



April 2, 2012

By RESS and Courier

Ms. Kirsten Walli, Board Secretary
Ontario Energy Board
2300 Yonge Street
27th Floor
Toronto, Ontario
M4P 1E4

**Re: Horizon Utilities Corporation ED-2006-0031
Application for 2012 Smart Meter Cost Recovery effective May 1, 2012
EB-2011-0417
Horizon Utilities Corporation Reply Submission**

Dear Ms. Walli:

On December 13, 2011, Horizon Utilities Corporation ("Horizon Utilities") filed an Application for Smart Meter Cost Recovery (the "Application"), effective May 1, 2012 with the Ontario Energy Board ("OEB" or the "Board"). Pursuant to the Notice of Application in respect of this proceeding, Horizon Utilities received submissions from Ontario Energy Board staff ("Board staff") on March 20, 2012 and Vulnerable Energy Consumers Coalition ("VECC") on March 26, 2012.

In response, Horizon Utilities submits the attached reply submission. Included with this reply submission, Horizon Utilities is filing a live copy of the Smart Meter Model version 2.17. This model reflects changes as a result of the use of the 2011 audited results. For the Board's assistance, Horizon Utilities is also filing a live copy of the Smart Meter Model version 2.17 which reflects the approach proposed by Board staff with respect to the balance of Horizon Utilities' Smart Meter deployment.

Should you have any questions or require further information, please do not hesitate to contact me.

Yours Truly,

Original signed by Indy Butany-DeSouza

Indy J. Butany-DeSouza
Vice-President, Regulatory Affairs
Horizon Utilities Corporation
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IN THE MATTER OF *the Ontario Energy Board Act, 1998*,
being Schedule B to the *Energy Competition Act, 1998* S.O.
1998, c. 15;

AND IN THE MATTER OF an Application by Horizon Utilities
Corporation to the Ontario Energy Board for an Order or
Orders approving or fixing just and reasonable rates with
respect to Smart Meters as of May 1, 2012.

HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)

**REPLY SUBMISSION
DELIVERED: APRIL 2, 2012**

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1 **INTRODUCTION**

2 Horizon Utilities is a licensed electricity distributor that is rate regulated by the Ontario
3 Energy Board (the “OEB” or the “Board”) under the *Ontario Energy Board Act, 1998*.
4 Horizon Utilities holds Electricity Distribution Licence No. ED-2006-0031 and provides
5 service to customers in the cities of Hamilton and St. Catharines.

6 In the Board’s Decision in Horizon Utilities’ most recent Cost of Service Application (EB-
7 2010-0131), the Board stated that it “*expects that Horizon will file, at its earliest*
8 *opportunity, a stand-alone application to seek a prudence review and disposition of*
9 *capital and operating costs for its installed meters*¹.” Consequently, on December 13,
10 2011, Horizon Utilities filed the current stand-alone application (the “Application”) with
11 the Board seeking a prudence review and the disposition and recovery of costs related
12 to its Smart Meter deployment, offset by Smart Meter Funding Adder (“SMFA”) revenues
13 from May 1, 2006 to April 30, 2012². Horizon Utilities also requested approval of the
14 proposed Smart Meter Disposition Riders (“SMDRs”) and Smart Meter Incremental
15 Revenue Requirement Riders (“SMIRRs”), effective May 1, 2012.

16 On January 23, 2012, the Board issued a Letter of Direction and Notice of Application in
17 respect of this proceeding. Pursuant to the Notice of Application, Horizon Utilities
18 received interrogatories from Board staff and the Vulnerable Energy Consumers
19 Coalition (“VECC”) on February 22, 2012. Horizon Utilities filed responses to the Board
20 staff and VECC interrogatories on March 7, 2012. Horizon Utilities received submissions
21 on the Application from Board staff and VECC on March 20, 2012 and March 26, 2012,
22 respectively.

23 In their submissions, neither Board staff nor VECC took issue with the nature or
24 prudence of Horizon Utilities’ Smart Meter related costs. Board staff specifically noted
25 that Horizon Utilities had “*prudently managed these costs overall through six years of*
26 *smart meter deployment*” and that the costs were “*well within the ranges that the Board*

¹ EB-2010-0131, Decision of the Board, July 7, 2011, p. 68

² The Application used Smart meter Model, Version 2.17 and was filed in accordance with *Guideline G-2008-0002: Smart Meter Funding and Cost Recovery*, issued October 22, 2008. The Application is also compliant with *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* which was issued on December 15, 2011, following the filing of this Application.

has seen for most utilities serving urbanized areas³". Further, VECC noted "Horizon's average capital costs are...significantly less than the most recent sector averages."⁴ In its submission, VECC submitted that Horizon Utilities' costs beyond minimum functionality "are eligible for recovery and consistent with the Board's Guidelines".⁵

UPDATE TO 2011 DATA TO REFLECT AUDITED RESULTS

As outlined on page 10 of the Application, Horizon Utilities confirmed that 93% of the costs submitted for disposition are included in the audited financial statements to December 31, 2010. As stated in the Board's Guideline (G-2011-0001), "The Board expects that the majority (i.e. 90% or more) of the total program costs for which the distributor is seeking recovery will be audited." Consequently, Horizon Utilities' request to recover an amount that was 93% audited is consistent with the Board's Guideline.

Board staff made no submissions regarding Horizon Utilities' audited results. VECC, in its submission, requested that Horizon Utilities "provide audited 2011 results in its reply submission if available"⁶.

Horizon Utilities provides the following Table 1 below to reflect 2011 audited results. The updated information in Table 1 below includes the 2011 audited results which increases the percentage of audited costs submitted for disposition from 93% to 99%.

Table 1: UPDATED Table 1 from the Application to reflect 2011 Audited Results

Year	OM&A	Capital	Total	Cumulative	Audited?	% of Cumulative Costs Audited
2006	\$99,285	-	\$99,285	\$99,285	Y	100%
2007	\$814,248	\$7,679,949	\$8,494,197	\$8,593,482	Y	100%
2008	\$689,859	\$10,547,661	\$11,237,520	\$19,831,002	Y	100%
2009	\$1,219,599	\$6,043,663	\$7,263,262	\$27,094,264	Y	100%
2010	\$1,150,191	\$2,239,719	\$3,389,910	\$30,484,174	Y	100%
2011	\$1,180,303	\$929,069	\$2,109,372	\$32,593,546	Y	100%
2012	\$292,221		\$292,221	\$32,885,767	N	99%

³ EB-2011-0417, Board staff submission, March 20, 2012, p. 5

⁴ EB-2011-0417, VECC submission, March 26, 2012, p.3

⁵ Ibid, p.4

⁶ EB-2011-0417, VECC submission, March 26, 2012, p. 5

1 The audited 2011 values for capital and OM&A expenditures and SMFA revenues differ
2 from the values used in the Application, as follows:

- 3 • Audited 2011 capital results were \$96,710 higher than those forecasted in Table
4 4 on page 18 of the Application. This is primarily as a result of higher than
5 anticipated software programming costs to ensure Smart Meter reads are
6 accurately displayed on customers' bills;
- 7 • Audited 2011 OM&A results were \$111,648 lower than those forecasted in Table
8 6 on page 20 of the Application. This is a result of lower than anticipated Smart
9 Meter maintenance costs incurred in the last quarter of 2011; and
- 10 • Horizon Utilities has updated the calculation of the SMDR true-up to reflect 2011
11 SMFA actual results which were \$17,928 higher than anticipated in the
12 Application.

13 The 2011 audited results reduce the revenue requirement for the SMDR by \$120,380 as
14 compared to Table 7 on page 33 of the Application, and increase the annual revenue
15 requirement for the SMIRR by \$14,108 as compared to Table 9 on page 34 of the
16 Application. These revised revenue requirements will result in updated class-specific
17 SMDR and SMIRR rate riders as follows:

1 **Table 2: UPDATED Table 11 from the Application - Summary of Rate Change**
2 **Updated to Reflect 2011 Audited Results**

Customer Class	SMDR	SMIRR	Total	Less: Current Adder	Change
Residential	\$0.08	\$1.49	\$1.57	(\$2.14)	(\$0.57)
GS< 50kW	\$0.19	\$3.66	\$3.85	(\$2.14)	\$1.71
GS>50kW	\$0.25	\$4.75	\$5.00	(\$2.14)	\$2.86

3
4 The change in the updated class-specific SMDR and SMIRR rate riders outlined above
5 in Table 2, as compared to those in the Application, as filed are as follows:

6 **Table 3: UPDATED Table 11 from the Application - Summary of Rate Change**
7 **Variance from Application to Update Reflecting 2011 Audited Results**

Customer Class	SMDR	SMIRR	Total	Less: Current Adder	Change
Residential	(\$0.03)	\$0.01	(\$0.02)	\$0.00	(\$0.02)
GS< 50kW	(\$0.07)	\$0.07	\$0.00	\$0.00	\$0.00
GS>50kW	(\$0.13)	(\$0.38)	(\$0.51)	\$0.00	(\$0.51)

8
9 As indicated on page 10 of the Application, Horizon Utilities supports updating the
10 SMDR and the SMIRR to reflect 2011 audited results. This change has been reflected
11 in the updated Smart Meter Model (version 2.17), attached as Appendix 1. Horizon
12 Utilities confirms that the only change to the Model from the version filed in conjunction
13 with the Application was to update for the aforementioned audited results.

14 Based on the Application as filed, a typical Residential customer with a monthly
15 consumption of 800 kWh would experience a net decrease of \$0.56 or 0.46% per month.
16 A typical General Service ("GS") <50 kW customer with a monthly consumption of 2,000
17 kWh would experience a net increase of \$1.72 or 0.60% per month. A typical GS>50
18 kW customer with a monthly demand of 2,500 kW and electricity consumption of
19 1,100,000 kWh would experience a net increase of \$3.37 or 0.003%.

20 Horizon Utilities has prepared the following bill impact table for the SMDR and SMIRR to
21 reflect the audited 2011 results:

**Table 4: UPDATED Table 12 from the Application – Summary of Bill Impacts
Updated to Reflect 2011 Audited Results**

Customer Class	Billing Units	Average Monthly Volume	Distribution charges		Bill Impacts on Distribution Charges		Total Bill Charges		Total Bill Impact	
			*Current	Proposed	\$	%	*Current	Proposed	\$	%
Residential	kWh	800	\$25.90	\$25.33	(\$0.57)	(2.20%)	\$108.64	\$108.06	(\$0.58)	(0.53%)
GS< 50kW	kWh	2,000	\$44.97	\$46.68	\$1.71	3.80%	\$258.00	\$259.74	\$1.74	0.67%
GS 50 to 4,999 kW	kW	2,500	\$1,939.14	\$1,942.00	\$2.86	0.15%	\$106,511.36	\$106,514.27	\$2.91	0.003%

*Current charges reflect those approved in Horizon Utilities' 2012 Electricity Distribution Rate Application [EB-2011-0172]. Total Bill Charges include HST and OCEB.

Based on the update noted above for audited 2011 results, a typical Residential customer with a monthly consumption of 800 kWh would experience a net decrease of \$0.58 or 0.53% per month. A typical GS<50 kW customer with a monthly consumption of 2,000 kWh would experience a net increase of \$1.74 or 0.67% per month. A typical GS>50 kW customer with a monthly demand of 2,500 kW and electricity consumption of 1,100,000 kWh would experience a net increase of \$2.91 or 0.003%.

Horizon Utilities provides the following reply submission in response to the submissions received from Board staff and VECC. For ease of reference, Horizon Utilities will address the issues in this reply submission in the same order that they appeared in the submission by Board staff.

APPROVALS SOUGHT

As part of the Application, Horizon Utilities has requested the Board's approval in respect of the following:

- The Board's determination that all Smart Meter capital and operating expenditures are prudent. (Those amounts are now \$27,440,059 and \$5,153,485 respectively, reflecting audited amounts through December 31, 2011);
- SMDRs, now updated to reflect audited 2011 values, to recover the deferred revenue requirement through April 30, 2012 related to Smart Meters installed through December 31, 2011, net of SMFA revenue collected to April 30, 2012;
- SMIRRs to recover the annual revenue requirement associated with Smart Meters installed from the inception of the Smart Meter program through to December 31, 2011. The SMIRR will be in place from May 1, 2012 until the

1 implementation date for new rates as determined in Horizon Utilities' next Cost of
2 Service application; and
3 • A new deferral account to record the revenue requirement on new Smart Meter
4 expenditures for Residential and GS<50 kW customer classes in 2012 and future
5 years until Horizon Utilities' next rebasing, currently anticipated to take place in
6 2015. This deferral account will record the revenue requirement associated with
7 remaining Smart Meter deployment through to December 31, 2014.

8 **COST ALLOCATION**

9 Horizon Utilities calculated the requested SMDR and SMIRR rate riders based on the
10 methodology approved by the Board and used by PowerStream in its most recent Smart
11 Meter Prudence Application (EB-2011-0128). This methodology is described on page
12 34 of the Application. In response to VECC Interrogatory #5, Horizon Utilities provided
13 alternate calculations of the SMDRs and SMIRRs.

14 *Submissions of the Parties:*

15 As noted on page 4 of the Board staff submission, "*Board staff submits that the class-*
16 *specific SMDRs and SMIRRs as provided in the Application have been calculated*
17 *appropriately and in accordance with the methodology approved by the Board for*
18 *PowerStream's 2011 application in EB-2011-0128*".

19 VECC submitted that it does not support the cost allocation proposal that Horizon
20 Utilities has advanced.

21 In VECC Interrogatory #5, VECC requested that Horizon Utilities recast the Smart Meter
22 Model, version 2.17 (Appendix 2 of the Application) by customer class and recalculate
23 the SMDR and SMIRR accordingly. The results of this recalculation by customer class
24 as compared to the methodology proposed in the Application were outlined on page 4 of
25 the Board staff submission as follows:

1 **Table 5: Board staff Submission Table 1 - Original and Revised SMDRs & SMIRRs**

Class	SMDR (\$/month, for 12 months)		SMIRR (\$/month)	
	Original	Revised	Original	Revised
		VECC IR #5		VECC IR #5
Residential	\$0.11	(\$0.61)	\$1.48	\$1.47
GS < 50 kW	\$0.26	\$7.61	\$3.59	\$3.62
GS > 50 kW	\$0.38	\$10.63	\$5.13	\$5.40

2
3 In its reply submission, VECC stated that the principle to be applied should be full cost
4 causality and cross subsidy will be avoided if rate riders are provided on a class specific
5 basis.

6 *Horizon Utilities' Reply:*

7 The methodology used by Horizon Utilities to allocate the revenue requirement
8 associated with the SMIRR for each year between customer classes is as follows:

- 9 • OM&A expenses were allocated on the basis of the number of meters installed
10 for each class.
11 • Return and Amortization were allocated on the basis of the capital costs of the
12 meters installed for each class.
13 • PILs were allocated based on the revenue requirement derived for each class
14 before PILs.

15 Horizon Utilities is proposing that the SMDR revenue requirements be collected from the
16 three customer classes that have installed Smart Meters, as a monthly fixed charge
17 based on the same methodology that is used to calculate the SMIRR rate rider.

18 Horizon Utilities notes that on page 4 of their reply submission Board staff stated "*that*
19 *the approach documented in VECC IR #5 is reasonable, but is also dependent on*
20 *assumptions about the quality of the data recorded at a customer class level.*" As the
21 Board noted at page 10 of its decision in PowerStream's 2011 Smart Meter Application
22 (EB-2011-0128), the Board had determined in PowerStream's prior application for Smart
23 Meter cost recovery that "*there has been no clear requirement to track costs by class.*"
24 In preparing the customer class-specific riders proposed in the current Application,
25 Horizon Utilities has used the customer class-specific data available to it. While Horizon
26 Utilities acknowledges that there are other alternate methodologies to calculate the

1 SMDR and SMIRR rate riders by customer class, Horizon Utilities submits that the
2 method used to calculate the SMDR and the SMIRR in the Application is reasonable as
3 it reflects a fair allocation of costs among the customer classes. This method of
4 calculating the SMDR and SMIRR rate riders is consistent with what the Board has
5 approved in the PowerStream Decision (EB-2011-0128). Horizon Utilities continues to
6 propose to retain the class-specific SMDRs and SMIRRs as filed in its Application on
7 December 13, 2012.

8 **PRUDENCE OF SMART METER COSTS**

9 As stated and supported in the Application on pages 13 through 19, Horizon Utilities has
10 diligently and prudently managed the procurement and installation of Smart Meters to
11 maximize cost efficiency. In response to VECC Interrogatory #1, Horizon Utilities
12 provided detailed explanations of the variances between the current Application and the
13 costs shown in prior SMFA applications. Horizon Utilities' average installed capital cost
14 per meter compares favourably to the sector average capital cost as derived from the
15 "Sector Market Meter Audit Review Report" issued by the Regulatory Audit and
16 Accounting group of the Board on March 31, 2010.

17 *Submissions of the Parties:*

18 As noted above, in response to VECC Interrogatory #1, Horizon Utilities provided
19 detailed explanations of the variances between the current Application and the costs
20 shown in Horizon Utilities' previous SMFA applications. Neither Board staff nor VECC
21 took issue with the variance analysis. In their submission, Board staff confirmed that
22 Horizon Utilities had, in response to VECC Interrogatory #3, provided a table showing
23 the average cost per installed meter, according to meter type and customer class. On
24 page 5 of their submission Board staff stated that they "*consider that these per meter
25 costs are reasonable and supported by the documentation, and are well within the
26 ranges the Board has seen for most utilities serving urbanized areas*".

27 Board staff went on to state, on the same page, "*that the utility has prudently managed
28 these costs overall through six years of smart meter deployment*". Finally, Board staff
29 submitted that "*the documented historical costs and the forecasted costs for 2012 are
30 prudent.*"

1 VECC stated in its submission that “*Horizon’s average capital costs are within the range*
2 *established in EB-2007-0063 and significantly less than the most recent sector*
3 *averages.*”⁷ At page 4 of its submission, VECC requested that Horizon Utilities provide
4 an explanation for the variance in costs per meter between 2008 and 2011.

5 *Horizon Utilities’ Reply:*

6 Horizon Utilities was one of the twelve licensed distributors authorized by regulation to
7 conduct Smart Meter activities in the province of Ontario and has played an active role in
8 helping to fulfill the government’s mandated Smart Meter objectives. Horizon Utilities
9 has been proactive in accomplishing the Smart Meter program goals and has effectively
10 managed the installation of over 230,000 meters as demonstrated by the achievement of
11 a low average unit cost as compared to industry benchmark levels. Horizon Utilities
12 submits that it has prudently managed the procurement and installation of Smart Meters
13 to maximize cost efficiency.

14 In response to the request by VECC that Horizon Utilities provide an explanation for the
15 variance in costs per meter between 2008 and 2011, Horizon Utilities offers the following
16 analysis:

17 There are two key components of the capital costs included in the annual average per
18 meter cost mentioned by VECC on page 4 of its reply submission: Smart Meters and
19 Installation, and Infrastructure to support the meters installed. Infrastructure costs
20 include workforce automation hardware, collectors, repeaters, computer equipment,
21 tools and equipment, and software upgrades to ensure TOU billing is implemented. The
22 following table outlines the impacts of these components on the annual average cost per
23 meter.

⁷ EB-2011-0417, VECC submission, March 26, 2012, p. 3

1 **Table 6: Average Capital Cost per Meter by Component**

	AVERAGE COST PER METER:						
	2007	2008	2009	2010	2011	2011	TOTAL
Component of Capital Costs:	Actual	Actual	Actual	Actual	Actual	Forecast	
Smart Meters & Installation	\$119.58	\$125.09	\$72.53	\$179.45	\$208.06	\$188.54	\$108.51
Infrastructure	\$7.07	\$7.26	\$3.26	\$134.11	\$41.36	\$34.91	\$10.30
Total Smart Meter Capital Costs	\$126.65	\$132.35	\$75.79	\$313.55	\$249.41	\$223.45	\$118.81
	ANNUAL CHANGE						
	2008 / 2007	2009 / 2008	2010 / 2009	2011 / 2010	2011 Actual / Forecast		
Smart Meters & Installation	\$5.51	(\$52.56)	\$106.92	\$28.61	\$19.52		
Infrastructure	\$0.19	(\$4.00)	\$130.85	(\$92.75)	\$6.44		
Total Smart Meter Capital Costs	\$5.70	(\$56.56)	\$237.77	(\$64.14)	\$25.96		

3 The underlying factors that contribute to the differences in the annual average cost per
4 meter are discussed in detail below.

5 In 2007, Horizon Utilities installed 60,641 Smart Meters with an average capital cost per
6 meter of \$126.65. These meters were primarily for Residential customers. Residential
7 meters have lower acquisition costs and were installed as part of Horizon Utilities' mass
8 deployment program. In addition, a base of 111 collectors were installed to form the
9 communication infrastructure backbone as discussed on page 24 of the Application.

10 In 2008, mass deployment of primarily Residential Smart Meters continued with the
11 installation of 79,696 Smart Meters. The total average capital cost per meter increased
12 by \$5.70 to \$132.35 for the year. The primary reason for the increased cost per meter
13 in 2008 was the acquisition of 30,000 meters purchased in late 2008 at a cost of \$2.9MM
14 that were installed in 2009, as discussed on page 26 of the Application.

15 In 2009, the installation of 79,745 Smart Meters resulted in the completion of the
16 Residential mass deployment phase and a reduction in the total average cost per meter
17 by \$56.56 to \$75.79. As in the previous two years, most of these meter changes
18 represent lower cost Residential installations. The primary reason for the reduced cost
19 per meter in 2009 was the 30,000 Smart Meters that were acquired in late 2008 and
20 installed in 2009. In addition, as detailed in Horizon Utilities' response to VECC
21 Interrogatory #1, pages 5 and 6, *"as part of the preparation of the interrogatory*
22 *responses for Horizon Utilities' Application for a Smart Metering Funding Adder (EB-*
23 *2010-0292), and based on a detailed review of all Smart Meter related expenditures,*
24 *Horizon Utilities reclassified certain capital expenditures previously recorded in fixed*
25 *assets in prior years to the Smart Meter variance account in 2010."* This includes

1 \$350,321 of computer hardware and \$459,210 of computer software. Such costs were
2 mainly incurred in 2009 and allocated in 2010, contributing to the year over year
3 variance in the average cost per meter calculation.

4 The total average cost per meter increased by \$237.77 to \$313.55 for the 7,143 meters
5 installed in 2010. While a significant portion of the increase (\$106.92) is due to the
6 installation of more costly Hard-to-Reach (4,091) and poly phase (2,810) Smart Meters,
7 as discussed on page 26 of the Application, \$130.85 of the increase is related to the
8 aforementioned review and reclassification of expenditures and the stabilization of the
9 communications infrastructure which required 25 additional collectors, 3 repeaters, and
10 approximately 100 collector upgrades as detailed on page 26 of the Application.

11 In 2011, the actual average cost per meter decreased by \$64.14 to \$249.41 primarily
12 due to the substantial completion of infrastructure activities. This is partially offset by an
13 increase in the average cost per Smart Meter of \$28.61 which reflects the continued
14 focus on installation of the more costly Hard-to-Reach and poly phase Smart Meters.
15 The 2011 actual average results were \$25.96 higher than those anticipated in the
16 forecast, primarily as result of higher than anticipated 2011 capital costs of \$96,710 as
17 discussed on page 4 of this reply submission.

18 Horizon Utilities trusts that this explanation is satisfactory, and reiterates that its Smart
19 Meter-related expenditures have been prudently incurred.

20 **COSTS ABOVE MINIMUM FUNCTIONALITY**

21 As discussed on page 28 of the Application, Horizon Utilities incurred OM&A costs of
22 \$405,098 and capital costs of \$584,907 which meet the criteria for beyond minimum
23 functionality expenditures. The total of these expenditures (\$990,005) represent 3% of
24 total Smart Meter program spending.

25 *Submissions of the Parties*

26 Board staff made no specific submissions regarding the costs beyond minimum
27 functionality except to state, as noted above, that "*the documented historical costs and*

1 *the forecasted costs for 2012 are prudent.*⁸ VECC submitted that *“these costs are*
2 *eligible for recovery and consistent with the Board’s Guidelines”*⁹.

3 *Horizon Utilities’ Reply*

4 Horizon Utilities confirms that its Application includes \$990,005 for costs beyond
5 minimum functionality (capital costs of \$584,907 and OM&A costs of \$405,098). When
6 these figures are adjusted for the 2011 audited results, the figures change to capital
7 costs of \$722,050 and OM&A costs of \$392,236 totaling \$1,114,286. Horizon Utilities
8 submits that these costs have been prudently incurred and requests that the Board
9 approve them as updated.

10 **EXCLUSION OF 2012 COSTS AND DEMAND FOR CUSTOMER GROWTH**

11 Horizon Utilities’ Application and calculation of the SMIRR, relating to Smart Meters
12 forecasted to be deployed in 2012, excludes customer growth related costs.

13 *Submissions of the Parties:*

14 Board staff, in their submission, noted that *“Horizon has not included costs for smart*
15 *meters to be forecasted to be deployed in 2012 due to customer growth,”*¹⁰ and that such
16 an approach was consistent with recent Board decisions on similar applications.

17 Board staff identified that some applications currently before the Board have included
18 growth related costs in the determination of the SMIRR; both approaches are
19 acceptable.

20 VECC did not make a submission on this issue.

21 *Horizon Utilities’ Reply*

22 Horizon Utilities confirms that the calculation of the SMIRR relating to Smart Meters
23 forecasted to be deployed in 2012 does not include Smart Meter installations related to
24 customer growth.

⁸ EB-2011-0417, Board staff submission, March 20, 2012, p. 6

⁹ EB-2011-0417, VECC submission, March 26, 2012, p. 4

¹⁰ EB-2011-0417, Board staff submission, March 20, 2012, p. 6

**REQUEST FOR A NEW DEFERRAL ACCOUNT TO TRACK COSTS FROM
SMART METERS INSTALLED FROM 2012 TO 2014**

In the Application, Horizon Utilities requested the approval of a new deferral account to record the revenue requirement associated with the remaining Residential and GS<50 kW Smart Meter conversions at December 31, 2011. These meter replacements are expected to occur in 2012, 2013, and 2014. The final disposition of this account and a review of the prudence of the costs incurred would be requested in the next Cost of Service Application, which Horizon Utilities anticipates filing for electricity distribution rates effective January 1, 2015. These expenditures are not included in the current rate base or in the calculation of the SMDR and SMIRR riders.

Submissions of the Parties

Board staff did not support the continuation of the deferral and variance accounts 1555 and 1556 as requested by Horizon Utilities, nor did they support the creation of a new deferral account to track costs related to Smart Meters installed past December 31, 2011 until December 31, 2014. Instead, Horizon Utilities' understanding of the Board staff submission is that Board staff are proposing a method for cost recovery that involves accelerating the completion of the Smart Meter deployment and forecasting the associated revenue requirement.

VECC, however, agreed with Horizon Utilities' request. At page 8 of their submission, VECC stated that it "*supports Horizon's request to track the costs for 2012 to 2014 in a deferral account (continuation of existing accounts) for disposition in its next COS application in 2015. In VEEC's view this is fair to both the utility and ratepayers.*"

Horizon Utilities' Reply

In its Application, Horizon Utilities stated that it still has outstanding meters as part of its Smart Meter deployment. While this number is relatively small, (approximately 2% of its total deployment), Horizon Utilities' Smart Meter implementation is not yet complete. As indicated in response to VECC Interrogatory #2, there are 4,602 Smart Meters to be installed in order to complete the deployment of Smart Meters. The deferral account will address only those Smart Meters. It will not include the costs of meter installations related to customer growth in 2012-2014.

Horizon Utilities disagrees with Board staff that the proposed approach is inconsistent with the Board's Smart Meter Guidelines. As discussed in its response to Board staff Interrogatory #2, Horizon Utilities submits that its proposed approach is similar to that of other distributors who have made an application for Smart Meter cost recovery when their implementation exceeded 50% deployment but was less than 100% deployment and continued to track costs in accounts 1555 and 1556 until their implementation was complete, at which time a second (and final) disposition application would be made.

Horizon Utilities submits that there will be a revenue deficiency associated with outstanding Smart Meter replacements at December 31, 2011 that will be completed in 2012 and beyond if the Board does not approve a mechanism to either (a) track the revenue requirement related to those remaining Smart Meters for recovery at Horizon Utilities' next rebasing (the approach proposed by Horizon Utilities); or (b) recover that revenue requirement as part of this Application. These Smart Meter replacements are for existing customers at December 31, 2011 with conventional meters. These costs will be incurred in 2012 and future years and there will be no opportunity for Horizon Utilities to recognize a revenue requirement associated with these costs until such time as they are included in rate base in the next Cost of Service application. These costs were not included in the calculation of the SMDR and SMIRR and have not been included in the most recent Cost of Service application (EB-2010-0131). Horizon Utilities submits that either the continuation of accounts 1555 and 1556 or the establishment of a new deferral account to track costs until December 31, 2014 is an appropriate method of recognizing the revenue requirement associated with capital expenditures required to complete Horizon Utilities' Smart Meter deployment.

As noted above, Board staff proposed a method for cost recovery that involves accelerating the completion of the Smart Meter deployment and forecasting the associated revenue requirement. Horizon Utilities also views this as an acceptable alternative to the deferral account requested in the Application, subject to Horizon Utilities' comments below. This is addressed in the following section.

COMPLETION OF SMART METER DEPLOYMENT

On page 12 of the Application, Horizon Utilities confirms that at December 31, 2011 a number of Hard-to-Reach Residential and GS<50 kW meters will be remaining for

1 installation between 2012 and 2014. As outlined in Horizon Utilities' response to VECC
2 Interrogatory #3, these conversions represent Hard-to-Reach and more costly and
3 complex installations. These meters were planned to be installed throughout the period
4 of 2012 to 2014, to coincide with the re-verification dates of the meters being replaced
5 as indicated on page 6 of the Application. Since these costs have not been included in
6 the SMDR or the SMIRR, Horizon Utilities requested a deferral account to record the
7 revenue requirement associated with these costs. Board staff note at page 10 of their
8 reply submission that these meters represent approximately 2% of the total metered
9 customers requiring Smart Meters.

10 Horizon Utilities requested a deferral account as noted above to record the revenue
11 requirement related to the Smart Meter conversions that remain to be deployed.

12 *Submissions of the Parties*

13 On page 10 of their submission, Board staff outlined an alternative to the deferral
14 account requested in the Application. Board staff stated that "*Horizon could, as one*
15 *option, be allowed to include the associated capital and operating costs in 2012 and to*
16 *recalculate the class-specific SMIRRs*". Horizon Utilities understands this to mean that
17 Board staff are proposing that Horizon Utilities adjust the planned deployment of its
18 remaining Smart Meters so that all remaining Smart Meters, which would have been
19 deployed over the 2012-2014 period, would be deployed in 2012, with corresponding
20 adjustments to the proposed SMIRR. In this case, the SMIRR would recover the annual
21 revenue requirement associated with Smart Meters installed from the inception of the
22 Smart Meter program through to December 31, 2012. Clarity in respect of the Board
23 staff position is important because it is of critical importance to Horizon Utilities that it be
24 permitted to recover the revenue requirement related to all of the Smart Meters
25 deployed, pursuant to its implementation plan.

26 VECC, in its submission, supported Horizon Utilities' proposal for the continuation of the
27 Accounts 1555 and 1556 to address the costs related to the remaining Smart Meters
28 outlined in its response to Board staff Interrogatory #2.

1 *Horizon Utilities' Reply*

2 Horizon Utilities maintains that it is appropriate to replace these remaining meters over
3 the three-year period as previously proposed, and agrees with VECC's submission that
4 the deferral account is fair to both the utility and its customers.

5 However, Horizon Utilities has reviewed its implementation plan and has determined that
6 the remaining installations could be completed in 2012. Horizon Utilities has calculated
7 the revenue requirement over the period from 2012 through 2014 related to the
8 remaining conversion costs to be incurred in 2012. This has been included in the
9 recomputed SMIRR to be recovered over the period May 1, 2012 to December 31, 2014.

10 Table 7 below summarizes the number of meters remaining to be installed at December
11 31, 2011 as identified in response to VECC Interrogatory #2 and the revenue
12 requirement for 2012–2014 associated with advancing the installation of these meters to
13 2012.

14 **Table 7: Revenue Requirement Impact of Installing Remaining Meters in 2012¹¹**

	2012	2013	2014	TOTAL
Forecasted Smart Meters to Install by Customer Class (as per Response to VECC 2):				
Residential	297	-	-	297
GS<50 kW	1,435	1,435	1,435	4,305
TOTAL	1,732	1,435	1,435	4,602
Expenditures & Revenue Requirement to install entire forecast in 2012:				
Capital Expenditure	\$ 2,707,774	\$ -	\$ -	\$ 2,707,774
Annual Revenue Requirement	\$ 197,522	\$ 386,497	\$ 377,008	\$ 961,027

15
16 Table 8 below outlines the distribution of the additional annualized revenue requirement
17 allocated to the respective customer classes consistent with the methodology used in
18 the Application:

¹¹ The revenue requirement outlined in Table 7 was calculated using the Smart Meter Model, version 2.17 attached as Appendix 2. In Appendix 2, in response to the proposal by Board staff with respect to the balance of Horizon Utilities' Smart Meter deployment, the 2012 capital expenditures outlined in Table 7 were input into the column labeled 2010 in order to calculate the three year revenue requirement associated with these expenditures.

**Table 8: Annualized (12 months) Additional Revenue Requirement from Table 7
Allocated to Customer Classes**

Customer Class	# of Active Metered Customers (average 2012)	Total Capital	Return	Amortization	OM&A	Subtotal	PILS	Total	% of Total
Residential	215,335	\$39,351	\$2,417	\$2,460	\$0	\$4,877	\$361	\$5,238	1.5%
GS< 50kW	17,970	\$2,668,423	\$163,887	\$166,776	\$0	\$330,663	\$24,485	\$355,147	98.5%
GS>50kW	2,281	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0%
Total	235,586	\$2,707,774	\$166,304	\$169,236	\$0	\$335,540	\$24,846	\$360,385	100.0%

The impact on the SMIRR of the additional revenue requirement outlined above would be a \$1.65 increase in the monthly GS<50 kW customer class rate rider. The following table outlines the incremental impact of the additional revenue requirement resulting from the completion of the remaining Smart Meter installations in 2012.

Table 9: Incremental Change to the SMIRR as a result of the Annual Additional Revenue Requirement outlined in Table 8

Customer Class	# of Active Metered Customers (average 2012)	SMIRR Allocation	Annual Revenue Requirement Allocation	Monthly Charge
Residential	215,335	1.5%	\$5,238	\$0.00
GS< 50kW	17,970	98.5%	\$355,147	\$1.65
GS>50kW	2,281	0.0%	\$0	\$0.00
Total	235,586	100%	\$360,385	

Table 10, below, illustrates the bill impacts of this approach.

Table 10: UPDATED Table 12 from the Application – Summary of Bill Impacts to reflect 2011 Audited Results and Annual Additional Revenue Requirement outlined in Table 8

Customer Class	Billing Units	Average Monthly Volume	Distribution charges		Bill Impacts on Distribution Charges		Total Bill Charges		Total Bill Impact	
			*Current	Proposed	\$	%	*Current	Proposed	\$	%
Residential	kWh	800	\$25.90	\$25.33	(\$0.57)	(2.20%)	\$108.64	\$108.06	(\$0.58)	(0.53%)
GS< 50kW	kWh	2,000	\$44.97	\$48.33	\$3.36	7.47%	\$258.00	\$261.42	\$3.42	1.32%
GS 50 to 4,999 kW	kW	2,500	\$1,939.14	\$1,942.00	\$2.86	0.15%	\$106,511.36	\$106,514.27	\$2.91	0.003%

*Current charges reflect those approved in Horizon Utilities 2012 Electricity Distribution Rate Application [EB-2011-0172]. Total Bill Charges include HST and OCEB.

1 Based on the alternative approach provided by Board staff, a typical Residential
2 customer with a monthly consumption of 800 kWh would experience a net decrease of
3 \$0.58 or 0.53% per month. A typical GS<50 kW customer with a monthly consumption
4 of 2,000 kWh would experience a net increase of \$3.42 or 1.32% per month. A typical
5 GS>50 kW customer with a monthly demand of 2,500 kW and electricity consumption of
6 1,100,000 kWh would experience a net increase of \$2.91 or 0.003%.

7 While Horizon Utilities would prefer to track the revenue requirement associated with the
8 2012 to 2014 capital expenditures in a deferral account, it recognizes that the method
9 provided by Board staff is an acceptable alternative, on the understanding that the
10 alternative allows Horizon Utilities to recover the revenue requirement related to all of
11 the remaining Smart Meters set out in its implementation plan (297 Residential and
12 4,305 GS<50 kW Smart Meter installations as outlined on page 2 of Horizon Utilities'
13 response to VECC Interrogatory #2) which will now be deployed through December 31,
14 2012.

15 **OTHER MATTERS**

16 Horizon Utilities is not seeking disposition of the stranded costs of its conventional
17 meters in this Application but rather will address such disposition at the time of its next
18 Cost of Service Application, currently scheduled for 2015 rates.

19 *Submissions of the Parties*

20 Board staff submitted that this approach is compliant with the Board's Smart Meter
21 Guideline G-2011-0001. Board staff also indicated that Horizon Utilities should, in its
22 next Cost of Service application, document its net book value as of December 31, 2014
23 and should propose a stranded meter rate rider to recover the residual amount.

24 VECC made no submission on this matter.

25 *Horizon Utilities' Reply*

26 Horizon Utilities confirms that it will bring forward the net book value of remaining
27 stranded meters for disposition as part of its next Cost of Service Application and that it
28 will propose a stranded meter rate rider to recover the residual amount. Further, Horizon
29 Utilities submits that it will address any operational efficiencies realized by Smart Meters
30 and the Time of Use implementation in its next Cost of Service Application, which

1 Horizon Utilities anticipates filing for electricity distribution rates effective January 1,
2 2015.

3 **CONCLUSION**

4 Horizon Utilities submits that the costs incurred to fulfill its obligations under the
5 provincially mandated Smart Meter initiative were prudently incurred and compliant with
6 the Board's Guidelines. Horizon Utilities' cost per meter is substantially lower than that
7 of the average cost per meter within the sector. Further, Horizon Utilities submits that
8 the proposed riders and the deferral account requested are just and that the associated
9 customer bill impacts are reasonable. Horizon Utilities requests that the Board approve
10 the revised proposed riders and the deferral account (or the alternative proposed by
11 Board staff subject to Horizon Utilities' comments set out above), for implementation
12 May 1, 2012.

13

14 **ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 2ND DAY OF APRIL, 2012.**

15 *Original Signed by Indy J. Butany-DeSouza*

16 Indy J. Butany-DeSouza
17 Vice-President, Regulatory Affairs
18 Horizon Utilities Corporation

APPENDIX 1

Smart Meter Model, Version 2.17

Updated for 2011 Audited Results



Ontario Energy Board

Smart Meter Model

Choose Your Utility:

Horizon Utilities Corporation

Hydro 2000 Inc.

Application Contact Information

Name: Indy J. Butany-DeSouza

Title: Vice President, Regulatory Affairs

Phone Number: (905) 317-4765

Email Address: indy.butany@horizonutilities.com

We are applying for rates effective: May 1, 2012

Last COS Re-based Year 2011

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.

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.



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		57,976	76,194	76,240	4,091	1,238	273	216012
General Service < 50 kW		2,405	3,161	3,163	2,810	2,044	4,425	18008
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	60381	79355	79403	6901	3282	4698	234020
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	25.80%	59.71%	93.64%	96.59%	97.99%	100.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed		260	341	342	242	206	891	2282
Other (please identify)								0
Total Number of Smart Meters installed or planned to be installed	0	60641	79696	79745	7143	3488	5589	236302
1 Capital Costs								
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
	Asset Type	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	6,943,048	9,302,140	4,233,167	782,616	451,543	0
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter		140,411	446,528	1,329,751	342,843	272,905	0
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware		110,554	45,029	0	9,205		0
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)			0	0	0	0		0
Total Advanced Metering Communications Devices (AMCD)		\$ -	\$ 7,194,012	\$ 9,793,696	\$ 5,562,918	\$ 1,134,663	\$ 724,448	\$ -
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
1.2.1 Collectors	Smart Meter		277,500	450,000	260,000	88,725		0
1.2.2 Repeaters (may include radio licence, etc.)	Computer Hardware		0	0	0	0	6,874	0
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Computer Hardware		0	0	0	0		0
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)		\$ -	\$ 277,500	\$ 450,000	\$ 260,000	\$ 88,725	\$ 6,874	\$ -

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	Computer Hardware		3,314	24,467	0	341,117		0	\$	368,898
1.3.2 Computer Software	Computer Software		0	0	0	11,588		0	\$	11,588
1.3.3 Computer Software Licences & Installation (includes hardware and software) (may include AS/400 disk space, backup and recovery computer, UPS, etc.)	Computer Software		0	0	0	6,000		0	\$	6,000
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ 3,314	\$ 24,467	\$ -	\$ 358,705	\$ -	\$ -		\$ 386,487

1.4 WIDE AREA NETWORK (WAN)

	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
1.4.1 Activation Fees			0	0	0	0		0	\$	-
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)			0	0	0	0		0	\$	-
1.5.2 AMI Interface to CIS			0	0	0	0		0	\$	-
1.5.3 Professional Fees			0	0	0	0		0	\$	-
1.5.4 Integration	Other Equipment		0	0	0			0	\$	-
1.5.5 Program Management	Tools & Equipment							0	\$	-
1.5.6 Other AMI Capital	Tools & Equipment		905	7,955	0	13,691		0	\$	22,551
Total Other AMI Capital Costs Related to Minimum Functionality		\$ -	\$ 905	\$ 7,955	\$ -	\$ 13,691	\$ -	\$ -		\$ 22,551
Total Capital Costs Related to Minimum Functionality		\$ -	\$ 7,475,732	\$ 10,276,118	\$ 5,822,918	\$ 1,595,785	\$ 731,321	\$ -		\$ 25,901,879

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

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	Other Equipment		0	0	0	45,968		0	\$	45,968
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Smart Meter	0	167,864	220,612	220,745	156,343	50,572	0	\$	816,136
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software		36,354	50,930	0	441,623	147,175	0	\$	676,081
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ 204,217	\$ 271,542	\$ 220,745	\$ 643,934	\$ 197,748	\$ -		\$ 1,538,185
Total Smart Meter Capital Costs		\$ -	\$ 7,679,949	\$ 10,547,660	\$ 6,043,663	\$ 2,239,718	\$ 929,069	\$ -		\$ 27,440,059

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

2.1.1 Maintenance (may include meter reverification costs, etc.)

2.1.2 Other (please specify)

Total Incremental AMCD OM&A Costs

2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)

2.2.1 Maintenance

2.2.2 Other (please specify)

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 specify)

Total Incremental AMCC OM&A Costs

2.4 WIDE AREA NETWORK (WAN)

2.4.1 WAN Maintenance

2.4.2 Other (please specify)

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)

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

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
		315,219	138,575	170,125	169,876	15,795	148,428	\$ 958,018
								\$ -
	\$ -	\$ 315,219	\$ 138,575	\$ 170,125	\$ 169,876	\$ 15,795	\$ 148,428	\$ 958,018
		28,704	23,688	57,422	44,457	64,480	74,214	\$ 292,965
								\$ -
	\$ -	\$ 28,704	\$ 23,688	\$ 57,422	\$ 44,457	\$ 64,480	\$ 74,214	\$ 292,965
		19,467	59,220	0	0		0	\$ 78,688
		88,046	83,857	90,471	188,946	251,998	392,793	\$ 1,096,112
					117,005	246,502		\$ 363,507
	\$ -	\$ 107,513	\$ 143,077	\$ 90,471	\$ 305,951	\$ 498,500	\$ 392,793	\$ 1,538,307
		42,708	63,935	148,132	96,528	141,370	112,800	\$ 605,473
								\$ -
	\$ -	\$ 42,708	\$ 63,935	\$ 148,132	\$ 96,528	\$ 141,370	\$ 112,800	\$ 605,473
	0	58,795	52,893	125,518	135,013	143,580	37,107	\$ 552,906
	0	156,254	90,617	268,317	84,631	53,762	0	\$ 653,580
	17,634	9,404	45,935	118,680	73,411	31,534	0	\$ 296,599
	0	19,494	16,769	77,814	87,391	91,112	37,107	\$ 329,686
	81,651	76,156	114,371	11,061	19,501	33,426	74,214	\$ 410,379
	0	0	0	0	0		0	\$ -
	\$ 99,285	\$ 320,103	\$ 320,584	\$ 601,390	\$ 399,947	\$ 353,414	\$ 148,428	\$ 2,243,150
	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,067,540	\$ 1,016,759	\$ 1,073,558	\$ 876,662	\$ 5,637,912
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
			0	0	0		0	\$ -
			0	0	0		0	\$ -
			0	152,058	133,432	106,746	0	\$ 392,236
	\$ -	\$ -	\$ -	\$ 152,058	\$ 133,432	\$ 106,746	\$ -	\$ 392,236
	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,219,599	\$ 1,150,191	\$ 1,180,303	\$ 876,662	\$ 6,030,148

3 Aggregate Smart Meter Costs by Category

3.1	Capital									
3.1.1	Smart Meter	\$ -	\$ 7,528,822	\$ 10,419,279	\$ 6,043,663	\$ 1,370,527	\$ 775,020	\$ -	\$ 26,137,311	
3.1.2	Computer Hardware	\$ -	\$ 113,868	\$ 69,496	\$ -	\$ 350,322	\$ 6,874	\$ -	\$ 540,559	
3.1.3	Computer Software	\$ -	\$ 36,354	\$ 50,930	\$ -	\$ 459,211	\$ 147,175	\$ -	\$ 693,670	
3.1.4	Tools & Equipment	\$ -	\$ 905	\$ 7,955	\$ -	\$ 13,691	\$ -	\$ -	\$ 22,551	
3.1.5	Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 45,968	\$ -	\$ -	\$ 45,968	
3.1.6	Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.1.7	Total Capital Costs	\$ -	\$ 7,679,949	\$ 10,547,660	\$ 6,043,663	\$ 2,239,718	\$ 929,069	\$ -	\$ 27,440,059	
3.2	OM&A Costs					Error				
3.2.1	Total OM&A Costs	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,219,599	\$ 1,150,191	\$ 1,180,303	\$ 876,662	\$ 6,030,148	



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization			4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	60.0%	60.0%	56.0%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	40.0%	40.0%	40.0%	40.0%	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			4.47%	4.47%	4.47%	2.46%	2.46%
Long-term Debt Rate (actual/embedded/deemed) ²	5.90%	5.90%	6.10%	6.10%	6.10%	5.79%	5.79%
Target Return on Equity (ROE)	9.0%	9.00%	8.57%	8.57%	8.57%	9.58%	9.58%
Return on Preferred Shares							
WACC	7.14%	7.14%	7.02%	7.02%	7.02%	7.17%	7.17%
Working Capital Allowance							
Working Capital Allowance Rate (% of the sum of Cost of Power + controllable expenses)	15.00%	15.00%	15.00%	15.00%	15.00%	13.50%	13.50%
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
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	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	3	3	3	3	3	3	3
- rate (%)	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%
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	47	47	47	47	47	47	47
Smart Meters - CCA Rate	8%	0	0	0	0	0	0
Computer Equipment - CCA Class	50	50	50	50	50	50	50
Computer Equipment - CCA Rate	55%	1	1	1	1	1	1
General Equipment - CCA Class	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	0	0	0	0	0	0
Applications Software - CCA Class		-	-	-	-	-	-
Applications Software - CCA Rate		-	-	-	-	-	-

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 straight line basis and has the "half-year" rule applied.



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance		\$ -	\$ 7,528,822	\$ 17,948,101	\$ 23,991,765	\$ 25,362,291	\$ 26,137,311
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 7,528,822	\$ 10,419,279	\$ 6,043,663	\$ 1,370,527	\$ 775,020	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 7,528,822	\$ 17,948,101	\$ 23,991,765	\$ 25,362,291	\$ 26,137,311	\$ 26,137,311
Accumulated Depreciation							
Opening Balance		\$ -	\$ 250,961	\$ 1,100,192	\$ 2,498,187	\$ 4,143,322	\$ 5,859,976
Amortization expense during year	\$ -	\$ 250,961	\$ 849,231	\$ 1,397,996	\$ 1,645,135	\$ 1,716,653	\$ 1,742,487
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 250,961	\$ 1,100,192	\$ 2,498,187	\$ 4,143,322	\$ 5,859,976	\$ 7,602,463
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 7,277,862	\$ 16,847,910	\$ 21,493,578	\$ 21,218,969	\$ 20,277,336
Closing Balance	\$ -	\$ 7,277,862	\$ 16,847,910	\$ 21,493,578	\$ 21,218,969	\$ 20,277,336	\$ 18,534,848
Average Net Book Value	\$ -	\$ 3,638,931	\$ 12,062,886	\$ 19,170,744	\$ 21,356,273	\$ 20,748,152	\$ 19,406,092
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ 113,868	\$ 183,364	\$ 183,364	\$ 533,686	\$ 540,559
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 113,868	\$ 69,496	\$ -	\$ 350,322	\$ 6,874	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 113,868	\$ 183,364	\$ 183,364	\$ 533,686	\$ 540,559	\$ 540,559
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 11,387	\$ 41,110	\$ 77,783	\$ 149,488	\$ 256,912
Amortization expense during year	\$ -	\$ 11,387	\$ 29,723	\$ 36,673	\$ 71,705	\$ 107,424	\$ 108,112
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 11,387	\$ 41,110	\$ 77,783	\$ 149,488	\$ 256,912	\$ 365,024
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 102,481	\$ 142,254	\$ 105,581	\$ 384,198	\$ 283,647
Closing Balance	\$ -	\$ 102,481	\$ 142,254	\$ 105,581	\$ 384,198	\$ 283,647	\$ 175,535
Average Net Book Value	\$ -	\$ 51,241	\$ 122,368	\$ 123,918	\$ 244,890	\$ 333,922	\$ 229,591
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ 36,354	\$ 87,283	\$ 87,283	\$ 546,495	\$ 693,670
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 36,354	\$ 50,930	\$ -	\$ 459,211	\$ 147,175	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 36,354	\$ 87,283	\$ 87,283	\$ 546,495	\$ 693,670	\$ 693,670
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 6,059	\$ 26,665	\$ 55,760	\$ 161,389	\$ 368,083
Amortization expense during year	\$ -	\$ 6,059	\$ 20,606	\$ 29,094	\$ 105,630	\$ 206,694	\$ 231,223
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 6,059	\$ 26,665	\$ 55,760	\$ 161,389	\$ 368,083	\$ 599,307
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 30,295	\$ 60,618	\$ 31,524	\$ 385,105	\$ 325,586
Closing Balance	\$ -	\$ 30,295	\$ 60,618	\$ 31,524	\$ 385,105	\$ 325,586	\$ 94,363
Average Net Book Value	\$ -	\$ 15,147	\$ 45,457	\$ 46,071	\$ 208,315	\$ 355,346	\$ 209,975
Net Fixed Assets - Tools and Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ 905	\$ 8,860	\$ 8,860	\$ 22,551	\$ 22,551
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 905	\$ 7,955	\$ -	\$ 13,691	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 905	\$ 8,860	\$ 8,860	\$ 22,551	\$ 22,551	\$ 22,551
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 45	\$ 534	\$ 1,420	\$ 2,990	\$ 5,245
Amortization expense during year	\$ -	\$ 45	\$ 488	\$ 886	\$ 1,571	\$ 2,255	\$ 2,255
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 45	\$ 534	\$ 1,420	\$ 2,990	\$ 5,245	\$ 7,500
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 860	\$ 8,327	\$ 7,441	\$ 19,561	\$ 17,306
Closing Balance	\$ -	\$ 860	\$ 8,327	\$ 7,441	\$ 19,561	\$ 17,306	\$ 15,051
Average Net Book Value	\$ -	\$ 430	\$ 4,593	\$ 7,884	\$ 13,501	\$ 18,433	\$ 16,178
Net Fixed Assets - Other Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 45,968	\$ 45,968
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 45,968	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 45,968	\$ 45,968	\$ 45,968
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,298	\$ 6,895
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ 2,298	\$ 4,597	\$ 4,597
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,298	\$ 6,895	\$ 11,492
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 43,670	\$ 39,073
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 43,670	\$ 39,073	\$ 34,476
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 21,835	\$ 41,371	\$ 36,774



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ 3,638,931	\$ 12,062,886	\$ 19,170,744	\$ 21,356,273	\$ 20,748,152	\$ 19,406,092
Computer Hardware	\$ -	\$ 51,241	\$ 122,368	\$ 123,918	\$ 244,890	\$ 333,922	\$ 229,591
Computer Software	\$ -	\$ 15,147	\$ 45,457	\$ 46,071	\$ 208,315	\$ 355,346	\$ 209,975
Tools & Equipment	\$ -	\$ 430	\$ 4,593	\$ 7,884	\$ 13,501	\$ 18,433	\$ 16,178
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 21,835	\$ 41,371	\$ 36,774
Total Net Fixed Assets	\$ -	\$ 3,705,749	\$ 12,235,303	\$ 19,348,616	\$ 21,844,813	\$ 21,497,225	\$ 19,898,610
Working Capital							
Operating Expenses (from Sheet 2)	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,219,599	\$ 1,150,191	\$ 1,180,303	\$ 876,662
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	14%	14%
Working Capital Allowance	\$ 14,893	\$ 122,137	\$ 103,479	\$ 182,940	\$ 172,529	\$ 159,341	\$ 118,349
Incremental Smart Meter Rate Base	\$ 14,893	\$ 3,827,886	\$ 12,338,782	\$ 19,531,556	\$ 22,017,341	\$ 21,656,566	\$ 20,016,960
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ 493,551	\$ 781,262	\$ 880,694	\$ 866,263	\$ 800,678
Deemed Long Term Debt	\$ 8,936	\$ 2,296,731	\$ 6,909,718	\$ 10,937,671	\$ 12,329,711	\$ 12,127,677	\$ 11,209,498
Equity	\$ 5,957	\$ 1,531,154	\$ 4,935,513	\$ 7,812,622	\$ 8,806,937	\$ 8,662,626	\$ 8,006,784
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 14,893	\$ 3,827,886	\$ 12,338,782	\$ 19,531,556	\$ 22,017,341	\$ 21,656,566	\$ 20,016,960
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ 22,062	\$ 34,922	\$ 39,367	\$ 21,310	\$ 19,697
Deemed Long Term Debt	\$ 527	\$ 135,507	\$ 421,493	\$ 667,198	\$ 752,112	\$ 702,192	\$ 649,030
Equity	\$ 536	\$ 137,804	\$ 422,973	\$ 669,542	\$ 754,754	\$ 829,880	\$ 767,050
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 1,063	\$ 273,311	\$ 866,528	\$ 1,371,662	\$ 1,546,234	\$ 1,553,382	\$ 1,435,777
Operating Expenses	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,219,599	\$ 1,150,191	\$ 1,180,303	\$ 876,662
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 250,961	\$ 849,231	\$ 1,397,996	\$ 1,645,135	\$ 1,716,653	\$ 1,742,487
Computer Hardware	\$ -	\$ 11,387	\$ 29,723	\$ 36,673	\$ 71,705	\$ 107,424	\$ 108,112
Computer Software	\$ -	\$ 6,059	\$ 20,606	\$ 29,094	\$ 105,630	\$ 206,694	\$ 231,223
Tools & Equipment	\$ -	\$ 45	\$ 488	\$ 886	\$ 1,571	\$ 2,255	\$ 2,255
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 2,298	\$ 4,597	\$ 4,597
Total Amortization Expense in Year	\$ -	\$ 268,452	\$ 900,048	\$ 1,464,649	\$ 1,826,339	\$ 2,037,624	\$ 2,088,674
Incremental Revenue Requirement before Taxes/PILs	\$ 100,348	\$ 1,356,011	\$ 2,456,435	\$ 4,055,910	\$ 4,522,764	\$ 4,771,309	\$ 4,401,113
Calculation of Taxable Income							
Incremental Operating Expenses	\$ 99,285	\$ 814,248	\$ 689,859	\$ 1,219,599	\$ 1,150,191	\$ 1,180,303	\$ 876,662
Amortization Expense	\$ -	\$ 268,452	\$ 900,048	\$ 1,464,649	\$ 1,826,339	\$ 2,037,624	\$ 2,088,674
Interest Expense	\$ 527	\$ 135,507	\$ 443,555	\$ 702,120	\$ 791,479	\$ 723,503	\$ 668,727
Net Income for Taxes/PILs	\$ 536	\$ 137,804	\$ 422,973	\$ 669,542	\$ 754,754	\$ 829,880	\$ 767,050
Grossed-up Taxes/PILs (from Sheet 7)	\$ 303.15	\$ 52,694.82	\$ 156,293.31	\$ 286,950.46	\$ 273,954.66	\$ 308,919.89	\$ 372,398.47
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 100,652	\$ 1,408,706	\$ 2,612,729	\$ 4,342,860	\$ 4,796,718	\$ 5,080,229	\$ 4,773,512



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	\$ -	\$ -	\$ 7,227,669.43	\$ 16,651,963.82	\$ 21,121,723.33	\$ 20,747,690.93	\$ 19,831,895.04
Capital Additions	\$ -	\$ 7,528,822.32	\$ 10,419,279.11	\$ 6,043,663.15	\$ 1,370,526.52	\$ 775,020.19	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 7,528,822.32	\$ 17,646,948.54	\$ 22,695,626.97	\$ 22,492,249.86	\$ 21,522,711.12	\$ 19,831,895.04
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 3,764,411.16	\$ 5,209,639.56	\$ 3,021,831.57	\$ 685,263.26	\$ 387,510.10	\$ -
Reduced UCC	\$ -	\$ 3,764,411.16	\$ 12,437,308.98	\$ 19,673,795.39	\$ 21,806,986.60	\$ 21,135,201.03	\$ 19,831,895.04
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ 301,152.89	\$ 994,984.72	\$ 1,573,903.63	\$ 1,744,558.93	\$ 1,690,816.08	\$ 1,586,551.60
Closing UCC	\$ -	\$ 7,227,669.43	\$ 16,651,963.82	\$ 21,121,723.33	\$ 20,747,690.93	\$ 19,831,895.04	\$ 18,245,343.44

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	\$ -	\$ -	\$ 108,910.61	\$ 136,318.52	\$ 61,343.33	\$ 614,515.78	\$ 388,217.45
Capital Additions Computer Hardware	\$ -	\$ 113,867.91	\$ 89,496.00	\$ -	\$ 350,321.76	\$ 6,873.51	\$ -
Capital Additions Computer Software	\$ -	\$ 36,353.62	\$ 50,929.85	\$ -	\$ 459,211.04	\$ 147,175.25	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 150,221.53	\$ 229,336.46	\$ 136,318.52	\$ 870,876.13	\$ 768,564.54	\$ 388,217.45
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 75,110.77	\$ 60,212.93	\$ -	\$ 404,766.40	\$ 77,024.38	\$ -
Reduced UCC	\$ -	\$ 75,110.77	\$ 169,123.53	\$ 136,318.52	\$ 466,109.73	\$ 691,540.16	\$ 388,217.45
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ 41,310.92	\$ 93,017.94	\$ 74,975.18	\$ 256,360.35	\$ 380,347.09	\$ 213,519.60
Closing UCC	\$ -	\$ 108,910.61	\$ 136,318.52	\$ 61,343.33	\$ 614,515.78	\$ 388,217.45	\$ 174,697.85

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	\$ -	\$ -	\$ 814.50	\$ 7,811.10	\$ 6,248.88	\$ 58,692.20	\$ 46,953.76
Capital Additions Tools & Equipment	\$ -	\$ 905.00	\$ 7,955.00	\$ -	\$ 13,691.00	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 45,968.00	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 905.00	\$ 8,769.50	\$ 7,811.10	\$ 65,907.88	\$ 58,692.20	\$ 46,953.76
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 452.50	\$ 3,977.50	\$ -	\$ 29,829.50	\$ -	\$ -
Reduced UCC	\$ -	\$ 452.50	\$ 4,792.00	\$ 7,811.10	\$ 36,078.38	\$ 58,692.20	\$ 46,953.76
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ 90.50	\$ 958.40	\$ 1,562.22	\$ 7,215.68	\$ 11,738.44	\$ 9,390.75
Closing UCC	\$ -	\$ 814.50	\$ 7,811.10	\$ 6,248.88	\$ 58,692.20	\$ 46,953.76	\$ 37,563.01



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	\$ 536.14	\$ 137,803.89	\$ 422,973.44	\$ 669,541.73	\$ 754,754.47	\$ 829,879.61	\$ 767,049.90
Amortization	\$ -	\$ 268,451.72	\$ 900,048.41	\$ 1,464,648.81	\$ 1,826,338.76	\$ 2,037,623.84	\$ 2,088,674.41
CCA - Smart Meters	\$ -	\$ 301,152.89	\$ 994,984.72	\$ 1,573,903.63	\$ 1,744,558.93	\$ 1,690,816.08	\$ 1,586,551.60
CCA - Computers	\$ -	\$ 41,310.92	\$ 93,017.94	\$ 74,975.18	\$ 256,360.35	\$ 380,347.09	\$ 213,519.60
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ 90.50	\$ 958.40	\$ 1,562.22	\$ 7,215.68	\$ 11,738.44	\$ 9,390.75
Change in taxable income	\$ 536.14	\$ 63,701.30	\$ 234,060.78	\$ 483,749.50	\$ 572,958.27	\$ 784,601.85	\$ 1,046,262.36
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	\$ 193.65	\$ 23,008.91	\$ 78,410.36	\$ 159,637.33	\$ 177,617.06	\$ 221,650.02	\$ 274,643.87
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ 7,277,861.58	\$ 16,847,909.90	\$ 21,493,577.51	\$ 21,218,968.84	\$ 20,277,335.62	\$ 18,534,848.20
Computer Hardware	\$ -	\$ 102,481.12	\$ 142,253.94	\$ 105,581.16	\$ 384,197.96	\$ 283,646.98	\$ 175,535.15
Computer Software	\$ -	\$ 30,294.68	\$ 60,618.35	\$ 31,523.86	\$ 385,105.24	\$ 325,586.44	\$ 94,363.19
(Including Application Software)	\$ -	\$ 859.75	\$ 8,326.50	\$ 7,440.50	\$ 19,560.95	\$ 17,305.85	\$ 15,050.75
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 43,669.60	\$ 39,072.80	\$ 34,476.00
Other Equipment	\$ -	\$ 7,411,497.13	\$ 17,059,108.68	\$ 21,638,123.03	\$ 22,051,502.59	\$ 20,942,947.69	\$ 18,854,273.29
Rate Base	\$ -	\$ 7,411,497.13	\$ 17,059,108.68	\$ 21,638,123.03	\$ 22,051,502.59	\$ 20,942,947.69	\$ 18,854,273.29
Less: Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Taxable Capital	\$ -	\$ 7,411,497.13	\$ 17,059,108.68	\$ 21,638,123.03	\$ 22,051,502.59	\$ 20,942,947.69	\$ 18,854,273.29
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)	\$ -	\$ 16,675.87	\$ 38,382.99	\$ 48,685.78	\$ 16,538.63	\$ -	\$ -
Change in Income Taxes Payable	\$ 193.65	\$ 23,008.91	\$ 78,410.36	\$ 159,637.33	\$ 177,617.06	\$ 221,650.02	\$ 274,643.87
Change in OCT	\$ -	\$ 16,675.87	\$ 38,382.99	\$ 48,685.78	\$ 16,538.63	\$ -	\$ -
PILs	\$ 193.65	\$ 39,684.78	\$ 116,793.36	\$ 208,323.11	\$ 194,155.69	\$ 221,650.02	\$ 274,643.87
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	\$ 303.15	\$ 36,018.96	\$ 117,910.32	\$ 238,264.68	\$ 257,416.03	\$ 308,919.89	\$ 372,398.47
Change in OCT	\$ -	\$ 16,675.87	\$ 38,382.99	\$ 48,685.78	\$ 16,538.63	\$ -	\$ -
PILs	\$ 303.15	\$ 52,694.82	\$ 156,293.31	\$ 286,950.46	\$ 273,954.66	\$ 308,919.89	\$ 372,398.47



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	Board Approved Smart Meter Funding Adder (from Tariff)
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	\$ -	\$ 89,706.86	4.14%	\$ -	\$ 89,706.86	\$ 711,618.46	\$ 0.39
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 89,706.86	\$ 92,727.18	4.14%	\$ 309.49	\$ 182,743.53		\$ 0.39
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 182,434.04	\$ 89,774.95	4.59%	\$ 697.81	\$ 272,906.80		\$ 0.39
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 272,208.99	\$ 89,851.47	4.59%	\$ 1,041.20	\$ 363,101.66		\$ 0.39
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 362,060.46	\$ 89,798.61	4.59%	\$ 1,384.88	\$ 453,243.95		\$ 0.39
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 451,859.07	\$ 80,613.11	4.59%	\$ 1,728.36	\$ 534,200.54		\$ 0.39
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 532,472.18	\$ 82,472.91	4.59%	\$ 2,036.71	\$ 616,981.80		\$ 0.39
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 614,945.09	\$ 87,122.76	4.59%	\$ 2,352.16	\$ 704,420.01		\$ 0.39
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 702,067.85	\$ 88,767.79	4.59%	\$ 2,685.41	\$ 793,521.05		\$ 0.39
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 790,835.64	\$ 86,730.74	4.59%	\$ 3,024.95	\$ 880,591.33		\$ 0.39
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 877,566.38	\$ 90,600.48	4.59%	\$ 3,356.69	\$ 971,523.55		\$ 0.39
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 968,166.86	\$ 88,083.97	4.59%	\$ 3,703.24	\$ 1,059,954.07		\$ 0.39
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 1,056,250.83	\$ 186,278.63	4.59%	\$ 4,040.16	\$ 1,246,569.62		\$ 0.82
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 1,242,529.46	\$ 188,374.12	4.59%	\$ 4,752.68	\$ 1,435,656.26		\$ 0.82
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 1,430,903.58	\$ 173,700.37	4.59%	\$ 5,473.21	\$ 1,610,077.16		\$ 0.82
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 1,604,603.95	\$ 195,745.60	4.59%	\$ 6,137.61	\$ 1,806,487.16		\$ 0.82
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 1,800,349.55	\$ 188,874.49	4.59%	\$ 6,886.34	\$ 1,996,110.38		\$ 0.82
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 1,989,224.04	\$ 188,780.38	5.14%	\$ 8,520.51	\$ 2,186,524.93		\$ 0.82
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 2,178,004.42	\$ 183,430.27	5.14%	\$ 9,329.12	\$ 2,370,763.81		\$ 0.82
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 2,361,434.69	\$ 193,327.44	5.14%	\$ 10,114.81	\$ 2,564,876.94	\$ 1,920,719.01	\$ 0.82
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 2,554,762.13	\$ 189,649.27	5.14%	\$ 10,942.90	\$ 2,755,354.30		\$ 0.82
2012 Q2		4.29%	Feb-08	2008	Q1	\$ 2,744,411.40	\$ 188,411.30	5.14%	\$ 11,755.23	\$ 2,944,577.93		\$ 0.82
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 2,932,822.70	\$ 35,882.23	5.14%	\$ 12,562.26	\$ 2,981,267.19		\$ 0.82
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 2,968,704.93	\$ 186,866.28	4.08%	\$ 10,093.60	\$ 3,165,664.81		\$ 0.82
			May-08	2008	Q2	\$ 3,155,571.21	\$ 190,814.06	4.08%	\$ 10,728.94	\$ 3,357,114.21		\$ 0.82
			Jun-08	2008	Q2	\$ 3,346,385.27	\$ 190,336.63	4.08%	\$ 11,377.71	\$ 3,548,099.61		\$ 0.82
			Jul-08	2008	Q3	\$ 3,536,721.90	\$ 178,274.17	3.35%	\$ 9,873.35	\$ 3,724,869.42		\$ 0.82
			Aug-08	2008	Q3	\$ 3,714,996.07	\$ 195,858.21	3.35%	\$ 10,371.03	\$ 3,921,225.31		\$ 0.82
			Sep-08	2008	Q3	\$ 3,910,854.28	\$ 354,060.77	3.35%	\$ 10,917.80	\$ 4,275,832.85		\$ 0.82
			Oct-08	2008	Q4	\$ 4,264,915.05	\$ 185,720.20	3.35%	\$ 11,906.22	\$ 4,462,541.47		\$ 0.82
			Nov-08	2008	Q4	\$ 4,450,635.25	\$ 191,099.14	3.35%	\$ 12,424.69	\$ 4,654,159.08		\$ 0.82
			Dec-08	2008	Q4	\$ 4,641,734.39	\$ 192,441.01	3.35%	\$ 12,958.18	\$ 4,847,133.58	\$ 2,415,325.18	\$ 0.82
			Jan-09	2009	Q1	\$ 4,834,175.40	\$ 192,097.07	2.45%	\$ 9,869.77	\$ 5,036,142.24		\$ 0.82
			Feb-09	2009	Q1	\$ 5,026,272.47	\$ 199,179.87	2.45%	\$ 10,261.97	\$ 5,235,714.31		\$ 0.82
			Mar-09	2009	Q1	\$ 5,225,452.34	\$ 165,350.75	2.45%	\$ 10,668.63	\$ 5,401,471.72		\$ 0.82
			Apr-09	2009	Q2	\$ 5,390,803.09	\$ 200,009.99	1.00%	\$ 4,492.34	\$ 5,595,305.42		\$ 0.82
			May-09	2009	Q2	\$ 5,590,813.08	\$ 181,434.67	1.00%	\$ 4,659.01	\$ 5,776,906.76		\$ 0.82
			Jun-09	2009	Q2	\$ 5,772,247.75	\$ 181,892.78	1.00%	\$ 4,810.21	\$ 5,958,950.74		\$ 0.82
			Jul-09	2009	Q3	\$ 5,954,140.53	\$ 193,078.73	0.55%	\$ 2,728.98	\$ 6,149,948.24		\$ 0.82
			Aug-09	2009	Q3	\$ 6,147,219.26	\$ 206,153.00	0.55%	\$ 2,817.48	\$ 6,356,189.74		\$ 0.82
			Sep-09	2009	Q3	\$ 6,353,372.26	\$ 171,463.82	0.55%	\$ 2,911.96	\$ 6,527,748.04		\$ 0.82
			Oct-09	2009	Q4	\$ 6,524,836.08	\$ 188,961.20	0.55%	\$ 2,990.55	\$ 6,716,787.83		\$ 0.82
			Nov-09	2009	Q4	\$ 6,713,797.28	\$ 375,126.77	0.55%	\$ 3,077.16	\$ 7,092,001.21		\$ 1.56
			Dec-09	2009	Q4	\$ 7,088,924.05	\$ 363,072.38	0.55%	\$ 3,249.09	\$ 7,455,245.52	\$ 2,680,358.18	\$ 1.56
			Jan-10	2010	Q1	\$ 7,451,996.43	\$ 449,162.59	0.55%	\$ 3,415.50	\$ 7,904,574.52		\$ 1.56
			Feb-10	2010	Q1	\$ 7,901,159.02	\$ 371,437.92	0.55%	\$ 3,621.36	\$ 8,276,218.30		\$ 1.56
			Mar-10	2010	Q1	\$ 8,272,596.94	\$ 348,553.25	0.55%	\$ 3,791.61	\$ 8,624,941.80		\$ 1.56
			Apr-10	2010	Q2	\$ 8,621,150.19	\$ 376,562.71	0.55%	\$ 3,951.36	\$ 9,001,664.26		\$ 1.56
			May-10	2010	Q2	\$ 8,997,712.90	\$ 367,443.48	0.55%	\$ 4,123.95	\$ 9,369,280.33		\$ 1.56
			Jun-10	2010	Q2	\$ 9,365,156.38	\$ 326,712.40	0.55%	\$ 4,292.36	\$ 9,696,161.14		\$ 1.56
			Jul-10	2010	Q3	\$ 9,691,868.78	\$ 368,087.35	0.89%	\$ 7,188.14	\$ 10,067,144.27		\$ 1.56
			Aug-10	2010	Q3	\$ 10,059,956.13	\$ 369,143.82	0.89%	\$ 7,461.13	\$ 10,436,561.08		\$ 1.56
			Sep-10	2010	Q3	\$ 10,429,099.95	\$ 336,945.60	0.89%	\$ 7,734.92	\$ 10,773,780.47		\$ 1.56
			Oct-10	2010	Q4	\$ 10,766,045.55	\$ 359,926.24	1.20%	\$ 10,766.05	\$ 11,136,737.84		\$ 1.56
			Nov-10	2010	Q4	\$ 11,125,971.79	\$ 375,232.39	1.20%	\$ 11,125.97	\$ 11,512,330.15		\$ 1.56
			Dec-10	2010	Q4	\$ 11,501,204.18	\$ 376,615.71	1.20%	\$ 11,501.20	\$ 11,889,321.09	\$ 4,504,797.01	\$ 1.56
			Jan-11	2011	Q1	\$ 11,877,819.89	\$ 363,137.60	1.47%	\$ 14,550.33	\$ 12,255,507.82		\$ 1.56
			Feb-11	2011	Q1	\$ 12,240,957.49	\$ 370,406.88	1.47%	\$ 14,995.17	\$ 12,626,359.54		\$ 1.56
			Mar-11	2011	Q1	\$ 12,611,364.37	\$ 486,288.82	1.47%	\$ 15,448.92	\$ 13,113,102.11		\$ 2.14
			Apr-11	2011	Q2	\$ 13,097,653.19	\$ 499,776.23	1.47%	\$ 16,044.63	\$ 13,613,474.05		\$ 2.14
			May-11	2011	Q2	\$ 13,597,429.42	\$ 515,414.14	1.47%	\$ 16,656.85	\$ 14,129,500.41		\$ 2.14
			Jun-11	2011	Q2	\$ 14,112,843.56	\$ 478,142.20	1.47%	\$ 17,288.23	\$ 14,608,273.99		\$ 2.14
			Jul-11	2011	Q3	\$ 14,590,985.76	\$ 515,336.60	1.47%	\$ 17,873.96	\$ 15,124,196.32		\$ 2.14
			Aug-11	2011	Q3	\$ 15,106,322.36	\$ 494,467.83	1.47%	\$ 18,505.24	\$ 15,619,295.43		\$ 2.14
			Sep-11	2011	Q3	\$ 15,600,790.19	\$ 500,346.89	1.47%	\$ 19,110.97	\$ 16,120,248.05		\$ 2.14
			Oct-11	2011	Q4	\$ 16,101,137.08	\$ 485,962.51	1.47%	\$ 19,723.89	\$ 16,606,823.48		\$ 2.14
			Nov-11	2011	Q4	\$ 16,587,099.59	\$ 541,084.86	1.47%	\$ 20,319.20	\$ 17,148,503.65		\$ 2.14
			Dec-11	2011	Q4	\$ 17,128,184.45	\$ 498,814.87	1.47%	\$ 20,982.03	\$ 17,647,981.35	\$ 5,960,678.85	\$ 2.14
			Jan-12	2012	Q1	\$ 17,626,999.32	\$ 502,644.20	1.47%	\$ 21,593.07	\$ 18,151,236.59		\$ 2.14
			Feb-12	2012	Q1	\$ 18,129,643.52	\$ 502,643.20	1.47%	\$ 22,208.81	\$ 18,654,495.53		\$ 2.14



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	Board Approved Smart Meter Funding Adder (from Tariff)
			Mar-12	2012	Q1	\$ 18,632,286.72	\$ 502,645.20	1.47%	\$ 22,824.55	\$ 19,157,756.47		
			Apr-12	2012	Q2	\$ 19,134,931.92	\$ 502,643.20	1.47%	\$ 23,440.29	\$ 19,661,015.41		\$ 2.14
			May-12	2012	Q2	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Jun-12	2012	Q2	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Jul-12	2012	Q3	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Aug-12	2012	Q3	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Sep-12	2012	Q3	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Oct-12	2012	Q4	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Nov-12	2012	Q4	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12		
			Dec-12	2012	Q4	\$ 19,637,575.12		0.00%	\$ -	\$ 19,637,575.12	\$ 2,100,642.52	
Total Funding Adder Revenues Collected							\$ 19,637,575.12		\$ 656,564.09	\$ 20,294,139.21	\$ 20,294,139.21	



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

This worksheet calculates the interest on OM&A and amortization/depreciation expense, based on monthly data.

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2006 Q1	0.00%	0.00%	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	-			-	4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-			-	4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-			-	4.59%	-	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-			-	4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-			-	4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-	\$ 99,285.03	\$ -	99,285.03	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	99,285.03	\$ 37,004.00	\$ 89.77	136,378.80	4.59%	379.77	379.77
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	136,378.80	\$ 64,986.00	\$ 2,230.44	203,595.25	4.59%	521.65	901.41
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	203,595.25	\$ 52,185.00	\$ 6,488.59	262,268.84	4.59%	778.75	1,680.17
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	262,268.84	\$ 31,908.00	\$ 8,501.75	302,678.58	4.59%	1,003.18	2,683.34
2010 Q1	0.55%	4.34%	May-07	2007	Q2	302,678.58	\$ 51,571.00	\$ 13,409.44	367,659.02	4.59%	1,157.75	3,841.09
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	367,659.02	\$ 51,187.00	\$ 16,088.39	434,934.41	4.59%	1,406.30	5,247.39
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	434,934.41	\$ 89,584.00	\$ 21,699.90	546,218.31	4.59%	1,663.62	6,911.01
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	546,218.31	\$ 86,103.00	\$ 21,896.19	654,217.50	4.59%	2,089.29	9,000.29
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	654,217.50	\$ 100,365.00	\$ 24,523.24	779,105.75	4.59%	2,502.38	11,502.68
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	779,105.75	\$ 82,742.00	\$ 27,103.13	888,950.88	5.14%	3,337.17	14,839.85
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	888,950.88	\$ 51,628.00	\$ 35,341.88	975,920.76	5.14%	3,807.67	18,647.52
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	975,920.76	\$ 114,985.34	\$ 39,701.32	1,130,607.42	5.14%	4,180.19	22,827.71
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	1,130,607.42	\$ 37,504.00	\$ 23,188.65	1,191,300.07	5.14%	4,842.77	27,670.48
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	1,191,300.07	\$ 38,418.00	\$ 44,404.68	1,274,122.75	5.14%	5,102.74	32,773.22
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	1,274,122.75	\$ 69,850.00	\$ 45,257.59	1,389,230.34	5.14%	5,457.49	38,230.71
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	1,389,230.34	\$ 65,073.00	\$ 49,630.49	1,503,933.83	4.08%	4,723.38	42,954.09
			May-08	2008	Q2	1,503,933.83	\$ 35,747.00	\$ 56,079.98	1,595,760.81	4.08%	5,113.38	48,067.47
			Jun-08	2008	Q2	1,595,760.81	\$ 174,561.00	\$ 60,507.58	1,830,829.39	4.08%	5,425.59	53,493.05
			Jul-08	2008	Q3	1,830,829.39	\$ 46,424.00	\$ 61,905.74	1,939,159.13	3.35%	5,111.07	58,604.12
			Aug-08	2008	Q3	1,939,159.13	\$ 66,477.00	\$ 64,318.41	2,069,954.54	3.35%	5,413.49	64,017.61
			Sep-08	2008	Q3	2,069,954.54	\$ 63,713.88	\$ 69,910.47	2,076,151.13	3.35%	5,776.62	69,796.23
			Oct-08	2008	Q4	2,076,151.13	\$ 54,849.41	\$ 70,871.78	2,201,872.32	3.35%	5,795.92	75,592.15
			Nov-08	2008	Q4	2,201,872.32	\$ 55,332.81	\$ 17,659.79	2,274,864.92	3.35%	6,148.89	81,739.04
			Dec-08	2008	Q4	2,274,864.92	\$ 109,336.64	\$ 147,125.41	2,531,326.97	3.35%	6,350.66	88,089.71
			Jan-09	2009	Q1	2,531,326.97	\$ 22,497.68	\$ 93,030.27	2,646,854.92	2.45%	5,168.13	93,257.83
			Feb-09	2009	Q1	2,646,854.92	\$ 44,185.00	\$ 93,047.31	2,784,087.23	2.45%	5,404.00	98,661.83
			Mar-09	2009	Q1	2,784,087.23	\$ 66,894.00	\$ 130,508.93	2,981,490.16	2.45%	5,684.18	104,346.01
			Apr-09	2009	Q2	2,981,490.16	\$ 73,318.00	\$ 103,779.84	3,158,588.00	1.00%	2,484.58	106,830.58
			May-09	2009	Q2	3,158,588.00	\$ 85,888.00	\$ 114,059.23	3,358,535.23	1.00%	2,632.16	109,462.74
			Jun-09	2009	Q2	3,358,535.23	\$ 114,008.00	\$ 121,834.71	3,594,377.94	1.00%	2,798.78	112,261.52
			Jul-09	2009	Q3	3,594,377.94	\$ 126,697.00	\$ 125,461.98	3,848,536.92	0.55%	1,647.42	113,908.94
			Aug-09	2009	Q3	3,848,536.92	\$ 61,048.00	\$ 137,907.01	4,047,491.93	0.55%	1,763.91	115,672.86
			Sep-09	2009	Q3	4,047,491.93	\$ 126,268.00	\$ 131,814.20	4,305,574.13	0.55%	1,855.10	117,527.96
			Oct-09	2009	Q4	4,305,574.13	\$ 107,448.00	\$ 140,254.68	4,553,276.81	0.55%	1,973.39	119,501.34
			Nov-09	2009	Q4	4,553,276.81	\$ 184,000.00	\$ 142,245.25	4,879,522.06	0.55%	2,086.92	121,588.26
			Dec-09	2009	Q4	4,879,522.06	\$ 205,347.00	\$ 106,087.32	5,190,956.38	0.55%	2,236.45	123,824.71
			Jan-10	2010	Q1	5,190,956.38	\$ 137,648.00	\$ 144,386.90	5,472,991.28	0.55%	2,379.19	126,203.90
			Feb-10	2010	Q1	5,472,991.28	\$ 92,176.00	\$ 292,007.58	5,857,174.86	0.55%	2,508.45	128,712.35
			Mar-10	2010	Q1	5,857,174.86	\$ 62,224.00	\$ 151,474.96	6,070,873.82	0.55%	2,684.54	131,396.89
			Apr-10	2010	Q2	6,070,873.82	\$ 6,429.00	\$ 133,468.28	6,197,913.10	0.55%	2,782.48	134,179.37
			May-10	2010	Q2	6,197,913.10	\$ 17,271.00	\$ 276,963.18	6,457,605.28	0.55%	2,840.71	137,020.08
			Jun-10	2010	Q2	6,457,605.28	\$ 40,850.00	\$ 135,167.57	6,633,622.85	0.55%	2,959.74	139,979.82
			Jul-10	2010	Q3	6,633,622.85	\$ 114,657.00	\$ 183,140.88	6,931,420.73	0.89%	4,919.94	144,899.76
			Aug-10	2010	Q3	6,931,420.73	\$ 437,432.00	\$ 183,140.86	7,551,993.59	0.89%	5,140.80	150,040.56
			Sep-10	2010	Q3	7,551,993.59	\$ 49,945.00	\$ 218,393.94	7,820,332.53	0.89%	5,601.06	155,641.62
			Oct-10	2010	Q4	7,820,332.53	\$ 66,853.00	\$ 194,891.88	8,082,077.41	1.20%	7,820.33	163,461.96
			Nov-10	2010	Q4	8,082,077.41	\$ 43,360.00	\$ 194,891.89	8,320,329.30	1.20%	8,082.08	171,544.03
			Dec-10	2010	Q4	8,320,329.30	\$ 128,746.00	\$ 91,601.56	8,540,676.86	1.20%	8,320.33	179,864.36
			Jan-11	2011	Q1	8,540,676.86	\$ 70,000.00	\$ 181,980.56	8,792,657.42	1.47%	10,462.33	190,326.69
			Feb-11	2011	Q1	8,792,657.42	\$ 200,633.00	\$ 183,905.14	9,177,195.56	1.47%	10,771.01	201,097.70
			Mar-11	2011	Q1	9,177,195.56	\$ 81,357.00	\$ 188,480.66	9,447,033.22	1.47%	11,242.06	212,339.76
			Apr-11	2011	Q2	9,447,033.22	\$ 96,685.00	\$ 183,733.95	9,727,452.17	1.47%	11,572.62	223,912.38
			May-11	2011	Q2	9,727,452.17	\$ 76,496.00	\$ 192,778.87	9,996,727.04	1.47%	11,916.13	235,828.51
			Jun-11	2011	Q2	9,996,727.04	\$ 84,341.00	\$ 184,962.58	10,266,030.62	1.47%	12,245.99	248,074.50
			Jul-11	2011	Q3	10,266,030.62	\$ 69,172.00	\$ 185,080.60	10,520,283.22	1.47%	12,575.89	260,650.38
			Aug-11	2011	Q3	10,520,283.22	\$ 85,114.00	\$ 162,396.44	10,767,793.66	1.47%	12,887.35	273,537.73
			Sep-11	2011	Q3	10,767,793.66	\$ 173,184.42	\$ 148,070.25	10,792,907.83	1.47%	13,190.55	286,728.28
			Oct-11	2011	Q4	10,792,907.83	\$ 84,009.00	\$ 164,837.98	11,041,754.81	1.47%	13,221.31	299,949.59
			Nov-11	2011	Q4	11,041,754.81	\$ 81,670.00	\$ 165,904.19	11,289,329.00	1.47%	13,526.15	313,475.74
			Dec-11	2011	Q4	11,289,329.00	\$ 77,641.58	\$ 180,434.70	11,547,405.28	1.47%	13,829.43	327,305.17
			Jan-12	2012	Q1	11,547,405.28	\$ 73,055.20	\$ 174,056.20	11,794,516.68	1.47%	14,145.57	341,450.74
			Feb-12	2012	Q1	11,794,516.68	\$ 73,055.20	\$ 174,056.20	12,041,628.09	1.47%	14,448.28	355,899.02
			Mar-12	2012	Q1	12,041,628.09	\$ 73,055.20	\$ 174,056.20	12,288,739.49	1.47%	14,750.99	370,650.02
			Apr-12	2012	Q2	12,288,739.49	\$ 73,055.20	\$ 174,056.20	12,535,850.90	1.47%	15,053.71	385,703.72
			May-12	2012	Q2	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Jun-12	2012	Q2	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Jul-12	2012	Q3	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Aug-12	2012	Q3	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Sep-12	2012	Q3	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Oct-12	2012	Q4	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Nov-12	2012	Q4	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
			Dec-12	2012	Q4	12,535,850.90			12,535,850.90	0.00%	-	385,703.72
						\$ 5,445,705.85	\$ 7,090,145.05	\$ 12,535,850.90				



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

This worksheet calculates the interest on OM&A and amortization/depreciation expense, in the absence of monthly data.

Year	OM&A (from Sheet 5)	Amortization Expense (from Sheet 5)	Cumulative OM&A and Amortization Expense	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
2006	\$ 99,285.03	\$ -	\$ 99,285.03	\$ 49,642.52	4.37%	\$ 2,166.90
2007	\$ 814,248.34	\$ 268,451.72	\$ 1,181,985.09	\$ 640,635.06	4.73%	\$ 30,286.02
2008	\$ 689,858.91	\$ 900,048.41	\$ 2,771,892.41	\$ 1,976,938.75	3.98%	\$ 78,682.16
2009	\$ 1,219,598.68	\$ 1,464,648.81	\$ 5,456,139.89	\$ 4,114,016.15	1.14%	\$ 46,796.93
2010	\$ 1,150,191.00	\$ 1,826,338.76	\$ 8,432,669.66	\$ 6,944,404.77	0.80%	\$ 55,381.63
2011	\$ 1,180,303.41	\$ 2,037,623.84	\$ 11,650,596.91	\$ 10,041,633.28	1.47%	\$ 147,612.01
2012	\$ 876,662.46	\$ 2,088,674.41	\$ 14,615,933.78	\$ 13,133,265.34	1.47%	\$ 193,059.00
Cumulative Interest to 2011						\$ 360,925.65
Cumulative Interest to 2012						\$ 553,984.65



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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)

☒ Smart Meter Disposition Rider (SMDR)

☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

The SMDR is calculated based on costs to December 31, 2011

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)	\$ 100,651.52	\$ 1,408,705.93	\$ 2,612,728.59	\$ 4,342,860.03	\$ 4,796,718.28	\$ 5,080,229.32	\$ 4,773,511.83	\$ 23,115,405.51
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ 22,827.71	\$ 65,262.00	\$ 35,735.00	\$ 56,039.65	\$ 147,440.81		\$ 327,305.17
<div><div>X</div>Sheet 8A (Interest calculated on monthly balances)</div>	\$ -	\$ 22,827.71	\$ 65,262.00	\$ 35,735.00	\$ 56,039.65	\$ 147,440.81		\$ 327,305.17
<div><div></div>Sheet 8B (Interest calculated on average annual balances)</div>								\$ -
SMFA Revenues (from Sheet 8)	\$ 702,067.85	\$ 1,852,694.28	\$ 2,279,413.27	\$ 2,617,821.03	\$ 4,425,823.46	\$ 5,749,179.43	\$ 2,010,575.80	\$ 19,637,575.12
SMFA Interest (from Sheet 8)	\$ 9,550.61	\$ 68,024.73	\$ 135,911.91	\$ 62,537.15	\$ 78,973.55	\$ 211,499.42	\$ 90,066.72	\$ 656,564.09
Net Deferred Revenue Requirement	-\$ 610,966.94	-\$ 489,185.36	\$ 262,665.41	\$ 1,698,236.85	\$ 347,960.92	-\$ 733,008.73	\$ 2,672,869.31	\$ 3,148,571.47
Number of Metered Customers (average for 2012 test year)							235585	
Calculation of Smart Meter Funding Adder (per metered customer per month)								
Net Deferred Revenues from 2006 to April 30, 2012	\$ 3,148,571.47							
SMFA <div>May 1, 2012 to April 30, 201X</div>	\$ 0.95							
Check: Forecasted SMFA Revenues for 2012 test year	\$ 2,685,673.22							
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	\$ 18,669,198.85							
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 20,294,139.21							
Net Deferred Revenue Requirement	-\$ 1,624,940.36	} Match						
SMDR <div>May 1, 2012 to April 30, 201X</div>	-\$ 0.57							
Check: Forecasted SMDR Revenues	-\$ 1,611,403.93							
Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)								
Incremental Revenue Requirement for 2012	\$ 4,773,511.83	} Match						
SMIRR	\$ 1.69							
Check: Forecasted SMIRR Revenues	\$ 4,777,671.30							



Funding and Cost Recovery Mechanisms

The following table provides a summary of the three mechanisms for smart meter funding and cost recovery that the Board has established and that can be calculated by this model. The Smart Meter Funding Adder ("SMFA") was described in Guideline G-2008-0002. The Smart Meter Disposition Rider ("SMDR") and Smart Meter Incremental Revenue Requirement Rate Rider ("SMIRR") were defined by the Board in the Decision for PowerStream Inc.'s application for Smart Meter disposition [EB-2010-0209], October 1, 2010.

Title	Acronym	Description
Smart Meter Funding Adder	SMFA	<ul style="list-style-type: none"> Mechanism to provide funding before and during smart meter deployment and acts to smooth the rate increases due to smart meter implementation. First implemented in rates for May 1, 2006. Initially established at a level of about \$0.26/month per metered customer for most distributors; some utilities have had unique SMFA rates due to initial Smart Meter Implementation Plans. Distributors could subsequently apply for a standard SMFA of \$1.00 per metered customer per month or a utility-specific SMFA. SMFA revenues are tracked in a sub-account of Account 1555. Upon disposition, the SMFA revenues and simple interest are used to offset the deferred historical revenue requirement of installed smart meters plus interest on the OM&A and amortization/depreciation expenses, with the variance recovered or refunded through the SMDR. In many 2011 EDR applications, the Board capped the SMFA at \$2.50/month per metered customer. Further, the Board indicated that the SMFA would cease by April 30, 2012.
Smart Meter Disposition Rider	SMDR	<ul style="list-style-type: none"> The SMDR recovers, over a specified time period, the variance between: 1) the deferred revenue requirement for the installed smart meters up to the time of disposition and interest on OM&A and depreciation/amortization expenses; and 2) the SMFA revenues collected and associated interest. The SMDR should be calculated as a fixed monthly charge. The capital (smart meter, AMI, systems hardware and software) and operating expenses are largely fixed costs and invariant to a customer's demand, and hence should be recovered largely through fixed charges. In many cases the SMDR has been recovered on an equal basis from all metered customer classes, although more recent decisions have dealt with class-specific disposition riders. The distributor should determine and support its proposed allocation, based on principles of cost causality and practicality.
Smart Meter Incremental Revenue Requirement Rate Rider	SMIRR	<ul style="list-style-type: none"> When smart meter disposition occurs in a stand-alone application, a SMIRR is calculated as the proxy for the incremental change in the distribution rates that would have occurred if the assets and operating expenses were incorporated into the rate base and the revenue requirement. The SMIRR is calculated as the annualized revenue requirement for the test year for the capital and operating costs for smart meters. The SMIRR should be calculated as a fixed monthly charge, similar to the SMDR. The allocation for the SMIRR should generally be the same as for the SMDR. The SMIRR ceases at the time of the utility's next cost of service application when smart meter capital and operating costs are explicitly incorporated into the rate base and revenue requirement.

Cost of Service Applications

The recovery of smart meter capital and operating costs is normally approved (or denied) following a review for prudence and disposition in a cost of service proceeding. A smart meter disposition rate rider (SMDR) is used to recover the residual revenue requirement that is made up of smart meter costs up to the time of disposition plus interest on OM&A and depreciation/amortization expenses, less amounts collected through the SMFA and associated interest. The approved gross book value and accumulated depreciation of installed smart meters are then added to rate base, and the test period operating expenses are added to OM&A. This ensures the recovery of the incremental revenue requirement on a going-forward basis through base rates. Further, smart meter capital and operating costs should be reflected in the cost allocation study to ensure an appropriate allocation of costs to the various customer classes.¹

If a distributor seeks approval for costs related to 100% smart meter deployment, any capital and operating costs for smart meters that are installed beyond the (2012) test year (i.e. for new customers) should not be recorded in Accounts 1555 and 1556.

The Board considers that rates will be fully compensatory when smart meter costs are either incorporated into base rates or recovered by means of the SMIRR. When smart meters are installed for new customers, these customers will pay rates that reflect the recovery of smart meter costs. The costs of these additional smart meter costs should be reflected in normal capital and operating accounts, akin to other normal distribution assets and costs.

Stand-alone Applications

As per *Chapter 3 of the Filing Requirements for Transmission and Distribution Applications*, issued June 22, 2011, the Board expects those distributors that are scheduled to remain on IRM to file a stand-alone application with the Board seeking final approval for smart meter related costs. When rates are adjusted in a stand-alone application, there is no re-evaluation of rate base or of the revenue requirement for the purpose of setting distribution rates. Where the Board approves smart meter capital and operating costs outside of a cost of service proceeding, a SMDR is still required. In addition, a smart meter incremental revenue requirement rate rider (SMIRR) is established to recover the prospective annualized incremental revenue requirement for the approved smart meters, until the distributor's next cost of service application. The SMIRR continues until the effective date of the distributor's next cost of service rate order, at which time assets and costs are incorporated into the rate base and revenue requirement and recovered on a going-forward basis through base rates.

As in a cost of service application, when smart meter costs are approved for 100% deployment, capital and operating costs for smart meters on a going-forward basis are no longer recorded in Accounts 1555 and 1556; instead the costs are recorded in the applicable capital or operating expense account (e.g. Account 1860 – Meters for smart meter capital assets).

Evidence to be Filed in Support of Smart Meter Cost Recovery in a Cost of Service or Stand-Alone Application

The purpose of this model is to calculate a smart meter revenue requirement from a distributor's capital and OM&A costs, and to provide one methodology for the determination of associated riders and/or adders. In addition to filing this model, distributors must provide in any application for cost recovery detailed descriptions of all costs incurred. The onus is on the distributor to support its case, and the distributor should provide any additional information necessary to understand the distributor's costs in light of its circumstances. 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. As an example, meter reading expenses may be reduced with the activation of remote meter reading through the AMI network for residential and small general service customers.

When applying for the recovery of smart meter costs, a distributor should ensure that historical cost information has been audited including the smart meter-related deferral account balances up to the distributor's last Audited Financial Statements. A distributor may also include historical costs that are not audited and estimated costs, corresponding to a stub period or to a forecast for the test rate year. The Board expects that the majority (i.e. 90% or more) of costs for which the distributor is seeking recovery will be audited. In all cases, the Board expects that the distributor will document and explain any differences between unaudited or forecasted amounts and audited costs.

Costs Beyond Minimum Functionality

While authorized smart meter deployment must meet the requirements for minimum functionality, a distributor may incur costs that are beyond the "minimum functionality". To date, the Board has reviewed three types of costs that are "beyond minimum functionality":

A. Costs for technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06;

B. Costs for deployment of smart meters to customers other than residential and small general service (i.e. Residential and GS < 50 kW customers); and

C. Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

Costs beyond minimum functionality for which recovery is sought must be recorded in the Smart Meter Costs tab of the model in these three categories, and appropriate supporting evidence for each cost type must be provided in the application. Further comments on each of these cost types are provided below.

A. Costs for technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg. 425/06

O.Reg. 425/06 specifies that costs that exceed minimum functionality may be approved by the Board for recovery. In deciding whether technical capabilities of installed smart meters or associated communications or other infrastructure that exceed minimum functionality are recoverable, the Board will consider the benefits of the added technical features and the prudence of these costs. Any distributor seeking recovery for these additional capabilities should provide documentation of the additional technical capabilities, the reasons for them and a detailed cost/benefit analysis.

Technical functionality beyond minimum functionality was dealt with by the Board with respect to Hydro One Networks' 2008 cost of service application, regarding the costs and benefits of super-capacitors in the smart meters and AMI collectors. In its Decision and Order on that application (EB-2007-0681), issued December 18, 2008, the Board approved the recovery of the incremental costs.

B. Costs for deployment of smart meters to customers other than residential and small general service

O.Reg. 425/06 defines smart meter deployment as pertaining to residential and small general service customers. The Functional Specification sets the required minimum level of functionality for the AMI to be "for residential and small general service consumers where the metering of demand is not required." As such, minimum functionality has been defined as customers in the residential and general service ("GS") < 50 kW classes.

While some customers in other metered customer classes (GS > 50 kW, Intermediate, Large Use) have interval meters that measure peak demand in a time interval, some distributors may have customers in these classes that have conventional meters and are not eligible for the regulated price plan ("RPP") and therefore are subject to the weighted average spot market price.

A distributor may, as part of its smart meter deployment program, decide to install smart meters for these customers. This could be on the basis that these customers will have higher demand than will typical residential and GS < 50 kW customers, and providing them with better information on how much and when they consume electricity may provide these customers with opportunities for more energy conservation and load shifting. While such meter conversions may generally appear to be logical, they are outside of the regulation and hence are beyond minimum functionality. In other instances, a distributor may convert the meters of interval-metered customers upon repair or re-sealing to "smart" meters that communicate using the AMI infrastructure that the distributor has installed, replacing the existing communications systems for these meters. Again, as these are for meters for customers other than residential and small general service, they are outside of the regulation and hence beyond minimum functionality.

The Board, as part of the Combined Proceeding (EB-2007-0063, December 13, 2007), approved cost recovery for meter conversions for GS > 50 kW customers for both Toronto Hydro Electric System Limited ("Toronto Hydro") and Hydro Ottawa Limited. However the Board stated:

"The Board is explicitly not finding that the costs associated with these meters fall into the minimum functionality costs. The Board approval of these costs is ancillary to the smart meter decision."

With respect to Toronto Hydro, the Board subsequently approved the recovery of these costs for smart meter installation/conversion for GS > 50 kW customers in Toronto Hydro's 2008-2009 [EB-2007-0681] and 2011 [EB-2010-0142] cost of service rate applications.

Some distributors may be doing "smart meter" conversions for General Service > 50 kW customers upon repair or resealing to enable meter data collection through the AMI infrastructure. While it is recognized that these smart meter installations and conversions are "beyond minimum functionality", a distributor may apply for the recovery of such costs. The application should document the nature, the justification and the cost per meter separately from those for the residential and GS < 50 kW customers.

C. Costs for TOU rate implementation, CIS system upgrades, web presentation, etc.

Costs for CIS systems, TOU rate implementation, etc., are beyond minimum functionality as established by the Board in the Combined Proceeding. However, such costs may be recoverable. In its application, a distributor should show how these costs are required for its smart meter program. Further, a distributor should document how these costs are incremental. For example, if a distributor has a normal budget for maintenance of its billing and CIS systems, costs claimed for system maintenance and upgrades must be shown to be incremental to the normal budget that is already recovered in base rates.

All costs beyond minimum functionality should be clearly identified and supported. Costs that are for meter data functions that will be the responsibility of the Smart Metering Entity will not be recoverable, unless already allowed for as per O.Reg. 426/06. Costs for other matters such as CIS changes or TOU bill presentment may be recoverable, but the distributor will have to support these costs and will have to demonstrate how they are required for the smart meter deployment program and that they are incremental to the distributor's normal operating costs.

Cost recovery for ongoing costs of the Smart Metering Entity should not be included in any smart meter cost recovery application, until such time as the Board establishes a cost recovery mechanism. To date, the Board has disallowed requests for either cost recovery or the establishment of a deferral account to track these costs.

Cost Allocation

The model does not deal with allocations between customer rate classes. In calculating the SMDR and SMIRR, the Board has approved, in some applications, the recovery of amounts from certain applicable customer classes based on the availability of detailed data at the customer class level and on principles of cost causality.

If a distributor does not have sufficient information to support an allocation to the applicable classes, a distributor may choose to propose a recovery on the basis of all metered customers resulting in one uniform rate rider for all metered customer classes. The model calculates the SMFA, SMIRR and SMDR on this basis.

Whichever method is adopted, the Board is of the view that any cost allocation approach should be consistent between the SMDR and the SMIRR when disposition is sought in a stand-alone application. The Board will entertain proposals supported by analysis for SMDRs and SMIRRs based on principles of cost causality and where the distributor has the necessary historical and forecasted data. Distributors should refer to the PowerStream application considered under EB-2010-0209 for a practical approach. However, if a distributor decides to adopt this approach in its application, it will have to adjust it to its own circumstances.² Further, adoption of this approach will not predetermine its approval by the Board in an individual application.

Stranded Meters

The model does not address the recovery of stranded meter costs. Distributors filing Cost of Service applications should refer to *Chapter 2 of the Filing Requirements for Transmission and Distribution Applications*, issued June 22, 2011 (Section 2.5.1.5).

While it would be preferable, conceptually, to also deal with stranded meter costs in a non-cost of service application, the Board recognizes that practical difficulties would arise since there is no restatement of rate base and rates. The Board therefore expects that stranded meter costs will be left in rate base until the distributor's next cost of service application.

The Stranded Meter Rate Rider to recover the residual Net Book Value of stranded (i.e. replaced conventional) meters is separate from any SMDR or SMIRR. In other words, a distributor must calculate (and should show its derivation) the Stranded Meter Rate Rider on a stand-alone basis.

¹ See Section 2.10 – Cost Allocation of Chapter 2 of the Filing Requirements for Transmission and Distribution Applications, issued June 22, 2011.

² For example, if a distributor has deployed smart meters to classes other than Residential and GS < 50 kW, it will have to reflect the additional classes in any cost allocation proposal.

APPENDIX 2

Smart Meter Model, Version 2.17

Impact of Accelerating Forecast for Smart Meter
Deployment in 2012



Ontario Energy Board

Smart Meter Model

Choose Your Utility:

Application Contact Information

Name:

Title:

Phone Number:

Email Address:

We are applying for rates effective:

Last COS Re-based Year:

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

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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.



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.

	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 Capital Cost and Operational Expense Data								
Smart Meter Installation Plan								
Actual/Planned number of Smart Meters installed during the Calendar Year								
Residential					297	0	0	297
General Service < 50 kW					1,435	1,435	1,435	4305
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	0	1732	1435	1435	4602
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	0.00%	37.64%	68.82%	100.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed								0
Other (please identify)								0
Total Number of Smart Meters installed or planned to be installed	0	0	0	0	1732	1435	1435	4602
1 Capital Costs								
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
Asset Type Asset type must be selected to enable calculations								
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
					1,888,221			\$ 1,888,221
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter				819,553			\$ 819,553
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)		\$ -	\$ -	\$ -	\$ 2,707,774	\$ -	\$ -	\$ 2,707,774
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
Asset Type								
1.2.1 Collectors		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast
								\$ -
1.2.2 Repeaters (may include radio licence, etc.)								\$ -
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)								\$ -
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

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)

Asset Type

Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Forecast

\$ -

\$ -

\$ -

\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

Asset Type

Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Forecast

\$ -

1.4.1 Activation Fees

Total Wide Area Network (WAN)

\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

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

1.5.5 Program Management

1.5.6 Other AMI Capital

Total Other AMI Capital Costs Related to Minimum Functionality

Total Capital Costs Related to Minimum Functionality

\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

\$ - \$ - \$ - \$ - \$ 2,707,774 \$ - \$ - \$ 2,707,774

Asset Type

Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Audited Actual Forecast

\$ -

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

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

1.6.2 Costs for deployment of smart meters to customers other than residential and small general service

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

\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -

\$ - \$ - \$ - \$ - \$ 2,707,774 \$ - \$ - \$ 2,707,774

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

2.1.1 Maintenance (may include meter reverification costs, etc.)

2.1.2 Other (please specify)

Total Incremental AMCD OM&A Costs

2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)

2.2.1 Maintenance

2.2.2 Other (please specify)

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 specify)

Total Incremental AMCC OM&A Costs

2.4 WIDE AREA NETWORK (WAN)

2.4.1 WAN Maintenance

2.4.2 Other (please specify)

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)

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

Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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3 Aggregate Smart Meter Costs by Category

3.1

Capital

[illegible]



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization			4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	60.0%	60.0%	56.0%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	40.0%	40.0%	40.0%	40.0%	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			2.46%	2.46%	2.46%	2.46%	2.46%
Long-term Debt Rate (actual/embedded/deemed) ²	5.90%	5.90%	5.79%	5.79%	5.79%	5.79%	5.79%
Target Return on Equity (ROE)	9.0%	9.00%	9.58%	9.58%	9.58%	9.58%	9.58%
Return on Preferred Shares							
WACC	7.14%	7.14%	7.17%	7.17%	7.17%	7.17%	7.17%
Working Capital Allowance							
Working Capital Allowance Rate	15.00%	15.00%	13.50%	13.50%	13.50%	13.50%	13.50%
<i>(% of the sum of Cost of Power + controllable expenses)</i>							
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	26.25%	26.25%	26.25%	26.25%	26.25%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates							
<i>(expressed as expected useful life in years)</i>							
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	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	3	3	3	3	3	3	3
- rate (%)	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%
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	47	47	47	47	47	47	47
Smart Meters - CCA Rate	8%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	50	50	50	50	50	50	50
Computer Equipment - CCA Rate	55%	55%	55%	55%	55%	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							
Applications Software - CCA Rate							

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 straight line basis and has the "half-year" rule applied.



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 2,707,774	\$ 2,707,774
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 2,707,774	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,707,774	\$ 2,707,774	\$ 2,707,774
Accumulated Depreciation							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 270,777
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 180,518	\$ 180,518
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 270,777	\$ 451,296
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,617,515	\$ 2,436,997
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,617,515	\$ 2,436,997	\$ 2,256,478
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 1,308,757	\$ 2,527,256	\$ 2,346,737
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)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Tools and 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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 1,308,757	\$ 2,527,256	\$ 2,346,737
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ -	\$ 1,308,757	\$ 2,527,256	\$ 2,346,737
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	14%	14%	14%	14%	14%
Working Capital Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ -	\$ -	\$ 1,308,757	\$ 2,527,256	\$ 2,346,737
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 52,350	\$ 101,090	\$ 93,869
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 732,904	\$ 1,415,263	\$ 1,314,173
Equity	\$ -	\$ -	\$ -	\$ -	\$ 523,503	\$ 1,010,902	\$ 938,695
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ -	\$ -	\$ 1,308,757	\$ 2,527,256	\$ 2,346,737
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 1,288	\$ 2,487	\$ 2,309
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ -	\$ 42,435	\$ 81,944	\$ 76,091
Equity	\$ -	\$ -	\$ -	\$ -	\$ 50,152	\$ 96,844	\$ 89,927
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ -	\$ -	\$ 93,875	\$ 181,275	\$ 168,327
Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 180,518	\$ 180,518
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 180,518	\$ 180,518
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ -	\$ -	\$ -	\$ 184,134	\$ 361,793	\$ 348,845
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization Expense	\$ -	\$ -	\$ -	\$ -	\$ 90,259	\$ 180,518	\$ 180,518
Interest Expense	\$ -	\$ -	\$ -	\$ -	\$ 43,723	\$ 84,431	\$ 78,400
Net Income for Taxes/PILs	\$ -	\$ -	\$ -	\$ -	\$ 50,152	\$ 96,844	\$ 89,927
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ -	\$ -	\$ -	\$ 13,388.47	\$ 24,703.71	\$ 28,163.05
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ -	\$ -	\$ -	\$ 197,522	\$ 386,497	\$ 377,008



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,599,463.04	\$ 2,391,506.00
Capital Additions	\$ -	\$ -	\$ -	\$ -	\$ 2,707,774.00	\$ -	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 2,707,774.00	\$ 2,599,463.04	\$ 2,391,506.00
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 1,353,887.00	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,353,887.00	\$ 2,599,463.04	\$ 2,391,506.00
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 108,310.96	\$ 207,957.04	\$ 191,320.48
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 2,599,463.04	\$ 2,391,506.00	\$ 2,200,185.52

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	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	\$ -	\$ -	\$ -	\$ -	\$ 50,151.58	\$ 96,844.44	\$ 89,926.98
Amortization	\$ -	\$ -	\$ -	\$ -	\$ 90,259.13	\$ 180,518.27	\$ 180,518.27
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 108,310.96	\$ 207,957.04	\$ 191,320.48
CCA - Computers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in taxable income	\$ -	\$ -	\$ -	\$ -	\$ 32,099.76	\$ 69,405.66	\$ 79,124.77
Tax Rate (from Sheet 3)	36.12%	36.12%	26.25%	26.25%	26.25%	26.25%	26.25%
Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ 8,426.19	\$ 18,218.99	\$ 20,770.25
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 2,617,514.87	\$ 2,436,996.60	\$ 2,256,478.33
Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer Software (Including Application Software)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ -	\$ 2,617,514.87	\$ 2,436,996.60	\$ 2,256,478.33
Less: Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ -	\$ 2,617,514.87	\$ 2,436,996.60	\$ 2,256,478.33
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)	\$ -	\$ -	\$ -	\$ -	\$ 1,963.14	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ 8,426.19	\$ 18,218.99	\$ 20,770.25
Change in OCT	\$ -	\$ -	\$ -	\$ -	\$ 1,963.14	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ -	\$ 10,389.32	\$ 18,218.99	\$ 20,770.25
Gross Up PILs							
Tax Rate	36.12%	36.12%	26.25%	26.25%	26.25%	26.25%	26.25%
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ -	\$ 11,425.34	\$ 24,703.71	\$ 28,163.05
Change in OCT	\$ -	\$ -	\$ -	\$ -	\$ 1,963.14	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ -	\$ 13,388.47	\$ 24,703.71	\$ 28,163.05



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

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	Board Approved Smart Meter Funding Adder (from Tariff)
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	\$ -		4.59%	\$ -	\$ -		
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ -		4.59%	\$ -	\$ -		
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ -		4.59%	\$ -	\$ -		
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ -		4.59%	\$ -	\$ -		
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ -		4.59%	\$ -	\$ -		
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ -		4.59%	\$ -	\$ -	\$ -	
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ -		4.59%	\$ -	\$ -		
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ -		4.59%	\$ -	\$ -		
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ -		4.59%	\$ -	\$ -		
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ -		4.59%	\$ -	\$ -		
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ -		4.59%	\$ -	\$ -		
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ -		4.59%	\$ -	\$ -		
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ -		4.59%	\$ -	\$ -		
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ -		4.59%	\$ -	\$ -		
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ -		4.59%	\$ -	\$ -		
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ -		5.14%	\$ -	\$ -		
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ -		5.14%	\$ -	\$ -		
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ -		5.14%	\$ -	\$ -	\$ -	
2012 Q1		4.29%	Jan-08	2008	Q1	\$ -		5.14%	\$ -	\$ -		
2012 Q2		4.29%	Feb-08	2008	Q1	\$ -		5.14%	\$ -	\$ -		
2012 Q3		4.29%	Mar-08	2008	Q1	\$ -		5.14%	\$ -	\$ -		
2012 Q4		4.29%	Apr-08	2008	Q2	\$ -		4.08%	\$ -	\$ -		
			May-08	2008	Q2	\$ -		4.08%	\$ -	\$ -		
			Jun-08	2008	Q2	\$ -		4.08%	\$ -	\$ -		
			Jul-08	2008	Q3	\$ -		3.35%	\$ -	\$ -		
			Aug-08	2008	Q3	\$ -		3.35%	\$ -	\$ -		
			Sep-08	2008	Q3	\$ -		3.35%	\$ -	\$ -		
			Oct-08	2008	Q4	\$ -		3.35%	\$ -	\$ -		
			Nov-08	2008	Q4	\$ -		3.35%	\$ -	\$ -		
			Dec-08	2008	Q4	\$ -		3.35%	\$ -	\$ -	\$ -	
			Jan-09	2009	Q1	\$ -		2.45%	\$ -	\$ -		
			Feb-09	2009	Q1	\$ -		2.45%	\$ -	\$ -		
			Mar-09	2009	Q1	\$ -		2.45%	\$ -	\$ -		
			Apr-09	2009	Q2	\$ -		1.00%	\$ -	\$ -		
			May-09	2009	Q2	\$ -		1.00%	\$ -	\$ -		
			Jun-09	2009	Q2	\$ -		1.00%	\$ -	\$ -		
			Jul-09	2009	Q3	\$ -		0.55%	\$ -	\$ -		
			Aug-09	2009	Q3	\$ -		0.55%	\$ -	\$ -		
			Sep-09	2009	Q3	\$ -		0.55%	\$ -	\$ -		
			Oct-09	2009	Q4	\$ -		0.55%	\$ -	\$ -		
			Nov-09	2009	Q4	\$ -		0.55%	\$ -	\$ -		
			Dec-09	2009	Q4	\$ -		0.55%	\$ -	\$ -	\$ -	
			Jan-10	2010	Q1	\$ -		0.55%	\$ -	\$ -		
			Feb-10	2010	Q1	\$ -		0.55%	\$ -	\$ -		
			Mar-10	2010	Q1	\$ -		0.55%	\$ -	\$ -		
			Apr-10	2010	Q2	\$ -		0.55%	\$ -	\$ -		
			May-10	2010	Q2	\$ -		0.55%	\$ -	\$ -		
			Jun-10	2010	Q2	\$ -		0.55%	\$ -	\$ -		
			Jul-10	2010	Q3	\$ -		0.89%	\$ -	\$ -		
			Aug-10	2010	Q3	\$ -		0.89%	\$ -	\$ -		
			Sep-10	2010	Q3	\$ -		0.89%	\$ -	\$ -		
			Oct-10	2010	Q4	\$ -		1.20%	\$ -	\$ -		
			Nov-10	2010	Q4	\$ -		1.20%	\$ -	\$ -		
			Dec-10	2010	Q4	\$ -		1.20%	\$ -	\$ -	\$ -	
			Jan-11	2011	Q1	\$ -		1.47%	\$ -	\$ -		
			Feb-11	2011	Q1	\$ -		1.47%	\$ -	\$ -		
			Mar-11	2011	Q1	\$ -		1.47%	\$ -	\$ -		
			Apr-11	2011	Q2	\$ -		1.47%	\$ -	\$ -		
			May-11	2011	Q2	\$ -		1.47%	\$ -	\$ -		
			Jun-11	2011	Q2	\$ -		1.47%	\$ -	\$ -		
			Jul-11	2011	Q3	\$ -		1.47%	\$ -	\$ -		
			Aug-11	2011	Q3	\$ -		1.47%	\$ -	\$ -		
			Sep-11	2011	Q3	\$ -		1.47%	\$ -	\$ -		
			Oct-11	2011	Q4	\$ -		1.47%	\$ -	\$ -		
			Nov-11	2011	Q4	\$ -		1.47%	\$ -	\$ -		
			Dec-11	2011	Q4	\$ -		1.47%	\$ -	\$ -	\$ -	
			Jan-12	2012	Q1	\$ -		0.00%	\$ -	\$ -		
			Feb-12	2012	Q1	\$ -		0.00%	\$ -	\$ -		



Ontario Energy Board
Smart Meter Model



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest			Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest				
			Mar-12	2012	Q1	\$ -		0.00%	\$ -		\$ -		
			Apr-12	2012	Q2	\$ -		0.00%	\$ -		\$ -		
			May-12	2012	Q2	\$ -		0.00%	\$ -		\$ -		
			Jun-12	2012	Q2	\$ -		0.00%	\$ -		\$ -		
			Jul-12	2012	Q3	\$ -		0.00%	\$ -		\$ -		
			Aug-12	2012	Q3	\$ -		0.00%	\$ -		\$ -		
			Sep-12	2012	Q3	\$ -		0.00%	\$ -		\$ -		
			Oct-12	2012	Q4	\$ -		0.00%	\$ -		\$ -		
			Nov-12	2012	Q4	\$ -		0.00%	\$ -		\$ -		
			Dec-12	2012	Q4	\$ -		0.00%	\$ -		\$ -	\$ -	
Total Funding Adder Revenues Collected							\$ -		\$ -		\$ -	\$ -	



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

This worksheet calculates the interest on OM&A and amortization/depreciation expense, based on monthly data.

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2006 Q1	0.00%	0.00%	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	-	-	-	-	4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-	-	-	-	4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-	-	-	-	4.59%	-	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-	-	-	-	4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-	-	-	-	4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-	-	-	-	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q1	0.55%	4.34%	May-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	-	-	-	-	4.59%	-	-
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	-	-	-	-	4.59%	-	-
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	-	-	-	-	4.59%	-	-
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	-	-	-	-	5.14%	-	-
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	-	-	-	-	5.14%	-	-
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	-	-	-	-	5.14%	-	-
2012 Q1	0.00%	4.29%	Jan-08	2008	Q1	-	-	-	-	5.14%	-	-
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	-	-	-	-	5.14%	-	-
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	-	-	-	-	5.14%	-	-
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	-	-	-	-	4.08%	-	-
			May-08	2008	Q2	-	-	-	-	4.08%	-	-
			Jun-08	2008	Q2	-	-	-	-	4.08%	-	-
			Jul-08	2008	Q3	-	-	-	-	3.35%	-	-
			Aug-08	2008	Q3	-	-	-	-	3.35%	-	-
			Sep-08	2008	Q3	-	-	-	-	3.35%	-	-
			Oct-08	2008	Q4	-	-	-	-	3.35%	-	-
			Nov-08	2008	Q4	-	-	-	-	3.35%	-	-
			Dec-08	2008	Q4	-	-	-	-	3.35%	-	-
			Jan-09	2009	Q1	-	-	-	-	2.45%	-	-
			Feb-09	2009	Q1	-	-	-	-	2.45%	-	-
			Mar-09	2009	Q1	-	-	-	-	2.45%	-	-
			Apr-09	2009	Q2	-	-	-	-	1.00%	-	-
			May-09	2009	Q2	-	-	-	-	1.00%	-	-
			Jun-09	2009	Q2	-	-	-	-	1.00%	-	-
			Jul-09	2009	Q3	-	-	-	-	0.55%	-	-
			Aug-09	2009	Q3	-	-	-	-	0.55%	-	-
			Sep-09	2009	Q3	-	-	-	-	0.55%	-	-
			Oct-09	2009	Q4	-	-	-	-	0.55%	-	-
			Nov-09	2009	Q4	-	-	-	-	0.55%	-	-
			Dec-09	2009	Q4	-	-	-	-	0.55%	-	-
			Jan-10	2010	Q1	-	-	-	-	0.55%	-	-
			Feb-10	2010	Q1	-	-	-	-	0.55%	-	-
			Mar-10	2010	Q1	-	-	-	-	0.55%	-	-
			Apr-10	2010	Q2	-	-	-	-	0.55%	-	-
			May-10	2010	Q2	-	-	-	-	0.55%	-	-
			Jun-10	2010	Q2	-	-	-	-	0.55%	-	-
			Jul-10	2010	Q3	-	-	-	-	0.89%	-	-
			Aug-10	2010	Q3	-	-	-	-	0.89%	-	-
			Sep-10	2010	Q3	-	-	-	-	0.89%	-	-
			Oct-10	2010	Q4	-	-	-	-	1.20%	-	-
			Nov-10	2010	Q4	-	-	-	-	1.20%	-	-
			Dec-10	2010	Q4	-	-	-	-	1.20%	-	-
			Jan-11	2011	Q1	-	-	-	-	1.47%	-	-
			Feb-11	2011	Q1	-	-	-	-	1.47%	-	-
			Mar-11	2011	Q1	-	-	-	-	1.47%	-	-
			Apr-11	2011	Q2	-	-	-	-	1.47%	-	-
			May-11	2011	Q2	-	-	-	-	1.47%	-	-
			Jun-11	2011	Q2	-	-	-	-	1.47%	-	-
			Jul-11	2011	Q3	-	-	-	-	1.47%	-	-
			Aug-11	2011	Q3	-	-	-	-	1.47%	-	-
			Sep-11	2011	Q3	-	-	-	-	1.47%	-	-
			Oct-11	2011	Q4	-	-	-	-	1.47%	-	-
			Nov-11	2011	Q4	-	-	-	-	1.47%	-	-
			Dec-11	2011	Q4	-	-	-	-	1.47%	-	-
			Jan-12	2012	Q1	-	-	-	-	0.00%	-	-
			Feb-12	2012	Q1	-	-	-	-	0.00%	-	-
			Mar-12	2012	Q1	-	-	-	-	0.00%	-	-
			Apr-12	2012	Q2	-	-	-	-	0.00%	-	-
			May-12	2012	Q2	-	-	-	-	0.00%	-	-
			Jun-12	2012	Q2	-	-	-	-	0.00%	-	-
			Jul-12	2012	Q3	-	-	-	-	0.00%	-	-
			Aug-12	2012	Q3	-	-	-	-	0.00%	-	-
			Sep-12	2012	Q3	-	-	-	-	0.00%	-	-
			Oct-12	2012	Q4	-	-	-	-	0.00%	-	-
			Nov-12	2012	Q4	-	-	-	-	0.00%	-	-
			Dec-12	2012	Q4	-	-	-	-	0.00%	-	-
						\$ -	\$ -	\$ -	\$ -			



Ontario Energy Board

Smart Meter Model

Horizon Utilities Corporation

This worksheet calculates the interest on OM&A and amortization/depreciation expense, in the absence of monthly data.

Year	OM&A (from Sheet 5)	Amortization Expense (from Sheet 5)	Cumulative OM&A and Amortization Expense	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
2006	\$ -	\$ -	\$ -	\$ -	4.37%	\$ -
2007	\$ -	\$ -	\$ -	\$ -	4.73%	\$ -
2008	\$ -	\$ -	\$ -	\$ -	3.98%	\$ -
2009	\$ -	\$ -	\$ -	\$ -	1.14%	\$ -
2010	\$ -	\$ 90,259.13	\$ 90,259.13	\$ 45,129.57	0.80%	\$ 359.91
2011	\$ -	\$ 180,518.27	\$ 270,777.40	\$ 180,518.27	1.47%	\$ 2,653.62
2012	\$ -	\$ 180,518.27	\$ 451,295.67	\$ 361,036.53	1.47%	\$ 5,307.24
Cumulative Interest to 2011						\$ 3,013.53
Cumulative Interest to 2012						\$ 8,320.76

Horizon Utilities Corporation

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)
- ☒ Smart Meter Disposition Rider (SMDR)
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

The SMDR is calculated based on costs to December 31, 2011

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)	\$ -	\$ -	\$ -	\$ -	\$ 197,522.16	\$ 386,496.98	\$ 377,008.10	\$ 961,027.24
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
<input type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)								\$ -
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SMFA Interest (from Sheet 8)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Deferred Revenue Requirement	\$ -	\$ -	\$ -	\$ -	\$ 197,522.16	\$ 386,496.98	\$ 377,008.10	\$ 961,027.24
Number of Metered Customers (average for 2012 test year)							235586	
Calculation of Smart Meter Funding Adder (per metered customer per month)								
Net Deferred Revenues from 2006 to April 30, 2012	\$ 961,027.24							
SMFA May 1, 2012 to April 30, 201X	\$ 0.13							
Check: Forecasted SMFA Revenues for 2012 test year	\$ 367,514.16							
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	\$ 584,019.14							
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ -							
Net Deferred Revenue Requirement	\$ 584,019.14							
SMDR May 1, 2012 to April 30, 201X	\$ 0.21							Match
Check: Forecasted SMDR Revenues	\$ 593,676.72							
Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)								
Incremental Revenue Requirement for 2012	\$ 377,008.10							
SMIRR	\$ 0.13							Match
Check: Forecasted SMIRR Revenues	\$ 367,514.16							