/09 - Increased rate to recover costs
   May 1/09 to Apr. 30/10 - Increased rate to recover costs
   2010 and beyond, continue to collect to be determined amount until costs recovered

10. **Please provide any additional comments that you believe would be helpful to the Board in its understanding of your SMIP and what you consider to be the requirements for the efficient and effective implementation of this government sponsored initiative.**

Cooperative Hydro Embrun has been working with some neighbouring utilities (Hydro 2000, Hawkesbury Hydro, Renfrew Hydro, Ottawa River Power Corporation Cooperative and Rideau-St.Lawrence) that may collaborate on the SMIP to share some of the common costs. These discussions are still ongoing but we expect that a least some of the utilities will partner with us. At this point we can confirm that Hydro 2000, Hawkesbury Hydro, Cooperative Hydro Embrun, Ottawa River Power Corporation are forming a group to share resources and expertise that will be mutually advantageous. Other utilities may join in the near future.

Coopérative Hydro Embrun Inc.

File Number:EB-2012-0094

Tab: 1
Schedule: 3

Date Filed: May 31, 2012

Attachment 4 of 4

2010 Smart Meter Deployment Plan

Exhibit 9: Deferral And Variance Accounts

Tab 3 (of 3): Smart Meters

SMART METER DEPLOYMENT PLAN STATUS

The following schedule present information regarding CHE's commitment to meet the Ministry's Smart Meter Initiative.

CHE is authorized by virtue of paragraph 8 of section 1 (1) of O.Reg 427/06 to procure smart meters were procured pursuant to the in compliance with the August 14, 2007 Request for Proposal issue by London Hydro Inc. At this time and as per G-2008-0002, CHE is authorized to charge the standard $1.00 funding adder.

CHE is described as a smart meter "implementing" utility. It has procured all meters in compliance with the August 14, 2007 Request for Proposal issued by London Hydro Inc. At year end 2009, CHE will have deployed and installed all meters and thus will have incurred all costs related to this initiative. Therefore, CHE wishes to apply for a Utility-Specific Smart Meter Funding Adder of $1.32 per metered customer per month.

The following required information is presented in the subsequent schedules.

- A detailed smart meter plan which includes the number of meters proposed to be installed and an installation schedule for each month during which the proposed smart meter funding adder is expected to be in effect. (New Reporting Requirements Related to Smart Meter Deployment and the Application of Time-of-Use Pricing)

- Actual or estimated costs in total
    - Procurement and installation of the components of the AMI system
        - $305,197.92
    - Customer information system
        - $600.00/one time cost 2009 include in 2009 projections
    - Incremental operating and maintenance activites

- $ 4,700.00/per year on-going cost
- $300/month

o Changes to ancillary systems

- $1,200 one time cost

o Stranded meters

- GL ACCOUNT # 1860 $79,071.94
- GL ACCOUNT # 1330 $2,000.00

Further background information on procurement and cost information is provided in the following attachments.

CHE attests that it has purchased, smart meters and/or metering infrastructure ("AMI") whose functionality exceeds the minimum functionality adopted in O. Reg. 425/06, and an estimate of those costs.

CHE is not proposing to dispose of deferral accounts 1555 & 1556 until they have been audited as part of its regular annual audit in the spring of 2010.

July 9, 2009

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

Attention: John Pickernell, Assistant Board Secretary

Dear Mr. Pickernell:

Re: New Reporting Requirements Related to Smart Meter Deployment and the Application of Time-of-Use Pricing

Attached is the baseline and quarterly information regarding smart meter deployment and TOU pricing for Cooperative Hydro Embrun Inc.

If you have any questions, please contact the undersigned.

Yours sincerely,

Benoit Lamarche
Manager

Cooperative Hydro Embrun Inc.

Smart Metering Deployment and TOU Pricing

Appendix A - Baseline Report

1. **Smart Meter Contract** – Hydro 2000 Inc. entered into a contract with Elster Metering on March 25, 2009 for the full implementation of an AMI system following participation in the London RFP Procurement Process. The contract will cover 100% of the metering requirement of Cooperative Hydro Embrun Inc.

   Cooperative Hydro Embrun Inc. has formed a partnership with Ottawa River Power Corporation, Hydro 2000, Hawkesbury Hydro and Renfrew Hydro and Elster for sharing Elster AMI system.

2. **Implementation Status** - The status of the deployment of smart meters is as follows:
   a. Deployment commenced on June 26, 2009
   b. By October, 2009 100% of Residential meters will have been installed.
   c. By October, 2009 100% of Commercial (below 50 kW will have been installed.)
   d. By December, 2009 100% of Commercial (over 50 kW will have been installed.)

Customer Class	Total	Smart Meters Installed	%
Residential	1 743	1 743	100
Commercial(Below 50 KW)	171	171	100
Commercial(Over50 KW)	12	12	100

3. **AMI** – Cooperative Hydro Embrun Inc. will be sharing the Ottawa River Power Corporation Elster AMI system, as indicated in Section 1, which was installed and made operational in October 2007.

4. **MDM/R Integration** - No work has been done on the integration of meters and systems with the provincial MDM/R. Ottawa River Power Corporation has attended MD/R Briefings and Workshops and based on the information we expect our small utility will commence integration work in mid 2010 with completion in early 2011.

5. **CIS Integration** - No changes to our business systems have occurred to date. Cooperative Hydro Embrun Inc. is leasing it's CIS system from ORPC. ORPC is

presently working with our CIS supplier to set in place temporary measures to allow billing to occur based on register reads from the installed smart meter population. Preliminary discussions are underway with our CIS vendor and other vendors regarding the integration of the Elster MAS to the Harris CIS system. It is planned to have these systems in place by July 2010 to tie in the time frame for the MDM/R implementation.

6. **Web Presentment** – No plan is in place for web presentment. The IESO has indicated that they may make this a feature of the MDM/R and we have indicated an interest in this proposal.

7. **Consumer Education** – As part of the smart meter installation program, a brochure (MOE authored) was provided to each customer providing information on the smart meter and the TOU billing. It is planned that additional consumer information will be rolled out with the implementation of TOU billing in the Spring of 2011.

Appendix A

PRP International, Inc.

Fairness Advisory Services

May 30, 2008

Mr. Benoit Lamarche
Cooperative Hydro Embrun Inc.
821 Notre-Dame Street, Suite 200
Embrun, ON K0A 1W1

Dear Mr. Lamarche:

Subject: Attestation of the Fairness Commissioner
Advanced Metering Infrastructure RFP, August 2007
London Hydro & Consortium of LDCs Smartmetering Project

PRP International, Inc. is pleased to submit its letter report of the Fairness Commissioner for the noted Request for Proposal (RFP) evaluation and selection phase. This judgment is being provided for the information and use of each Consortium LDC Sponsor, in their consideration of the report from the Evaluation Phase, for this competitive transaction.

"It is the judgment of PRP International, Inc., as the Fairness Commissioner, that the determinations of the two (2) highest ranked Proponents for the Cooperative Hydro Embrun Inc. requirements are:

- *Silver Spring Networks, as the recommended Preferred Proponent, based on its highest ranking, and*
- *Elster Metering being the second ranked Proponent.*

These determinations were made in a fair (objective and competent) manner and consistent with the evaluation and selection processes set out in the RFP, issued August 14, 2007."

A detailed report for your records will be submitted to you, by August 31, 2008. Should you have any questions or require clarification of any matter contained in this letter report, please contact the undersigned.

Yours truly,

Peter Sorensen.

Peter Sorensen
President

cc: Mr. Gary Rains, RFP Project Director

203 - 8 QUEEN STREET, SUMMERSIDE, PEI C1N 0A6
TELEPHONE: 902.436.3930 FAX: 604-677-5409
EMAIL: fairness@telus.net

Appendix B

Ottawa River Power

283 pembroke street west – p.o. box 1087
pembroke, ontario K8A 6Y6
tel: (613) 732-3687 – fax: (613) 732-9838
web: www. orpowercorp.com

October 17, 2008

Usman Syed
Senior Advisor
Office of Consumer and Regulatory Affairs
Ontario Ministry of Energy & Infrastructure
880 Bay Street, 3rd Floor
Toronto, ON M7A 2C1

Email: usman.syed@ontario.ca

Dear Syed:

RE: Smart Meter Deployment

In reference to your e-mail inquiry through London Hydro, we can report as follows:

- Ottawa River Power was identified with Silver Springs as the "best value" and Elster as the second "best value" supplier in the London RFP.
- ORPC had completed a pilot program with Elster that was approved by the OEB as part of the third tranche C&DM initiative that included a MAS server and meters.
- In reviewing the costs of abandoning the Elster pilot and moving to Silver Springs, it was found there was a substantial cost increase that would be incurred which raises the question whether it would be prudent purchase.
- In August, we had discussions with the Fairness Commissioner and the Ministry of Energy regarding the implications of not moving ahead with Silver Springs and moving to the second rated vendor, Elster. As late as October 9th, our concern was being reviewed by the Ministry of Energy and the OEB.

In view of this background, the status of our smart meter project is:

- We have not entered into negotiations with a vendor.
- Vendor negotiations are not being pursued pending a response from the Ministry and the OEB.
- We would hope to have a response in the near future and be in a position to meet with a vendor and plan deployment for 50% of meters in both 2009 and 2010 (approximately 4000 per year). No planned work was performed in 2008.

Furthermore, it has been our intention to work with three other local utilities on smart meter implementation. We share the same billing system and there are synergies in having the same smart metering system, using a common MAS. As well, they have Silver Springs and Elster as their respective vendors. Embrun and Hydro 2000 already have Elster water meters in their municipalities.

The utilities and their meter deployment are as follows;

	2009	**2010**
Hydro Hawkesbury Inc.	2500	2500
Ottawa River Power	4000	4000
Hydro 2000	1300	
Cooperative Hydro Embrun	1000	1000
Renfrew Hydro	1400	2000

If we can provide any additional information, please let us know.

Yours truly,

Original signed by

Douglas Fee, P.Eng.
President

Cc: Michel Poulin, Hydro Hawkesbury
Rene Beaulne, Hydro 2000 Inc.
Benoit Lamarche, Cooperative Hydro Embrun Inc.
Tom Freemark, Renfrew Hydro Inc.

\\Server\data\ORPC Files\Administration\A01-Assoc\OEB Smart Meters\Syed Oct 2008.doc

PRP International, Inc.

Fairness Advisory Services

April 29, 2009

Cooperative Hydro Embrun Inc.
821 Notre-Dame Street, Suite 200
Embrun, Ontario K0A 1W1

Attention: Benoit Lamarche

Dear Mr. Lamarche:

Subject: Attestation Letter (Negotiations) of the Fairness Commissioner
Cooperative Hydro Embrun – Elster Metering Contract Award
Advanced Metering Infrastructure RFP, August 2007
London Hydro & Consortium of LDCs Smartmetering Project

PRP International, Inc. is pleased to submit its Attestation Letter (Negotiations) of the Fairness Commissioner for the noted negotiations and contracting phase of the London Hydro AMI Request for Proposal (RFP) procurement. This judgment is being provided for the information and use of Cooperative Hydro Embrun Inc., in its administration of the contract awarded to its #2 ranked Proponent, Elster Metering following unsuccessful negotiations with its #1 ranked Proponent, Silver Spring Networks.

"It is the judgment of PRP International, Inc.(as the Fairness Commissioner engaged by Cooperative Hydro Embrun *for the phase of negotiations and contract award) that the successful conclusion of negotiations and contract award to* Elster Metering, *was undertaken in accordance with the principles for such negotiations and contract award set out in the RFP, issued August 14, 2007 and the Fairness Protocol, issued August 2008."*

A backgrounder and summary of the Fairness Protocol is attached and forms part of this Attestation Letter (Negotiations).

Yours truly,

Peter Sorensen
President

Attachment: Negotiations and Contract Phase Backgrounder

203 - 8 Queen Street, Summerside, PEI C1N 0A6
Direct telephone: 902.436.3930 Fax: 604-677-5409
Email: fairness@telus.net

BACKGROUNDER TO FAIRNESS CONFIRMATION / ATTESTATION
Advanced Metering Infrastructure Procurement

TO WHOM IT MAY CONCERN:

Background:

- A Request for Proposal procurement transaction was conducted by London Hydro Inc., as the lead sponsoring Local Distribution Company (LDC) and with a consortia of another 63 LDCs, during the period August 2007 to July, 2008;
- The evaluation and selection phase of the RFP provided for the determination of the #1 and #2 ranked Proponents for each LDC;
- RFP Provision 7.5.14[1] provides the framework (principle) for negotiations and contracting based on the principle of "first right to negotiation and execution of a contract" being accorded to the ranked order of Proponents commencing with the highest ranked Proponent and proceeding in a consecutive order thereafter; and
- Each LDC was provided the evaluation results for their #1 and #2 ranked Proponents supported by the Attestation Letter of the Fairness Commissioner as to those rankings.

Fairness Coverage Objective:

Normally, fairness coverage terminates with the determination of the ranked Proponents following the evaluation and selection phase of the RFP; however, certain LDCs expressed a wish to secure additional fairness coverage during the subsequent phase of negotiations and contract award. The objective for this second phase fairness coverage is to assure that LDCs undertook a phase of negotiations and contracting that meets the RFP provisions of consecutive negotiations where required, e.g. with their top two ranked Proponents and in the event of unsuccessful negotiations with the #1 ranked Proponent, a subsequent contract award to the next ranked Proponent would be on an equitable basis as was the requirements in the negotiations with the #1 ranked Proponent.

---

[1] 7.5.14 **Final Contract Negotiations**

Any conditions and provisions that a bidder seeks shall be a part of this proposal. Notwithstanding, nothing herein shall be interpreted to prohibit London Hydro from introducing or modifying contract terms and conditions during negotiation of the final contract.

London Hydro has scheduled no more than two weeks for contract negotiations (if necessary), and expects the successful bidder to maintain a prompt and responsive negotiation to accomplish and complete final contract agreement within that time period. If contract negotiations exceed an interval acceptable to London Hydro, London Hydro retains the option to terminate negotiations and continue to the next apparent successful bidder, at the sole discretion of London Hydro. Said interval shall in no event be less than three weeks.

BACKGROUNDER TO FAIRNESS CONFIRMATION / ATTESTATION
Advanced Metering Infrastructure Procurement

Fairness Protocols:

- A Fairness Protocol was developed and issued to all LDCs, in August 2008 that set forth the best practices for fair consecutive-based negotiations and contract award.
    - The fundamental principle of the Protocol was the requirement for the LDC to establish the negotiations agenda for their top ranked Proponents and submit a copy to the Fairness Commissioner prior to engagement of their #1 ranked Proponent, i.e. the agenda would demonstrate a common statement of work, a LDC standard for pass/fail in their negotiations and the negotiation issues would only differ to the extent of the respective Proponent's technical solution being offered.

Form of Fairness Confirmation / Attestation[2]:

1. A confirmation of fair negotiations and contract award would be issued if the LDC's #1 ranked Proponent was awarded a contract; the original Attestation Letter remains in effect.

2. An Attestation of fair negotiations and contract award would be issued if the LDC determined that their #1 Proponent was to be set aside and the LDC successfully contracted with their next ranked Proponent, e.g. their #2; the original Attestation Letter is thus superseded by the Negotiations and Contract Award Attestation Letter.

Local Distribution Company:

Cooperative Hydro Embrun Inc.
821 Notre-Dame Street, Suite 200
Embrun, Ontario K0A 1W1

Attention: Benoit Lamarche

---

[2] **Conditions on the rendering of this Confirmation/Attestation.**

- The two Negotiations Agenda were provided by CHEI via Ottawa River Power;
- Fairness Commissioner undertook no direct participation or oversight in the negotiations between CHEI and either of their #1 or #2 ranked Proponents;
- The successful contract award was based on the CHEI criteria and no independent analysis nor any comparison with the evaluation results of the RFP process was carried out by the Fairness Commissioner; and
- The confirmation of the Fairness Commissioner was based on the progress report(s) provided by CHEI via Ottawa River Power.

Capital Costs related to Smart Meter Implementation

Actuals For The Period of January to August 2009

Company	Description	Date	Amount
LONDON HYDRO	RFP LONDON-SHARE OF SM CONSULTANT	April	$ 2,723.82
CLAUDE BLANCHARD	LOCATION ENTREPÔT	April	$ 1,600.00
FANNY LAMARCHE	METER CHANGE DATA	April	$ 420.00
HALPENNY INSURANCE BROOKER	INSURED -SMART METER STOCK	April	$ 764.64
E.J. BROOKS INDUSTRIES LTD	PLASTIC PADLOCK	April	$ 404.31
COOPÉRATIVE AGRICOLE D'EMBRUN	CADNAS POUR STORAGE	May	$ 22.67
EKSTROM INDUSTRIES INC.	METER RING	May	$ 4,644.00
PRP INTERNATIONAL INC	FAIRNESS COMMISSIONNER (PROPONENT #2 ELSTER)	April	$ 500.00
CLAUDE BLANCHARD	DELIVERED SMART METERS	May	$ 350.00
ELSTER	AS PER AGREEMENT	May	$ 21,600.00
ELSTER	REX METER	June	$ 93,348.80
ELSTER	REX METER	June	$ 93,348.80
PUROLATOR	COURRIER-BOOKLET FOR CUSTOMER	June	$ 145.35
JUSTINE LAMARCHE	METER DATA	July	$ 630.00
JUSTINE LAMARCHE	METER DATA	July	$ 315.00
JUSTINE LAMARCHE	METER DATA	July	$ 210.00
GINETTE PATENAUDE	METER DATA	July	$ 500.00
EKSTROM	METER ADAPTER	August	$ 5,347.08
ELSTER	A3 COLLECTOR	August	$ 4,592.55
ARIELLE LAMACHE	METER CHANGE	August	$ 1,700.00
MIKE VANDELST	INSTALLED SMART METER	August	$ 21,060.00
GINETTE PATENAUDE	METER DATA	August	$ 662.50
PANA ELECTRIC	SERVICE CALL SMART METER	August	$ 223.54
PANA ELECTRIC	SERVICE CALL SMART METER	August	$ 111.77
MIKE VANDELST	INSTALLED SMART METER	September	$ 1,548.00
ARIELLE LAMARCHE	DELIVERED BOOKLET TO CUSTOMER JULY -AUGUST	September	$ 1,460.00
ELSTER	METER 12S FORM - 3S FORM	September	$ 13,493.09
	TOTAL EXPENSES		**$ 271,725.92**

Projections For The Period of September to December 31 2009

ELSTER	SPECIAL METER ORDER	$ 25,000.00
HAWKESBURY HYDRO	INSTALLATION OF SPECIAL METER	$ 3,000.00
Waverunner	Antenna WCI-306 Kit	$ 1,772.00
SPROULE POWERLINE	INSTALLATION COLLECTOR	$ 600.00
PANA ELECTRIC	WIRING COLLECTOR	$ 300.00
ORPC	BOOKLET FOR CUSTOMER	$ 600.00
BELL CANADA	TELEPHONE LINE INSTALLATION	$ 400.00
HARRIS CIS SYSTEM	ITEGRATION MAS AND MDMR	$ 1,200.00
HARRIS CIS SYSTEM	CIS INTEGRATION	$ 600.00
	TOTAL PROJECTION EXPENSES	**$ 33,472.00**
	GRAND TOTAL EXPENSES AT DECEMBER 31ST 2009	**$ 305,197.92**

On-Going Operating Costs related to Smart Meter Implementation

procurement and installation of the components of the AMI system	starting in 2009	$ 4,700.00	per year
incremental operating and maintenance activities Operation data Store	starting Jan 2010	$ 300.00	per month
Total		**$ 8,300.00**	per year

Memorandum

To: Benoit Lemarche

From: Doug Fee

Date: September 10, 2009

Re: Elster MAS Costs

We have done a quick estimate of the costs for the provision of MAS service to Embrun. It is based on the cost for ORPC prorated by the number of customers in each utility with a hardware and software life of 5 years. Costs are still being developed by Harris, IESO, etc. and the complete scope of the work is not completely known.

On this basis the estimated cost for Embrun would be:

Item	Cost
MAS hardware cost, software, annual software maintenance fee and estimate for ORPC ongoing monitoring and troubleshooting system	$4,700/year
Operation Data Store (Utilismart pass though) this appears to be a new requirement that has arisen that we originally thought would be looked after by the MDMR. It will be used in the interim basis to create the file for upload to Harris until MDMR is operational and after as a data store for data to query by the utility. (Harris will also have an offering for this service. At this time they have not provided pricing)	$0.20/meter/month
MDMR – the IESO have not provided costing yet , this is guess at best	$0.20/meter/month
Elster Project Support Services – ORPC paid a fee in 2007 for this service, this year the other utilities paid a fee as well under Elster's new pricing structure	N/C
Harris Work – integration of ODS of third party vendor (ie Utilismart) for the interim transfer of data from the MAS to Harris Northstar. Share of costs for setup	$600 (one time cost)
Harris Work – integration of the Harris Northstar, MAS and MDMR once the MDMR is ready to go. Share of costs for setup. (see Option B provided by Harris Sept 10-09)	$1200 (one time cost)

SMART METER RATE ADDER AMOUNTS

CHE is applying for a Smart Meter Funding Adder for 2010 of $1.32 per metered customer per month following the Board's G-2008-0002 Guideline for Smart Meter Funding and Cost Recovery issued October 22, 2008.

This new Smart Meter Funding Adder replaces the Board-approved smart meter rate adder of $1.00 per metered customer per month. This funding adder is based on the capital expenditure in the amount of $305,198 and on-going operation, maintenance and administration expenditures related to the installation of Smart Meters in the amount of $8300 per year.

Details of the calculations can be found at Exhibit 9, Tab 3, Schedule 2, Attachment 1 and a breakdown of these costs is provided at Exhibit 9, Tab 3, Schedule 2, Attachment 3.

Smart Meter Costs

2008 EDR Data Information

Third-party long-term debt	54.8%
Deemed long-term debt	1.2%
Short-term debt	4.0%
Deemed Equity	40.0%
Third-party long-term debt rate	5.71%
Deemed long-term debt rate	6.10%
Short-term debt rate	4.47%
Return on Equity	8.57%
Weighted Average Cost of Capital	6.81%

2009 Tax Rate

Corporate Income Tax Rate	33.00%
Capital Tax Rate	0.225%

Capital Data:

	01-May-07 to 31-Dec-07	01-Jan-08 to 31-Dec-08	01-Jan-09 to 31-Dec-09
Smart meter including installation			$ 305,198
Tools and Equipment (Work force management)		$ -	$ -
Computer Hardware Costs		$ -	$ -
Computer Software		$ -	$ -
Total Capital Costs	$ -	$ -	$ 305,198

LDC Amortization Policy:

Smart Meter Amortization Rate	$ 15	Years
Tools and Equipment (Work force management)	$ 5	Years
Computer Hardware Amortization Rate	$ 5	Years
Computer Software Amortization Rate	$ 10	Years

Operating Expense Data:

	01-Jan-09 to 31-Dec-09
Incremental OM&A Expenses	$ 8,300
Total Incremental Operating Expense	$ 8,300

Smart Meter Revenue Requirement Calculation 2009

Average Asset Values	**31-Dec-09**			
Net Fixed Assets Smart Meters	$ 147,512			
Net Fixed Assets Tools and Equipment	$ -			
Net Fixed Assets Computer Hardware	$ -			
Net Fixed Assets Computer Software	$ -			
Total Net Fixed Assets	$ 147,512	$ 147,512		
Working Capital				
Operation Expense	$ 8,300			
11.2 % Working Capital	$ 930	$ 930		
Smart Meters included in Rate Base		$ 148,442		
Return on Rate Base				
Third-party long-term debt	54.8%	$ 81,346		
Deemed long-term debt	1.2%	$ 1,781		
Short-term debt	4.0%	$ 5,938		
Deemed Equity	40.0%	$ 59,377		
		$ 148,442		
Third-party long-term debt rate	5.71%	$ 4,647		
Deemed long-term debt rate	6.10%	$ 109		
Short-term debt rate	4.47%	$ 265		
Return on Equity	8.57%	$ 5,089		
Return on Rate Base		$ 10,110	$	10,110
Operating Expenses				
Incremental Operating Expenses			$	8,300
Amortization Expenses				
Amortization Expenses - Smart Meters		$ 10,173		
Amortization Expenses - Tools and equirement		$ -		
Amortization Expenses - Computer Hardware		$ -		
Amortization Expenses - Computer Software		$ -		
Total Amortization Expenses			$	10,173
Revenue Requirement Before PILs			$	28,583
Calculation of Taxable Income				
Incremental Operating Expenses			-$	8,300
Depreciation Expenses			-$	10,173
Interest Expense			-$	5,021
Taxable Income For PILs			$	5,089
Grossed up PILs			$	2,168
Revenue Requirement Before PILs			$	28,583
Grossed up PILs			$	2,168
Revenue Requirement for Smart Meters			**$**	**30,751**
Net Revenue Requirement for 2009			**$**	**30,751**
Average customer #				1,937
Rate Adder per month per metered customer				$1.32

PILs Calculation 2009

		31-Dec-09
INCOME TAX		
Net Income	$	5,089
Amortization	$	10,173
CCA - Class 47 (8%) Smart Meters	-$	12,208
CCA - Class 8 (20%) Tools and Equipment	$	-
CCA - Class 45 (45%) Computers		
CCA - Class 12 (100%) Computers Software	$	-
Change in taxable income	$	3,054
Tax Rate		33.00%
Income Taxes Payable	$	1,008
ONTARIO CAPITAL TAX		
Smart Meters	$	295,025
Tools and Equipment	$	-
Computer Hardware	$	-
Computer Software	$	-
Rate Base	$	295,025
Less: Exemption	$	-
Deemed Taxable Capital	$	295,025
Ontario Capital Tax Rate		0.225%
Net Amount (Taxable Capital x Rate)	$	664

Gross Up

	PILs Payable		Gross Up	Grossed Up PILs	
Change in Income Taxes Payable	$	1,008	33.00%	$	1,504
Change in OCT	$	664		$	664
PIL's	$	1,672		**$**	**2,168**

Smart Meter Average Net Fixed Assets 2009

Net Fixed Assets - Smart Meters	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening Capital Investment	$ -	$ -	$ -
Capital Investment Year 1	$ -		
Capital Investment Year 2		$ -	
Capital Investment Subsequent Years			$ 305,198
Closing Capital Investment	$ -	$ -	$ 305,198
Opening Accumulated Amortization	$ -	$ -	$ -
Amortization Year 1 (15 Years Straight Line)	$ -	$ -	$ -
Amortization Subsequent Years		$ -	$ 10,173
Closing Accumulated Amortization	$ -	$ -	$ 10,173
Opening Net Fixed Assets	$ -	$ -	$ -
Closing Net Fixed Assets	$ -	$ -	$ 295,025
Average Net Fixed Assets	$ -	$ -	$ 147,512

Net Fixed Assets - Tools and Equipment	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening Capital Investment	$ -	$ -	$ -
Capital Investment Year 1	$ -		
Capital Investment Year 2		$ -	$ -
Closing Capital Investment	$ -	$ -	$ -
Opening Accumulated Amortization	$ -	$ -	$ -
Amortization Year 1 (10 Years Straight Line)	$ -	$ -	$ -
Amortization Year 2 (10 Years Straight Line)		$ -	$ -
Closing Accumulated Amortization	$ -	$ -	$ -
Opening Net Fixed Assets	$ -	$ -	$ -
Closing Net Fixed Assets	$ -	$ -	$ -
Average Net Fixed Assets	$ -	$ -	$ -

Net Fixed Assets - Computer Hardware	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening Capital Investment	$ -	$ -	$ -
Capital Investment Year 1	$ -		
Capital Investment Year 2		$ -	$ -
Closing Capital Investment	$ -	$ -	$ -
Opening Accumulated Amortization	$ -	$ -	$ -
Amortization Year 1 (5 Years Straight Line)	$ -	$ -	$ -
Amortization Year 2 (5 Years Straight Line)		$ -	$ -
Closing Accumulated Amortization	$ -	$ -	$ -
Opening Net Fixed Assets	$ -	$ -	$ -
Closing Net Fixed Assets	$ -	$ -	$ -
Average Net Fixed Assets	$ -	$ -	$ -

Net Fixed Assets - Computer Software	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening Capital Investment	$ -	$ -	$ -
Capital Investment Year 1	$ -		
Capital Investment Year 2		$ -	$ -
Closing Capital Investment	$ -	$ -	$ -
Opening Accumulated Amortization	$ -	$ -	$ -
Amortization Year 1 (10 Years Straight Line)	$ -	$ -	$ -
Amortization Year 2 (10 Years Straight Line)		$ -	$ -
Closing Accumulated Amortization	$ -	$ -	$ -

Opening Net Fixed Assets	$ -	$ -	$ -
Closing Net Fixed Assets	$ -	$ -	$ -
Average Net Fixed Assets	$ -	$ -	$ -

Total Assets

Total Fixed Assets	$ -	$ -	$ 305,198
Total Accumulated Amortization	$ -	$ -	$ 10,173
Closing Net Fixed Assets	$ -	$ -	$ 295,025

For PILs Calculation

UCC - Smart Meters

CCA Class 47 (8%)	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening UCC	$ -	$ -	$ -
Capital Additions	$ -	$ -	$ 305,198
UCC Before Half Year Rule	$ -	$ -	$ 305,198
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ 152,599
Reduced UCC	$ -	$ -	$ 152,599
CCA Rate Class 47	8%	8%	8%
CCA	$ -	$ -	$ 12,208
Closing UCC	$ -	$ -	$ 292,990

UCC - Tools and Equipment

CCA Class 8 (20%)	01-May-07 to 31-Dec-07	31-Dec-08	31-Dec-09
Opening UCC	$ -	$ -	$ -
Capital Additions	$ -	$ -	$ -
UCC Before Half Year Rule	$ -	$ -	$ -
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -
Reduced UCC	$ -	$ -	$ -
CCA Rate Class 8	20%	20%	20%
CCA	$ -	$ -	$ -
Closing UCC	$ -	$ -	$ -

UCC - Computer Equipment

CCA Class 45 (45%)	31-Dec-07	31-Dec-08	31-Dec-09
Opening UCC	$ -	$ -	$ -
Capital Additions Hardware	$ -	$ -	$ -
Capital Additions Software			
UCC Before Half Year Rule	$ -	$ -	$ -
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -
Reduced UCC	$ -	$ -	$ -
CCA Rate Class 45	55%	55%	55%
CCA	$ -	$ -	$ -
Closing UCC	$ -	$ -	$ -

UCC - Computer Software

CCA Class 12 (100%)	31-Dec-07	31-Dec-08	31-Dec-09
Opening UCC	$ -	$ -	$ -
Capital Additions Hardware			
Capital Additions Software	$ -	$ -	$ -
UCC Before Half Year Rule	$ -	$ -	$ -
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -
Reduced UCC	$ -	$ -	$ -
CCA Rate Class 12	100%	100%	100%
CCA	$ -	$ -	$ -
Closing UCC	$ -	$ -	$ -

CLEARANCE OF SMART METER VARIANCE ACCOUNTS

Unless otherwise advised by the OEB, CHE is not proposing to clear its smart meter related variance accounts.

Exhibit 10:

END OF APPLICATION

Coopérative Hydro Embrun Inc.

File Number: EB-2012-0094

Date Filed: May 31, 2012

Tab 2 of 2

Appendices

Appendix 1 of 1

Appendix A - 2012 Smart Meter Model v2.17

V 2.17

Ontario Energy Board

Smart Meter Model

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

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

Cooperative Hydro Embrun Inc.

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	2006	2007	2008	2009	2010	2011	2012 and later	Total
	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)	2006	2007	2008	2009	2010	2011	2012 and later	Total
		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.1.1 Smart Meters *(may include new meters and modules, etc.)*	Smart Meter	0	0	0	224,188	12,003			$ 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)		$ -	$ -	$ -	$ 258,092	$ 14,643	$ -	$ -	$ 272,735

1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)	Asset Type	2006	2007	2008	2009	2010	2011	2012 and later	Total
		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.2.1 Collectors	Smart Meter				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)	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
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)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-

1.4 WIDE AREA NETWORK (WAN)	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
1.4.1 Activiation Fees									$	-
Total Wide Area Network (WAN)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-

1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
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	Smart Meter				28,705				$	28,705
1.5.5 Program Management									$	-
1.5.6 Other AMI Capital									$	-
Total Other AMI Capital Costs Related to Minimum Functionality		$ -	$ -	$ -	$ 28,705	$ -	$ -	$ -	$	28,705
Total Capital Costs Related to Minimum Functionality		$ -	$ -	$ -	$ 296,227	$ 16,306	$ 1,883	$ -	$	314,417

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY *(Please provide a descriptive title and identify nature of beyond minimum functionality costs)*	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
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	Computer Software								$	-
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Applications Software								$	-
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		$ -	$ -	$ -	$ 296,227	$ 16,306	$ 1,883	$ -	$	314,417

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
2.1.1 Maintenance *(may include meter reverification costs, etc.)*								$	-
2.1.2 Other *(please specifiy)*								$	-
Total Incremental AMCD OM&A Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
2.2.1 Maintenance								$	-
2.2.2 Other *(please specifiy)*								$	-
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.)*								$	-
2.3.2 Other *(please specifiy)*								$	-
Total Incremental AMCC OM&A Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-
2.4 WIDE AREA NETWORK (WAN)									
2.4.1 WAN Maintenance								$	-
2.4.2 Other *(please specifiy)*								$	-
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								$	-
2.5.6 Other AMI Expenses *(please specify)*								$	-
Total Other AMI OM&A Costs Related to Minimum Functionality	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY *(Please provide a descriptive title and identify nature of beyond minimum functionality costs)*	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual			
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	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$	-

3 Aggregate Smart Meter Costs by Category

3.1	**Capital**										
3.1.1	Smart Meter	$ -	$ -	$ -	$ 293,686	$ 14,643	$ 1,883	$ -	$ 310,212		
3.1.2	Computer Hardware	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
3.1.3	Computer Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
3.1.4	Tools & Equipment	$ -	$ -	$ -	$ 2,542	$ 1,663	$ -	$ -	$ 4,205		
3.1.5	Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
3.1.6	Applications Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
3.1.7	**Total Capital Costs**	**$ -**	**$ -**	**$ -**	**$ 296,227**	**$ 16,306**	**$ 1,883**	**$ -**	**$ 314,417**		
3.2	**OM&A Costs**										
3.2.1	**Total OM&A Costs**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**		

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure[1]							
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%
(% of the sum of Cost of Power + controllable expenses)							
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

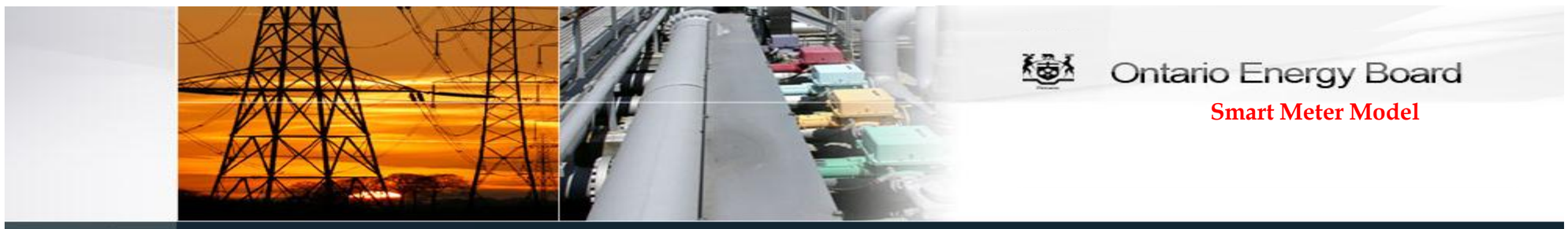
Smart Meters - CCA Class	1	47	47	47	47	47	47
Smart Meters - CCA Rate	4%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	45	50	50	52	52	50	50
Computer Equipment - CCA Rate	45%	55%	55%	100%	100%	55%	55%
General Equipment - CCA Class	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%
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 striaght 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		$ -	$ -	$ -	$ 293,686	$ 308,329
Capital Additions during year (from Smart Meter Costs)	$ -	$ -	$ -	$ 293,686	$ 14,643	$ 1,883
Retirements/Removals (if applicable)						
Closing Balance	$ -	$ -	$ -	$ 293,686	$ 308,329	$ 310,212
Accumulated Depreciation						
Opening Balance		$ -	$ -	$ -	-$ 9,790	-$ 29,857
Amortization expense during year	$ -	$ -	$ -	-$ 9,790	-$ 20,067	-$ 20,618
Retirements/Removals (if applicable)						
Closing Balance	$ -	$ -	$ -	-$ 9,790	-$ 29,857	-$ 50,475
Net Book Value						
Opening Balance	$ -	$ -	$ -	$ -	$ 283,896	$ 278,472
Closing Balance	$ -	$ -	$ -	$ 283,896	$ 278,472	$ 259,737
Average Net Book Value	$ -	$ -	$ -	$ 141,948	$ 281,184	$ 269,105
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

$	310,212
$	-
$	310,212

-$	50,475
-$	20,681
-$	71,155

$	259,737
$	239,057
$	249,397

$	-
$	-
$	-

$	-
$	-
$	-

$	-
$	-
$	-

$	-
$	-
$	-

$	-
$	-
$	-

$	-
$	-
$	-

$	4,205
$	-
$	4,205

-$	885
-$	420
-$	1,305

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

$	-
$	-
$	-

$	-
$	-
$	-

$	-
$	-
$	-

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	$ -	$ -	$ -	$ 141,948	$ 281,184	$ 269,105	$ 249,397
Computer Hardware	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Computer Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools & Equipment	$ -	$ -	$ -	$ 1,207	$ 3,077	$ 3,530	$ 3,110
Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Net Fixed Assets	**$ -**	**$ -**	**$ -**	**$ 143,155**	**$ 284,261**	**$ 272,635**	**$ 252,507**
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	**$ -**	**$ -**	**$ -**	**$ 143,155**	**$ 284,261**	**$ 272,635**	**$ 252,507**
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	$ -	$ -	$ -	$ -	$ 11,370	$ 10,905	$ 10,100
Deemed Long Term Debt	$ -	$ -	$ -	$ 81,169	$ 159,186	$ 152,676	$ 141,404
Equity	$ -	$ -	$ -	$ 61,986	$ 113,705	$ 109,054	$ 101,003
Preferred Shares	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capitalization	$ -	$ -	$ -	$ 143,155	$ 284,261	$ 272,635	$ 252,507
Return on							
Deemed Short Term Debt	$ -	$ -	$ -	$ -	$ 235	$ 226	$ 209
Deemed Long Term Debt	$ -	$ -	$ -	$ 5,073	$ 9,344	$ 8,962	$ 8,300
Equity	$ -	$ -	$ -	$ 5,579	$ 11,200	$ 10,742	$ 9,949
Preferred Shares	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Return on Capital	$ -	$ -	$ -	$ 10,652	$ 20,780	$ 19,930	$ 18,458
Operating Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Amortization Expenses (from Sheet 4)							
Smart Meters	$ -	$ -	$ -	$ 9,790	$ 20,067	$ 20,618	$ 20,681
Computer Hardware	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Computer Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools & Equipment	$ -	$ -	$ -	$ 127	$ 337	$ 420	$ 420
Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Amortization Expense in Year	$ -	$ -	$ -	$ 9,917	$ 20,404	$ 21,039	$ 21,101
Incremental Revenue Requirement before Taxes/PILs	$ -	$ -	$ -	$ 20,568	$ 41,184	$ 40,968	$ 39,560
Calculation of Taxable Income							
Incremental Operating Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Amortization Expense	$ -	$ -	$ -	$ 9,917	$ 20,404	$ 21,039	$ 21,101
Interest Expense	$ -	$ -	$ -	$ 5,073	$ 9,580	$ 9,188	$ 8,509
Net Income for Taxes/PILs	$ -	$ -	$ -	$ 5,579	$ 11,200	$ 10,742	$ 9,949
Grossed-up Taxes/PILs (from Sheet 7)	$ -	$ -	$ -	$ 1,334.59	$ 1,704.95	$ 1,681.04	$ 1,879.79
Revenue Requirement, including Grossed-up Taxes/PILs	$ -	$ -	$ -	$ 21,903	$ 42,889	$ 42,649	$ 41,439

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	$ -	$ -	$ -	$ -	$ 281,938.12	$ 273,440.48	$ 253,373.39
Capital Additions	$ -	$ -	$ -	$ 293,685.54	$ 14,643.14	$ 1,883.48	$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	$ -	$ -	$ -	$ 293,685.54	$ 296,581.26	$ 275,323.96	$ 253,373.39
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -	$ 146,842.77	$ 7,321.57	$ 941.74	$ -
Reduced UCC	$ -	$ -	$ -	$ 146,842.77	$ 289,259.69	$ 274,382.22	$ 253,373.39
CCA Rate Class	1	47	47	47	47	47	47
CCA Rate	4%	8%	8%	8%	8%	8%	8%
CCA	$ -	$ -	$ -	$ 11,747.42	$ 23,140.78	$ 21,950.58	$ 20,269.87
Closing UCC	$ -	$ -	$ -	$ 281,938.12	$ 273,440.48	$ 253,373.39	$ 233,103.51

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

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	$ -	$ -	$ -	$ 5,578.76	$ 11,199.90	$ 10,741.81	$ 9,948.76
Amortization	$ -	$ -	$ -	$ 9,916.60	$ 20,404.46	$ 21,038.50	$ 21,101.28
CCA - Smart Meters	$ -	$ -	$ -	-$ 11,747.42	-$ 23,140.78	-$ 21,950.58	-$ 20,269.87
CCA - Computers	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CCA - Applications Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CCA - Other Equipment	$ -	$ -	$ -	-$ 254.16	-$ 623.80	-$ 665.35	-$ 532.28
Change in taxable income	$ -	$ -	$ -	$ 3,493.78	$ 7,839.78	$ 9,164.38	$ 10,247.89
Tax Rate (from Sheet 3)	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%
Income Taxes Payable	$ -	$ -	$ -	$ 576.47	$ 1,254.37	$ 1,420.48	$ 1,588.42
ONTARIO CAPITAL TAX							
Smart Meters	$ -	$ -	$ -	$ 283,896.02	$ 278,472.02	$ 259,737.47	$ 239,056.66
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	$ -	$ -	$ -	$ 286,310.58	$ 282,212.34	$ 263,057.32	$ 241,956.04
Less: Exemption							
Deemed Taxable Capital	$ -	$ -	$ -	$ 286,310.58	$ 282,212.34	$ 263,057.32	$ 241,956.04
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)	$ -	$ -	$ -	$ 644.20	$ 211.66	$ -	$ -
Change in Income Taxes Payable	$ -	$ -	$ -	$ 576.47	$ 1,254.37	$ 1,420.48	$ 1,588.42
Change in OCT	$ -	$ -	$ -	$ 644.20	$ 211.66	$ -	$ -
PILs	$ -	$ -	$ -	$ 1,220.67	$ 1,466.02	$ 1,420.48	$ 1,588.42

Gross Up PILs

Tax Rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%
Change in Income Taxes Payable	$ -	$ -	$ -	$ 690.39	$ 1,493.29	$ 1,681.04	$ 1,879.79
Change in OCT	$ -	$ -	$ -	$ 644.20	$ 211.66	$ -	$ -
PILs	**$ -**	**$ -**	**$ -**	**$ 1,334.59**	**$ 1,704.95**	**$ 1,681.04**	**$ 1,879.79**

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	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	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts
			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)
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Board Approved Smart Meter Funding Adder (from Tariff)	
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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	826.38
				Mar-09	2009	Q1	1,652.77
				Apr-09	2009	Q2	2,479.15
				May-09	2009	Q2	3,305.53
				Jun-09	2009	Q2	4,131.92
				Jul-09	2009	Q3	4,958.30
				Aug-09	2009	Q3	5,784.68
				Sep-09	2009	Q3	6,611.07
				Oct-09	2009	Q4	7,437.45
				Nov-09	2009	Q4	8,263.83
				Dec-09	2009	Q4	9,090.22
				Jan-10	2010	Q1	9,916.60
				Feb-10	2010	Q1	11,616.97
				Mar-10	2010	Q1	13,317.34
				Apr-10	2010	Q2	15,017.71
				May-10	2010	Q2	16,718.09
				Jun-10	2010	Q2	18,418.46
				Jul-10	2010	Q3	20,118.83
				Aug-10	2010	Q3	21,819.20
				Sep-10	2010	Q3	23,519.57
				Oct-10	2010	Q4	25,219.94
				Nov-10	2010	Q4	26,920.32
				Dec-10	2010	Q4	28,620.69
				Jan-11	2011	Q1	30,321.06
				Feb-11	2011	Q1	32,074.27
				Mar-11	2011	Q1	33,827.48
				Apr-11	2011	Q2	35,580.68
				May-11	2011	Q2	37,333.89
				Jun-11	2011	Q2	39,087.10
				Jul-11	2011	Q3	40,840.31
				Aug-11	2011	Q3	42,593.52
				Sep-11	2011	Q3	44,346.73
				Oct-11	2011	Q4	46,099.93
				Nov-11	2011	Q4	47,853.14
				Dec-11	2011	Q4	49,606.35

[redacted]	Jan-12	2012	Q1	51,359.56
	Feb-12	2012	Q1	51,359.56
	Mar-12	2012	Q1	51,359.56
	Apr-12	2012	Q2	51,359.56
	May-12	2012	Q2	51,359.56
	Jun-12	2012	Q2	51,359.56
	Jul-12	2012	Q3	51,359.56
	Aug-12	2012	Q3	51,359.56
	Sep-12	2012	Q3	51,359.56
	Oct-12	2012	Q4	51,359.56
	Nov-12	2012	Q4	51,359.56
	Dec-12	2012	Q4	51,359.56

eciation 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%	-	-
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		-	5.14%	-	-
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		-	5.14%	-	-
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		-	5.14%	-	-
		-	5.14%	-	-
		-	4.08%	-	-
		-	4.08%	-	-
		-	4.08%	-	-
		-	3.35%	-	-
		-	3.35%	-	-
		-	3.35%	-	-
		-	3.35%	-	-
		-	3.35%	-	-
		-	3.35%	-	-
	$ 826.38	826.38	2.45%	-	-
	$ 826.38	1,652.77	2.45%	1.69	1.69
	$ 826.38	2,479.15	2.45%	3.37	5.06
	$ 826.38	3,305.53	1.00%	2.07	7.13
	$ 826.38	4,131.92	1.00%	2.75	9.88
	$ 826.38	4,958.30	1.00%	3.44	13.33
	$ 826.38	5,784.68	0.55%	2.27	15.60
	$ 826.38	6,611.07	0.55%	2.65	18.25
	$ 826.38	7,437.45	0.55%	3.03	21.28
	$ 826.38	8,263.83	0.55%	3.41	24.69
	$ 826.38	9,090.22	0.55%	3.79	28.48
	$ 826.38	9,916.60	0.55%	4.17	32.64
	$ 1,700.37	11,616.97	0.55%	4.55	37.19
	$ 1,700.37	13,317.34	0.55%	5.32	42.51
	$ 1,700.37	15,017.71	0.55%	6.10	48.62
	$ 1,700.37	16,718.09	0.55%	6.88	55.50
	$ 1,700.37	18,418.46	0.55%	7.66	63.16
	$ 1,700.37	20,118.83	0.55%	8.44	71.60
	$ 1,700.37	21,819.20	0.89%	14.92	86.52
	$ 1,700.37	23,519.57	0.89%	16.18	102.71
	$ 1,700.37	25,219.94	0.89%	17.44	120.15
	$ 1,700.37	26,920.32	1.20%	25.22	145.37
	$ 1,700.37	28,620.69	1.20%	26.92	172.29
	$ 1,700.37	30,321.06	1.20%	28.62	200.91
	$ 1,753.21	32,074.27	1.47%	37.14	238.05
	$ 1,753.21	33,827.48	1.47%	39.29	277.35
	$ 1,753.21	35,580.68	1.47%	41.44	318.78
	$ 1,753.21	37,333.89	1.47%	43.59	362.37
	$ 1,753.21	39,087.10	1.47%	45.73	408.10
	$ 1,753.21	40,840.31	1.47%	47.88	455.99
	$ 1,753.21	42,593.52	1.47%	50.03	506.02
	$ 1,753.21	44,346.73	1.47%	52.18	558.19
	$ 1,753.21	46,099.93	1.47%	54.32	612.52
	$ 1,753.21	47,853.14	1.47%	56.47	668.99
	$ 1,753.21	49,606.35	1.47%	58.62	727.61
	$ 1,753.21	51,359.56	1.47%	60.77	788.38

		51,359.56	1.47%	62.92	851.29
		51,359.56	1.47%	62.92	914.21
		51,359.56	1.47%	62.92	977.12
		51,359.56	1.47%	62.92	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04
		51,359.56	0.00%	-	1,040.04

$ -	$ 51,359.56	$ 51,359.56	

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	$ -	$ 9,916.60	$ 9,916.60
2010	$ -	$ 20,404.46	$ 30,321.06
2011	$ -	$ 21,038.50	$ 51,359.56
2012	$ -	$ 21,101.28	$ 72,460.84

Cumulative Interest to 2011
Cumulative Interest to 2012

ıse, 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%	$ -
$ 4,958.30	1.14%	$ 56.40
$ 20,118.83	0.80%	$ 160.45
$ 40,840.31	1.47%	$ 600.35
$ 61,910.20	1.47%	$ 910.08
		$ 817.20
		$ 1,727.28

Ontario Energy Board

Smart Meter Model

Cooperative Hydro Embrun Inc.

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)	
X	Smart Meter Disposition Rider (SMDR)	**The SMDR is calculated based on costs to December 31, 2011**
X	Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)	**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)	$ -	$ -	$ -	$ 21,903.01	$ 42,888.92	$ 42,649.15	$ 41,439.31	$ 148,880.39
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B)	$ -	$ -	$ -	$ 56.40	$ 160.45	$ 600.35		$ 817.20
(Check **one** of the boxes below)								
Sheet 8A (Interest calculated on monthly balances)								$ -
X Sheet 8B (Interest calculated on average annual balances)	$ -	$ -	$ -	$ 56.40	$ 160.45	$ 600.35		$ 817.20
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	$ 6,306.09	$ 15,268.74	$ 9,987.91	$ 30,580.09	$ 46,672.82
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	$	108,258.28
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	$	103,024.78
Net Deferred Revenue Requirement	$	5,233.50
SMDR May 1, 2012 to April 30, 2013	$	0.22
Check: Forecasted SMDR Revenues	$	5,169.12

Match

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

Incremental Revenue Requirement for 2012	$	41,439.31
SMIRR	$	1.76

Match

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	$21,959.41	$43,049.37	$43,249.50		**$108,258.28**					
Total Return on Capital	$10,651.83	$20,779.51	$19,929.61		**$51,360.95**	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
					Allocated per Class			$51,360.95	$38,669.49	$10,133.81
Amortization	$9,973.00	$20,564.91	$21,638.85		**$52,176.76**	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
					Allocated per Class			$52,176.76	$39,283.71	$10,294.78
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	$1,334.59	$1,704.95	$1,681.04		**$4,720.58**	Revenue Requirement allocated to each Class before PILs		$103,537.71	$77,953.20	$20,428.59
					Allocated per Class			$4,720.58	$3,554.11	$931.40
								Total	**Residential**	**General Service Less than 50 kW**
TOTAL REVENUE REQUIREMENT					**$108,258.28**			**$108,258.28**	**$81,507.31**	**$21,359.98**
					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					**$5,233.50**					
					Allocated per Class			$5,233.50	-$12,417.82	$12,887.90
					Number of Metered Customers	(2012)			1,796	162
					Smart Meter Disposition Rate Rider				-$0.58	$6.63

Smart Meter Funding Adder Revenues		Number of customers			**Estimated SMFA Revenues**			
Year	Residential	GS < 50 kW	Other Metered Customer Classes	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

Cooperative Hydro Embrun Inc.

	2012		Total 2012	Explanation Allocator	ID and Factors	Total	Residential	General Service Less than 50 kW
Revenue Requirement for the Historical Years	$41,439.31		**$41,439.31**					
Total Return on Capital	$18,458.24		**$18,458.24**	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
			Allocated per Class			$18,458.24	$13,897.15	$3,641.92
Amortization	$21,101.28		**$21,101.28**	Smart Meter - Capital	CWMC	100.00%	75.29%	19.73%
			Allocated per Class			$21,101.28	$15,887.09	$4,163.40
Operating Expenses	$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	$1,879.79		**$1,879.79**	Revenue Requirement allocated to each Class before PILs		$39,559.52	$29,784.23	$7,805.32
			Allocated per Class			$1,879.79	$1,415.29	$370.89
						Total	**Residential**	**General Service Less than 50 kW**
TOTAL REVENUE REQUIREMENT			**$41,439.31**			**$41,439.31**	**$31,199.52**	**$8,176.22**
			Percentage of costs allocated to Residential and GS < 50 kW customer classes			100.00%	75.29%	19.73%
			Number of Metered Customers	(2012)			1,796	162
			Smart Meter Disposition Rate Rider				$1.45	$4.21

Rate Class	SMDR One Year Recovery	SMIRR
Residential	($0.58)	$1.45
General Service Less than 50 kW	$6.63	$4.21
General Service Greater than 50 kW	$33.08	$14.33