



EB-2007-0747
EB-2007-0748

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

AND IN THE MATTER OF applications by electricity distribution companies for approval of a smart meter rate adder;

AND IN THE MATTER OF a combined proceeding initiated by the Ontario Energy Board pursuant to sections 19(4), 21(1), 21(5) and 78(3.03) of the *Ontario Energy Board Act, 1998* to determine issues related to the recovery of costs incurred by distributors and associated with authorized discretionary metering activities;

AND IN THE MATTER OF motions by Toronto Hydro-Electric System Limited ("THESL") and by Hydro Ottawa Limited ("Hydro Ottawa") requesting the Board to review and vary certain aspects of Decision and Order in EB-2007-0063 dated August 8, 2007.

BEFORE: Gordon Kaiser
Vice Chair, Presiding Member

Ken Quesnelle
Member

Cathy Spoel
Member

DECISION AND ORDER

In January and February of 2007, twelve licensed distributors authorized to conduct discretionary metering activities filed applications pursuant to section 78 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B) for the approval of distribution

rates, which applications included a smart metering rate adder to be effective as of May 1, 2007.

These distributors are Chatham-Kent Hydro Inc., Enersource Hydro Mississauga Inc., Horizon Utilities Corporation, Hydro One Brampton Networks Inc., Hydro One Networks Inc., Hydro Ottawa, Middlesex Power Distribution Corporation, Milton Hydro Distribution Inc., PowerStream Inc., Tay Hydro Electric Distribution Co. Inc., THESL, and Veridian Connections Inc.

On March 26, 2007, the Board received an application from THESL pursuant to section 78 of the Act for rate adjustments related to smart metering activities and Conservation and Demand Management activities. The Board determined it would consider the adjustments related to smart metering activities in this Combined Proceeding.

On May 2, 2007, the Board issued a further Notice of a Combined Proceeding pursuant to sections 19, 21 and 78 of the Act to determine the prudence and recovery of costs associated with smart metering activities for the twelve licensed distributors referred to above, and a thirteenth licensed distributor, Newmarket Hydro Limited, that has been authorized by regulation to conduct discretionary metering activities. These thirteen licensed distributors are deemed to be applicants in the Combined Proceeding.

The combined hearing commenced on June 15, 2007 and ended on July 12, 2007. A determination was made by the Board at the outset of that hearing that the hearing would be held *in camera*. Only parties that signed the Board's form of Declaration and Undertaking were permitted to participate in the hearing and access the evidence, transcripts and exhibits.

The Board issued its Decision in this matter on August 8, 2007, approving, with minor exceptions, the costs claimed by the utilities with respect to smart metering activities. The Decision contained two appendices, one of which was confidential, and one of which was not confidential. The non-confidential appendix aggregated the costs, while the confidential appendix itemized all the costs.

On August 29, 2007, the Board received two applications, one from THESL and the other from Hydro Ottawa, to vary the Board's Decision. Those motions were heard by the Board on September 18, 2007. The Board issued an oral decision on the motions as rendered in the transcript dated September 18, 2007.

The THESL Motion

THESL requested that the Board review and vary its decision in the following manner:

1. add certain smart meter costs that the Board had disallowed because those amounts had been previously paid by the 3rd tranche Conservation and Demand Management (“CDM”) funding;
2. rescind the deduction of 1,000 Smart Meter units from the total number of units claimed by THESL. The Board had disallowed this quantity of meters on the assumption that these meters had been previously funded through CDM;
3. exclude certain costs related to the AMCC; and
4. increase the cost per meter to the gross cost paid to Elster. The Board had reduced the allowed cost by the amount of the volume discount, and applied that volume discount to all meters purchased during the entire term of the contract.

The Board, in its oral decision, granted the relief requested by THESL in paragraphs 1, 2 and 3. The relief requested in paragraph 4 was denied. The Board has ruled that the volume discount available to THESL at the end of its contract should be applied to all purchases made, with the result that the actual cost per meter was the cost after taking into account the volume discount. The net effect of all of these changes is indicated in the attached Appendix “A” and results in an increase in the total costs from \$24.294 million to \$26.139 million.

The Hydro Ottawa Motion

Hydro Ottawa requested that the Board review and vary its decision in the following manner:

1. increase the cost per meter to the gross cost paid to Elster. The Board had reduced the allowed cost by the amount of the volume discount, and applied that volume discount to all meters purchased during the entire term of the contract;
2. in the alternative, should the Board decide to maintain the volume discount, a recalculation of the Board’s adjusted capital spending based on the actual credits that Hydro Ottawa will receive from Elster Metering as documented in Schedule D of

the Meter Supply and Service Agreement between Hydro Ottawa and Elster Metering; and a determination by the Board that the revised adjustment amount of removed from costs in the period up to April 30, 2007 will be added to costs for recovery in a subsequent period without further scrutiny to ensure that Hydro Ottawa can recover its actual costs;

3. approve Hydro Ottawa's smart meter capital costs for commercial demand customers; and
4. add to Hydro Ottawa's smart meter costs the exchange rate costs.

The Board, in its oral decision, denied the relief requested in paragraph 1 but has granted the relief requested in paragraphs 2, 3 and 4. Regarding paragraphs 2 and 4, the Board has ruled that the volume discount available to Hydro Ottawa at the end of its contract should be applied to all purchases made. The Board ruled that the prudent costs to be reflected in the attached Appendix "A" should be recalculated based on the actual discounted costs of the four meter types that Hydro Ottawa will receive from Elster. Further, the Board ruled that the price should be increased to reflect exchange rate differences in the relevant period. The net effect of these changes is indicated in the attached Appendix "A" and results in an increase in the total costs from \$15.514 million to \$15.701 million. The Board also granted the relief requested in paragraph 3. The Board found that the cost of the purchases set out in paragraph 17 of Hydro Ottawa's motion related to 328 commercial meters to be prudent.

THE BOARD ORDERS THAT:

1. The "Appendix "A" Revised September 18, 2007 (Confidential)" attached to this Order, which includes itemized costs, is approved as final and shall be made a part of the confidential transcript of the Board's September 18, 2007 oral decision. Only parties that signed the Board's standard form of Declaration and Undertaking for maintaining confidentiality will have access to the confidential Appendix "a" and confidential transcript.
2. The "Appendix "A" Revised September 18, 2007 (Non-Confidential)" attached to this Order, which includes aggregated costs, is approved as final and shall be made a part of the public redacted transcript of the Board's September 18, 2007 oral decision.

DATED at Toronto, September 21, 2007

ONTARIO ENERGY BOARD

Original signed by

Peter O'Dell
Assistant Board Secretary

	A	B	C	D	E	F	G	H	I	J	K
1	Recovery of Costs Incurred for Installed Units (Minimum Functionality)										
2	Cost Breakdown of Functional Specification for an Advanced Metering Infrastructure										
3											
4	CAD \$ MILLIONS		TORONTO HYDRO		HYDRO ONE		HYDRO ONE				
5			(Revised 18sep07)		NETWORKS		BRAMPTON				
6	CAPITAL COSTS										
7			\$	Qty	\$	Qty	\$	Qty			
8	ADVANCED METERING COMMUNICATION DEVICE (AMCD)										
9	1. Smart Meter										
10	2. Installation Cost										
11	3. Workforce Automation										
12											
13	ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)										
14	4. Collectors										
15	5. Repeaters										
16	6. Installation										
17											
18	ADVANCED METERING CONTROL COMPUTER (AMCC)										
19	7. Computer Hardware										
20	8. Computer Software										
21	9. Computer Software Licence & Installation										
22											
23	WIDE AREA NETWORK (WAN)										
24	10. Activation Fees										
25											
26	OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY										
27	11. AMI Interface to CIS										
28	12. Professional Fees										
29	13. Integration										
30	14. Program Management										
31											
32	TOTAL CAPITAL COST (CAD \$ Millions)		25.741	193,294	21.799	62,914	0.940	6,401			
33	TOTAL OM&A COST (CAD \$ Millions) ^{see NOTE}		0.398		8.366		0.008				
34	TOTAL COST (CAD \$ Millions)		26.139		30.165		0.948				
35											
36	Total Cost per Unit \$ (Total Cost / Quantity of Smart Meters)		\$135.23		\$479.47		\$148.04				
37											
38	Costs Incurred to:		31-Dec-06		31-May-07		31-May-07				
39	Source:		Ex A12 Tab G adjusted		Ex A5 adjusted		Ex A4 adjusted				
40	Commitment re Quantity of Units Installed by December 31, 2007		400,000		240,000		35,000				
41											
42	NOTE: OM&A Costs include the following:				* The Board will allow						
43	AMCD Maintenance				half of the program						
44	AMRC/LAN Maintenance				management costs						
45	AMCC Hardware and Software Maintenance										
46	WAN										
47	Other (Business Process Redesign/Customer Communication/Program Management/Change Management)										

	A	B	L	M	N	O	P	Q	R	S	T
1	Recovery of Costs Incurred for Installed Units (Minimum Functionali										
2	Cost Breakdown of Functional Specification for an Advanced Meteri										
3											
4	CAD \$ MILLIONS		HYDRO OTTAWA		(Revised 18sep07)		HORIZON		POWERSTREAM		
5											
6	CAPITAL COSTS										
7			\$	Qty	\$	Qty	\$	Qty			
8	ADVANCED METERING COMMUNICATION DEVICE (AMCD)										
9	1. Smart Meter										
10	2. Installation Cost										
11	3. Workforce Automation										
12											
13	ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)										
14	4. Collectors										
15	5. Repeaters										
16	6. Installation										
17											
18	ADVANCED METERING CONTROL COMPUTER (AMCC)										
19	7. Computer Hardware										
20	8. Computer Software										
21	9. Computer Software Licence & Installation										
22											
23	WIDE AREA NETWORK (WAN)										
24	10. Activation Fees										
25											
26	OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY										
27	11. AMI Interface to CIS										
28	12. Professional Fees										
29	13. Integration										
30	14. Program Management										
31											
32	TOTAL CAPITAL COST (CAD \$ Millions)		15.480	114,432	0.816	0	0.074	0			
33	TOTAL OM&A COST (CAD \$ Millions) ^{see NOTE}		0.221		0.239		0				
34	TOTAL COST (CAD \$ Millions)		15.701		1.055		0.074				
35											
36	Total Cost per Unit \$ (Total Cost / Quantity of Smart Meters)		\$137.21				n/a		n/a		
37											
38	Costs Incurred to:		30-Apr-07		30-Apr-07		31-Dec-06				
39	Source:		Ex A6 adjusted		Ex A3 adjusted		Ex A10				
40	Commitment re Quantity of Units Installed by December 31, 2007		175,000		50,000		80,000				
41											
42	NOTE: OM&A Costs include the following:										
43	AMCD Maintenance										
44	AMRC/LAN Maintenance										
45	AMCC Hardware and Software Maintenance										
46	WAN										
47	Other (Business Process Redesign/Customer Communication/Program Manage										

	A	B	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF
1	Recovery of Costs Incurred for Installed Units (Minimum Functionali													
2	Cost Breakdown of Functional Specification for an Advanced Meteri													
3														
4	CAD \$ MILLIONS		VERIDIAN		ENERSOURCE			CHATHAM-KENT			MIDDLESEX			
5														
6	CAPITAL COSTS													
7			\$	Qty			\$	Qty			\$	Qty		
8	ADVANCED METERING COMMUNICATION DEVICE (AMCD)													
9	1. Smart Meter													
10	2. Installation Cost													
11	3. Workforce Automation													
12														
13	ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)													
14	4. Collectors													
15	5. Repeaters													
16	6. Installation													
17														
18	ADVANCED METERING CONTROL COMPUTER (AMCC)													
19	7. Computer Hardware													
20	8. Computer Software													
21	9. Computer Software Licence & Installation													
22														
23	WIDE AREA NETWORK (WAN)													
24	10. Activation Fees													
25														
26	OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY													
27	11. AMI Interface to CIS													
28	12. Professional Fees													
29	13. Integration													
30	14. Program Management													
31														
32	TOTAL CAPITAL COST (CAD \$ Millions)		0.043	0			1.514	12,528			2.862	17,052	0.557	3,063
33	TOTAL OM&A COST (CAD \$ Millions) ^{see NOTE}		0				0.293				0.367		0.025	
34	TOTAL COST (CAD \$ Millions)		0.043				1.807			3.229		0.582		
35														
36	Total Cost per Unit \$ (Total Cost / Quantity of Smart Meters)					n/a		\$144.20			\$189.34		\$189.96	
37														
38	Costs Incurred to:		31-Dec-06		30-Apr-07			30-Apr-07			30-Apr-07			
39	Source:		Ex A13 Tab B		Ex A2 Updated Adj			K7.2			K7.2 (incl correction)			
40	Commitment re Quantity of Units Installed by December 31, 2007		40,000		60,000			34,000 (incl M)			(see C-K)			
41														
42	NOTE: OM&A Costs include the following:													
43	AMCD Maintenance													
44	AMRC/LAN Maintenance													
45	AMCC Hardware and Software Maintenance													
46	WAN													
47	Other (Business Process Redesign/Customer Communication/Program Manage													

	A	B	AG	AH	AI	AJ	AK	AL	AM	AN	AO	
1	Recovery of Costs Incurred for Installed Units (Minimum Functionali											
2	Cost Breakdown of Functional Specification for an Advanced Meteri											
3												
4	CAD \$ MILLIONS		MILTON		NEWMARKET				TAY			
5												
6	CAPITAL COSTS											
7			\$	Qty	\$	Qty	\$	Qty				
8	ADVANCED METERING COMMUNICATION DEVICE (AMCD)											
9	1. Smart Meter											
10	2. Installation Cost											
11	3. Workforce Automation											
12												
13	ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)											
14	4. Collectors											
15	5. Repeaters											
16	6. Installation											
17												
18	ADVANCED METERING CONTROL COMPUTER (AMCC)											
19	7. Computer Hardware											
20	8. Computer Software											
21	9. Computer Software Licence & Installation											
22												
23	WIDE AREA NETWORK (WAN)											
24	10. Activation Fees											
25												
26	OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY											
27	11. AMI Interface to CIS											
28	12. Professional Fees											
29	13. Integration											
30	14. Program Management											
31												
32	TOTAL CAPITAL COST (CAD \$ Millions)		0.697	5,494	2.111	19,000	0	0				
33	TOTAL OM&A COST (CAD \$ Millions) ^{see NOTE}		0		0.237		0					
34	TOTAL COST (CAD \$ Millions)		0.697		2.348		0					
35												
36	Total Cost per Unit \$ (Total Cost / Quantity of Smart Meters)			\$126.83		\$123.59			n/a			
37												
38	Costs Incurred to:		30-Apr-07		08-Jun-07				08-Jun-07			
39	Source:		Ex A8		Ex A9 Confidential				Ex A11 Confidential			
40	Commitment re Quantity of Units Installed by December 31, 2007				26,000				4,000			
41												
42	NOTE: OM&A Costs include the following:											
43	AMCD Maintenance											
44	AMRC/LAN Maintenance											
45	AMCC Hardware and Software Maintenance											
46	WAN											
47	Other (Business Process Redesign/Customer Communication/Program Manage											