

ONTARIO ENERGY BOARD

**IN THE MATTER OF the Ontario Energy Board Act, 1998;
AND IN THE MATTER OF an Application by Peterborough Distribution Inc.
for an Order or Orders approving rates for smart meter cost recovery
to be implemented on May 1, 2012;**

On April 16 10, 2012 Peterborough Distribution Inc. (PDI) filed a VECC interrogatory response. The submission had an incorrect table in response to VECC question 6. PDI requests that the April 16, 2012 interrogatory submission be withdrawn and replaced with the attached revised response.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'RK' followed by a horizontal line.

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PETERBOROUGH DISTRIBUTION INC.

1867 Ashburnham Drive, PO Box 4125, Station Main
Peterborough ON, K9J 6Z5

April 17, 2012

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario
M4P 1E4

Dear Ms. Walli

**Peterborough Distribution Inc.
2012 Smart Meter Cost Recovery
Response to VECC Interrogatories
Board File No. EB-2012-0008**

Please find accompanying this letter two hard copies of Peterborough Distribution Inc's response to VECC Interrogatories. Electronic version of this response will be forwarded to the Board in PDF format.

Yours truly,

A handwritten signature in black ink, appearing to be 'RK' followed by a horizontal line.

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VECC Interrogatories
2012 Smart Meter Cost Recovery
Peterborough Distribution Incorporated (“PDI”)
EB-2012-0008

VECC Question # 1

Reference: Application, 2. Status of Implementation of Smart Meters, Page 4

Preamble: The evidence indicates Peterborough has installed a total of 34,924 smart meters as of December 31, 2011, which represents 99.8% of total meters.

- a) Please confirm the total number of meter installations included in this total by customer class and reconcile to Sheet 2 of the Smart Meter Model.

Response:

The total number of meters installed as of December 31, 2011 was 34,900, consisting of 31,366 Residential meters and 3,534 GS<50 kW meters.

	NUMBER OF SMART METERS INSTALLED							Total
	2006	2007	2008	2009	2010	2011	2012	
Residential	1,088	1,538	1,089	26,811	545	295	9	31,375
GS<50	55	86	69	2,001	1,120	203	58	3,592
Total	1,143	1,624	1,158	28,812	1,665	498	67	34,967
Cumulative		2,767	3,925	32,737	34,402	34,900	34,967	

- b) Please confirm the remaining meters to be installed by customer class to reach 100% completion.

Response:

All Residential meters have been installed and 21 remaining GS<50 kW meters are planned to be installed by June 30, 2012.

- c) Please provide the average cost per meter by year and customer class on a total cost basis (capex + opex) and capex only.

Response:

Please see the tables presented on the following pages.

The following chart summarizes the direct meter cost by customer class and includes forecasted 2012 costs. This table is the basis for one of the cost allocators for the rate riders.

NORMALIZED COSTING SUMMARY								
RESIDENTIAL	2006	2007	2008	2009	2010	2011	Estimate	Total
Direct Meter Costs	95,624	135,175	95,712	2,308,159	69,428	24,370	743	2,729,211
GS<50 kW	5,333	8,339	6,691	314,157	613,726	111,238	31,782	1,091,267
Smart Meter Rate Rider Allocation	100,958	143,514	102,403	2,622,316	683,154	135,608	32,526	3,820,479

The following table provides the direct meter cost per meter.

SMART METER INSTALLATION								
PHYSICAL METERS	2006	2007	2008	2009	2010	2011	2012 +	Total
	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	
Residential	1,088	1,538	1,089	26,811	545	295	9	31,375
General Service < 50 kW	55	86	69	2,001	1,120	203	58	3,592
TOTAL INSTALLATION	1,143	1,624	1,158	28,812	1,665	498	67	34,967
Average cost - Direct Meter Cost								
Residential	87.89	87.89	87.89	86.09	127.39	82.61	82.61	86.99
GS<50kW	96.97	96.97	96.97	157.00	547.97	547.97	547.97	303.80

The following table provides the capital cost per Residential meter based upon a "normalization" of costs incurred. The table reconciles timing differences between when costs or credits were incurred and the meters to which the adjustments apply to. An example of this are meter credits that were received from Elster post 2008 for meters purchased prior to being named. This adjustment was negotiated to ensure that all Elster meter purchases were based upon the Ontario pricing per the London RFP.

FULL "NORMALIZED" CAPITAL COST ALLOCATION								
RESIDENTIAL	2006	2007	2008	2009	2010	2011	Estimate	Total
Direct Meter Cost	95,624	135,175	95,712	2,308,159	69,428	24,370	743	2,729,211
US Exchange	11,539	16,312	11,550	278,537	8,378	2,941	-	329,258
Contractor Labour	-	-	-	377,848	3,904	1,922	-	383,674
Other Capital, AMRC/AMCC, Etc	27,111	38,324	27,136	668,087	13,581	7,351	-	781,591
Total Allocated Capital	134,275	189,812	134,398	3,632,631	95,291	36,584	743	4,223,734
Residential Meters	1,088	1,538	1,089	26,811	545	295	9	31,375
Capital Cost / Meter	123.41	123.41	123.41	135.49	174.85	124.01	82.61	134.62

The table on the following page summarizes the total cost per Residential meter, capital and operating and is based upon a normalized cost allocation.

FULL "NORMALIZED" COST ALLOCATION								
RESIDENTIAL	2006	2007	2008	2009	2010	2011	Estimate	Total
Capital	134,275	189,812	134,398	3,632,631	95,291	36,584	743	4,223,734
Operating	5,373	7,595	5,378	132,399	2,691	1,457	-	154,893
Total Allocated Cost	141,654	199,414	141,784	3,767,039	99,992	40,052	743	4,390,678
Residential Meters	1,088	1,538	1,089	26,811	545	295	9	31,375
Capital Cost / Meter	130.20	129.66	130.20	140.50	183.47	135.77	82.61	139.94

The following table provides the capital cost per GS<50kW metered customer.

FULL "NORMALIZED" CAPITAL COST ALLOCATION								
GS<50kW	2006	2007	2008	2009	2010	2011	Estimate	Total
Direct Meter Cost	5,333	8,339	6,691	314,157	613,726	111,238	31,782	1,091,267
US Exchange	644	1,006	807	37,911	74,061	13,424	-	127,853
Contractor Labour	-	-	-	28,200	8,024	1,323	-	37,547
Other Capital, AMRC/AMCC, Etc	1,371	2,143	1,719	49,862	27,909	5,058	-	88,062
Total Allocated Capital	7,347	11,489	9,218	430,130	723,720	131,043	31,782	1,344,729
GS<50kW Meters	55	86	69	2,001	1,120	203	58	3,592
Capital Cost / Meter	133.59	133.59	133.59	214.96	646.18	645.53	547.97	374.37

The following table summarizes the total cost per GS<50kW meter, capital and operating.

FULL "NORMALIZED" COST ALLOCATION								
RESIDENTIAL	2006	2007	2008	2009	2010	2011	Estimate	Total
Capital	7,347	11,489	9,218	430,130	723,720	131,043	31,782	1,344,729
Operating	272	425	341	9,882	5,531	1,002	-	17,453
Total Allocated Cost	9,625	13,921	11,567	442,021	731,261	134,056	31,782	1,374,233
GS<50kW Meters	55	86	69	2,001	1,120	203	58	3,592
Capital Cost / Meter	175.01	161.87	167.63	220.90	652.91	660.37	547.97	382.58

d) Please discuss any variances (>10%) in average costs per year.

Response:

Residential meter cost increased by greater than 10% in 2010 as approximately \$25,000 of costs were incorrectly allocated to Residential whereas the costs should have been charged to GS<50kW. The costs are not material and do not impact the rate rider, however, when adjusted the 2010 normalized capital cost per meter is reduced from \$174.85 to \$128.97, as well the full capital and operating cost per meter is reduced from \$183.47 to \$137.60

GS<50kW meter costs increases in 2009 and 2010 are related to the types of meter being installed. Prior to 2009, GS<50kW meter installations were primarily single phase meters whereas in 2009 there was a combination of more costly 2-phase and 3-phase meter installation.

2009 installation of 2001 meters was comprised of 1,558 single phase, 297 2-phase and 146 3-phase, which resulted in an average cost of \$157.00 as compared to \$96.97 for 2008.

2010 installation of 1,120 meters was comprised of 3-phase meters at an average cost of \$547.97.

VECC Question # 2

Reference: Application, 2. Status of Implementation of Smart Meters, Page 4

a) Please summarize the types of meters installed for each rate class.

Response:

The following meter types have been installed;

Residential

A3RL10AANT
A3TL3S
Rex-R1S
REX-R1SDIS
REX-R1SNET
REX-R2DIS
REX-R2S
REX-R2S-1S
REX-R2S-NET
T-REX
T-REX-NET

GS<50kW

A3RL
A3RL-10AANT
A3RL-35AANT
A3TL12S
A3TL 3S
A3TL 3S ANT
REX-R1SNET
REX-R2DIS
REX-R2S
REX-R2S-1S
REX-R2S-NET
T-REX
T-REX-NET

- b) Please complete the following table to show the average installed cost per meter type based on 1.1.1 and 1.1.2 capital costs from the model.

Response:

PDI did not record costs by meter type. The tables provided in response to question 1(c) provides an allocation of labour per customer class, Residential and GS<50KW.

- c) Please complete the Table in Part (b) above based on total capital costs.

Response:

PDI did not record costs by meter type. The tables provided in response to question 1(c) provides an allocation of labour per customer class, Residential and GS<50KW.

VECC Question # 3

Reference: Application, 5. Project Specifics, Meter Deployment, Page 6

- a) Please confirm the number of meters installed for each customer class by Peterborough staff by year.

Response:

Peterborough staff installed 5,533 meters or approximately 15.8% of the total meters as provided in the following table.

Meters Installed by Peterborough Staff								
Year	2006	2007	2008	2009	2010	2011	Total	Pre-Authorized %
Meters								
Residential	1,088	1,538	536	-	545	293	4,000	12.7%
GS < 50 kW	55	86	69	-	1,120	203	1,533	42.7%
Total Meters	1,143	1,624	605	-	1,665	496	5,533	15.8%

- b) Please discuss the incremental internal labour costs incurred by Peterborough to deploy smart meters that are included in this application. Include the cost, number of positions (permanent vs. contract, full-time vs. part-time), position type and work activities.

Response:

PDI's Smart Meter Application does not include internal labour costs. The table provided in response to question 1 provides the capital cost associated with the meter installation exclusive of internal labour.

PDI noted in the original application that \$663,377 of internal labour costs have been excluded from the Smart Meter Application.

VECC Question # 4

Reference: Application, 8. Integration with MDM/R, Page 8

Preamble: The project plan called for unit testing to begin June 2011, this is now scheduled to be completed on February 7, 2012 and System Integration (SIT) and Qualification Testing (QT) on May 2, 2011, in preparation for cutover to live data transfer with the MDMR on February 27, 2012. The ability to meet these targeted timelines was to a large extent contingent upon clear and complete requirements, software systems delivering the functionality and suppliers meeting their contractual obligations and deadlines.

- a) Please provide specific details related to the inability to meet targeted deadlines and discuss how Peterborough's smart meter implementation has been impacted.

Response:

The delay has not impacted PDI meter installation plan as all residential meters have been installed and there are 21 GS<50 kW meters left to be installed.

- b) Please provide a status update on the timelines.

Response:

System Integration and Transfer (SIT) and Qualification Testing (QT) is in progress. PDI is anticipating cutover to live data transfer with the MDMR on May 4, 2012 and TOU billing to commence on July 12, 2012

VECC Question # 5

Reference: Application, 9. Transition to Time of Use (TOU) Pricing, Page 9

Preamble: Peterborough's mandated date for TOU billing was January 1, 2012. Peterborough is not able to meet the January 1, 2012 deadline and has targeted July 12, 2012. Peterborough was advised by the Board that an extension request was not necessary as the delay was caused by the IESO.

a) Please explain how the IESO impacted Peterborough's timelines.

Response:

Delays in the MDM/R production R7.2 deployment pushed out PDI's TOU billing to July 12, 2012 but it did not have an impact on PDI's smart meter installation project.

VECC Question # 6

Reference: Application, 16. Smart Meter Rate Rider, Page 16

Preamble: Peterborough indicates the average cost of installing smart meters for the Residential and GS<50 kW customer classes are \$86.00 and \$303.80, respectively.

a) Please provide the detailed calculations for these amounts.

Response:

The average cost noted on page 16 references the direct meter cost, the notation should not have read installed average cost. PDI used the actual, direct meter cost (exclusive of labour, exchange rate fluctuations and other applied costs) as the main allocation driver.

VECC Question # 7

Reference: Smart Meter Model (V2_17)

Preamble: Sheet 2 indicates 9 residential; 58 GS<50 kW; and 243 GS>50 kW meter installations are forecast to be installed in 2012 and beyond.

a) Please confirm Peterborough's meter deployment plans moving forward by year and by rate class. Reconcile to Sheet 2.

Response:

As of this response PDI has installed all residential smart meters, 37 of the 58 GS<50kW meters have been installed, the remaining 21 meters are planned to be installed by June 30, 2012. The non-mandated 243 GS>50kw meter are planned to be installed by December 31, 2013

b) Please confirm Peterborough's proposed treatment of the above meter installations.

Response:

PDI is not seeking cost recovery for cost incurred beyond the December 31, 2011 audited amounts indicated with this Application.

c) Please confirm Peterborough's forecasted customer growth for 2011 and 2012.

Response:

Residential and GS<50kW customer growth for 2011 was 0.7% and is forecasted to be 0.5% in 2012.

VECC Question # 8

Reference 1: Smart Meter Model (V2_17)

Preamble: Peterborough 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 complete a separate smart meter revenue requirement model by rate class.

Response:

PDI has provided a revised SMDR rate rider. The main driver is the cost of the meters, except for the OM&A costs and the PILs allocations. The OM&A cost have been allocated based upon meter count as this is more representative of cost causation. PILs have been allocated based upon total return before PILs. The Smart Meter revenues and smart meter true-up has been allocated based upon the Power Stream Decision, see table in response to question 8(c).

- b) Please recast Tables 5 and 6 by customer class based on customer class cost information calculated in part (a).

Response:

Updated SMDR and SMIRR cost allocations are provided in the following tables.

Smart Meter Actual Cost Recovery Rate Rider - SMDR Calculated by Rate Class			
	Total	Residential	GS < 50
Allocators			
Direct Meter Cost - \$'s	3,820,478	2,729,211	1,091,267
Direct Meter Cost - %	100.00%	71.40%	28.60%
Number of meters installed	34,967	31,375	3,592
Number of meters installed	100.00%	89.73%	10.27%
Total Return (deemed interest plus return on equity)	\$ 931,588	\$ 665,154	\$ 266,434
Amortization	\$ 1,092,698	\$ 780,186	\$ 312,512
OM&A	\$ 172,347	\$ 154,643	\$ 17,704
Total Before PILs	\$ 2,196,633	\$ 1,599,983	\$ 596,650
PILs	\$ 119,853	\$ 87,298	\$ 32,555
Total Revenue Requirement 2006 to 2011	\$ 2,316,486	\$ 1,687,281	\$ 629,205
	100.00%	72.84%	27.16%
Smart Meter Rate Adder Revenues	(\$1,476,419)	(\$1,315,503)	(\$160,916)
Carrying Charge	(\$61,142)	(\$54,478)	(\$6,664)
Smart Meter True-up	\$ 778,925	\$ 317,301	\$ 461,625
Metered Customers	34,967	31,375	3,592
Rate Rider to Recover Smart Meter Costs - 2 yrs	\$ 0.93	\$ 0.42	\$ 5.35

Based upon a re-allocation of Smart Meter Revenues and Carrying Charges, the residential SMDR rate rider has decreased from \$0.75 per Residential customer to \$0.42 and General Service < 50 kW SMDR rate rider has increased from \$2.45 to \$5.35.

Smart Meter Actual Cost Recovery Rate Rider - SMIRR Calculated by Rate Class			
	Total	Residential	GS < 50
Allocators			
Direct Meter Cost - \$'s	3,820,478	2,729,211	1,091,267
Direct Meter Cost - %	100.00%	71.44%	28.56%
Number of meters installed	34,967	31,375	3,592
Number of meters installed	100.00%	89.73%	10.27%
Total Return (deemed interest plus return on equity)	\$ 294,429	\$ 210,329	\$ 84,100
Amortization	\$ 410,764	\$ 293,435	\$ 117,329
OM&A	\$ -	\$ -	\$ -
Total Before PILs	\$ 705,193	\$ 503,764	\$ 201,429
PILs	\$ 65,363	\$ 46,693	\$ 18,670
Total Revenue Requirement 2006 to 2011	\$ 770,556	\$ 550,457	\$ 220,099
	100.00%	71.44%	28.56%
Smart Meter Rate Adder Revenues	\$0		
Carrying Charge	\$0		
Smart Meter True-up	\$ 770,556	\$ 550,457	\$ 220,099
Metered Customers	34,967	31,375	3,592
Rate Rider to Recover Smart Meter Costs -1 yr	\$ 1.84	\$ 1.46	\$ 5.11

There has been no change in the proposed SMIRR Rate Rider.

- c) Please provide a table that summarizes the total Smart Meter Rate Adder Revenue collected by customer class.

Response:

The table on the following page allocates the smart meter revenue by customer class and attributed to the residential and GS<50 class per the Power Stream Decision.

SMART METER REVENUE ALLOCATION								
	2006	2007	2008	2009	2010	2011	2012	Total
Residential	53,314	92,492	93,786	205,148	364,333	372,097	126,270	1,307,440
GS<50	6,410	11,158	11,240	23,991	42,983	42,834	14,240	152,854
GS>50	659	1,145	1,144	2,440	4,412	4,664	1,576	16,039
LU	4	6	6	14	24	24	8	86
Total	60,386	104,801	106,176	231,592	411,751	419,618	142,094	1,476,419
Residential	53,314	92,492	93,786	205,148	364,333	372,097	126,270	1,307,440
+50% GS>50 & LU	331	576	575	1,227	2,218	2,344	792	8,063
Residential	53,645	93,068	94,361	206,375	366,551	374,441	127,062	1,315,503
GS>50	6,410	11,158	11,240	23,991	42,983	42,834	14,240	152,856
+50% GS>50 & LU	331	575	575	1,226	2,218	2,343	792	8,060
GS<50	6,741	11,733	11,815	25,217	45,201	45,177	15,032	160,916
Total	60,386	104,801	106,176	231,592	411,751	419,618	142,094	1,476,419

VECC Question # 9

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

Preamble: The Guidelines state, “The Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation.”

a) Please summarize Peterborough’s operational efficiencies and cost savings.

Response:

PDI has not included incremental operating cost beyond 2010. PDI has experienced efficiency gains and costs savings associated with moving from monthly manual meter reading to electronic meter reading.

VECC Question # 10

Reference: General

a) Please confirm the timing of Peterborough’s next Cost of Service application.

Response:

PDI will be submitting a 2013 COS Application.