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#### ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998 (the "OEB Act");

AND IN THE MATTER OF an Application by Chatham-Kent Hydro ("CKH") and Middlesex Power Distribution Corporation ("MPDC")
Pursuant to Section 78(1) and (2) of the OEB Act
for new Rates Effective November 1, 2008;

#### APPLICATION

CKH and MPDC hereby apply to the Ontario Energy Board (the "Board") for recovery of prudently incurred costs for the second tranche of meter installations as part of the Applicants' smart meter program. In EB-2007-0063 the Board approved, in addition to the general parameters of the smart meter program, recovery in rates for the meters installed by CKH and MPDC up to December 31, 2007. The Applicants have installed additional meters to complete the residential smart meter program during the period May 1, 2007 and December 31, 2007. The amount expended was funded by the rate rider of \$1.09 (CKH) and \$1.35 (MPDC) both were approved in EB-2007-0063, which was collected from November 1, 2007 until April 30, 2008, a continuation of the rate rider of \$1.09 (CKH) and \$1.35 (MPDC) until October 30, 2008, approved in EB-2007-0881 (CKH) and EB-2007-0867 (MPDC). The Applicants now wish to have the ongoing revenue requirement for the additional meters accepted by the Board included in rates effective November 1, 2008. The current rate riders will be adjusted at that time.

This application will not have any rate impact on the customers of CKH and MPDC as the most recently approved rates have a rate rider that recovers the revenue requirement relief being requested.

CKH and MPDC are seeking the following approvals from the Board through this application:

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- 1. The revenue requirement for smart meters installed between May 1, 2007 and December 31, 2007 which all costs have been audited.
- 2. The proposed methodology for recovering the smart meter revenue requirement through rates.
- 3. The proposed accounting procedures related to the smart meter costs.

#### **Confidential Information**

In EB-2007-0063 the details of the smart meter contracts and detailed costs were considered confidential. This was due to the fact that the smart meter vendors did not want their detailed contracts and pricing to be public as there were still a large number of utilities that had not selected their smart meter solution. In that Decision it was stated:

"The Board finds that it is in the public interest that the prices charged to the Applicants, including unit prices, installation costs and contractual terms, be kept confidential". 1

The smart meter market in Ontario has not changed much since the Decision was released as only one other RFP has taken place, led by London Hydro with nineteen other utilities. However, the Ontario regulations have not yet been modified to allow for any new smart meter contracts to be signed. Therefore the same competitive issues are in place today as during the previous hearing.

Tantalus Systems Corp ("Tantalus"), which is the smart meter solution provider for CKH and MPDC, made written and oral submissions in EB-2007-0063 to keep the details of the contracts and prices confidential. Mr Crocker, counsel for Tantalus, made the following statement:

"Mr Chairman, for the moment, my instructions are that beyond the information which has been submitted not with the caveat that it is

<sup>&</sup>lt;sup>1</sup> Ontario Energy Board Decision EB-2007-0063, page 5, paragraph 4

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confidential – that the confidential information should not be released to any of the parties, intervenors or observers to the hearing ... our main concerns are of course with respect to competitors and future customers."

Tantalus once again is filing a submission in this application (Appendix A) requesting that the details of its contract and the detailed costing for smart meters for CKH and MPDC remain confidential.

CKH and MPDC respectfully request that the Board ensure that the commercial details of the supply contract, equipment and installation costs, be kept confidential in this proceeding. We would also like to maintain the confidentiality of the Tantalus supply contract itself, which the Board established in EB-2007-0063. The material for which the Applicant is seeking confidential treatment is contained in Appendices A1, A2, B1, B2, C1 and C2 (marked portions).

**CKH and MPDC Current Smart Meter Installation Program** 

CKH and MPDC were named in Ontario Regulation 427/06 as a priority installation. In our commitment to the Ministry of Energy we had agreed to install smart meters in the total residential class, CKH 27,872 and MPDC 6,015, by the end of December 2007. CKH and MPDC met those commitments.

CKH and MPDC have been working with the Independent Electricity System Operator (IESO) and the Meter Data Management Repository ("MDMR") to interface the smart meter data so that time-of-use pricing can be passed on to the customers. The MDMR project has been successful. Milestones achieved include:

• CKH and MPDC have certified with the MDMR

<sup>2</sup> EB-2007-0063 Transcript V1, P 14, L 14-21

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• CKH and MPDC are in pilot programs with the MDMR that require more than

2,000 customers' information to be transferred and tested on a daily basis.

The fact that CKH and MPDC now have the hourly smart meter data interfaced with the

customer information system ("CIS") allows customers to review their hourly

consumption. Currently there are over 1,500 customers signed up who use the service

regularly.

CKH and MPDC continue to read all meters on a daily basis and continue to attain read

reliability in the high 90% range.

**Combined Proceeding – Smart Metering EB-2007-0063** 

CKH and MPDC were two of thirteen utilities that participated in the above noted

proceeding. In that proceeding the Applicants sought the Board's approval of:

1. The Applicants' interpretation of Minimum Functionality.

2. The Applicants' prudence in the purchasing of smart meters.

3. The Applicants' proposed methodology for dealing with stranded smart meter

costs.

4. The Applicants' proposed methodology for recovering smart meter costs through

rates.

5. The Applicants' proposed accounting procedures related to the smart meter costs.

In its decision, the Board:

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- 1. Determined that there are fourteen cost categories in relation to smart meter minimum functionality.<sup>3</sup> The cost categories were set out in Appendix A of the Decision;
- Found that the purchasing decisions of the thirteen utilities involved in this
  proceeding were implemented with the necessary due diligence, and the terms of
  the contracts each had concluded with suppliers, including the pricing, were
  prudent;<sup>4</sup>
- 3. Decided that Utilities could, if they choose, bring forward applications for the recovery of stranded costs in the 2008 rates; and
- 4. approved the rate relief for smart meter investments.

CKH and MPDC made the necessary accounting changes to reflect the Board's decision.

### **Current Application**

#### <u>Minimum Functionality – Capital Costs</u>

CKH and MPDC are providing the costs for the minimum functionality in the same cost categories and format as provided for in the EB-2007-0063. Appendix B in that decision is the "bundling" of the various detailed costs. In that preceding the Board stated that "the general consensus was that the public interest could be met by bundling smart meter costs on a cost per installation basis and publicly disclosing only these bundled costs". <sup>5</sup>

The costs incurred between May 1, 2007 and Dec 31, 2007 is the same type of costs as filed in the previous application (see Table 1 below). These costs are for smart meters installed and do not include any smart meters or other material that are purchased and not installed. These costs have also been audited as part of the 2007 year end audit, which the financial statements have been filed with the Board previously.

<sup>&</sup>lt;sup>3</sup> Ontario Energy Board Decision EB-2007-0063, page 7, paragraph 2

<sup>&</sup>lt;sup>4</sup> Ontario Energy Board Decision EB-2007-0063, page 16, paragraph 2

<sup>&</sup>lt;sup>5</sup> Ontario Energy Board Decision EB-2007-0063, page 5, paragraph 2

Table 1

	СК	TH .	MPDC		
	Current			Current	
		Application		Application	
	EB-2007-0063	EB-2008-0155	EB-2007-0063	EB-2008-0155	
Installed	17,052	9,820	3,063	2,824	
Capital Costs	\$2,862,000	\$1,747,126	\$557,000	\$421,361	
Avg / Unit	\$167.84	\$177.92	\$181.48	\$149.21	

#### Difference in average capital costs

CKH – there are three main cost categories that have impacted the difference in capital costs for this period:

- Cost of meters and modules
- Installation costs
- Other costs such as hardware/ software and WAN

The costs of the modules, new GE meters and retrofits have decreased by \$4.61 per installed smart meter because we did not require as many new meters during this period, compared to the period prior to April 30, 2007. The reduction in new meters was offset by higher retrofit and sealing costs which were previously included in the cost of new meters.

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The unit cost for installing the smart meters has increased. The CKH service territory is

quite vast and covers an area that is 2,400 square kilometres. The smart meters installed

up to April 30, 2007 totalled 17,052 with 90% of the smart meters installed in the

Chatham service area where the employees report for duty each day. This significantly

reduced the travel time required to get to the service area where the smart meters would

be installed.

During the period of May 1, 2007 and December 31, 2007 smart meters were being

installed in the 10 other service areas, such as Wallaceburg, Tilbury and Wheatley, where

the travel times one way are 20 minute, 15 minutes and 35 minutes respectively. Having

to travel to the various communities had reduced the productivity of the smart meter

installation programs.

The outlying service areas also have older homes and neighbourhoods. The majority of

the new construction over the past 20 years has been in the Chatham service territory.

In its Decision EB-2007-0063 the Board accepted that it is more expensive to install

smart meters in a rural area than an urban area. The Board also accepted that it is more

expensive to install meters in areas characterized by older construction as opposed to new

subdivisions.6

Therefore CKH believes that its costs for installing smart meters from May 1, 2007 to

December 31, 2007 is reasonable under these circumstances.

There is also less computer hardware and software costs as they were installed prior to

April 30, 2007. There is also a reduction in WAN costs as a higher percentage of this

equipment was installed prior to April 30, 2007.

<sup>6</sup> Ontario Energy Board Decision EB-2007-0063, page 12, paragraph 4

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MPDC - there are three main cost categories that have impacted the difference in capital costs for this period:

- Cost of meters and modules
- Installation costs
- Other costs such as hardware/ software and WAN

The combined cost of the modules, new GE meters and retrofits has decreased by approximately \$10.59 per installed smart meter because we did not require as many new meters during this period compared to the meters installed prior to April 30, 2007. The reduction in new meters was offset by requiring more retrofit and sealing costs, which were previously included in the cost of new meters.

The installation costs did increase, as they did for CKH, but not to the same extent, as the MPDC service territory is only 800 kilometres and the travel times to the two service areas outside of Strathroy, Mount Brydges and Parkhill are not as far. We believe that these costs are reasonable for the reasons identified above.

The hardware, software and WAN costs have decreased as the items were installed prior to April 30, 2007 and, therefore, were not incurred during this period.

#### Minimum Functionality – O&M Costs

CKH and MPDC have incurred O&M costs during the last year that reflect the costs of the smart meters installed and are only to meet the minimum functionality of the smart meter system (see Table 2 below).

Table 2

СКН	MPDC	

	EB-2007-0063	Current	EB-2007-0063	Current
		Application		Application
		EB-2008-0155		EB-2008-0155
Installed	17,052	9,820	3,063	2,824
O&M Costs	\$367,000	\$192,378	\$25,000	\$36,920
Avg / Unit	\$21.52	\$19.59	\$8.16	\$13.07

#### Difference in average O&M costs

The O&M average cost increase for MPDC is because the total number of units installed in the current period is lower than in the previous period. Many of the O&M costs are similar to the previous year as they are required to support the smart meter system regardless of how many meters are installed.

Moreover, MPDC's O&M increases because the meters installed were done earlier in the year compared to the previous year's installations. Therefore the assets were in service longer in the year in which they were installed.

#### Prudency Review

CKH and MPDC continue to purchase and install the smart meters under the same contracts and methods brought forward in evidence in EB-2007-0063. We submit that the smart meter program continues to be "prudent" and therefore a detailed prudency review is not required in this proceeding.

#### Stranded Costs

CKH and MPDC did not apply for recovery of stranded costs in the 2008 rate application as it was an Incentive Rate Mechanism (IRM) application and not a cost of service application. Neither Applicant is requesting recovery of its stranded costs at this time. The Applicants will come forward with a proposal for recovery of stranded costs when they rebase rates, which is scheduled for 2010.

#### **Approval requested – Revenue Requirement**

CKH and MPDC have filed the Smart Meter Rate Calculation Model, which is the same model used and approved in EB-2007-0063, as a confidential document due to the details provided in the model.

The revenue requirement being submitted to the Board is found on the schedule entitled "Smart Meter Revenue Requirement & Proposed Rates - Summary", which is highlighted in Table 3.

Table 3

	СКН	MPDC
Return on rate base	\$195,952	\$50,143
Operating expenses	\$288,200	\$57,048
Grossed up PILs	\$43,572	\$7,979
Total	\$527,724	\$115,170
Carrying Costs	(\$6,004)	(\$2,002)
Net Revenue Requirement	\$521,720	\$113,168

#### Notes on the revenue requirement:

- Return on rate base reflects the change in the capital structure at May 1, 2008
   from 50 / 50 Debt / Equity to 53 / 47 Debt / Equity.
- Operating costs includes depreciation.
- PILs reflects current tax rates.
- Carrying costs are a credit due to the fact that CKH and MPDC currently have rate riders and the cash flow coming in is faster than the cash flow going out.

#### Approval Requested- Proposed Methodology for Recovering Revenue Requirement

The schedule that calculated the revenue requirement also calculates the proposed rates to recover the revenue requirement and is provided in Table 4.

Table 4

	СКН			MPDC		
	Rate	Customers	Revenue	Rate	Customers	Revenue
Nov-Apr <sup>(1)</sup>	\$1.09	31,872	\$208,443	\$1.35	6,764	\$54,788
May-Oct <sup>(2)</sup>	\$1.09	31,872	\$208,443	\$1.35	6,764	\$54,788
Nov-Apr <sup>(3)</sup>	\$0.55	31,872	\$104,834	\$0.09	6,764	\$3,592
Total Rev <sup>(4)</sup>			\$521,720			\$113,168

#### Notes:

- (1) The period of the recovery is November 2007 to April 2008 and rates were approved in EB-2007-0063 for both CKH and MPDC.
- (2) The period of the recovery is May 2008 to October 2008 and the rate was approved in EB-2007-0881 (CKH) and EB-2007-0867 (MPDC).
- (3) The period of the recovery is November 2008 to April 2009 and is being proposed in this application.
- (4) The total revenue matched the revenue requirement in above Table.

CKH and MPDC are also requesting that a rate rider continue to support continued investments in smart meters and, in particular, the investments required for the general service class of customers. The rate riders being proposed are in Table 5.

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Table 5

	СКН			MPDC		
	Rate	Customers	Revenue	Rate	Customers	Revenue
Nov-Apr	\$0.54	31,872	\$103,401	\$1.26	6,764	\$51,241

There will be no rate impact to the customers because the sum of the rate for the recovery of the revenue requirement and the new rate rider is the same as the rate rider currently in rates as summarized in Table 6.

Table 6

	СКН	MPDC
Proposed rate – Table 4	\$0.55	\$0.09
Proposed rate rider –Table 5	\$0.54	\$1.26
Total rate	\$1.09	\$1.35
Current rate rider	\$1.09	\$1.35

CKH and MPDC are also requesting approval of the permanent rate adjustment that would be reflected in the May 2009 rates. This is the same process as in EB-2007-0063 where the permanent rate adjustment effective May 2007 was approved. The rate being proposed for implementation in May 2009, which is again calculated in the model, is \$0.78 for CKH and \$0.77 for MPDC.

#### **Approval requested- Proposed Accounting Procedures for the Smart Meter Costs**

The proposed accounting procedures are provided in Appendix B.

# Chatham-Kent Hydro Inc. Proposed Accounting Treatment Confidential Information EB-2008-0155 Appendix D1 Page 1 of 1

Chatham-Kent Hydro Inc. Proposed Accounting Treament May 1 2007 to December 31, 2007

Account	Account Description	Debit	Credit	Details
The distribution of Smar	rt Meter Capital Cost to Fixed Assets Accounts			
	nt residential smart meters ter residential capital sub-account		Modu Modu	ules/Ge Meters/Sealing Rings/Meter Base Extenders/Labour and Truck Costs ules/Ge Meters/Sealing Rings/Meter Base Extenders/Labour and Truck Costs
1920 Computer equipmen 1555 sub-accou	nt - hardware unt - Smart meter computer hardware			puter Hardware/Installation Tower puter Hardware/Installation Tower
1925 Computer Software 1555 sub-accou	rnt - Smart meter computer software			outer Software/transceivers outer Software/transceivers
	zation residential smart meter sub-account mort sub-account residential smart meters		Depr	eciation based on 15 years
	zation - Computer Equipment - hardware nort smart meter computer hardware		Depre	eciation based on 5 year
	zation - Computer Software nort smart meter computer software		Depre	eciation based on 3 years
he distribution of Smar	t Meter OM&A costs to Expense Accounts			
5705 Amortizaiton expens 5705 Amortization expens	e - residential smart meters e - Smart meter computer hardware e - Smart meter computer software er OM&A sub-account - Depreciation		Depre	eciation- New assets from May 1 2007 to December 31 2007
	d income - sub-account Smart Meter er OM&A sub-account - Interest carrying charge		Carry	ring Cost - Interest
615 Admin Salary - Smar 1556 Smart Met	rt Meter er OM&A sub-account - Admin Salary		Admi	nistrative cost - Salary
	nse -Contract - Software Support er OM&A sub-account - Contract		Softw	vare Support
	nse -Contract - Radio License er OM&A sub-account - Radio License		Radio	Dicense
	se - Material - Smart Meter er OM&A sub-account - Small Tools		Small	Tools and Supplies/Garbage Collection
660 Advertising - Smart <b>f</b> 1556 Smart Met	Meter er OM&A sub-account - Advertising		Adve	rtising
	se - Material - Smart Meter er OM&A sub-account - Misc		Misce	ellaneous Inventory Items

## Middlesex Power Distribution Corp. Proposed Accounting Treatment May 1 2007 to December 31 2007

Work Order Account	Account Description	Debit	Credit	Details
The distribution	of Smart Meter Capital Cost to Fixed Assets Accounts			
	o-account residential smart meters Smart Meter residential capital sub-account			Modules/Ge Meters/Sealing Rings/Meter Base Extenders/Labour and Truck Costs Modules/Ge Meters/Sealing Rings/Meter Base Extenders/Labour and Truck Costs
1920 Computer e 1555	quipment - hardware sub-account - Smart meter computer hardware			Computer Hardware/Installation Tower Computer Hardware/Installation Tower
1925 Computer S 1555	oftware sub-account - Smart meter computer software			Computer Software/transceivers Computer Software/transceivers
	d amortization residential smart meter sub-account Accum. Amort sub-account residential smart meters			Depreciation based on 15 years
1555 Accumulate 2105	d amortization - Computer Equipment - hardware Accum. Amort smart meter computer hardware			Depreciation based on 5 year
1555 Accumulate 2105	d amortization - Computer Software Accum. Amort smart meter computer software		•	Depreciation based on 3 years
The distribution	of Smart Meter OM&A costs to Expense Accounts			
5705 5705	Amortization expense - residential smart meters Amortizaiton expense - Smart meter computer hardware Amortization expense - Smart meter computer software r OM&A sub-account - depreciation			Depreciation- New assets from May 1 2007 to December 31 2007
	Dividend income - sub-account Smart Meter Smart Meter OM&A sub-account - Interest carrying charge			Carrying Cost - Interest
5615 Admin Salar 1556	ry - Smart Meter Smart Meter OM&A sub-account - Admin Salary			Administrative cost - Salary
5665 - Misc Gene 1556	ral Expense -Contract - Software Support Smart Meter OM&A sub-account - Contract			Software Support
	ral Expense -Contract - Radio License Smart Meter OM&A sub-account - Radio License			Radio License
	al Expense - Material - Smart Meter Smart Meter OM&A sub-account - Small Tools			Courier charges
	al Expense - Material - Smart Meter Smart Meter OM&A sub-account - Misc			Modem rental fees
	- -	36,920.10	36,920.1	<u>.</u>