

MANAGER'S SUMMARY

COOPÉRATIVE HYDRO EMBRUN INC.

SMART METER 2007 EDR RATE ADDERS

IN THE MATTER OF an Application by Cooperative Hydro Embrun Inc. for Incentive Rate Mechanism Adjustment Model, effective May 1, 2007, in accordance with the Cost of Capital EB –2006-0088 and 2nd Generation Incentive Regulation Mechanism issued December 20,2006 by the Ontario Energy Board.

1. Introduction

Cooperative Hydro Embrun Inc. (the “Company”) is a licensed electricity distribution business operating in the Town of Embrun, under license #ED-2002-0493 with no special conditions in its' licence.

The Company submits this Application which includes the 2007 Smart Meter Rate Adders as February 9,2007 and the required documentation to adjust distribution rates effective May 1, 2007 in accordance with the Filing Guidelines issued by the Ontario Energy Board (“Board”) and dated December 20, 2006. Also in accordance with the filing guidelines issued in Report of the Board on 2nd Generation Incentive Regulation for Ontario's Electricity Distributors Addendum for Smart Metering Rates dated January 29th, 2007.

2. 2007 EDR SMART METER RATE CALCULATION MODEL

TAB 1 LDC information

As per the instructions issued by the Board, *LDC* information related to the application.

The following information summarizes the output of the Smart Meter Rate Calculation. Only sheets with information inputs are identified.

On December 15, 2006 the Cooperative filed his Smart Meter Implementation. It was mentioned that Cooperative Hydro Embrun Inc.,

Hydro 2000 Inc., Ottawa River Power Corporation and Hawkesbury Hydro are forming a group to share resources and expertise that will mutually benefit for everyone. Furthermore 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

procuring some metering services it was decided that the utilities mentioned above will move forward with Elster in 2007.

The implementation of Smart Meters will be as follow:

2007- 300 residential and 25 commercial Meter Pilot Program with Elster involving installation of meters, collector and communication serviced by the Cooperative.

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

2009 – completion of implementation for the Cooperative with 663 residential meters and 72 commercial meter.

A complication has arisen in the last 3 weeks with the announcement that Advance, our CIS vendor is exiting the Ontario marketplace due the reduction in utilities and the ongoing burden that the Ontario market place changes places on CIS vendors. This will mean the added significant workload of changing vendors.

Ottawa River Power Corporation provide billing services to the Cooperative and Hydro 2000 Inc. It is expected that our three utilities and possible Hawkesbury Hydro will cooperate with smart meters to provide a cost saving to the AMI. Details of the working arrangement will be established during the pilot stage in 2007.

Tab 2 **Smart Meter Data**

A. **Smart Meter Unit Cost**

Based on pricing by Elster each meter will cost \$95.00.
 Cost per meter for three year period:

Based on pricing By Elster each meter is \$95.00			
Year	Meter Installed	Unit Cost \$	Total Cost \$
2007	325	95	30,875.00
2008	735	95	69,825.00
2009	735	95	69,825.00
Meter unit cost Cell C17		95	

B. Smart Meter Other Unit Cost

In 2007, the Cooperative will install 4 Alpha Meter Collector(\$820.00/each). This device will have access to read conventional meter in the following classes: Residential, Commercial Less than 50Kw.

The Cooperative will also installed 4 Commercial Alpha Meter(\$600.00 /each)in 2007 pilot project for Commercial Cost for three year period:

Year	Alpha Meter Collector	Unit Cost \$	Total Cost \$
2007	4	820	3,280.00
2008	1	820	820.00
2009	1	820	820.00

Year	Alpha Commercial	Unit Cost \$	Total Cost \$
2007	4	600	2,400.00
2008	16	600	9,600.00
2009	16	600	9,600.00
Total	1795		26,520.00
Total divided by 1795 customers Cell C20			14.77

C. Smart Meter Installation Unit Cost

The Cooperative assumes that the cost per meter installation for residential and commercial below 50kW will be \$30.00.
Cost of installation for three years period:

Year	Meter Installed	Unit Cost \$	Total Cost \$
2007	325	30	9,750.00
2008	735	30	22,050.00
2009	735	30	22,050.00
Meter unit cost Cell C23		30	

D. Smart Meter Other Installation Unit Cost

In 2007 will have to upgrade Commercial Installation(\$300.00/per unit) and upgrade A Base Meter(\$35.00/per unit).

Also project management will be needed to monitor the pilot project.(\$10,000.00 for year 2007)

A project manager will be assigned for the implementation and coordination of the full deployment of smart meter installation and related duties.			
Year	Project Manager	Unit Cost \$	Total Cost \$
2007	1	\$ 5,000.00	\$ 5,000.00
2008	1	\$ 5,000.00	\$ 5,000.00
2009	0	0	-
Residential upgrade Installation for A Base Adaptor			
Year	Alpha Commercial	Unit Cost \$	Total Cost \$
2007	20	35	700.00
2008	10	35	350.00
2009	10	35	350.00
Commercial upgrade Installation \$300.00/each.			
Year	Alpha Commercial	Unit Cost \$	Total Cost \$
2007	20	300	6,000.00
2008	10	300	3,000.00
2009	10	300	3,000.00
Total	1795		23,400.00
Total divided by 1795 customers Cell C20			13.04

AMI Computer Hardware Capital Cost

AMI Computer Hardware Capital Cost

As mention in our filing of December 15th, 2006, four LDC already form a group to minimize the cost for the implementation of smart meters. The group is form of Ottawa River Power Corporation, Cooperative Hydro Embrun Inc., Hawkesbury Hydro and Hydro 2000 Inc. other LDCs may joint the group after. Capital cost estimated to \$10,000.00.

Year	Partners #	Unit Cost \$	Total Cost \$
2007	3	10,000	3,333.00
Total AMI hardware capital cost Cell D34			3,333.00

AMI Computer Software Capital Cost

As mention above the capital cost for software will be split between partners. Capital cost estimated to \$70,000.00.

Year	Partners #	Unit Cost \$	Total Cost \$
2007	3	70,000.00	23,333.00
Total AMI software capital cost Cell D37			\$ 23,333.00

AMI Other Computer Hardware Capital Cost

Year	Partners #	Unit Cost \$	Total Cost \$
2007	0	0	-
2008	0	5,000	5,000.00
Total Other hardware capital cost Cell E44			\$ 5,000.00

AMI OTHER Computer Software Capital Cost

Other Computer Software Capital Cost

Cost related to software modification for smart meter implementation project.		
Year	Description	Total Cost \$
2008	CIS Software modification	25,000.00
2008	Web/Telephone Response System	10,000.00
2008	Project Manager	5,000.00
2008	Elster licensing	898.00
Total Other software capital cost Cell E47		\$ 40,898.00

AMI O&M EXPENSES

An estimated cost of \$10,000 per year for cost charges for the MDM/R operations.			
Year		Unit Cost \$	Total Cost \$
2007		0	-
2008		10,000	10,000.00
2009		10,000	10,000.00
2010		10,000	10,000.00

INCREMENTAL OTHER O&M EXPENSES

Phone lines expenses			
Year	Total Number Phone Lines	Unit Cost \$	Total Cost \$
2007	4	60/per month	2,880.00
2008	4	60/per month	2,880.00
2009	4	60/per month	2,880.00
2010	4	60/per month	2,880.00
Elster support software			
Year	Partners Numbers	Unit Cost \$	Total Cost \$
2007	3	14,000	4,666.67
2008	3	14,000	4,666.67
2009	3	14,000	4,666.67
2010	3	14,000	4,666.67
Total Per Year			7,546.67
Total Other Incremental O&M Cell D64-E64-F64-G64			7,546.67

Tab 3 LDC Assumptions and Data
No inputs are required for this spreadsheet.

Tab 4 Smart Meter Rate Calculation
No inputs are required for this spreadsheet.
Smart Meter Rate Adder \$0.81

Tab 5 PIL'S
No inputs are required for this spreadsheet.

Tab 6 SM Avg Net Fixed Asset & UCC
No inputs are required for this spreadsheet.

Signed this 8th day of February, 2007 at Embrun by:

Benoit Lamarche
Manager
Cooperative Hydro Embrun Inc.