

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 of fixing just and reasonable rates and
other service charges for the distribution of Electricity as of
May 1, 2012.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 1

Reference: 2.0 Manager’s Summary, Page 10

Preamble: Horizon indicates that the capital and operating costs are consistent with amounts previously reported to the Board for all prior years.

a) Please provide a comparison of Smart Meter capital and OM&A forecasts in the previous applications to the current application (based on OEB categories) and explain any variances.

Response:

a) As Horizon Utilities noted at page 10 of its Manager’s Summary to this Application, “the capital and operating costs are consistent with amounts previously reported to the Board for all prior years”. Horizon Utilities clarifies that such amounts were consistent with actual results as reported in Horizon Utilities’ financial statements.

29 At the time of Horizon Utilities' 2007 Smart Meter Funding Adder ("SMFA")
30 application (EB-2007-0538), distributors had limited knowledge of the full extent of
31 the provincial Smart Meter implementation. Subsequently, Horizon Utilities has
32 brought forward two more SMFA applications and the current Smart Meter
33 Prudence Application ("SMPA"). Consequently, the identification of variances
34 between applications is not unexpected.

35 Horizon Utilities provides the following tables summarizing Capital and OM&A
36 information from previous SMFA applications and comparing them to the current
37 SMPA. An explanation of variances is provided following each table:

38

39 **Capital Expenditures:**

Comparison of Smart Meter Capital Expenditures in Previous Applications to Current Application								
OEB Category								
	Year	Smart Meters	Computers (1921)	Computers (1925)	Tools, Shops (1940)	Buidling General Office	Total	
As per Application:								
EB-2007-0538								
	2007	\$ 7,610,130	\$ 532,500	\$ 250,000	\$ -	\$ -	\$ 8,392,630	
	2008	12,020,322	383,400	150,000	-	-	12,553,722	
	2009	8,371,495	54,000	-	-	-	8,425,495	
	2010	4,860,257	54,000	-	-	-	4,914,257	
	2011	-	-	-	-	-	-	
	Total	\$ 32,862,204	\$ 1,023,900	\$ 400,000	\$ -	\$ -	\$ 34,286,104	
EB-2009-0158								
	2007	\$ 7,528,822	\$ 113,868	\$ 36,354	\$ 905	\$ -	\$ 7,679,949	
	2008	10,419,279	69,496	50,930	7,955	-	10,547,660	
	2009	8,005,645	286,000	375,000	-	35,000	8,701,645	
	2010	-	-	-	-	-	-	
	2011	-	-	-	-	-	-	
	Total	\$ 25,953,746	\$ 469,364	\$ 462,284	\$ 8,860	\$ 35,000	\$ 26,929,254	
EB-2010-0292								
	2007	\$ 7,528,822	\$ 113,868	\$ 36,354	\$ 905	\$ -	\$ 7,679,949	
	2008	10,419,279	69,496	50,930	7,955	-	10,547,660	
	2009	6,043,663	-	-	-	-	6,043,663	
	2010	701,000	-	-	-	-	701,000	
	2011	4,186,525	-	-	-	-	4,186,525	
	Total	\$ 28,879,289	\$ 183,364	\$ 87,284	\$ 8,860	\$ -	\$ 29,158,797	
Actuals/2011 Forecast								
EB-2011-0417								
	2007	\$ 7,528,822	\$ 113,868	\$ 36,354	\$ 905	\$ -	\$ 7,679,949	
	2008	10,419,279	69,496	50,930	7,955	-	10,547,660	
	2009	6,043,663	-	-	-	-	6,043,663	
	2010	1,370,527	367,910	487,591	13,691	-	2,239,719	
	2011	822,327	-	10,032	-	-	832,359	
	Total	\$ 26,184,618	\$ 551,274	\$ 584,907	\$ 22,551	\$ -	\$ 27,343,350	
Previous Application Variances to Current EB-2011-0417 Application (over/(under))								
EB-2007-0538								
	2007	\$ (81,308)	\$ (418,632)	\$ (213,646)	\$ 905	\$ -	\$ (712,681)	
	2008	(1,601,043)	(313,904)	(99,070)	7,955	-	(2,006,062)	
	2009	(2,327,832)	(54,000)	-	-	-	(2,381,832)	
	2010	(3,489,730)	313,910	487,591	13,691	-	(2,674,538)	
	2011	822,327	-	10,032	-	-	832,359	
	Total	\$ (6,677,586)	\$ (472,626)	\$ 184,907	\$ 22,551	\$ -	\$ (6,942,754)	
EB-2009-0158								
	2007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	2008	-	-	-	-	-	-	
	2009	(1,961,982)	(286,000)	(375,000)	-	(35,000)	(2,657,982)	
	2010	1,370,527	367,910	487,591	13,691	-	2,239,719	
	2011	822,327	-	10,032	-	-	832,359	
	Total	\$ 230,872	\$ 81,910	\$ 122,623	\$ 13,691	\$ (35,000)	\$ 414,096	
EB-2010-0292								
	2007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	2008	-	-	-	-	-	-	
	2009	-	-	-	-	-	-	
	2010	669,527	367,910	487,591	13,691	-	1,538,719	
	2011	(3,364,198)	-	10,032	-	-	(3,354,166)	
	Total	\$ (2,694,671)	\$ 367,910	\$ 497,623	\$ 13,691	\$ -	\$ (1,815,447)	

Total Capital expenditures in the current application of \$27,343,350 are \$6,942,754 lower than in the EB-2007-0538 application, \$414,096 higher than in EB-2009-0158, and \$1,815,447 lower than EB-2010-0292.

EB-2007-0538 compared to EB-2011-0417

Smart Meters

In EB-2007-0538 and based on the best current market and other information available at that time, Smart Meter capital expenditures were estimated at \$32,862,204 over the life of the program. Actual costs including the modest 2011 forecast are expected to be \$26,184,618, as provided in EB-2011-0417. The overall favorable cost variance between the original estimated costs and expected actual costs of \$6,677,586 is explained as follows:

- For fiscal 2008, Smart Meter capital was \$1,601,043 lower than originally estimated reflecting lower meter prices and installation costs, as provided in response to Vulnerable Energy Consumers Coalition Interrogatory #4.
- For fiscal 2009, Smart Meter capital was \$2,327,832 lower than originally anticipated and is principally explained by the net impact of:
 - the deferral of approximately \$2,650,000 in capital costs, originally planned for the conversion of three-phase GS<50 kW customers to Smart Meters. As outlined in Horizon Utilities' Z-Factor Application (EB-2009-0332), in 2009 Horizon Utilities deferred \$2,900,000 in capital costs for the conversion of three-phase meters (GS<50 kW and GS >50 kW). The deferral of these costs was necessary to mitigate the cash flow impacts of a significant shortfall in distribution revenue from a large commercial customer. In addition, Horizon Utilities did not receive a Board decision on the 2009 Smart Meter Funding Adder application (EB-2009-0158) until October 8, 2009;

- the installation of 21,240 additional Residential Smart Meters in 2009 as compared to the initial projection in 2007 due to lower Smart Meter pricing; and
- lower overall unit costs per Residential Smart Meter. As noted in response to Vulnerable Energy Consumer Coalition Interrogatory #3, the average installed cost per Residential meter was \$98.79, which compares to EB-2007-0538 which provided for an average cost of \$146.84 per Smart Meter.
- For fiscal 2010, Smart Meter capital was \$3,489,730 lower than originally anticipated principally reflecting:
 - the substantial completion of the mass deployment of Smart Meters by the end of fiscal 2009 created a timing difference that resulted in higher costs in 2009 and lower costs in 2010;
 - the change in timing of the deployment of the three-phase GS<50 kW meters to align with the meter re-verification dates resulted in fewer GS<50 kW installations in 2010; and
 - the installation of GS>50 kW meters, which were not originally contemplated in EB-2007-0538, to align with the meter re-verification dates.
- For fiscal 2011, Smart Meter capital was \$822,327 higher than originally anticipated reflecting the installations of Hard-To-Reach Residential meters, the change in timing of the deployment of the three-phase GS<50 kW meters to align with the re-verification dates, as well as the continuation of the three-phase GS>50 kW meters implementation.

Computer Hardware

In EB-2007-0538, computer hardware capital expenditures were estimated at \$1,023,900 over the life of the program, as compared to EB-2011-0417 of \$551,274. The overall decrease of \$472,626 reflects the following:

- Actual 2007 capital expenditures were \$418,632 less than originally estimated as contemplated investment in Collector hardware, Serial to Ethernet Hardware, and UPS hardware was not required until 2009. In addition, the Smart Meter data volumes remained manageable throughout 2007; therefore the estimated investment in additional disk space was deferred until 2008.
- Actual 2008 capital expenditures were \$313,904 lower than originally anticipated, principally due to the deferral of a new AMI server platform and back-up and recovery system, which were purchased in 2009 and further elaborated below.
- Actual 2009 capital expenditures were \$54,000 lower than planned as the acquisition of additional disk space was not required. The original Application contemplated an annual upgrade to disk space, which Horizon Utilities subsequently determined would not be necessary on an annual basis and future requirements would be based on estimated increases in transaction volume.
- Actual 2010 capital expenditures were \$313,910 higher than originally estimated to provide for enhancements to Horizon Utilities' Customer Information System ("CIS") necessary to accommodate mandatory Time-of-Use billing requirements, as well as the acquisition and implementation of back-up redundancy at Horizon Utilities' disaster recovery data centre.

As documented in the response to Energy Probe Technical Conference Question #1 (EB-2010-0131), "as part of the preparation of the Interrogatory Responses for Horizon Utilities' Application for a Smart Meter Funding Adder (EB-2010-0292), and based on a detailed review of all Smart Meter related expenditures, Horizon Utilities reclassified certain capital expenditures previously recorded in fixed assets in prior years to the Smart Meter variance account in 2010". As a result of this review, \$350,321 of computer hardware capital expenditures incurred in prior years was reclassified to the Smart Meter variance account in 2010. Such reclassification included the upgrade to the AMI server platform and back-up and disaster recovery system, previously noted.

Computer Software

In EB-2007-0538, computer software capital expenditures were estimated at \$400,000 over the life of the program, as compared to EB-2011-0417 of \$584,907. The overall increase of \$184,907 is explained as follows:

- Actual 2007 capital expenditures were \$213,646 less than originally contemplated due to the deferral of programming upgrades related to Smart Meters and the AMI, the CIS, web presentment, provincial MDM/R interfaces, and the implementation of Time-of-Use rates. Such deferral was necessary to allow Horizon Utilities to focus on mass deployment efforts, and time to fully develop and assess the regulatory requirements and the necessary business processes to support the future state of implementing mandatory Time-of-Use rates.
- Actual 2008 capital expenditures were \$99,070 less than originally anticipated resulting from lower than expected development and programming costs for the Smart Meter web presentment tool, which was completed over a two year period, commencing in 2007.
- Actual 2010 capital expenditures were \$487,591 higher than originally planned due to the prior year deferrals previously noted, as well as higher than anticipated programming costs to provide for necessary interfacing with the provincial MDM/R, AMI, and the CIS in order to begin billing customers on Time-of-Use rates. The programming of these interfaces was complex and required more substantive efforts than originally contemplated.

As documented in the response to Energy Probe Technical Conference Question #1 (EB-2010-0131), "as part of the preparation of the Interrogatory Responses for Horizon Utilities' Application for a Smart Meter Funding Adder (EB-2010-0292), and based on a detailed review of all Smart Meter related expenditures, Horizon Utilities reclassified certain capital expenditures previously recorded in fixed assets in prior years to the

Smart Meter variance account in 2010". As a result of this review, \$459,210 of computer software capital expenditures incurred in prior years was reclassified to the Smart Meter variance account in 2010. Such reclassification included the development of the Smart Meter web presentment tool and the programming costs, previously noted.

EB-2009-0158 compared to EB-2011-0417

Smart Meters

In EB-2009-0158, Smart Meter capital expenditures were estimated at \$25,953,746 over the life of the program, as compared to EB-2011-0417 of \$26,184,618, an overall increase of \$230,872.

The overall variance between EB-2009-0158 and EB-2011-0417 is principally with respect to the actual timing of the purchase and installations of Smart Meters in fiscals 2009, 2010 and 2011 as compared to the schedule set out in EB-2009-0158.

- For fiscal 2009, Smart Meter capital was \$1,961,982 lower than originally anticipated and is explained by:
 - the deferral of \$2,900,000 in Smart Meter capital costs, as noted previously; but
 - partially offset by an increase in the number of Residential and GS<50 kW meter installations in 2009 in order to substantially complete mass deployment and take advantage of lower Smart Meter pricing.
- For fiscal 2010, Smart Meter capital was \$1,370,527 greater than anticipated in 2009 as a consequence of the purchase and installation of i) Hard-to-Reach meters; and ii) the decision to align the installation of the three-phase GS<50 kW and GS>50 kW meters to the re-verification date. The 2009 application assumed full deployment of all Residential Smart Meters, and therefore did not contemplate a Hard-to-Reach category.
- For fiscal 2011, Smart Meter capital was \$822,327 higher than originally anticipated in 2009 as a consequence of the purchase and installation for i) Hard-

to-Reach meters; and ii) the decision to align the installation of the three-phase GS<50 kW and GS>50 kW meters to the re-verification date.

As noted above, the 2009 application assumed full deployment of all Residential Smart Meters, and therefore did not contemplate a Hard-to-Reach category.

Computer Hardware

In EB-2009-0158, Computer Hardware capital expenditures were estimated at \$469,364 over the life of the program, as compared to EB-2011-0417 of \$551,274. The overall increase of \$81,910 is principally a consequence of higher than anticipated costs for the AMI server upgrade.

The variance identified between fiscal years 2009 and 2010 is a consequence of the timing of when the expenditures were recorded to the Smart Meter variance accounts. As documented in the response to Energy Probe Technical Conference Question #1 (EB-2010-0131), "as part of the preparation of the Interrogatory Responses for Horizon Utilities' Application for a Smart Meter Funding Adder (EB-2010-0292), and based on a detailed review of all Smart Meter related expenditures, Horizon Utilities reclassified certain capital expenditures previously recorded in fixed assets in prior years to the Smart Meter variance account in 2010". As a result of this review, \$350,321 of computer hardware capital expenditures incurred in prior years was reclassified to the Smart Meter variance account in 2010.

Computer Software

In EB-2009-0158, Computer Software capital expenditures were estimated at \$462,284 over the life of the program, as compared to EB-2011-0417 of \$584,907. The overall increase of \$122,623 is principally a consequence of higher programming costs resulting from the complexity of the programming requirements to interface internal systems with the provincial MDM/R and to develop processes and automation to implement mandatory Time-of-Use billing.

As documented in the response to Energy Probe Technical Conference question #1 (EB-2010-0131), "as part of the preparation of the Interrogatory Responses for Horizon

Utilities' Application for a Smart Meter Funding Adder (EB-2010-0292), and based on a detailed review of all Smart Meter related expenditures, Horizon Utilities reclassified certain capital expenditures previously recorded in fixed assets in prior years to the Smart Meter variance account in 2010". As a result of this review, \$459,210 of computer software capital expenditures incurred in prior years was reclassified to the Smart Meter variance account in 2010.

EB-2010-0292 compared to EB-2011-0417

Smart Meters

In EB-2010-0292, Smart Meter capital expenditures were estimated at \$28,879,289 over the life of the program, as compared to EB-2011-0417 of \$26,184,618; an overall decrease of \$2,694,671.

The overall variance between EB-2010-0292 and EB-2011-0417 is principally a consequence of the timing of purchases and installations with respect to the three phase GS<50 kW and GS>50 kW customers.

- Actual Smart Meter capital for 2010 was \$669,527 higher than forecast in the 2010 application and is principally explained by:
 - \$88,725 to upgrade the collectors and communication modems to improve meter reading capabilities; and
 - The purchase of the three-phase GS<50 kW and GS>50 kW meters in the latter part of 2010 to facilitate the scheduled implementation of such in the early part of 2011 to align with re-verification dates.
- For fiscal 2011, the 2010 application included \$4,186,525 in Smart Meter capital expenditures for the installation of the three-phase GS<50 kW and GS>50 kW meters from 2011 to 2015 (EB-2010-0292, Pg. 8). Horizon Utilities' current Application only provides for the capital expenditures required for fiscal 2011.

234 **OM&A Expenditures:**

Comparison of Smart Meter OM&A Expenditures in Previous Applications to Current Application and Actuals								
Year	EB-2007-0538	EB-2009-0158	EB-2010-0292	EB-2011-0417	Variance From Current EB-2011-0417			
					EB-2007-0538	EB-2009-0158	EB-2010-0292	
	(a)	(b)	(c)	(d)	(d) - (a)	(d) - (b)	(d) - (c)	
2006	\$ -	\$ 99,285	\$ 99,285	\$ 99,285	\$ 99,285	\$ -	\$ -	
2007	1,262,000	814,248	814,248	814,248	(447,752)	-	-	
2008	1,402,700	689,859	689,859	689,859	(712,841)	-	-	
2009	1,543,800	1,332,703	1,219,599	1,219,599	(324,201)	(113,104)	-	
2010	1,685,400	1,284,000	1,551,637	1,150,191	(535,209)	(133,809)	(401,446)	
	5,893,900	4,220,095	4,374,628	3,973,182	(1,920,718)	(246,913)	(401,446)	
2011	-	-	1,680,309	1,291,951	1,291,951	1,291,951	(388,358)	
Total	\$ 5,893,900	\$ 4,220,095	\$ 6,054,937	\$ 5,265,133	\$ (628,767)	\$ 1,045,038	\$ (789,804)	

235

236 The preceding table summarizes OM&A variances by fiscal year for previously filed
 237 Smart Meter Funding Adder applications, as compared to the current Application.
 238 Horizon Utilities submits that the OM&A categories identified in the Smart Meter Model v
 239 2.17 were not previously contemplated in previous OEB Smart Meter Model versions
 240 (e.g. EB-2007-0538, page 15). However, Horizon Utilities provides the following
 241 analysis based on material OM&A variances:

242 Total OM&A expenditures in the current application of \$5,265,133 are: \$628,767 lower
 243 than in the EB-2007-0538 application; \$1,045,038 higher than in EB-2009-0158; and
 244 \$789,804 lower than EB-2010-0292.

245 **EB-2007-0538 compared to EB-2011-0417**

246 In EB-2007-0538, OM&A expenditures for 2011 were not anticipated as the expectation
 247 at that time was that the Smart Meter program would have been completed. Despite an
 248 additional year of OM&A expenditures for 2011, total OM&A expenditures for the period
 249 2006 through 2011 were \$628,767 lower than originally anticipated in EB-2007-0538.

250 The following is an overview of OM&A variances by fiscal year:

- 251 • Actual 2006 OM&A expenses of \$99,285 included the development of the
- 252 communication plan and the distribution of the initial Smart Meter print materials
- 253 containing introductory information for customers.

- 254 • Actual 2007 OM&A expenses were \$447,752 less than originally contemplated;
255 this was principally a consequence of lower consulting costs and the elimination
256 of Smart Meter verification costs. The original estimate for 2007 OM&A
257 expenditures included:
 - 258 ○ consulting costs of approximately \$300,000 related to a proposed pilot for
259 “shadow billing” to compare traditional bill calculations to Time-of-Use bill
260 calculations to identify the potential rate impacts of Time-of-Use billing to
261 customers. The pilot project was undertaken in 2007 and 2008 and actual
262 costs were substantially lower than originally anticipated; and
 - 263 ○ Smart Meter verification costs of \$132,000 were originally contemplated to
264 perform field inspections of Smart Meters to verify the accuracy of reads
265 from the AMI system. This work effort was not required and therefore
266 these costs were not incurred.
- 267 • Actual 2008 OM&A expenses were \$712,841 less than originally estimated as
268 explained by:
 - 269 ○ lower meter repairs and maintenance costs of approximately \$170,000
270 due to a lower than forecast number of meter base replacements and
271 lower than anticipated number of customer-owned equipment repairs;
 - 272 ○ lower media communications costs of approximately \$134,000 reflecting a
273 delay in the development of a customer education program related to
274 Time-of-Use rates;
 - 275 ○ Smart Meter verification costs of \$144,000 to perform field inspections
276 were not required, as noted previously; and
 - 277 ○ lower than anticipated computer maintenance and license costs of
278 approximately \$190,000, principally as a result of the decision to delay the
279 AMI hardware and other computer system upgrades in 2007, as noted
280 previously.
- 281 • 2009 and 2010 OM&A expenditures were originally estimated in EB-2007-0538
282 based on expected expenditure levels similar to 2007 and 2008, with

adjustments to meter base repairs and maintenance to reflect an increase in the number of installed meters, and general inflationary increases for wages and benefits. As noted previously, OM&A expenditures for repairs and maintenance, computer maintenance, and Smart Meter verification costs continued to be less than originally anticipated in EB-2007-0538.

EB-2009-0158 compared to EB-2011-0417

At the time of filing EB-2009-0158, it was contemplated that Smart Meter OM&A expenses continuing beyond 2011 would be in rate base. However, Smart Meter expenses are not a component of Horizon Utilities' current rate base. As referenced on page 68 of the Decision of the Board in Horizon Utilities' 2011 Cost of Service Application (EB-2010-0131), dated July 7, 2011, "The Board expects that Horizon will file, at its earliest opportunity, a stand-alone application to seek a prudence review and disposition of capital and operating costs of its installed meters."

As a result, total OM&A expenditures for the period 2006 through 2011 as per EB-2011-0417 are \$1,045,038 higher than originally anticipated in EB-2009-0158; explained by \$1,291,951 in OM&A costs for 2011, partially offset by lower OM&A of \$113,104 and \$133,809 in fiscal years 2009 and 2010, respectively.

The lower OM&A expenditures in 2009 and 2010 of \$113,104 and \$133,809, respectively, are principally explained by lower than anticipated costs for Smart Meter communication materials and the communication plan for Time-of-Use rates.

EB-2010-0292 compared to EB-2011-0417

Total OM&A expenditures for the period 2006 through 2011 in EB-2011-0417 were \$5,265,133 or \$789,804 lower than forecast in EB-2010-0292, and are explained by lower actual costs in 2010 of \$401,446, and an estimated reduction in 2011 expenditures of \$388,358.

Actual OM&A expenditures in 2010 were \$401,446 lower than originally estimated in EB-2010-0292 and are principally explained by lower computer maintenance costs (hardware and software), as well as lower customer communication costs.

311 The estimated computer maintenance costs for 2010 were based on the assumption
312 that Horizon Utilities would require a 24 hour/7 days a week maintenance contract on its
313 AMI computer software. Upon further review and analysis, it was determined that this
314 level of maintenance was not required.

315 Customer communication costs related to print materials were lower than anticipated.

316 Estimated OM&A expenditures for 2011 were reduced by \$388,358 in EB-2011-0417
317 based on refinements in cost expectations based on 2010 experience but adjusted for
318 an increase in expected computer maintenance costs (hardware and software) as a
319 result of computer system upgrades completed in 2010 and inflationary increases
320 related to salaries and benefits.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 2

Reference: 2.0 Manager’s Summary, Pages 11-13

Preamble: Table 2 on Page 13 provides the number of smart meters installed by customer class for each the years 2007 to 2011. Horizon indicates that approval of a new deferral account is requested to record the revenue requirement associated with the estimated capital cost of \$2,729,880 of installing the remaining Residential and GS<50 kW Smart Meters in 2012, 2013 and 2014. Horizon indicates that at the end of 2011 it expects to have approximately 350 HTR Residential Smart Meters installations.

- a) Please confirm the total number of meters installed by December 31, 2011 and advise of any updates.
- b) Please expand Table 2 to include the remaining meters to be installed in each year (2012, 2013, 2014) by customer class.
- c) Please confirm the total number of meters forecast to be installed by the end of 2012.
- d) Please indicate the number of Hard-To-Reach (HTR) Residential Smart Meters installed by year and indicate the % of total meters that are HTR.
- e) Please discuss the alternative metering technologies available to resolve confined spaces and unusual configurations.¹
- f) Please provide the name of the company selected for the installation of GS>50 kW Smart Meters.

Response:

- a) Horizon Utilities confirms that the number of meters that were installed by the end of 2011 was 229,686. Such reflects a minor increase in the number of Residential meters installed in 2011 by 244 and a minor increase in the number of GS<50 kW meters

installed by 120. The increased installations in 2011 above the 2011 forecast were primarily a result of strong response to communication Horizon Utilities distributed to Hard-to-Reach Residential customers concerning Smart Meter installations. The increased installations in the GS<50 kW customer class relate to additional focus on deploying meters to this customer class following the completion of the mass deployment Residential cycle.

b) The revised Table 2 below has been expanded to include the remaining meters to be installed in each year (2012, 2013, 2014) by customer class. Please note that as discussed on page 12 of the Application, the poly phase meters required for three phase services in the GS<50 kW class will be converted to Smart Meters when such require re-verification as prescribed by the *Electricity and Gas Inspection Act*, R.S.C., 1985, c.E-4.

Revised Table 2 - Smart Meter Implementation

Customer Class	Total Connections (December 31, 2011)	2007	2008	2009	2010	2011 Forecast	2011 Actual	2012 Forecast	2013 Forecast	2014 Forecast	% of target completed
Residential	216,089	57,976	134,170	210,410	214,501	215,739	215,983	216,280	216,280	216,280	100.1%
GS<50 kW	18,503	2,405	5,566	8,729	11,539	13,583	13,703	15,138	16,573	18,008	97.3%
Total	234,592	60,381	139,736	219,139	226,040	229,322	229,686	231,418	232,853	234,288	99.9%

Note:

1: Number of meters may not equal number of customers due to inclusion of inactive accounts and customers with multiple meters.

The forecast for Residential customers for 2012 to 2013 varies from that reported in Appendix 2 of the Application as result of higher than anticipated customer growth in 2011. As noted in Horizon Utilities' response to Board Staff Interrogatory 2, growth-related capital is not included in Smart Meter program beyond 2012 and therefore the forecast for meter installations shown in the table above does not show growth beyond 2012.

c) Horizon Utilities confirms that the total number of meters forecast to be installed by the end of 2012 is 231,418.

d) The Hard-to-Reach ("HTR") program began in 2010 when the mass deployment of

single phase Residential meters was substantively complete. The table below provides the number of HTR meters installed by year and as a percentage of the total number of meters. The table below indicates the forecast for HTR installations to the end of the program.

Hard-To-Reach Residential Meter Installations

	2010	2011	2012 Forecast	Total
Hard-To-Reach installed	4,091	1,482	297	5,870
% total meters	1.89%	0.69%	0.14%	2.72%

Note: percentage based of 2012 total number of residential meters 216,280

e) Horizon Utilities plans to use the Elster GREX meter, which is the only technology solution that offers smaller meters that can fit into confined spaces and is compatible with Horizon Utilities' software system. This meter is less than half the size of a conventional smart meter installation. The only other available option is to move the meter base to a location where there is sufficient room for a new conventional Smart Meter.

f) Due to safety concerns and the nature of the GS>50 kW complex metering configurations, Horizon Utilities is utilizing its own staff for the installation of the more complex GS>50 kW meters.

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DELIVERED: March 7, 2012

Question 3

Reference: Reference: 2.0 Manager’s Summary, Table 2, Page 13

Preamble: Horizon forecasts the total number of smart meters installed by December 31, 2011 as 230,713.

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

b) Please complete the following table to show the average installed cost per meter.

Class	Type of Meter	Quantity	Installed Cost	Average Costs
Residential				
GS<50 kW				
GS>50 kW				

Response:

a) The following meter types are used for the following customer classes:

Residential:

For the Residential customer class, Elster meter types R1S and R2S are used for single phase services up to 200 amps and 240 volt service applications.

GS<50 kW:

For the GS<50 kW customer class the following meter types are used, depending on the customer’s service requirements:

- Elster meter types R1S and R2S single phase up to 200 amps and 240 volt applications and 400 amp transformer rated complex single phase metering;

- Elster meter type GREX 100 Amp 120/240 volt kWh;
- Elster meter type A3RL 10 Amp up to 200 Amp from 120 volts to 480 volts three phase with watt and volt ampere demand; and
- Elster meter type A3TL 10 Amp single phase 120/240 volt kWh, with watt demand.

GS>50 kW

For the GS>50 kW class, the following meters are used depending on the customer's service requirements:

- Elster meter type A3RL 10 Amp up to 200 Amp from 120 volts to 480 volts three phase with watt and volt ampere demand; and
- Elster meter type A3TL 10 Amp single phase 120/240 volt kWh, with watt demand.

b) Horizon Utilities has populated the table below as requested to show the average installed cost per meter.

Class	Type of Meter	Quantity	Installed Costs	Average Costs
Residential	R1S / R2S	215,739	\$ 21,312,020	\$98.79
GS<50kW	R1S / R2S / GREX	8,205	\$ 1,321,322	\$161.05
	A3RL	4,903	\$ 3,541,746	\$722.41
	A3TL	476	\$ 218,467	\$459.16
GS>50kW	A3RL	1,182	\$ 853,827	\$722.41
	A3TL	209	\$ 96,006	\$459.16

Notes to table above:

1. The installed costs for the A3RL and A3TL meters in the GS classes only reflect incremental installation costs and not Horizon Utilities' internal labour cost. As noted in Horizon Utilities' response to Board staff Interrogatory #9 in its 2011 EDR Cost of Service Application (EB-2010-0131), the associated internal labour

43 component noted above was not considered an incremental cost.

44 2. Please see Horizon Utilities' response to Board Staff Interrogatory # 3 for
45 comments on the additional cost drivers.

46 3. The total installed cost aligns with Table 9 of the Application

47 The variance in the average cost per meter for GS<50 kW – R1S/R2S/GREX meter
48 type and Residential - R1S/R2S meter type relates to the additional costs associated
49 with deploying meters to GS<50 kW customers. Residential customers are often
50 located within close proximity of each other and Smart Meters can be deployed quickly
51 using systematic approaches. GS<50 kW customers are geographically more widely
52 dispersed making it more difficult and time-consuming to deploy meters, which adds
53 travel and additional time associated with the deployment of these meters. In addition,
54 GS<50 kW customers with 600 volt services may require meter types with additional
55 features. These meter features increase the cost of GS<50 kW customer class meters,
56 as compared to those required for the Residential customer class.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 4

Reference: 2.0 Manager’s Summary, Page 14

Preamble: Horizon indicates that THESL obtained a new and reduced per unit pricing arrangement from Elster and Elster agreed to provide the same pricing arrangement to Horizon.

a) Please provide the effective date of the new pricing arrangement for Horizon.

Response:

a) Elster provided Horizon Utilities with THESL’s new and reduced per unit pricing arrangement effective January 2008.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 5

Reference: Smart Meter Model

Preamble: Horizon completed the Smart Meter Model (Appendix 2) provided by the OEB to arrive at the proposed Smart Meter Incremental Rate Rider and the proposed Smart Meter Disposition Rate Rider.

Reference 2: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 19

Preamble: The Guideline states, “The Board views that, where practical and where data is available, class specific SMDRs should be calculated on full cost causality.

- a) Please provide the calculations in Appendix 2 by customer class.
- b) Please recast Tables 7, 8, 9 and 10 by customer class. Reconcile to Tables 7, 8, 9 and 10 in the application.
- c) Please provide a table that summarizes the total Smart Meter Rate Adder Revenue collected by customer class.

Response:

Horizon Utilities has prepared the calculations in the manner requested by VECC for the purpose of responding to this interrogatory. However, Horizon Utilities maintains that the methodology used in its Application is appropriate and is not proposing to amend its Application to reflect this response.

a) Please see Appendices 1, 2 and 3 attached to this response for recalculations of Appendix 2 from the Application for each of Residential, GS<50 kW and GS>50 kW customer classes.

b) The following are the recast Tables 7, 8, 9 and 10 by customer class that reconcile

with the calculations from part a) above and Tables 7, 8, 9 and 10 on pages 33, 34 and 35 of the Application.

Table 7a) below is the recast Table 7 from page 33 of the Application, by customer class.

Table 7a) – Calculation of True-up amount for SMDR (recast by Customer Class)

Smart Meter Disposition Rider		Residential	GS<50kW	GS>50kW	Large User	TOTAL
Smart Meter Revenue Requirement -2006		\$92,000	\$7,677	\$975		\$100,652
Smart Meter Revenue Requirement -2007		\$1,214,790	\$172,677	\$21,239		\$1,408,706
Smart Meter Revenue Requirement -2008		\$2,149,717	\$413,461	\$49,550		\$2,612,728
Smart Meter Revenue Requirement -2009		\$3,577,446	\$677,806	\$87,607		\$4,342,860
Smart Meter Revenue Requirement -2010		\$3,912,207	\$767,952	\$116,560		\$4,796,718
Smart Meter Revenue Requirement -2011		\$4,210,551	\$819,432	\$144,173		\$5,174,156
Smart Meter Revenue Requirement -2012		\$1,266,676	\$260,406	\$49,236		\$1,576,317
Revenue Requirement Total	A	\$16,423,386	\$3,119,412	\$469,338	\$0	\$20,012,136
Smart Meter Rate Adder	B	(\$17,917,614)	(\$1,516,568)	(\$184,446)	(\$1,014)	(\$19,619,642)
Carrying Cost	C	(\$88,992)	\$39,040	\$6,180	(\$34)	(\$43,807)
Smart Meter True-up	D=A+B+C	(\$1,583,220)	\$1,641,883	\$291,073	(\$1,048)	\$348,687
Number of Metered Customers	E	215,335	17,970	2,281		235,586
Rate Rider	F=D/E/12	(\$0.61)	\$7.61	\$10.63		\$0.12

Table 8a) below, recast by customer class, outlines that if the Smart Meter Disposition Rider ("SMDR") revenue requirement was prepared by customer class the monthly charges would be adjusted from the allocation displayed in Table 8 on page 33 of the Application. The adjustments by customer class are outlined in the following table.

Table 8a) – Calculation of Smart Meter Disposition Rate Rider (recast by Customer Class)

Customer Class	# of Active Metered Customers (average 2012)	SMIRR Allocation (%)	True-up Amount Allocation	Monthly Charge
Residential	215,335		(\$1,583,220)	(\$0.61)
GS< 50kW	17,970		\$1,641,883	\$7.61
GS>50kW	2,281		\$291,073	\$10.63
Large Users			(\$1,048)	
Total	235,586	0%	\$348,687	

Table 8b) below illustrates that the monthly charge for Residential customers would decrease by (\$0.72) while the GS<50 kW and GS>50 kW customer classes would increase by \$7.35 and \$10.26, respectively.

Table 8b) – Variance between Table 8a) and the SMDR as illustrated in Table 8 in the Application

Customer Class	Monthly Charge as per Table 8 in EB-2011-0417 Application	Monthly Charge as per recast Table 8 in VECC IR #5 Response	Monthly Charge Variance \$
Residential	\$0.11	(\$0.61)	(\$0.72)
GS< 50kW	\$0.26	\$7.61	\$7.35
GS>50kW	\$0.38	\$10.63	\$10.26

The Smart Meter Funding Adder ("SMFA") revenue was collected from each customer class at a consistent rate, with no differential for the costs associated with each customer class. Recasting Appendix 2 by customer class does not allocate the SMFA revenue collected from the Large User customer class to the respective Residential, GS<50 kW and GS>50 kW customer classes. As outlined in the Board's Decision on PowerStream Inc.'s 2011 Smart Meter Cost Recovery Application (EB-2011-0128), the Board directed that SMFA revenue received from the Large User customer class be allocated to the Residential and GS<50 kW customer classes when calculating the true-ups for the SMDR. Accordingly, the SMDR allocation to customer class used in Table 8 of the Application allocates the Large User SMFA Revenue collected to the Residential, GS<50 kW and GS>50 kW customer classes. If the recast Table 8a) above were adjusted to allocate the SMFA collected from Large Users to the other customer classes based on the counts of customers in each class, the impact to the SMDR would be as outlined in Table 8c) below.

Table 8c) - Calculation of Smart Meter Disposition Rate Rider (recast by Customer Class & allocating Large Users SMFA)

Customer Class	# of Active Metered Customers (average 2012)	SMIRR Allocation (%)	True-up Amount Allocation	Monthly Charge
Residential	215,335		(\$1,584,179)	(\$0.61)
GS< 50kW	17,970		\$1,641,803	\$7.61
GS>50kW	2,281		\$291,063	\$10.63
Large Users			\$0	
Total	235,586	0%	\$348,687	

Table 9a) below has been recast to reflect the detailed calculations by customer class in Appendices 1-3.

Table 9a) – Allocation of Revenue Requirement between Customer Classes (recast by Customer Class)

Customer Class	# of Active Metered Customers (average 2012)	Total Capital	Return	Amortization	OM&A	Subtotal	PILS	Total	% of Total
Residential	215,335	\$21,312,019	\$1,115,204	\$1,591,335	\$801,305	\$3,507,844	\$292,179	\$3,800,024	80.4%
GS< 50kW	17,970	\$5,081,495	\$264,593	\$380,172	\$66,869	\$711,634	\$69,584	\$781,217	16.5%
GS>50kW	2,281	\$949,835	\$52,130	\$74,127	\$8,488	\$134,745	\$12,962	\$147,707	3.1%
Total	235,586	\$27,343,349	\$1,431,927	\$2,045,634	\$876,662	\$4,354,223	\$374,725	\$4,728,948	100.0%

The following Table 9b) outlines the variances related to recasting Table 9a) by customer class based on the recast models from Appendix 2 as shown in Appendices 1-3 to this response. The variances are a result of the detailed amortization being calculated by asset class in the Smart Meter Model, version 2.17 and the impacts this adjustment has on the Return on Equity and PILS. In total, the revenue requirement for the SMIRR does not change as a result of this adjustment to the customer class allocation methodology.

Table 9b) outlined below indicates that there is a minor realignment of costs between the customer classes based on recasting Table 9 by customer class.

Table 9b) – Variance between Table 9a) and Table 9 from page 34 of the Application

Customer Class	# of Active Metered Customers (average 2012)	Total Capital	Return	Amortization	OM&A	Subtotal	PILS	Total	% of Total
Residential	-	\$0	(\$872)	(\$3,078)	\$0	(\$3,950)	(\$10,046)	(\$13,996)	-0.3%
GS< 50kW	-	\$0	(\$1,517)	\$11	\$0	(\$1,506)	\$8,211	\$6,705	0.1%
GS>50kW	-	\$0	\$2,389	\$3,067	\$0	\$5,456	\$1,835	\$7,291	0.2%
Total	-	\$0	\$0	(\$0)	\$0	(\$0)	(\$0)	(\$0)	0.0%

Table 10a) below has been recast to reflect the detailed calculations by customer class in Appendices 1-3 of this response.

Table 10a) – Calculation of Smart Meter Incremental Revenue Rider (recast by Customer Class)

Customer Class	# of Active Metered Customers (average 2012)	SMIRR Allocation	Annual Revenue Requirement Allocation	Monthly Charge
Residential	215,335	80.4%	\$3,800,024	\$1.47
GS< 50kW	17,970	16.5%	\$781,217	\$3.62
GS>50kW	2,281	3.1%	\$147,707	\$5.40
Total	235,586	100%	\$4,728,948	

The impact of the realignment of costs between customer classes for the SMIRR on the monthly charge calculations are as follows, in Table 10b).

Table 10b) – Variance between Table 10a) and Table 10 from page 35 of the Application

Customer Class	# of Active Metered Customers (average 2012)	SMIRR Allocation	Annual Revenue Requirement Allocation	Monthly Charge
Residential	-	-0.3%	(\$13,996)	(\$0.01)
GS< 50kW	-	0.1%	\$6,705	\$0.03
GS>50kW	-	0.2%	\$7,291	\$0.27
Total	-	0%	(\$0)	

Table 10b) shows that the SMIRR monthly charge for residential customers would decrease by (\$0.01) and the GS<50 kW and GS>50 kW customers' monthly charge would increase by \$0.03 and \$0.27, respectively, if the customer class allocation was completed based on the recast detailed calculations from Appendix 2 (as illustrated in Appendices 1-3)

c) Horizon Utilities' total Smart Meter Funding Adder Revenue collected by customer class to December 31, 2011 is outlined in the table below:

YEAR	Smart Meter Funding Adder Revenue				
	Residential	GS<50 kW	GS>50 kW	Large User	Total
2006	\$ 638,882	\$ 56,165	\$ 6,983	\$ 37	\$ 702,068
2007	\$ 1,689,604	\$ 147,183	\$ 15,809	\$ 97	\$ 1,852,694
2008	\$ 2,081,262	\$ 177,005	\$ 21,028	\$ 118	\$ 2,279,413
2009	\$ 2,388,028	\$ 205,068	\$ 24,589	\$ 136	\$ 2,617,821
2010	\$ 4,047,740	\$ 336,044	\$ 41,812	\$ 227	\$ 4,425,823
2011	\$ 5,252,636	\$ 442,406	\$ 53,838	\$ 300	\$ 5,749,179
TOTAL	\$ 16,098,153	\$1,363,871	\$ 164,060	\$ 915	\$17,626,999

VECC 5 - APPENDIX 1

Smart Meter Model, version 2.17

Recast – Residential Customer Class



Ontario Energy Board

Smart Meter Model

 Horizon Utilities Corporation
 Hydro 2000 Inc.

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.

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								0
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	57976	76194	76240	4091	1238	273	216012
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	26.84%	62.11%	97.41%	99.30%	99.87%	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	57976	76194	76240	4091	1238	273	216012
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.)	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
	Smart Meter	5,606,934	7,512,044	3,418,540	632,010	385,328	0	\$ 17,554,855
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter	113,390	360,598	1,073,855	276,867	74,357	0	\$ 1,899,067
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware	86,168	35,096	0	7,174	0	0	\$ 128,439
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)		0	0	0	0	0	0	\$ -
Total Advanced Metering Communications Devices (AMCD)	\$ -	\$ 5,806,492	\$ 7,907,739	\$ 4,492,395	\$ 916,051	\$ 459,684	\$ -	\$ 19,582,361
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	
	Smart Meter	224,098	363,402	209,966	71,651	91,501	0	\$ 960,618
1.2.2 Repeaters (may include radio licence, etc.)	Computer Hardware	0	0	0	0	5,420	0	\$ 5,420
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Computer Hardware	0	0	0	0	0	0	\$ -
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)	\$ -	\$ 224,098	\$ 363,402	\$ 209,966	\$ 71,651	\$ 96,920	\$ -	\$ 966,037

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	0	2,583	19,070	0	265,874	0	0	\$ 287,528
1.3.2 Computer Software	Computer Software	0	0	0	0	9,032	0	0	\$ 9,032
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	0	4,677	0	0	\$ 4,677
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ 2,583	\$ 19,070	\$ -	\$ 279,583	\$ -	\$ -	\$ 301,237

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	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	0	0	\$ -
1.5.2 AMI Interface to CIS		0	0	0	0	0	0	0	\$ -
1.5.3 Professional Fees		0	0	0	0	0	0	0	\$ -
1.5.4 Integration	Other Equipment	0	0	0	0	0	0	0	\$ -
1.5.5 Program Management	Tools & Equipment	0	0	0	0	0	0	0	\$ -
1.5.6 Other AMI Capital	Tools & Equipment	0	731	6,424	0	11,056	0	0	\$ 18,211
Total Other AMI Capital Costs Related to Minimum Functionality		\$ -	\$ 731	\$ 6,424	\$ -	\$ 11,056	\$ -	\$ -	\$ 18,211
Total Capital Costs Related to Minimum Functionality		\$ -	\$ 6,033,904	\$ 8,296,636	\$ 4,702,361	\$ 1,278,341	\$ 556,605	\$ -	\$ 20,867,846

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

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

	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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	35,828	0	0	0	\$ 35,828
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Smart Meter	0	0	0	0	0	0	0	\$ -
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software	0	27,544	38,589	0	334,610	7,601	0	\$ 408,344
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ 27,544	\$ 38,589	\$ -	\$ 370,438	\$ 7,601	\$ -	\$ 444,172
Total Smart Meter Capital Costs		\$ -	\$ 6,061,449	\$ 8,335,224	\$ 4,702,361	\$ 1,648,779	\$ 564,206	\$ -	\$ 21,312,019

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	
		288,123	126,663	155,501	155,274	135,663	135,669	\$ 996,894
		0	0	0	0	0	0	\$ -
	\$ -	\$ 288,123	\$ 126,663	\$ 155,501	\$ 155,274	\$ 135,663	\$ 135,669	\$ 996,894
		26,237	21,652	52,486	40,636	58,486	67,834	\$ 267,331
		0	0	0	0	0	0	\$ -
	\$ -	\$ 26,237	\$ 21,652	\$ 52,486	\$ 40,636	\$ 58,486	\$ 67,834	\$ 267,331
		17,794	54,130	0	0	0	0	\$ 71,924
		80,478	76,649	82,694	172,705	234,351	359,029	\$ 1,005,906
		0	0	0	106,947	222,470	0	\$ 329,417
	\$ -	\$ 98,272	\$ 130,779	\$ 82,694	\$ 279,652	\$ 456,821	\$ 359,029	\$ 1,407,247
		39,037	58,439	135,399	88,230	141,772	103,104	\$ 565,981
		0	0	0	0	0	0	\$ -
	\$ -	\$ 39,037	\$ 58,439	\$ 135,399	\$ 88,230	\$ 141,772	\$ 103,104	\$ 565,981
	0	53,741	48,346	114,729	123,407	138,766	33,917	\$ 512,906
	0	142,822	82,827	245,253	77,356	0	0	\$ 548,258
	16,119	8,596	41,987	108,479	67,100	28,823	0	\$ 271,103
	0	17,818	15,327	71,125	79,879	78,056	33,917	\$ 296,123
	74,632	69,610	104,539	10,110	17,825	33,183	67,834	\$ 377,733
	0	0	0	0	0	0	0	\$ -
	\$ 90,751	\$ 292,587	\$ 293,027	\$ 549,695	\$ 365,568	\$ 278,828	\$ 135,669	\$ 2,006,124
	\$ 90,751	\$ 744,256	\$ 630,559	\$ 975,776	\$ 929,360	\$ 1,071,570	\$ 801,305	\$ 5,243,577
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
	0	0	0	0	0	0	0	\$ -
								\$ -
			0	138,988	121,962	109,327	0	\$ 370,276
	\$ -	\$ -	\$ -	\$ 138,988	\$ 121,962	\$ 109,327	\$ -	\$ 370,276
	\$ 90,751	\$ 744,256	\$ 630,559	\$ 1,114,763	\$ 1,051,322	\$ 1,180,897	\$ 801,305	\$ 5,613,853

3 Aggregate Smart Meter Costs by Category

3.1	Capital									
3.1.1	Smart Meter	\$ -	\$ 5,944,422	\$ 8,236,045	\$ 4,702,361	\$ 980,527	\$ 551,185	\$ -	\$ 20,414,540	
3.1.2	Computer Hardware	\$ -	\$ 88,751	\$ 54,167	\$ -	\$ 273,049	\$ 5,420	\$ -	\$ 421,386	
3.1.3	Computer Software	\$ -	\$ 27,544	\$ 38,589	\$ -	\$ 348,319	\$ 7,601	\$ -	\$ 422,053	
3.1.4	Tools & Equipment	\$ -	\$ 731	\$ 6,424	\$ -	\$ 11,056	\$ -	\$ -	\$ 18,211	
3.1.5	Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 35,828	\$ -	\$ -	\$ 35,828	
3.1.6	Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.1.7	Total Capital Costs	\$ -	\$ 6,061,449	\$ 8,335,224	\$ 4,702,361	\$ 1,648,779	\$ 564,206	\$ -	\$ 21,312,019	
3.2	OM&A Costs									
3.2.1	Total OM&A Costs	\$ 90,751	\$ 744,256	\$ 630,559	\$ 1,114,763	\$ 1,051,322	\$ 1,180,897	\$ 801,305	\$ 5,613,853	



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	15.00%	15.00%	15.00%	15.00%	15.00%	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%	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							
<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%	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		\$ -	\$ 5,944,422	\$ 14,180,467	\$ 18,882,828	\$ 19,863,355	\$ 20,414,540
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 5,944,422	\$ 8,236,045	\$ 4,702,361	\$ 980,527	\$ 551,185	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 5,944,422	\$ 14,180,467	\$ 18,882,828	\$ 19,863,355	\$ 20,414,540	\$ 20,414,540
Accumulated Depreciation							
Opening Balance		\$ -	\$ 198,147	\$ 868,977	\$ 1,971,087	\$ 3,262,626	\$ 4,605,223
Amortization expense during year	\$ -	\$ 198,147	\$ 670,830	\$ 1,102,110	\$ 1,291,539	\$ 1,342,597	\$ 1,360,969
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 198,147	\$ 868,977	\$ 1,971,087	\$ 3,262,626	\$ 4,605,223	\$ 5,966,192
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 5,746,275	\$ 13,311,490	\$ 16,911,741	\$ 16,600,729	\$ 15,809,317
Closing Balance	\$ -	\$ 5,746,275	\$ 13,311,490	\$ 16,911,741	\$ 16,600,729	\$ 15,809,317	\$ 14,448,348
Average Net Book Value	\$ -	\$ 2,873,137	\$ 9,528,883	\$ 15,111,616	\$ 16,756,235	\$ 16,205,023	\$ 15,128,833
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ 88,751	\$ 142,918	\$ 142,918	\$ 415,967	\$ 421,386
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 88,751	\$ 54,167	\$ -	\$ 273,049	\$ 5,420	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 88,751	\$ 142,918	\$ 142,918	\$ 415,967	\$ 421,386	\$ 421,386
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 8,875	\$ 32,042	\$ 60,626	\$ 116,514	\$ 200,249
Amortization expense during year	\$ -	\$ 8,875	\$ 23,167	\$ 28,584	\$ 55,888	\$ 83,735	\$ 84,277
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 8,875	\$ 32,042	\$ 60,626	\$ 116,514	\$ 200,249	\$ 284,527
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 79,876	\$ 110,876	\$ 82,292	\$ 299,453	\$ 221,137
Closing Balance	\$ -	\$ 79,876	\$ 110,876	\$ 82,292	\$ 299,453	\$ 221,137	\$ 136,860
Average Net Book Value	\$ -	\$ 39,938	\$ 95,376	\$ 96,584	\$ 190,872	\$ 260,295	\$ 178,998
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ 27,544	\$ 66,133	\$ 66,133	\$ 414,452	\$ 422,053
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 27,544	\$ 38,589	\$ -	\$ 348,319	\$ 7,601	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 27,544	\$ 66,133	\$ 66,133	\$ 414,452	\$ 422,053	\$ 422,053
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 4,591	\$ 20,204	\$ 42,248	\$ 122,346	\$ 261,763
Amortization expense during year	\$ -	\$ 4,591	\$ 15,613	\$ 22,044	\$ 80,097	\$ 139,417	\$ 140,684
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 4,591	\$ 20,204	\$ 42,248	\$ 122,346	\$ 261,763	\$ 402,447
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 22,954	\$ 45,929	\$ 23,885	\$ 292,106	\$ 160,290
Closing Balance	\$ -	\$ 22,954	\$ 45,929	\$ 23,885	\$ 292,106	\$ 160,290	\$ 19,606
Average Net Book Value	\$ -	\$ 11,477	\$ 34,442	\$ 34,907	\$ 157,996	\$ 226,198	\$ 89,948
Net Fixed Assets - Tools and Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ 731	\$ 7,155	\$ 7,155	\$ 18,211	\$ 18,211
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 731	\$ 6,424	\$ -	\$ 11,056	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 731	\$ 7,155	\$ 7,155	\$ 18,211	\$ 18,211	\$ 18,211
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 37	\$ 431	\$ 1,146	\$ 2,415	\$ 4,236
Amortization expense during year	\$ -	\$ 37	\$ 394	\$ 715	\$ 1,268	\$ 1,821	\$ 1,821
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 37	\$ 431	\$ 1,146	\$ 2,415	\$ 4,236	\$ 6,057
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 694	\$ 6,724	\$ 6,009	\$ 15,797	\$ 13,976
Closing Balance	\$ -	\$ 694	\$ 6,724	\$ 6,009	\$ 15,797	\$ 13,976	\$ 12,154
Average Net Book Value	\$ -	\$ 347	\$ 3,709	\$ 6,366	\$ 10,903	\$ 14,886	\$ 13,065
Net Fixed Assets - Other Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 35,828	\$ 35,828
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 35,828	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 35,828	\$ 35,828	\$ 35,828
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,791	\$ 5,374
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ 1,791	\$ 3,583	\$ 3,583
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,791	\$ 5,374	\$ 8,957
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,037	\$ 30,454
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 34,037	\$ 30,454	\$ 26,871
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 17,019	\$ 32,246	\$ 28,663



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	\$ -	\$ 2,873,137	\$ 9,528,883	\$ 15,111,616	\$ 16,756,235	\$ 16,205,023	\$ 15,128,833
Computer Hardware	\$ -	\$ 39,938	\$ 95,376	\$ 96,584	\$ 190,872	\$ 260,295	\$ 178,998
Computer Software	\$ -	\$ 11,477	\$ 34,442	\$ 34,907	\$ 157,996	\$ 226,198	\$ 89,948
Tools & Equipment	\$ -	\$ 347	\$ 3,709	\$ 6,366	\$ 10,903	\$ 14,886	\$ 13,065
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 17,019	\$ 32,246	\$ 28,663
Total Net Fixed Assets	\$ -	\$ 2,924,900	\$ 9,662,409	\$ 15,249,473	\$ 17,133,024	\$ 16,738,647	\$ 15,439,506
Working Capital							
Operating Expenses (from Sheet 2)	\$ 90,751	\$ 744,256	\$ 630,559	\$ 1,114,763	\$ 1,051,322	\$ 1,180,897	\$ 801,305
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	14%	14%
Working Capital Allowance	\$ 13,613	\$ 111,638	\$ 94,584	\$ 167,214	\$ 157,698	\$ 159,421	\$ 108,176
Incremental Smart Meter Rate Base	\$ 13,613	\$ 3,036,538	\$ 9,756,993	\$ 15,416,688	\$ 17,290,722	\$ 16,898,068	\$ 15,547,683
Return on Rate Base							
<i>Capital Structure</i>							
Deemed Short Term Debt	\$ -	\$ -	\$ 390,280	\$ 616,668	\$ 691,629	\$ 675,923	\$ 621,907
Deemed Long Term Debt	\$ 8,168	\$ 1,821,923	\$ 5,463,916	\$ 8,633,345	\$ 9,682,805	\$ 9,462,918	\$ 8,706,702
Equity	\$ 5,445	\$ 1,214,615	\$ 3,902,797	\$ 6,166,675	\$ 6,916,289	\$ 6,759,227	\$ 6,219,073
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 13,613	\$ 3,036,538	\$ 9,756,993	\$ 15,416,688	\$ 17,290,722	\$ 16,898,068	\$ 15,547,683
<i>Return on</i>							
Deemed Short Term Debt	\$ -	\$ -	\$ 17,446	\$ 27,565	\$ 30,916	\$ 16,628	\$ 15,299
Deemed Long Term Debt	\$ 482	\$ 107,493	\$ 333,299	\$ 526,634	\$ 590,651	\$ 547,903	\$ 504,118
Equity	\$ 490	\$ 109,315	\$ 334,470	\$ 528,484	\$ 592,726	\$ 647,534	\$ 595,787
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 972	\$ 216,809	\$ 685,214	\$ 1,082,683	\$ 1,214,293	\$ 1,212,065	\$ 1,115,204
Operating Expenses	\$ 90,751	\$ 744,256	\$ 630,559	\$ 1,114,763	\$ 1,051,322	\$ 1,180,897	\$ 801,305
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 198,147	\$ 670,830	\$ 1,102,110	\$ 1,291,539	\$ 1,342,597	\$ 1,360,969
Computer Hardware	\$ -	\$ 8,875	\$ 23,167	\$ 28,584	\$ 55,888	\$ 83,735	\$ 84,277
Computer Software	\$ -	\$ 4,591	\$ 15,613	\$ 22,044	\$ 80,097	\$ 139,417	\$ 140,684
Tools & Equipment	\$ -	\$ 37	\$ 394	\$ 715	\$ 1,268	\$ 1,821	\$ 1,821
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,791	\$ 3,583	\$ 3,583
Total Amortization Expense in Year	\$ -	\$ 211,650	\$ 710,004	\$ 1,153,453	\$ 1,430,585	\$ 1,571,153	\$ 1,591,335
Incremental Revenue Requirement before Taxes/PILs	\$ 91,723	\$ 1,172,715	\$ 2,025,777	\$ 3,350,900	\$ 3,696,200	\$ 3,964,114	\$ 3,507,844
Calculation of Taxable Income							
Incremental Operating Expenses	\$ 90,751	\$ 744,256	\$ 630,559	\$ 1,114,763	\$ 1,051,322	\$ 1,180,897	\$ 801,305
Amortization Expense	\$ -	\$ 211,650	\$ 710,004	\$ 1,153,453	\$ 1,430,585	\$ 1,571,153	\$ 1,591,335
Interest Expense	\$ 482	\$ 107,493	\$ 350,744	\$ 554,199	\$ 621,567	\$ 564,531	\$ 519,417
Net Income for Taxes/PILs	\$ 490	\$ 109,315	\$ 334,470	\$ 528,484	\$ 592,726	\$ 647,534	\$ 595,787
Grossed-up Taxes/PILs (from Sheet 7)	\$ 277.09	\$ 42,074.95	\$ 123,940.21	\$ 226,546.66	\$ 216,006.88	\$ 246,436.35	\$ 292,179.34
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 92,000	\$ 1,214,790	\$ 2,149,717	\$ 3,577,446	\$ 3,912,207	\$ 4,210,551	\$ 3,800,024



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	\$ -	\$ -	\$ 5,706,645.51	\$ 13,156,716.83	\$ 16,618,445.94	\$ 16,230,276.39	\$ 15,460,991.85
Capital Additions	\$ -	\$ 5,944,422.40	\$ 8,236,044.75	\$ 4,702,360.89	\$ 980,527.21	\$ 551,184.97	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 5,944,422.40	\$ 13,942,690.26	\$ 17,859,077.72	\$ 17,598,973.15	\$ 16,781,461.36	\$ 15,460,991.85
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 2,972,211.20	\$ 4,118,022.38	\$ 2,351,180.45	\$ 480,263.60	\$ 275,582.49	\$ -
Reduced UCC	\$ -	\$ 2,972,211.20	\$ 9,824,667.88	\$ 15,507,897.28	\$ 17,108,709.55	\$ 16,505,868.87	\$ 15,460,991.85
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ 237,776.90	\$ 785,973.43	\$ 1,240,631.78	\$ 1,368,696.76	\$ 1,320,469.51	\$ 1,236,879.35
Closing UCC	\$ -	\$ 5,706,645.51	\$ 13,156,716.83	\$ 16,618,445.94	\$ 16,230,276.39	\$ 15,460,991.85	\$ 14,224,112.50

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	\$ -	\$ -	\$ 84,314.38	\$ 105,189.13	\$ 47,335.11	\$ 471,791.98	\$ 221,746.33
Capital Additions Computer Hardware	\$ -	\$ 88,751.20	\$ 54,166.74	\$ -	\$ 273,048.64	\$ 5,419.54	\$ -
Capital Additions Computer Software	\$ -	\$ 27,544.50	\$ 38,588.65	\$ -	\$ 348,318.51	\$ 7,601.07	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 116,295.70	\$ 177,069.78	\$ 105,189.13	\$ 668,702.25	\$ 484,812.59	\$ 221,746.33
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 58,147.85	\$ 46,377.70	\$ -	\$ 310,683.57	\$ 6,510.31	\$ -
Reduced UCC	\$ -	\$ 58,147.85	\$ 130,692.08	\$ 105,189.13	\$ 358,018.68	\$ 478,302.28	\$ 221,746.33
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ 31,981.32	\$ 71,880.64	\$ 57,854.02	\$ 196,910.27	\$ 263,066.26	\$ 121,960.48
Closing UCC	\$ -	\$ 84,314.38	\$ 105,189.13	\$ 47,335.11	\$ 471,791.98	\$ 221,746.33	\$ 99,785.85

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	\$ -	\$ -	\$ 657.76	\$ 6,307.94	\$ 5,046.35	\$ 46,233.41	\$ 36,986.73
Capital Additions Tools & Equipment	\$ -	\$ 730.84	\$ 6,424.15	\$ -	\$ 11,056.32	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 35,828.49	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 730.84	\$ 7,081.91	\$ 6,307.94	\$ 51,931.16	\$ 46,233.41	\$ 36,986.73
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 365.42	\$ 3,212.07	\$ -	\$ 23,442.40	\$ -	\$ -
Reduced UCC	\$ -	\$ 365.42	\$ 3,869.83	\$ 6,307.94	\$ 28,488.75	\$ 46,233.41	\$ 36,986.73
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ 73.08	\$ 773.97	\$ 1,261.59	\$ 5,697.75	\$ 9,246.68	\$ 7,397.35
Closing UCC	\$ -	\$ 657.76	\$ 6,307.94	\$ 5,046.35	\$ 46,233.41	\$ 36,986.73	\$ 29,589.38



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	\$ 490.05	\$ 109,315.37	\$ 334,469.73	\$ 528,484.06	\$ 592,725.97	\$ 647,533.98	\$ 595,787.19
Amortization	\$ -	\$ 211,649.83	\$ 710,003.80	\$ 1,153,453.31	\$ 1,430,585.10	\$ 1,571,153.16	\$ 1,591,334.80
CCA - Smart Meters	\$ -	\$ 237,776.90	\$ 785,973.43	\$ 1,240,631.78	\$ 1,368,696.76	\$ 1,320,469.51	\$ 1,236,879.35
CCA - Computers	\$ -	\$ 31,981.32	\$ 71,880.64	\$ 57,854.02	\$ 196,910.27	\$ 263,066.26	\$ 121,960.48
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ 73.08	\$ 773.97	\$ 1,261.59	\$ 5,697.75	\$ 9,246.68	\$ 7,397.35
Change in taxable income	\$ 490.05	\$ 51,133.90	\$ 185,845.49	\$ 382,189.98	\$ 452,006.28	\$ 625,904.70	\$ 820,884.81
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	\$ 177.01	\$ 18,469.56	\$ 62,258.24	\$ 126,122.69	\$ 140,121.95	\$ 176,818.08	\$ 215,482.26
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ 5,746,274.99	\$ 13,311,490.09	\$ 16,911,741.14	\$ 16,600,728.91	\$ 15,809,317.37	\$ 14,448,348.02
Computer Hardware	\$ -	\$ 79,876.08	\$ 110,875.91	\$ 82,292.32	\$ 299,452.50	\$ 221,136.77	\$ 136,859.55
Computer Software (Including Application Software)	\$ -	\$ 22,953.75	\$ 45,929.46	\$ 23,885.08	\$ 292,106.11	\$ 160,289.79	\$ 19,605.54
Tools & Equipment	\$ -	\$ 694.30	\$ 6,724.16	\$ 6,008.66	\$ 15,796.66	\$ 13,975.53	\$ 12,154.40
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 34,037.07	\$ 30,454.22	\$ 26,871.37
Rate Base	\$ -	\$ 5,849,799.12	\$ 13,475,019.62	\$ 17,023,927.20	\$ 17,242,121.25	\$ 16,235,173.67	\$ 14,643,838.88
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ 5,849,799.12	\$ 13,475,019.62	\$ 17,023,927.20	\$ 17,242,121.25	\$ 16,235,173.67	\$ 14,643,838.88
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)	\$ -	\$ 13,162.05	\$ 30,318.79	\$ 38,303.84	\$ 12,931.59	\$ -	\$ -
Change in Income Taxes Payable	\$ 177.01	\$ 18,469.56	\$ 62,258.24	\$ 126,122.69	\$ 140,121.95	\$ 176,818.08	\$ 215,482.26
Change in OCT	\$ -	\$ 13,162.05	\$ 30,318.79	\$ 38,303.84	\$ 12,931.59	\$ -	\$ -
PILs	\$ 177.01	\$ 31,631.61	\$ 92,577.03	\$ 164,426.53	\$ 153,053.54	\$ 176,818.08	\$ 215,482.26
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	\$ 277.09	\$ 28,912.90	\$ 93,621.41	\$ 188,242.83	\$ 203,075.29	\$ 246,436.35	\$ 292,179.34
Change in OCT	\$ -	\$ 13,162.05	\$ 30,318.79	\$ 38,303.84	\$ 12,931.59	\$ -	\$ -
PILs	\$ 277.09	\$ 42,074.95	\$ 123,940.21	\$ 226,546.66	\$ 216,006.88	\$ 246,436.35	\$ 292,179.34



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	\$ -	\$ 81,633.24	4.14%	\$ -	\$ 81,633.24		\$ 0.39
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 81,633.24	\$ 84,381.73	4.14%	\$ 281.63	\$ 166,296.61		\$ 0.39
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 166,014.98	\$ 81,695.20	4.59%	\$ 635.01	\$ 248,345.19		\$ 0.39
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 247,710.18	\$ 81,764.84	4.59%	\$ 947.49	\$ 330,422.51		\$ 0.39
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 329,475.02	\$ 81,716.74	4.59%	\$ 1,260.24	\$ 412,451.99		\$ 0.39
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 411,191.75	\$ 73,357.93	4.59%	\$ 1,572.81	\$ 486,122.49		\$ 0.39
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 484,549.68	\$ 75,050.35	4.59%	\$ 1,853.40	\$ 561,453.43		\$ 0.39
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 559,600.03	\$ 79,281.71	4.59%	\$ 2,140.47	\$ 641,022.21	\$ 647,572.79	\$ 0.39
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 638,881.74	\$ 80,778.69	4.59%	\$ 2,443.72	\$ 722,104.15		\$ 0.39
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 719,660.43	\$ 78,924.97	4.59%	\$ 2,752.70	\$ 801,338.11		\$ 0.39
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 798,585.41	\$ 82,446.44	4.59%	\$ 3,054.59	\$ 884,086.43		\$ 0.39
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 881,031.84	\$ 80,156.41	4.59%	\$ 3,369.95	\$ 964,558.21		\$ 0.39
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 961,188.26	\$ 170,299.22	4.59%	\$ 3,676.55	\$ 1,135,164.03		\$ 0.82
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 1,131,487.48	\$ 171,655.51	4.59%	\$ 4,327.94	\$ 1,307,470.93		\$ 0.82
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 1,303,142.99	\$ 158,569.39	4.59%	\$ 4,984.52	\$ 1,466,696.90		\$ 0.82
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 1,461,712.38	\$ 178,280.40	4.59%	\$ 5,591.05	\$ 1,645,583.83		\$ 0.82
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 1,639,992.78	\$ 172,474.48	4.59%	\$ 6,272.97	\$ 1,818,740.23		\$ 0.82
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 1,812,467.26	\$ 172,119.22	5.14%	\$ 7,763.40	\$ 1,992,349.88		\$ 0.82
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 1,984,586.48	\$ 167,362.41	5.14%	\$ 8,500.65	\$ 2,160,449.54		\$ 0.82
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 2,151,948.89	\$ 176,537.06	5.14%	\$ 9,217.51	\$ 2,337,703.46	\$ 1,751,559.75	\$ 0.82
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 2,328,485.95	\$ 173,416.19	5.14%	\$ 9,973.68	\$ 2,511,875.82		\$ 0.82
2012 Q2		4.29%	Feb-08	2008	Q1	\$ 2,501,902.14	\$ 171,386.16	5.14%	\$ 10,716.48	\$ 2,684,004.78		\$ 0.82
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 2,673,288.30	\$ 19,367.04	5.14%	\$ 11,450.58	\$ 2,704,105.92		\$ 0.82
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 2,692,655.34	\$ 170,214.84	4.08%	\$ 9,155.03	\$ 2,872,025.21		\$ 0.82
			May-08	2008	Q2	\$ 2,862,870.18	\$ 174,124.69	4.08%	\$ 9,733.76	\$ 3,046,728.63		\$ 0.82
			Jun-08	2008	Q2	\$ 3,036,994.87	\$ 173,533.47	4.08%	\$ 10,325.78	\$ 3,220,854.12		\$ 0.82
			Jul-08	2008	Q3	\$ 3,210,528.34	\$ 162,723.13	3.35%	\$ 8,962.72	\$ 3,382,214.19		\$ 0.82
			Aug-08	2008	Q3	\$ 3,373,251.47	\$ 178,482.50	3.35%	\$ 9,416.99	\$ 3,561,150.96		\$ 0.82
			Sep-08	2008	Q3	\$ 3,551,733.97	\$ 337,693.29	3.35%	\$ 9,915.26	\$ 3,899,342.52		\$ 0.82
			Oct-08	2008	Q4	\$ 3,889,427.26	\$ 169,629.71	3.35%	\$ 10,857.98	\$ 4,069,914.95		\$ 0.82
			Nov-08	2008	Q4	\$ 4,059,056.97	\$ 174,466.96	3.35%	\$ 11,331.53	\$ 4,244,855.46		\$ 0.82
			Dec-08	2008	Q4	\$ 4,233,523.93	\$ 176,224.41	3.35%	\$ 11,818.59	\$ 4,421,566.93	\$ 2,204,920.77	\$ 0.82
			Jan-09	2009	Q1	\$ 4,409,748.34	\$ 174,999.44	2.45%	\$ 9,003.24	\$ 4,593,751.02		\$ 0.82
			Feb-09	2009	Q1	\$ 4,584,747.78	\$ 182,101.67	2.45%	\$ 9,360.53	\$ 4,776,209.98		\$ 0.82
			Mar-09	2009	Q1	\$ 4,766,849.45	\$ 149,687.16	2.45%	\$ 9,732.32	\$ 4,926,268.93		\$ 0.82
			Apr-09	2009	Q2	\$ 4,916,536.61	\$ 183,863.35	1.00%	\$ 4,097.11	\$ 5,104,497.07		\$ 0.82
			May-09	2009	Q2	\$ 5,100,399.96	\$ 164,120.43	1.00%	\$ 4,250.33	\$ 5,268,770.72		\$ 0.82
			Jun-09	2009	Q2	\$ 5,264,520.39	\$ 165,682.29	1.00%	\$ 4,387.10	\$ 5,434,589.78		\$ 0.82
			Jul-09	2009	Q3	\$ 5,430,202.68	\$ 176,344.19	0.55%	\$ 2,488.84	\$ 5,609,035.71		\$ 0.82
			Aug-09	2009	Q3	\$ 5,606,546.87	\$ 190,031.57	0.55%	\$ 2,569.67	\$ 5,799,148.11		\$ 0.82
			Sep-09	2009	Q3	\$ 5,796,578.44	\$ 154,542.16	0.55%	\$ 2,656.77	\$ 5,953,777.37		\$ 0.82
			Oct-09	2009	Q4	\$ 5,951,120.60	\$ 173,143.71	0.55%	\$ 2,727.60	\$ 6,126,991.91		\$ 0.82
			Nov-09	2009	Q4	\$ 6,124,264.31	\$ 342,073.32	0.55%	\$ 2,806.95	\$ 6,469,144.58		\$ 1.56
			Dec-09	2009	Q4	\$ 6,466,337.63	\$ 331,439.16	0.55%	\$ 2,963.74	\$ 6,800,740.53	\$ 2,445,072.65	\$ 1.56
			Jan-10	2010	Q1	\$ 6,797,776.79	\$ 416,864.66	0.55%	\$ 3,115.65	\$ 7,217,757.10		\$ 1.56
			Feb-10	2010	Q1	\$ 7,214,641.45	\$ 339,320.38	0.55%	\$ 3,306.71	\$ 7,557,268.54		\$ 1.56
			Mar-10	2010	Q1	\$ 7,553,961.83	\$ 317,072.39	0.55%	\$ 3,462.23	\$ 7,874,496.45		\$ 1.56
			Apr-10	2010	Q2	\$ 7,871,034.22	\$ 345,488.82	0.55%	\$ 3,607.56	\$ 8,220,130.60		\$ 1.56
			May-10	2010	Q2	\$ 8,216,523.04	\$ 334,284.14	0.55%	\$ 3,765.91	\$ 8,554,573.09		\$ 1.56
			Jun-10	2010	Q2	\$ 8,550,807.18	\$ 297,039.81	0.55%	\$ 3,919.12	\$ 8,851,766.11		\$ 1.56
			Jul-10	2010	Q3	\$ 8,847,846.99	\$ 336,413.60	0.89%	\$ 6,562.15	\$ 9,190,822.74		\$ 1.56
			Aug-10	2010	Q3	\$ 9,184,260.59	\$ 338,597.54	0.89%	\$ 6,811.66	\$ 9,529,669.79		\$ 1.56
			Sep-10	2010	Q3	\$ 9,522,858.13	\$ 305,762.61	0.89%	\$ 7,062.79	\$ 9,835,683.53		\$ 1.56
			Oct-10	2010	Q4	\$ 9,828,620.74	\$ 329,356.35	1.20%	\$ 9,828.62	\$ 10,167,805.71		\$ 1.56
			Nov-10	2010	Q4	\$ 10,157,977.09	\$ 343,040.59	1.20%	\$ 10,157.98	\$ 10,511,175.66		\$ 1.56
			Dec-10	2010	Q4	\$ 10,501,017.68	\$ 344,499.15	1.20%	\$ 10,501.02	\$ 10,856,017.85	\$ 4,119,841.44	\$ 1.56
			Jan-11	2011	Q1	\$ 10,845,516.83	\$ 330,661.05	1.47%	\$ 13,285.76	\$ 11,189,463.64		\$ 1.56
			Feb-11	2011	Q1	\$ 11,176,177.88	\$ 337,735.74	1.47%	\$ 13,690.82	\$ 11,527,604.44		\$ 1.56
			Mar-11	2011	Q1	\$ 11,513,913.62	\$ 443,362.98	1.47%	\$ 14,104.54	\$ 11,971,381.14		\$ 2.14
			Apr-11	2011	Q2	\$ 11,957,276.60	\$ 456,999.89	1.47%	\$ 14,647.66	\$ 12,428,924.15		\$ 2.14
			May-11	2011	Q2	\$ 12,414,276.49	\$ 470,262.84	1.47%	\$ 15,207.49	\$ 12,899,746.82		\$ 2.14
			Jun-11	2011	Q2	\$ 12,884,539.33	\$ 436,788.66	1.47%	\$ 15,783.56	\$ 13,337,111.55		\$ 2.14
			Jul-11	2011	Q3	\$ 13,321,327.99	\$ 470,367.96	1.47%	\$ 16,318.63	\$ 13,808,014.58		\$ 2.14
			Aug-11	2011	Q3	\$ 13,791,695.95	\$ 452,566.19	1.47%	\$ 16,894.83	\$ 14,261,156.97		\$ 2.14
			Sep-11	2011	Q3	\$ 14,244,262.14	\$ 457,773.39	1.47%	\$ 17,449.22	\$ 14,719,484.75		\$ 2.14
			Oct-11	2011	Q4	\$ 14,702,035.53	\$ 459,368.38	1.47%	\$ 18,009.99	\$ 15,179,413.89		\$ 2.14
			Nov-11	2011	Q4	\$ 15,161,403.90	\$ 459,368.38	1.47%	\$ 18,572.72	\$ 15,639,345.00		\$ 2.14
			Dec-11	2011	Q4	\$ 15,620,772.28	\$ 459,368.38	1.47%	\$ 19,135.45	\$ 16,099,276.11	\$ 5,427,724.50	\$ 2.14
			Jan-12	2012	Q1	\$ 16,080,140.66	\$ 459,368.38	1.47%	\$ 19,698.17	\$ 16,559,207.20		\$ 2.14
			Feb-12	2012	Q1	\$ 16,539,509.03	\$ 459,368.38	1.47%	\$ 20,260.90	\$ 17,019,138.31		\$ 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	\$ 16,998,877.41	\$ 459,368.38	1.47%	\$ 20,823.62	\$ 17,479,069.41		\$ 2.14
			Apr-12	2012	Q2	\$ 17,458,245.79	\$ 459,368.38	1.47%	\$ 21,386.35	\$ 17,939,000.52		
			May-12	2012	Q2	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Jun-12	2012	Q2	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Jul-12	2012	Q3	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Aug-12	2012	Q3	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Sep-12	2012	Q3	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Oct-12	2012	Q4	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Nov-12	2012	Q4	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17		
			Dec-12	2012	Q4	\$ 17,917,614.17		0.00%	\$ -	\$ 17,917,614.17	\$ 1,919,642.55	
Total Funding Adder Revenues Collected							\$ 17,917,614.17		\$ 598,720.29	\$ 18,516,334.46	\$ 18,516,334.46	



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	-	\$ 90,750.59	\$ -	90,750.59	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	90,750.59	\$ 33,823.17	\$ 69.84	124,643.60	4.59%	347.12	347.12
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	124,643.60	\$ 59,399.87	\$ 1,735.10	185,778.57	4.59%	476.76	823.88
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	185,778.57	\$ 47,699.23	\$ 5,047.59	238,525.39	4.59%	710.60	1,534.49
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	238,525.39	\$ 29,165.22	\$ 6,613.66	274,304.27	4.59%	912.36	2,446.85
2010 Q1	0.55%	4.34%	May-07	2007	Q2	274,304.27	\$ 47,138.01	\$ 10,431.44	331,873.71	4.59%	1,049.21	3,496.06
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	331,873.71	\$ 46,787.02	\$ 12,515.45	391,176.17	4.59%	1,269.42	4,765.48
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	391,176.17	\$ 81,883.45	\$ 16,880.74	489,940.36	4.59%	1,496.25	6,261.73
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	489,940.36	\$ 78,701.67	\$ 17,033.44	585,675.47	4.59%	1,874.02	8,135.75
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	585,675.47	\$ 91,737.72	\$ 19,077.07	696,490.26	4.59%	2,240.21	10,375.96
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	696,490.26	\$ 75,629.58	\$ 21,084.01	793,203.85	5.14%	2,983.30	13,359.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	793,203.85	\$ 47,190.11	\$ 27,493.08	867,887.03	5.14%	3,397.56	16,756.81
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	867,887.03	\$ 105,101.31	\$ 30,884.36	1,003,872.71	5.14%	3,717.45	20,474.26
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	1,003,872.71	\$ 34,280.19	\$ 18,038.86	1,056,191.76	5.14%	4,299.92	24,774.18
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	1,056,191.76	\$ 35,115.63	\$ 34,543.19	1,125,850.58	5.14%	4,524.02	29,298.20
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	1,125,850.58	\$ 63,845.76	\$ 35,206.68	1,224,903.03	5.14%	4,822.39	34,120.60
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	1,224,903.03	\$ 59,479.39	\$ 38,608.44	1,322,990.85	4.08%	4,164.67	38,285.27
			May-08	2008	Q2	1,322,990.85	\$ 32,674.22	\$ 43,625.61	1,399,290.69	4.08%	4,498.17	42,783.44
			Jun-08	2008	Q2	1,399,290.69	\$ 159,555.91	\$ 47,069.92	1,605,916.52	4.08%	4,757.59	47,541.03
			Jul-08	2008	Q3	1,605,916.52	\$ 42,433.44	\$ 48,157.57	1,696,507.54	3.35%	4,483.18	52,024.21
			Aug-08	2008	Q3	1,696,507.54	\$ 60,762.70	\$ 50,034.43	1,807,304.67	3.35%	4,796.08	56,760.29
			Sep-08	2008	Q3	1,807,304.67	\$ 58,237.10	\$ 54,384.60	1,803,452.17	3.35%	5,045.39	61,805.68
			Oct-08	2008	Q4	1,803,452.17	\$ 50,134.61	\$ 55,132.42	1,908,719.19	3.35%	5,034.64	66,840.32
			Nov-08	2008	Q4	1,908,719.19	\$ 50,576.46	\$ 13,737.86	1,973,033.52	3.35%	5,328.51	72,168.83
			Dec-08	2008	Q4	1,973,033.52	\$ 99,938.17	\$ 114,451.47	2,187,423.16	3.35%	5,508.05	77,676.88
			Jan-09	2009	Q1	2,187,423.16	\$ 20,563.80	\$ 72,369.90	2,280,356.86	2.45%	4,465.99	82,142.87
			Feb-09	2009	Q1	2,280,356.86	\$ 40,386.90	\$ 72,383.15	2,393,126.91	2.45%	4,655.73	86,798.60
			Mar-09	2009	Q1	2,393,126.91	\$ 61,143.86	\$ 101,525.21	2,555,795.99	2.45%	4,885.97	91,684.57
			Apr-09	2009	Q2	2,555,795.99	\$ 67,015.66	\$ 80,732.18	2,703,543.82	1.00%	2,129.83	93,814.40
			May-09	2009	Q2	2,703,543.82	\$ 78,505.15	\$ 88,728.70	2,870,777.68	1.00%	2,252.95	96,067.35
			Jun-09	2009	Q2	2,870,777.68	\$ 104,207.99	\$ 94,777.38	3,069,763.05	1.00%	2,392.31	98,459.66
			Jul-09	2009	Q3	3,069,763.05	\$ 117,634.33	\$ 97,599.10	3,284,996.48	0.55%	1,406.97	99,866.64
			Aug-09	2009	Q3	3,284,996.48	\$ 55,800.37	\$ 107,280.31	3,448,077.17	0.55%	1,505.62	101,372.26
			Sep-09	2009	Q3	3,448,077.17	\$ 115,414.13	\$ 102,540.61	3,666,031.91	0.55%	1,580.37	102,952.63
			Oct-09	2009	Q4	3,666,031.91	\$ 98,211.88	\$ 109,106.61	3,873,350.39	0.55%	1,680.26	104,632.90
			Nov-09	2009	Q4	3,873,350.39	\$ 168,183.54	\$ 110,655.11	4,152,189.04	0.55%	1,775.29	106,408.18
			Dec-09	2009	Q4	4,152,189.04	\$ 187,695.58	\$ 82,527.21	4,422,411.83	0.55%	1,903.09	108,311.27
			Jan-10	2010	Q1	4,422,411.83	\$ 125,815.92	\$ 112,321.13	4,660,548.87	0.55%	2,026.94	110,338.21
			Feb-10	2010	Q1	4,660,548.87	\$ 84,252.64	\$ 227,157.88	4,971,959.40	0.55%	2,136.08	112,474.29
			Mar-10	2010	Q1	4,971,959.40	\$ 56,875.29	\$ 117,835.06	5,146,669.75	0.55%	2,278.81	114,753.11
			Apr-10	2010	Q2	5,146,669.75	\$ 5,876.37	\$ 103,827.35	5,244,620.72	0.55%	2,358.89	117,112.00
			May-10	2010	Q2	5,244,620.72	\$ 15,786.40	\$ 215,454.58	5,444,288.90	0.55%	2,403.78	119,515.78
			Jun-10	2010	Q2	5,444,288.90	\$ 37,338.57	\$ 105,149.25	5,586,776.72	0.55%	2,495.30	122,011.08
			Jul-10	2010	Q3	5,586,776.72	\$ 104,801.20	\$ 142,468.54	5,834,046.46	0.89%	4,143.53	126,154.61
			Aug-10	2010	Q3	5,834,046.46	\$ 399,830.78	\$ 142,468.53	6,376,345.77	0.89%	4,326.92	130,481.52
			Sep-10	2010	Q3	6,376,345.77	\$ 45,651.78	\$ 169,892.52	6,591,890.07	0.89%	4,729.12	135,210.65
			Oct-10	2010	Q4	6,591,890.07	\$ 61,106.38	\$ 151,609.85	6,804,606.31	1.20%	6,591.89	141,802.54
			Nov-10	2010	Q4	6,804,606.31	\$ 39,632.82	\$ 151,609.86	6,995,848.99	1.20%	6,804.61	148,607.14
			Dec-10	2010	Q4	6,995,848.99	\$ 117,679.12	\$ 71,258.48	7,184,786.59	1.20%	6,995.85	155,602.99
			Jan-11	2011	Q1	7,184,786.59	\$ 63,982.87	\$ 141,565.91	7,390,335.37	1.47%	8,801.36	164,404.36
			Feb-11	2011	Q1	7,390,335.37	\$ 183,386.79	\$ 143,063.07	7,716,785.23	1.47%	9,053.16	173,457.52
			Mar-11	2011	Q1	7,716,785.23	\$ 74,363.63	\$ 146,622.45	7,937,771.32	1.47%	9,453.06	182,910.58
			Apr-11	2011	Q2	7,937,771.32	\$ 88,374.05	\$ 142,929.90	8,169,075.28	1.47%	9,723.77	192,634.35
			May-11	2011	Q2	8,169,075.28	\$ 69,920.48	\$ 149,966.11	8,388,961.86	1.47%	10,007.12	202,641.47
			Jun-11	2011	Q2	8,388,961.86	\$ 77,091.13	\$ 143,885.68	8,609,938.67	1.47%	10,276.48	212,917.94
			Jul-11	2011	Q3	8,609,938.67	\$ 63,226.04	\$ 143,977.49	8,817,142.20	1.47%	10,547.17	223,465.12
			Aug-11	2011	Q3	8,817,142.20	\$ 77,797.69	\$ 126,331.07	9,021,270.96	1.47%	10,801.00	234,266.12
			Sep-11	2011	Q3	9,021,270.96	\$ 158,297.66	\$ 115,186.48	9,064,382.14	1.47%	11,051.06	245,317.18
			Oct-11	2011	Q4	9,064,382.14	\$ 76,787.67	\$ 128,230.39	9,269,400.20	1.47%	11,103.87	256,421.04
			Nov-11	2011	Q4	9,269,400.20	\$ 123,834.26	\$ 208,488.62	9,601,723.08	1.47%	11,355.02	267,776.06
			Dec-11	2011	Q4	9,601,723.08	\$ 128,834.26	\$ 208,488.62	9,934,045.95	1.47%	11,762.11	279,538.17
			Jan-12	2012	Q1	9,934,045.95	\$ 66,775.45	\$ 132,611.24	10,133,432.65	1.47%	12,169.21	291,707.38
			Feb-12	2012	Q1	10,133,432.65	\$ 66,775.45	\$ 132,611.24	10,332,819.34	1.47%	12,413.45	304,120.83
			Mar-12	2012	Q1	10,332,819.34	\$ 66,775.45	\$ 132,611.24	10,532,206.04	1.47%	12,657.70	316,778.53
			Apr-12	2012	Q2	10,532,206.04	\$ 66,775.45	\$ 132,611.24	10,731,592.73	1.47%	12,901.95	329,680.49
			May-12	2012	Q2	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Jun-12	2012	Q2	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Jul-12	2012	Q3	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Aug-12	2012	Q3	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Sep-12	2012	Q3	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Oct-12	2012	Q4	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Nov-12	2012	Q4	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
			Dec-12	2012	Q4	10,731,592.73	\$ -	\$ -	10,731,592.73	0.00%	-	329,680.49
						\$ 5,079,649.60	\$ 5,651,943.13	\$ 10,731,592.73				



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	\$ 90,750.59	\$ -	\$ 90,750.59	\$ 45,375.29	4.37%	\$ 1,980.63
2007	\$ 744,256.36	\$ 211,649.83	\$ 1,046,656.78	\$ 568,703.68	4.73%	\$ 26,885.47
2008	\$ 630,559.33	\$ 710,003.80	\$ 2,387,219.90	\$ 1,716,938.34	3.98%	\$ 68,334.15
2009	\$ 1,114,763.19	\$ 1,153,453.31	\$ 4,655,436.41	\$ 3,521,328.16	1.14%	\$ 40,055.11
2010	\$ 1,051,321.73	\$ 1,430,585.10	\$ 7,137,343.24	\$ 5,896,389.82	0.80%	\$ 47,023.71
2011	\$ 1,180,896.55	\$ 1,571,153.16	\$ 9,889,392.96	\$ 8,513,368.10	1.47%	\$ 125,146.51
2012	\$ 801,305.43	\$ 1,591,334.80	\$ 12,282,033.18	\$ 11,085,713.07	1.47%	\$ 162,959.98
Cumulative Interest to 2011						\$ 309,425.57
Cumulative Interest to 2012						\$ 472,385.55



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)	\$ 91,999.62	\$ 1,214,789.96	\$ 2,149,717.45	\$ 3,577,446.32	\$ 3,912,206.57	\$ 4,210,550.72	\$ 3,800,023.73	\$ 18,956,734.38
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ 20,474.26	\$ 57,202.62	\$ 30,634.39	\$ 47,291.72	\$ 123,935.18		\$ 279,538.17
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ 20,474.26	\$ 57,202.62	\$ 30,634.39	\$ 47,291.72	\$ 123,935.18		\$ 279,538.17
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ 638,881.74	\$ 1,689,604.20	\$ 2,081,262.39	\$ 2,388,028.45	\$ 4,047,740.04	\$ 5,234,623.83	\$ 1,837,473.51	\$ 17,917,614.17
SMFA Interest (from Sheet 8)	\$ 8,691.05	\$ 61,955.55	\$ 123,658.38	\$ 57,044.20	\$ 72,101.40	\$ 193,100.67	\$ 82,169.04	\$ 598,720.29
Net Deferred Revenue Requirement	-\$ 555,573.17	-\$ 516,295.53	\$ 1,999.30	\$ 1,163,008.06	-\$ 160,343.15	-\$ 1,093,238.60	\$ 1,880,381.18	\$ 719,938.09
Number of Metered Customers (average for 2012 test year)							215335	

Calculation of Smart Meter Funding Adder (per metered customer per month)

Net Deferred Revenues from 2006 to April 30, 2012	\$ 719,938.09
SMFA May 1, 2012 to April 30, 201X	\$ 0.73
Check: Forecasted SMFA Revenues for 2012 test year	\$ 1,886,335.13

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	\$ 15,436,248.81
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 18,516,334.46
Net Deferred Revenue Requirement	-\$ 3,080,085.64
SMDR May 1, 2012 to April 30, 201X	-\$ 1.19
Check: Forecasted SMDR Revenues	-\$ 3,074,984.66

Match

Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)

Incremental Revenue Requirement for 2012	\$ 3,800,023.73
SMIRR	\$ 1.47
Check: Forecasted SMIRR Revenues	\$ 3,798,510.46

Match

VECC 5 - APPENDIX 2

Smart Meter Model, version 2.17

Recast –
GS<50 kW Customer Class



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.

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								0
General Service < 50 kW	0	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	2405	3161	3163	2810	2044	4425	18008
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	13.36%	30.91%	48.47%	64.08%	75.43%	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	2405	3161	3163	2810	2044	4425	18008
1 Capital Costs								
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
	<div>Asset Type</div> <div>Asset type must be selected to enable calculations</div>							
1.1.1 Smart Meters (may include new meters and modules, etc.)	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
	Smart Meter	1,336,113	1,790,095	814,627	150,606	91,822	0	\$ 4,183,263
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter	27,021	85,929	255,896	65,976	17,719	0	\$ 452,541
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware	20,545	8,368	0	1,711	0	0	\$ 30,624
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)		0	0	0	0	0	0	\$ -
Total Advanced Metering Communications Devices (AMCD)	\$ -	\$ 1,383,679	\$ 1,884,392	\$ 1,070,523	\$ 218,293	\$ 109,541	\$ -	\$ 4,666,428
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
	<div>Asset Type</div>							
1.2.1 Collectors	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
	Smart Meter	53,402	86,598	50,034	17,074	21,804	0	\$ 228,912
1.2.2 Repeaters (may include radio licence, etc.)	Computer Hardware	0	0	0	0	1,291	0	\$ 1,291
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Computer Hardware	0	0	0	0	0	0	\$ -
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)	\$ -	\$ 53,402	\$ 86,598	\$ 50,034	\$ 17,074	\$ 23,096	\$ -	\$ 230,203

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	0	616	4,547	0	63,393	0	0	\$ 68,556
1.3.2 Computer Software	Computer Software	0	0	0	0	2,154	0	0	\$ 2,154
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	0	1,115	0	0	\$ 1,115
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ 616	\$ 4,547	\$ -	\$ 66,662	\$ -	\$ -	\$ 71,825

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	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	0	0	\$ -
1.5.2 AMI Interface to CIS		0	0	0	0	0	0	0	\$ -
1.5.3 Professional Fees		0	0	0	0	0	0	0	\$ -
1.5.4 Integration	Other Equipment	0	0	0	0	0	0	0	\$ -
1.5.5 Program Management	Tools & Equipment	0	0	0	0	0	0	0	\$ -
1.5.6 Other AMI Capital	Tools & Equipment	0	174	1,531	0	2,635	0	0	\$ 4,340
Total Other AMI Capital Costs Related to Minimum Functionality		\$ -	\$ 174	\$ 1,531	\$ -	\$ 2,635	\$ -	\$ -	\$ 4,340
Total Capital Costs Related to Minimum Functionality		\$ -	\$ 1,437,871	\$ 1,977,068	\$ 1,120,557	\$ 304,664	\$ 132,637	\$ -	\$ 4,972,796

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

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

	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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	8,543	0	0	0	\$ 8,543
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Smart Meter	0	0	0	0	0	0	0	\$ -
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software	0	6,756	9,465	0	82,071	1,864	0	\$ 100,156
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ 6,756	\$ 9,465	\$ -	\$ 90,614	\$ 1,864	\$ -	\$ 108,699
Total Smart Meter Capital Costs		\$ -	\$ 1,444,627	\$ 1,986,532	\$ 1,120,557	\$ 395,277	\$ 134,501	\$ -	\$ 5,081,495

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	
		24,044	10,570	12,977	12,958	11,321	11,322	\$ 83,191
		0	0	0	0	0	0	\$ -
	\$ -	\$ 24,044	\$ 10,570	\$ 12,977	\$ 12,958	\$ 11,321	\$ 11,322	\$ 83,191
		2,189	1,807	4,380	3,391	4,881	5,661	\$ 22,309
		0	0	0	0	0	0	\$ -
	\$ -	\$ 2,189	\$ 1,807	\$ 4,380	\$ 3,391	\$ 4,881	\$ 5,661	\$ 22,309
		1,485	4,517	0	0	0	0	\$ 6,002
		6,716	6,396	6,901	14,412	19,557	29,961	\$ 83,943
		0	0	0	8,925	18,565	0	\$ 27,490
	\$ -	\$ 8,201	\$ 10,913	\$ 6,901	\$ 23,337	\$ 38,122	\$ 29,961	\$ 117,435
		3,258	4,877	11,299	7,363	11,831	8,604	\$ 47,231
		0	0	0	0	0	0	\$ -
	\$ -	\$ 3,258	\$ 4,877	\$ 11,299	\$ 7,363	\$ 11,831	\$ 8,604	\$ 47,231
	0	4,485	4,034	9,574	10,298	11,580	2,830	\$ 42,802
	0	11,919	6,912	20,466	6,455	0	0	\$ 45,752
	1,345	717	3,504	9,053	5,600	2,405	0	\$ 22,624
	0	1,487	1,279	5,935	6,666	6,514	2,830	\$ 24,711
	6,228	5,809	8,724	844	1,487	2,769	5,661	\$ 31,522
	0	0	0	0	0	0	0	\$ -
	\$ 7,573	\$ 24,416	\$ 24,453	\$ 45,872	\$ 30,507	\$ 23,268	\$ 11,322	\$ 167,411
	\$ 7,573	\$ 62,108	\$ 52,620	\$ 81,429	\$ 77,555	\$ 89,423	\$ 66,869	\$ 437,577
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
	0	0	0	0	0	0	0	\$ -
	0	0	0	0	0	0	0	\$ -
	0	0	0	11,599	10,178	9,123	0	\$ 30,900
	\$ -	\$ -	\$ -	\$ 11,599	\$ 10,178	\$ 9,123	\$ -	\$ 30,900
	\$ 7,573	\$ 62,108	\$ 52,620	\$ 93,027	\$ 87,733	\$ 98,546	\$ 66,869	\$ 468,476

3 Aggregate Smart Meter Costs by Category

3.1	Capital									
3.1.1	Smart Meter	\$ -	\$ 1,416,536	\$ 1,962,622	\$ 1,120,557	\$ 233,656	\$ 131,346	\$ -	\$ 4,864,716	
3.1.2	Computer Hardware	\$ -	\$ 21,161	\$ 12,915	\$ -	\$ 65,104	\$ 1,291	\$ -	\$ 100,472	
3.1.3	Computer Software	\$ -	\$ 6,756	\$ 9,465	\$ -	\$ 85,340	\$ 1,864	\$ -	\$ 103,425	
3.1.4	Tools & Equipment	\$ -	\$ 174	\$ 1,531	\$ -	\$ 2,635	\$ -	\$ -	\$ 4,340	
3.1.5	Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 8,543	\$ -	\$ -	\$ 8,543	
3.1.6	Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.1.7	Total Capital Costs	\$ -	\$ 1,444,627	\$ 1,986,532	\$ 1,120,557	\$ 395,277	\$ 134,501	\$ -	\$ 5,081,495	
3.2	OM&A Costs									
3.2.1	Total OM&A Costs	\$ 7,573	\$ 62,108	\$ 52,620	\$ 93,027	\$ 87,733	\$ 98,546	\$ 66,869	\$ 468,476	



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		\$ -	\$ 1,416,536	\$ 3,379,157	\$ 4,499,714	\$ 4,733,370	\$ 4,864,716
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 1,416,536	\$ 1,962,622	\$ 1,120,557	\$ 233,656	\$ 131,346	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 1,416,536	\$ 3,379,157	\$ 4,499,714	\$ 4,733,370	\$ 4,864,716	\$ 4,864,716
Accumulated Depreciation							
Opening Balance		\$ -	\$ 47,218	\$ 207,074	\$ 469,703	\$ 777,473	\$ 1,097,409
Amortization expense during year	\$ -	\$ 47,218	\$ 159,856	\$ 262,629	\$ 307,769	\$ 319,936	\$ 324,314
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 47,218	\$ 207,074	\$ 469,703	\$ 777,473	\$ 1,097,409	\$ 1,421,723
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 1,369,318	\$ 3,172,083	\$ 4,030,011	\$ 3,955,898	\$ 3,767,307
Closing Balance	\$ -	\$ 1,369,318	\$ 3,172,083	\$ 4,030,011	\$ 3,955,898	\$ 3,767,307	\$ 3,442,992
Average Net Book Value	\$ -	\$ 684,659	\$ 2,270,700	\$ 3,601,047	\$ 3,992,954	\$ 3,861,602	\$ 3,605,150
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ 21,161	\$ 34,076	\$ 34,076	\$ 99,180	\$ 100,472
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 21,161	\$ 12,915	\$ -	\$ 65,104	\$ 1,291	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 21,161	\$ 34,076	\$ 34,076	\$ 99,180	\$ 100,472	\$ 100,472
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 2,116	\$ 7,640	\$ 14,455	\$ 27,781	\$ 47,746
Amortization expense during year	\$ -	\$ 2,116	\$ 5,524	\$ 6,815	\$ 13,326	\$ 19,965	\$ 20,094
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 2,116	\$ 7,640	\$ 14,455	\$ 27,781	\$ 47,746	\$ 67,840
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 19,045	\$ 26,437	\$ 19,621	\$ 71,399	\$ 52,726
Closing Balance	\$ -	\$ 19,045	\$ 26,437	\$ 19,621	\$ 71,399	\$ 52,726	\$ 32,631
Average Net Book Value	\$ -	\$ 9,523	\$ 22,741	\$ 23,029	\$ 45,510	\$ 62,063	\$ 42,679
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ 6,756	\$ 16,221	\$ 16,221	\$ 101,561	\$ 103,425
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 6,756	\$ 9,465	\$ -	\$ 85,340	\$ 1,864	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 6,756	\$ 16,221	\$ 16,221	\$ 101,561	\$ 103,425	\$ 103,425
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 1,126	\$ 4,955	\$ 10,362	\$ 29,993	\$ 64,157
Amortization expense during year	\$ -	\$ 1,126	\$ 3,829	\$ 5,407	\$ 19,630	\$ 34,164	\$ 34,475
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 1,126	\$ 4,955	\$ 10,362	\$ 29,993	\$ 64,157	\$ 98,632
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 5,630	\$ 11,265	\$ 5,858	\$ 71,568	\$ 39,268
Closing Balance	\$ -	\$ 5,630	\$ 11,265	\$ 5,858	\$ 71,568	\$ 39,268	\$ 4,793
Average Net Book Value	\$ -	\$ 2,815	\$ 8,448	\$ 8,562	\$ 38,713	\$ 55,418	\$ 22,031
Net Fixed Assets - Tools and Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ 174	\$ 1,705	\$ 1,705	\$ 4,340	\$ 4,340
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 174	\$ 1,531	\$ -	\$ 2,635	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 174	\$ 1,705	\$ 1,705	\$ 4,340	\$ 4,340	\$ 4,340
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 9	\$ 103	\$ 273	\$ 575	\$ 1,009
Amortization expense during year	\$ -	\$ 9	\$ 94	\$ 171	\$ 302	\$ 434	\$ 434
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 9	\$ 103	\$ 273	\$ 575	\$ 1,009	\$ 1,443
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 165	\$ 1,602	\$ 1,432	\$ 3,764	\$ 3,330
Closing Balance	\$ -	\$ 165	\$ 1,602	\$ 1,432	\$ 3,764	\$ 3,330	\$ 2,896
Average Net Book Value	\$ -	\$ 83	\$ 884	\$ 1,517	\$ 2,598	\$ 3,547	\$ 3,113
Net Fixed Assets - Other Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 8,543	\$ 8,543
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 8,543	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 8,543	\$ 8,543	\$ 8,543
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 427	\$ 1,281
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ 427	\$ 854	\$ 854
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 427	\$ 1,281	\$ 2,136
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,116	\$ 7,261
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 8,116	\$ 7,261	\$ 6,407
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 4,058	\$ 7,688	\$ 6,834



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	\$ -	\$ 684,659	\$ 2,270,700	\$ 3,601,047	\$ 3,992,954	\$ 3,861,602	\$ 3,605,150
Computer Hardware	\$ -	\$ 9,523	\$ 22,741	\$ 23,029	\$ 45,510	\$ 62,063	\$ 42,679
Computer Software	\$ -	\$ 2,815	\$ 8,448	\$ 8,562	\$ 38,713	\$ 55,418	\$ 22,031
Tools & Equipment	\$ -	\$ 83	\$ 884	\$ 1,517	\$ 2,598	\$ 3,547	\$ 3,113
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 4,058	\$ 7,688	\$ 6,834
Total Net Fixed Assets	\$ -	\$ 697,079	\$ 2,302,773	\$ 3,634,155	\$ 4,083,834	\$ 3,990,319	\$ 3,679,806
Working Capital							
Operating Expenses (from Sheet 2)	\$ 7,573	\$ 62,108	\$ 52,620	\$ 93,027	\$ 87,733	\$ 98,546	\$ 66,869
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	14%	14%
Working Capital Allowance	\$ 1,136	\$ 9,316	\$ 7,893	\$ 13,954	\$ 13,160	\$ 13,304	\$ 9,027
Incremental Smart Meter Rate Base	\$ 1,136	\$ 706,395	\$ 2,310,666	\$ 3,648,109	\$ 4,096,993	\$ 4,003,622	\$ 3,688,834
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ 92,427	\$ 145,924	\$ 163,880	\$ 160,145	\$ 147,553
Deemed Long Term Debt	\$ 682	\$ 423,837	\$ 1,293,973	\$ 2,042,941	\$ 2,294,316	\$ 2,242,028	\$ 2,065,747
Equity	\$ 454	\$ 282,558	\$ 924,266	\$ 1,459,243	\$ 1,638,797	\$ 1,601,449	\$ 1,475,533
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 1,136	\$ 706,395	\$ 2,310,666	\$ 3,648,109	\$ 4,096,993	\$ 4,003,622	\$ 3,688,834
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ 4,131	\$ 6,523	\$ 7,325	\$ 3,940	\$ 3,630
Deemed Long Term Debt	\$ 40	\$ 25,006	\$ 78,932	\$ 124,619	\$ 139,953	\$ 129,813	\$ 119,607
Equity	\$ 41	\$ 25,430	\$ 79,210	\$ 125,057	\$ 140,445	\$ 153,419	\$ 141,356
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 81	\$ 50,437	\$ 162,273	\$ 256,199	\$ 287,724	\$ 287,172	\$ 264,593
Operating Expenses	\$ 7,573	\$ 62,108	\$ 52,620	\$ 93,027	\$ 87,733	\$ 98,546	\$ 66,869
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 47,218	\$ 159,856	\$ 262,629	\$ 307,769	\$ 319,936	\$ 324,314
Computer Hardware	\$ -	\$ 2,116	\$ 5,524	\$ 6,815	\$ 13,326	\$ 19,965	\$ 20,094
Computer Software	\$ -	\$ 1,126	\$ 3,829	\$ 5,407	\$ 19,630	\$ 34,164	\$ 34,475
Tools & Equipment	\$ -	\$ 9	\$ 94	\$ 171	\$ 302	\$ 434	\$ 434
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 427	\$ 854	\$ 854
Total Amortization Expense in Year	\$ -	\$ 50,469	\$ 169,304	\$ 275,022	\$ 341,455	\$ 375,354	\$ 380,172
Incremental Revenue Requirement before Taxes/PILs	\$ 7,654	\$ 163,014	\$ 384,197	\$ 624,248	\$ 716,911	\$ 761,072	\$ 711,634
Calculation of Taxable Income							
Incremental Operating Expenses	\$ 7,573	\$ 62,108	\$ 52,620	\$ 93,027	\$ 87,733	\$ 98,546	\$ 66,869
Amortization Expense	\$ -	\$ 50,469	\$ 169,304	\$ 275,022	\$ 341,455	\$ 375,354	\$ 380,172
Interest Expense	\$ 40	\$ 25,006	\$ 83,064	\$ 131,142	\$ 147,279	\$ 133,753	\$ 123,237
Net Income for Taxes/PILs	\$ 41	\$ 25,430	\$ 79,210	\$ 125,057	\$ 140,445	\$ 153,419	\$ 141,356
Grossed-up Taxes/PILs (from Sheet 7)	\$ 23.12	\$ 9,663.59	\$ 29,263.85	\$ 53,558.15	\$ 51,040.32	\$ 58,360.83	\$ 69,583.73
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 7,677	\$ 172,677	\$ 413,461	\$ 677,806	\$ 767,952	\$ 819,432	\$ 781,217



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	\$ -	\$ -	\$ 1,359,874.31	\$ 3,135,201.10	\$ 3,960,119.43	\$ 3,867,619.94	\$ 3,684,302.04
Capital Additions	\$ -	\$ 1,416,535.74	\$ 1,962,621.59	\$ 1,120,556.69	\$ 233,656.32	\$ 131,345.51	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 1,416,535.74	\$ 3,322,495.91	\$ 4,255,757.78	\$ 4,193,775.74	\$ 3,998,965.45	\$ 3,684,302.04
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 708,267.87	\$ 981,310.80	\$ 560,278.34	\$ 116,828.16	\$ 65,672.76	\$ -
Reduced UCC	\$ -	\$ 708,267.87	\$ 2,341,185.11	\$ 3,695,479.44	\$ 4,076,947.59	\$ 3,933,292.69	\$ 3,684,302.04
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ 56,661.43	\$ 187,294.81	\$ 295,638.36	\$ 326,155.81	\$ 314,663.42	\$ 294,744.16
Closing UCC	\$ -	\$ 1,359,874.31	\$ 3,135,201.10	\$ 3,960,119.43	\$ 3,867,619.94	\$ 3,684,302.04	\$ 3,389,557.87

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	\$ -	\$ -	\$ 20,239.97	\$ 25,333.47	\$ 11,400.06	\$ 114,201.77	\$ 53,678.76
Capital Additions Computer Hardware	\$ -	\$ 21,161.24	\$ 12,915.15	\$ -	\$ 65,103.88	\$ 1,291.46	\$ -
Capital Additions Computer Software	\$ -	\$ 6,755.97	\$ 9,464.82	\$ -	\$ 85,339.89	\$ 1,864.35	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 27,917.21	\$ 42,619.95	\$ 25,333.47	\$ 161,843.84	\$ 117,357.57	\$ 53,678.76
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 13,958.60	\$ 11,189.99	\$ -	\$ 75,221.89	\$ 1,577.90	\$ -
Reduced UCC	\$ -	\$ 13,958.60	\$ 31,429.96	\$ 25,333.47	\$ 86,621.95	\$ 115,779.67	\$ 53,678.76
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ 7,677.23	\$ 17,286.48	\$ 13,933.41	\$ 47,642.07	\$ 63,678.82	\$ 29,523.32
Closing UCC	\$ -	\$ 20,239.97	\$ 25,333.47	\$ 11,400.06	\$ 114,201.77	\$ 53,678.76	\$ 24,155.44

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	\$ -	\$ -	\$ 156.74	\$ 1,503.16	\$ 1,202.53	\$ 11,021.67	\$ 8,817.34
Capital Additions Tools & Equipment	\$ -	\$ 174.16	\$ 1,530.85	\$ -	\$ 2,634.68	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 8,542.70	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 174.16	\$ 1,687.59	\$ 1,503.16	\$ 12,379.92	\$ 11,021.67	\$ 8,817.34
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 87.08	\$ 765.43	\$ -	\$ 5,588.69	\$ -	\$ -
Reduced UCC	\$ -	\$ 87.08	\$ 922.17	\$ 1,503.16	\$ 6,791.22	\$ 11,021.67	\$ 8,817.34
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ 17.42	\$ 184.43	\$ 300.63	\$ 1,358.24	\$ 2,204.33	\$ 1,763.47
Closing UCC	\$ -	\$ 156.74	\$ 1,503.16	\$ 1,202.53	\$ 11,021.67	\$ 8,817.34	\$ 7,053.87



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	\$ 40.89	\$ 25,430.24	\$ 79,209.63	\$ 125,057.17	\$ 140,444.94	\$ 153,418.81	\$ 141,356.10
Amortization	\$ -	\$ 50,468.68	\$ 169,303.62	\$ 275,021.75	\$ 341,454.76	\$ 375,353.93	\$ 380,171.99
CCA - Smart Meters	\$ -	\$ 56,661.43	\$ 187,294.81	\$ 295,638.36	\$ 326,155.81	\$ 314,663.42	\$ 294,744.16
CCA - Computers	\$ -	\$ 7,677.23	\$ 17,286.48	\$ 13,933.41	\$ 47,642.07	\$ 63,678.82	\$ 29,523.32
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ 17.42	\$ 184.43	\$ 300.63	\$ 1,358.24	\$ 2,204.33	\$ 1,763.47
Change in taxable income	\$ 40.89	\$ 11,542.84	\$ 43,747.52	\$ 90,206.53	\$ 106,743.57	\$ 148,226.17	\$ 195,497.14
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	\$ 14.77	\$ 4,169.27	\$ 14,655.42	\$ 29,768.15	\$ 33,090.51	\$ 41,873.89	\$ 51,318.00
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ 1,369,317.89	\$ 3,172,083.04	\$ 4,030,010.68	\$ 3,955,897.52	\$ 3,767,306.83	\$ 3,442,992.44
Computer Hardware	\$ -	\$ 19,045.12	\$ 26,436.51	\$ 19,621.23	\$ 71,399.44	\$ 52,725.70	\$ 32,631.35
Computer Software (Including Application Software)	\$ -	\$ 5,629.97	\$ 11,265.33	\$ 5,858.40	\$ 71,568.05	\$ 39,268.12	\$ 4,793.11
Tools & Equipment	\$ -	\$ 165.45	\$ 1,602.34	\$ 1,431.84	\$ 3,764.29	\$ 3,330.32	\$ 2,896.35
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 8,115.57	\$ 7,261.30	\$ 6,407.03
Rate Base	\$ -	\$ 1,394,158.42	\$ 3,211,387.22	\$ 4,056,922.16	\$ 4,110,744.88	\$ 3,869,892.27	\$ 3,489,720.28
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ 1,394,158.42	\$ 3,211,387.22	\$ 4,056,922.16	\$ 4,110,744.88	\$ 3,869,892.27	\$ 3,489,720.28
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)	\$ -	\$ 3,136.86	\$ 7,225.62	\$ 9,128.07	\$ 3,083.06	\$ -	\$ -
Change in Income Taxes Payable	\$ 14.77	\$ 4,169.27	\$ 14,655.42	\$ 29,768.15	\$ 33,090.51	\$ 41,873.89	\$ 51,318.00
Change in OCT	\$ -	\$ 3,136.86	\$ 7,225.62	\$ 9,128.07	\$ 3,083.06	\$ -	\$ -
PILs	\$ 14.77	\$ 7,306.13	\$ 21,881.04	\$ 38,896.23	\$ 36,173.57	\$ 41,873.89	\$ 51,318.00
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	\$ 23.12	\$ 6,526.73	\$ 22,038.22	\$ 44,430.08	\$ 47,957.26	\$ 58,360.83	\$ 69,583.73
Change in OCT	\$ -	\$ 3,136.86	\$ 7,225.62	\$ 9,128.07	\$ 3,083.06	\$ -	\$ -
PILs	\$ 23.12	\$ 9,663.59	\$ 29,263.85	\$ 53,558.15	\$ 51,040.32	\$ 58,360.83	\$ 69,583.73



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	\$ -	\$ 7,176.55	4.14%	\$ -	\$ 7,176.55		\$ 0.39
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 7,176.55	\$ 7,418.17	4.14%	\$ 24.76	\$ 14,619.48		\$ 0.39
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 14,594.72	\$ 7,182.00	4.59%	\$ 55.82	\$ 21,832.54		\$ 0.39
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 21,776.72	\$ 7,188.12	4.59%	\$ 83.30	\$ 29,048.14		\$ 0.39
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 28,964.84	\$ 7,183.89	4.59%	\$ 110.79	\$ 36,259.52		\$ 0.39
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 36,148.73	\$ 6,449.05	4.59%	\$ 138.27	\$ 42,736.04		\$ 0.39
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 42,597.77	\$ 6,597.83	4.59%	\$ 162.94	\$ 49,358.55		\$ 0.39
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 49,195.61	\$ 6,969.82	4.59%	\$ 188.17	\$ 56,353.60	\$ 56,929.48	\$ 0.39
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 56,165.43	\$ 7,101.42	4.59%	\$ 214.83	\$ 63,481.68		\$ 0.39
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 63,266.85	\$ 6,938.46	4.59%	\$ 242.00	\$ 70,447.31		\$ 0.39
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 70,205.31	\$ 7,248.04	4.59%	\$ 268.54	\$ 77,721.89		\$ 0.39
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 77,453.35	\$ 7,046.72	4.59%	\$ 296.26	\$ 84,796.33		\$ 0.39
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 84,500.07	\$ 14,467.88	4.59%	\$ 323.21	\$ 99,291.16		\$ 0.82
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 98,967.95	\$ 15,143.93	4.59%	\$ 378.55	\$ 114,490.43		\$ 0.82
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 114,111.88	\$ 13,701.09	4.59%	\$ 436.48	\$ 128,249.45		\$ 0.82
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 127,812.97	\$ 15,823.49	4.59%	\$ 488.88	\$ 144,125.34		\$ 0.82
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 143,636.46	\$ 14,857.81	4.59%	\$ 549.41	\$ 159,043.68		\$ 0.82
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 158,494.27	\$ 15,103.73	5.14%	\$ 678.88	\$ 174,276.88		\$ 0.82
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 173,598.00	\$ 14,548.89	5.14%	\$ 743.58	\$ 188,890.47		\$ 0.82
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 188,146.89	\$ 15,201.88	5.14%	\$ 805.90	\$ 204,154.67	\$ 152,609.86	\$ 0.82
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 203,348.77	\$ 14,722.28	5.14%	\$ 871.01	\$ 218,942.06		\$ 0.82
2012 Q2		4.29%	Feb-08	2008	Q1	\$ 218,071.05	\$ 15,159.12	5.14%	\$ 934.07	\$ 234,164.24		\$ 0.82
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 233,230.17	\$ 14,767.28	5.14%	\$ 999.00	\$ 248,996.45		\$ 0.82
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 247,997.45	\$ 14,870.51	4.08%	\$ 843.19	\$ 263,711.15		\$ 0.82
			May-08	2008	Q2	\$ 262,867.96	\$ 14,915.44	4.08%	\$ 893.75	\$ 278,677.15		\$ 0.82
			Jun-08	2008	Q2	\$ 277,783.40	\$ 14,999.63	4.08%	\$ 944.46	\$ 293,727.49		\$ 0.82
			Jul-08	2008	Q3	\$ 292,783.03	\$ 13,859.92	3.35%	\$ 817.35	\$ 307,460.30		\$ 0.82
			Aug-08	2008	Q3	\$ 306,642.95	\$ 15,504.01	3.35%	\$ 856.04	\$ 323,003.00		\$ 0.82
			Sep-08	2008	Q3	\$ 322,146.96	\$ 14,605.17	3.35%	\$ 899.33	\$ 337,651.46		\$ 0.82
			Oct-08	2008	Q4	\$ 336,752.13	\$ 14,332.94	3.35%	\$ 940.10	\$ 352,025.17		\$ 0.82
			Nov-08	2008	Q4	\$ 351,085.07	\$ 14,836.45	3.35%	\$ 980.11	\$ 366,901.63		\$ 0.82
			Dec-08	2008	Q4	\$ 365,921.52	\$ 14,431.79	3.35%	\$ 1,021.53	\$ 381,374.84	\$ 188,004.48	\$ 0.82
			Jan-09	2009	Q1	\$ 380,353.31	\$ 15,246.00	2.45%	\$ 776.55	\$ 396,375.86		\$ 0.82
			Feb-09	2009	Q1	\$ 395,599.31	\$ 15,246.56	2.45%	\$ 807.68	\$ 411,653.55		\$ 0.82
			Mar-09	2009	Q1	\$ 410,845.87	\$ 13,962.50	2.45%	\$ 838.81	\$ 425,647.18		\$ 0.82
			Apr-09	2009	Q2	\$ 424,808.37	\$ 14,640.53	1.00%	\$ 354.01	\$ 439,802.91		\$ 0.82
			May-09	2009	Q2	\$ 439,448.90	\$ 15,476.84	1.00%	\$ 366.21	\$ 455,291.95		\$ 0.82
			Jun-09	2009	Q2	\$ 454,925.74	\$ 14,405.35	1.00%	\$ 379.10	\$ 469,710.19		\$ 0.82
			Jul-09	2009	Q3	\$ 469,331.09	\$ 14,943.49	0.55%	\$ 215.11	\$ 484,489.69		\$ 0.82
			Aug-09	2009	Q3	\$ 484,274.58	\$ 14,396.56	0.55%	\$ 221.96	\$ 498,893.10		\$ 0.82
			Sep-09	2009	Q3	\$ 498,671.14	\$ 15,026.85	0.55%	\$ 228.56	\$ 513,926.55		\$ 0.82
			Oct-09	2009	Q4	\$ 513,697.99	\$ 14,108.39	0.55%	\$ 235.44	\$ 528,041.82		\$ 0.82
			Nov-09	2009	Q4	\$ 527,806.38	\$ 29,598.45	0.55%	\$ 241.91	\$ 557,646.74		\$ 1.56
			Dec-09	2009	Q4	\$ 557,404.83	\$ 28,016.04	0.55%	\$ 255.48	\$ 585,676.35	\$ 209,988.38	\$ 1.56
			Jan-10	2010	Q1	\$ 585,420.87	\$ 28,722.81	0.55%	\$ 268.32	\$ 614,412.00		\$ 1.56
			Feb-10	2010	Q1	\$ 614,143.68	\$ 28,564.57	0.55%	\$ 281.48	\$ 642,989.73		\$ 1.56
			Mar-10	2010	Q1	\$ 642,708.25	\$ 27,988.00	0.55%	\$ 294.57	\$ 670,990.82		\$ 1.56
			Apr-10	2010	Q2	\$ 670,696.25	\$ 27,789.67	0.55%	\$ 307.40	\$ 698,793.32		\$ 1.56
			May-10	2010	Q2	\$ 698,485.92	\$ 29,459.32	0.55%	\$ 320.14	\$ 728,265.38		\$ 1.56
			Jun-10	2010	Q2	\$ 727,945.24	\$ 26,346.51	0.55%	\$ 333.64	\$ 754,625.39		\$ 1.56
			Jul-10	2010	Q3	\$ 754,291.75	\$ 28,171.89	0.89%	\$ 559.43	\$ 783,023.07		\$ 1.56
			Aug-10	2010	Q3	\$ 782,463.64	\$ 27,165.63	0.89%	\$ 580.33	\$ 810,209.60		\$ 1.56
			Sep-10	2010	Q3	\$ 809,629.27	\$ 27,454.29	0.89%	\$ 600.48	\$ 837,684.04		\$ 1.56
			Oct-10	2010	Q4	\$ 837,083.56	\$ 27,210.22	1.20%	\$ 837.08	\$ 865,130.86		\$ 1.56
			Nov-10	2010	Q4	\$ 864,293.78	\$ 28,611.62	1.20%	\$ 864.29	\$ 893,769.69		\$ 1.56
			Dec-10	2010	Q4	\$ 892,905.40	\$ 28,559.73	1.20%	\$ 892.91	\$ 922,358.04	\$ 342,184.33	\$ 1.56
			Jan-11	2011	Q1	\$ 921,465.13	\$ 28,861.87	1.47%	\$ 1,128.79	\$ 951,455.79		\$ 1.56
			Feb-11	2011	Q1	\$ 950,327.00	\$ 28,920.27	1.47%	\$ 1,164.15	\$ 980,411.42		\$ 1.56
			Mar-11	2011	Q1	\$ 979,247.27	\$ 38,047.94	1.47%	\$ 1,199.58	\$ 1,018,494.79		\$ 2.14
			Apr-11	2011	Q2	\$ 1,017,295.21	\$ 37,946.02	1.47%	\$ 1,246.19	\$ 1,056,487.42		\$ 2.14
			May-11	2011	Q2	\$ 1,055,241.23	\$ 40,085.96	1.47%	\$ 1,292.67	\$ 1,096,619.86		\$ 2.14
			Jun-11	2011	Q2	\$ 1,095,327.19	\$ 36,600.36	1.47%	\$ 1,341.78	\$ 1,133,269.33		\$ 2.14
			Jul-11	2011	Q3	\$ 1,131,927.55	\$ 39,912.51	1.47%	\$ 1,386.61	\$ 1,173,226.67		\$ 2.14
			Aug-11	2011	Q3	\$ 1,171,840.06	\$ 37,635.38	1.47%	\$ 1,435.50	\$ 1,210,910.94		\$ 2.14
			Sep-11	2011	Q3	\$ 1,209,475.44	\$ 38,481.28	1.47%	\$ 1,481.61	\$ 1,249,438.33		\$ 2.14
			Oct-11	2011	Q4	\$ 1,247,956.72	\$ 38,373.03	1.47%	\$ 1,528.75	\$ 1,287,858.50		\$ 2.14
			Nov-11	2011	Q4	\$ 1,286,329.75	\$ 38,373.03	1.47%	\$ 1,575.75	\$ 1,326,278.53		\$ 2.14
			Dec-11	2011	Q4	\$ 1,324,702.78	\$ 38,373.03	1.47%	\$ 1,622.76	\$ 1,364,698.58	\$ 458,014.83	\$ 2.14
			Jan-12	2012	Q1	\$ 1,363,075.82	\$ 38,373.03	1.47%	\$ 1,669.77	\$ 1,403,118.62		\$ 2.14
			Feb-12	2012	Q1	\$ 1,401,448.85	\$ 38,373.03	1.47%	\$ 1,716.77	\$ 1,441,538.65		\$ 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	\$ 1,439,821.88	\$ 38,373.03	1.47%	\$ 1,763.78	\$ 1,479,958.70		\$ 2.14
			Apr-12	2012	Q2	\$ 1,478,194.92	\$ 38,373.03	1.47%	\$ 1,810.79	\$ 1,518,378.74		
			May-12	2012	Q2	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Jun-12	2012	Q2	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Jul-12	2012	Q3	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Aug-12	2012	Q3	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Sep-12	2012	Q3	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Oct-12	2012	Q4	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Nov-12	2012	Q4	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95		
			Dec-12	2012	Q4	\$ 1,516,567.95		0.00%	\$ -	\$ 1,516,567.95	\$ 160,453.24	
Total Funding Adder Revenues Collected							\$ 1,516,567.95		\$ 51,616.65	\$ 1,568,184.60	\$ 1,568,184.60	



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	-	\$ 7,573.14	\$ -	7,573.14	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	7,573.14	\$ 2,822.54	\$ 16.68	10,412.37	4.59%	28.97	28.97
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	10,412.37	\$ 4,956.92	\$ 414.52	15,783.81	4.59%	39.83	68.79
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	15,783.81	\$ 3,980.50	\$ 1,205.88	20,970.19	4.59%	60.37	129.17
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	20,970.19	\$ 2,433.84	\$ 1,580.01	24,984.04	4.59%	80.21	209.38
2010 Q1	0.55%	4.34%	May-07	2007	Q2	24,984.04	\$ 3,933.67	\$ 2,492.08	31,409.79	4.59%	95.56	304.94
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	31,409.79	\$ 3,904.38	\$ 2,989.96	38,304.12	4.59%	120.14	425.08
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	38,304.12	\$ 6,833.18	\$ 4,032.83	49,170.13	4.59%	146.51	571.60
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	49,170.13	\$ 6,567.66	\$ 4,069.31	59,807.10	4.59%	188.08	759.67
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	59,807.10	\$ 7,655.52	\$ 4,557.54	72,020.15	4.59%	228.76	988.44
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	72,020.15	\$ 6,311.29	\$ 5,037.00	83,368.44	5.14%	308.49	1,296.92
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	83,368.44	\$ 3,938.02	\$ 6,568.13	93,874.59	5.14%	357.09	1,654.02
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	93,874.59	\$ 8,770.71	\$ 7,378.31	110,023.61	5.14%	402.10	2,056.11
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	110,023.61	\$ 2,860.68	\$ 4,309.51	117,193.80	5.14%	471.27	2,527.38
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	117,193.80	\$ 2,930.40	\$ 8,252.41	128,376.61	5.14%	501.98	3,029.36
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	128,376.61	\$ 5,327.93	\$ 8,410.92	142,115.47	5.14%	549.88	3,579.24
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	142,115.47	\$ 4,963.56	\$ 9,223.61	156,302.63	4.08%	483.19	4,062.43
			May-08	2008	Q2	156,302.63	\$ 2,726.67	\$ 10,422.22	169,451.51	4.08%	531.43	4,593.86
			Jun-08	2008	Q2	169,451.51	\$ 13,314.95	\$ 11,245.07	194,011.52	4.08%	576.14	5,170.00
			Jul-08	2008	Q3	194,011.52	\$ 3,541.07	\$ 11,504.91	209,057.50	3.35%	541.62	5,711.61
			Aug-08	2008	Q3	209,057.50	\$ 5,070.65	\$ 11,953.29	226,081.44	3.35%	583.62	6,295.23
			Sep-08	2008	Q3	226,081.44	\$ 4,859.89	\$ 12,992.55	234,214.11	3.35%	631.14	6,926.38
			Oct-08	2008	Q4	234,214.11	\$ 4,183.73	\$ 13,171.21	251,569.05	3.35%	653.85	7,580.22
			Nov-08	2008	Q4	251,569.05	\$ 4,220.61	\$ 3,281.99	259,071.65	3.35%	702.30	8,282.52
			Dec-08	2008	Q4	259,071.65	\$ 8,339.84	\$ 27,342.61	294,754.10	3.35%	723.24	9,005.76
			Jan-09	2009	Q1	294,754.10	\$ 1,716.05	\$ 17,289.26	313,759.41	2.45%	601.79	9,607.55
			Feb-09	2009	Q1	313,759.41	\$ 3,370.29	\$ 17,292.43	334,422.13	2.45%	640.59	10,248.14
			Mar-09	2009	Q1	334,422.13	\$ 5,102.46	\$ 24,254.51	363,779.09	2.45%	682.78	10,930.92
			Apr-09	2009	Q2	363,779.09	\$ 5,592.46	\$ 19,287.02	388,658.58	1.00%	303.15	11,234.07
			May-09	2009	Q2	388,658.58	\$ 6,551.26	\$ 21,197.40	416,407.24	1.00%	323.88	11,557.95
			Jun-09	2009	Q2	416,407.24	\$ 8,696.16	\$ 22,642.44	447,745.84	1.00%	347.01	11,904.96
			Jul-09	2009	Q3	447,745.84	\$ 9,816.59	\$ 23,316.55	480,878.98	0.55%	205.22	12,110.18
			Aug-09	2009	Q3	480,878.98	\$ 4,656.54	\$ 25,629.41	511,164.93	0.55%	220.40	12,330.58
			Sep-09	2009	Q3	511,164.93	\$ 9,631.31	\$ 24,497.08	545,293.33	0.55%	234.28	12,564.86
			Oct-09	2009	Q4	545,293.33	\$ 8,195.78	\$ 26,065.71	579,554.82	0.55%	249.93	12,814.79
			Nov-09	2009	Q4	579,554.82	\$ 14,034.92	\$ 26,435.65	620,025.39	0.55%	265.63	13,080.42
			Dec-09	2009	Q4	620,025.39	\$ 15,663.20	\$ 19,715.86	655,404.46	0.55%	284.18	13,364.60
			Jan-10	2010	Q1	655,404.46	\$ 10,499.34	\$ 26,833.67	692,737.46	0.55%	300.39	13,664.99
			Feb-10	2010	Q1	692,737.46	\$ 7,030.89	\$ 54,268.31	754,036.66	0.55%	317.50	13,982.50
			Mar-10	2010	Q1	754,036.66	\$ 4,746.24	\$ 28,150.95	786,933.86	0.55%	345.60	14,328.10
			Apr-10	2010	Q2	786,933.86	\$ 490.38	\$ 24,804.49	811,247.96	0.55%	360.68	14,688.77
			May-10	2010	Q2	811,247.96	\$ 1,317.38	\$ 51,472.38	861,402.97	0.55%	371.82	15,060.60
			Jun-10	2010	Q2	861,402.97	\$ 3,115.91	\$ 25,120.29	889,639.17	0.55%	394.81	15,455.41
			Jul-10	2010	Q3	889,639.17	\$ 8,745.66	\$ 34,035.92	932,420.75	0.89%	659.82	16,115.22
			Aug-10	2010	Q3	932,420.75	\$ 33,365.89	\$ 34,035.92	999,822.56	0.89%	691.55	16,806.77
			Sep-10	2010	Q4	999,822.56	\$ 3,809.64	\$ 40,587.55	1,044,219.75	0.89%	741.54	17,548.30
			Oct-10	2010	Q4	1,044,219.75	\$ 5,099.33	\$ 36,219.79	1,085,538.87	1.20%	1,044.22	18,592.52
			Nov-10	2010	Q4	1,085,538.87	\$ 3,307.36	\$ 36,219.79	1,125,066.03	1.20%	1,085.54	19,678.06
			Dec-10	2010	Q4	1,125,066.03	\$ 9,820.33	\$ 17,023.74	1,151,910.10	1.20%	1,125.07	20,803.13
			Jan-11	2011	Q1	1,151,910.10	\$ 5,339.37	\$ 33,820.28	1,191,069.75	1.47%	1,411.09	22,214.22
			Feb-11	2011	Q1	1,191,069.75	\$ 15,303.63	\$ 34,177.96	1,240,551.34	1.47%	1,459.06	23,673.28
			Mar-11	2011	Q1	1,240,551.34	\$ 6,205.65	\$ 35,028.30	1,281,785.28	1.47%	1,519.68	25,192.95
			Apr-11	2011	Q2	1,281,785.28	\$ 7,374.82	\$ 34,146.14	1,323,306.24	1.47%	1,570.19	26,763.14
			May-11	2011	Q2	1,323,306.24	\$ 5,834.87	\$ 35,827.10	1,364,968.21	1.47%	1,621.05	28,384.19
			Jun-11	2011	Q2	1,364,968.21	\$ 6,433.26	\$ 34,374.48	1,405,775.94	1.47%	1,672.09	30,056.28
			Jul-11	2011	Q3	1,405,775.94	\$ 5,276.22	\$ 34,396.41	1,445,448.56	1.47%	1,722.08	31,778.35
			Aug-11	2011	Q3	1,445,448.56	\$ 6,492.22	\$ 30,180.66	1,482,121.44	1.47%	1,770.67	33,549.03
			Sep-11	2011	Q3	1,482,121.44	\$ 13,209.95	\$ 27,518.20	1,467,813.19	1.47%	1,815.60	35,364.62
			Oct-11	2011	Q4	1,467,813.19	\$ 6,407.93	\$ 30,634.41	1,504,855.53	1.47%	1,798.07	37,162.70
			Nov-11	2011	Q4	1,504,855.53	\$ 10,333.97	\$ 49,808.20	1,564,997.71	1.47%	1,843.45	39,006.14
			Dec-11	2011	Q4	1,564,997.71	\$ 10,333.97	\$ 49,808.20	1,625,139.88	1.47%	1,917.12	40,923.27
			Jan-12	2012	Q1	1,625,139.88	\$ 5,572.41	\$ 31,681.00	1,662,393.30	1.47%	1,990.80	42,914.06
			Feb-12	2012	Q1	1,662,393.30	\$ 5,572.41	\$ 31,681.00	1,699,646.71	1.47%	2,036.43	44,950.49
			Mar-12	2012	Q1	1,699,646.71	\$ 5,572.41	\$ 31,681.00	1,736,900.12	1.47%	2,082.07	47,032.56
			Apr-12	2012	Q2	1,736,900.12	\$ 5,572.41	\$ 31,681.00	1,774,153.53	1.47%	2,127.70	49,160.26
			May-12	2012	Q2	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Jun-12	2012	Q2	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Jul-12	2012	Q3	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Aug-12	2012	Q3	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Sep-12	2012	Q3	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Oct-12	2012	Q4	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Nov-12	2012	Q4	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
			Dec-12	2012	Q4	1,774,153.53			1,774,153.53	0.00%	-	49,160.26
						\$	423,896.94	\$ 1,350,256.60	\$ 1,774,153.53			



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	\$ 7,573.14	\$ -	\$ 7,573.14	\$ 3,786.57	4.37%	\$ 165.28
2007	\$ 62,108.22	\$ 50,468.68	\$ 120,150.04	\$ 63,861.59	4.73%	\$ 3,019.06
2008	\$ 52,620.20	\$ 169,303.62	\$ 342,073.86	\$ 231,111.95	3.98%	\$ 9,198.26
2009	\$ 93,027.03	\$ 275,021.75	\$ 710,122.64	\$ 526,098.25	1.14%	\$ 5,984.37
2010	\$ 87,732.83	\$ 341,454.76	\$ 1,139,310.23	\$ 924,716.43	0.80%	\$ 7,374.61
2011	\$ 98,545.86	\$ 375,353.93	\$ 1,613,210.02	\$ 1,376,260.13	1.47%	\$ 20,231.02
2012	\$ 66,868.97	\$ 380,171.99	\$ 2,060,250.97	\$ 1,836,730.50	1.47%	\$ 26,999.94
Cumulative Interest to 2011						\$ 45,972.60
Cumulative Interest to 2012						\$ 72,972.54



Smart Meter Model

Horizon Utilities Corporation

This worksheet calculates the Smart Meter Dispersion 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

X Smart Meter Funding Adder (SMFA)

X Smart Meter Disposition Rider (SMDR)

X	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)	\$ 7,677.37	\$ 172,677.12	\$ 413,461.10	\$ 677,806.32	\$ 767,951.57	\$ 819,432.43	\$ 781,217.34	\$ 3,640,223.25
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ 3,757.67	\$ 17,603.91	\$ 13,183.47	\$ 24,535.73	\$ 67,992.56		\$ 127,073.33
<div><div></div>Sheet 8A (Interest calculated on monthly balances)</div>	\$ -	\$ 3,757.67	\$ 17,603.91	\$ 13,183.47	\$ 24,535.73	\$ 67,992.56		\$ 127,073.33
<div><div></div>Sheet 8B (Interest calculated on average annual balances)</div>								\$ -
SMFA Revenues (from Sheet 8)	\$ 56,165.43	\$ 147,183.34	\$ 177,004.54	\$ 205,067.56	\$ 336,044.26	\$ 441,610.69	\$ 153,492.13	\$ 1,516,567.95
SMFA Interest (from Sheet 8)	\$ 764.05	\$ 5,426.52	\$ 10,999.94	\$ 4,920.82	\$ 6,140.07	\$ 16,404.14	\$ 6,961.11	\$ 51,616.65
Net Deferred Revenue Requirement	-\$ 49,252.11	\$ 23,824.93	\$ 243,060.53	\$ 481,001.40	\$ 450,302.97	\$ 429,410.16	\$ 620,764.09	\$ 2,199,111.98
Number of Metered Customers (average for 2012 test year)							17970	
Calculation of Smart Meter Funding Adder (per metered customer per month)								
Net Deferred Revenues from 2006 to April 30, 2012	\$ 2,199,111.98							
SMFA May 1, 2012 to April 30, 201X	\$ 2.88							
Check: Forecasted SMFA Revenues for 2012 test year	\$ 621,031.45							
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	\$ 2,986,079.24							
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 1,568,184.60							
Net Deferred Revenue Requirement	\$ 1,417,894.64							
SMDR May 1, 2012 to April 30, 201X	\$ 6.58							
Check: Forecasted SMDR Revenues	\$ 1,418,884.35							
Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)								
Incremental Revenue Requirement for 2012	\$ 781,217.34							
SMIRR	\$ 3.62							
Check: Forecasted SMIRR Revenues	\$ 780,602.03							

VECC 5 - APPENDIX 3

Smart Meter Model, version 2.17

Recast –
GS>50 kW Customer Class



Ontario Energy Board

Smart Meter Model

Choose Your Utility:

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.



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	
							0
							0
0	0	0	0	0	0	0	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	260	341	342	242	206	891	2282
							0
0	260	341	342	242	206	891	2282

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Smart Meter								\$ -
Smart Meter								\$ -
Computer Hardware		3,840	1,564	0	320	0	0	\$ 5,724
								\$ -
	\$ -	\$ 3,840	\$ 1,564	\$ -	\$ 320	\$ -	\$ -	\$ 5,724

[illegible]

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		115	850	0	11,849	0	0	\$ 12,815
1.3.2 Computer Software	Computer Software		0	0	0	403	0	0	\$ 403
1.3.3 Computer Software Licences & Installation (includes hardware and software) (may include AS400 disk space, backup and recovery computer, UPS, etc.)	Computer Software		0	0	0	208	0	0	\$ 208
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ 115	\$ 850	\$ -	\$ 12,460	\$ -	\$ -	\$ 13,426

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									\$ -
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)									\$ -
1.5.2 AMI Interface to CIS									\$ -
1.5.3 Professional Fees									\$ -
1.5.4 Integration	Other Equipment								\$ -
1.5.5 Program Management	Tools & Equipment								\$ -
1.5.6 Other AMI Capital	Tools & Equipment								\$ -
Total Other AMI Capital Costs Related to Minimum Functionality		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Costs Related to Minimum Functionality		\$ -	\$ 3,955	\$ 2,414	\$ -	\$ 12,780	\$ -	\$ -	\$ 19,150

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

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

	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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	0	1,597	0	0	\$ 1,597
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	133,087	0	\$ 898,651
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software	0	2,053	2,876	0	24,942	567	0	\$ 30,438
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ 169,917	\$ 223,488	\$ 220,745	\$ 182,881	\$ 133,654	\$ -	\$ 930,685
Total Smart Meter Capital Costs		\$ -	\$ 173,872	\$ 225,902	\$ 220,745	\$ 195,662	\$ 133,654	\$ -	\$ 949,835

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	
	0	3,052	1,342	1,647	1,645	1,437	1,437	\$ 10,560
	0	0	0	0	0	0	0	\$ -
	\$ -	\$ 3,052	\$ 1,342	\$ 1,647	\$ 1,645	\$ 1,437	\$ 1,437	\$ 10,560
	0	278	229	556	430	620	719	\$ 2,832
	0	0	0	0	0	0	0	\$ -
	\$ -	\$ 278	\$ 229	\$ 556	\$ 430	\$ 620	\$ 719	\$ 2,832
	0	188	573	0	0	0	0	\$ 762
	0	852	812	876	1,829	2,482	3,803	\$ 10,655
	0	0	0	0	1,133	2,357	0	\$ 3,489
	\$ -	\$ 1,041	\$ 1,385	\$ 876	\$ 2,962	\$ 4,839	\$ 3,803	\$ 14,907
	0	414	619	1,434	935	1,502	1,092	\$ 5,995
	0	0	0	0	0	0	0	\$ -
	\$ -	\$ 414	\$ 619	\$ 1,434	\$ 935	\$ 1,502	\$ 1,092	\$ 5,995
	0	569	512	1,215	1,307	1,470	359	\$ 5,433
	0	1,513	877	2,598	819	0	0	\$ 5,808
	171	91	445	1,149	711	305	0	\$ 2,872
	0	189	162	753	846	827	359	\$ 3,137
	791	737	1,107	107	189	352	719	\$ 4,001
	0	0	0	0	0	0	0	\$ -
	\$ 961	\$ 3,099	\$ 3,104	\$ 5,823	\$ 3,872	\$ 2,954	\$ 1,437	\$ 21,250
	\$ 961	\$ 7,884	\$ 6,679	\$ 10,336	\$ 9,845	\$ 11,351	\$ 8,488	\$ 55,544
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
	0	0	0	0	0	0	0	\$ -
	0	0	0	0	0	0	0	\$ -
	0	0	0	1,472	1,292	1,158	0	\$ 3,922
	\$ -	\$ -	\$ -	\$ 1,472	\$ 1,292	\$ 1,158	\$ -	\$ 3,922
	\$ 961	\$ 7,884	\$ 6,679	\$ 11,808	\$ 11,136	\$ 12,509	\$ 8,488	\$ 59,466

3 Aggregate Smart Meter Costs by Category

3.1	Capital									
3.1.1	Smart Meter	\$ -	\$ 167,864	\$ 220,612	\$ 220,745	\$ 156,343	\$ 133,087	\$ -	\$ 898,651	
3.1.2	Computer Hardware	\$ -	\$ 3,955	\$ 2,414	\$ -	\$ 12,169	\$ -	\$ -	\$ 18,539	
3.1.3	Computer Software	\$ -	\$ 2,053	\$ 2,876	\$ -	\$ 25,553	\$ 567	\$ -	\$ 31,049	
3.1.4	Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.1.5	Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,597	\$ -	\$ -	\$ 1,597	
3.1.6	Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
3.1.7	Total Capital Costs	\$ -	\$ 173,872	\$ 225,902	\$ 220,745	\$ 195,662	\$ 133,654	\$ -	\$ 949,835	
3.2	OM&A Costs									
3.2.1	Total OM&A Costs	\$ 961	\$ 7,884	\$ 6,679	\$ 11,808	\$ 11,136	\$ 12,509	\$ 8,488	\$ 59,466	



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		\$ -	\$ 167,864	\$ 388,475	\$ 609,220	\$ 765,563	\$ 898,651
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 167,864	\$ 220,612	\$ 220,745	\$ 156,343	\$ 133,087	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 167,864	\$ 388,475	\$ 609,220	\$ 765,563	\$ 898,651	\$ 898,651
Accumulated Depreciation							
Opening Balance		\$ -	\$ 5,595	\$ 24,140	\$ 57,397	\$ 103,223	\$ 158,697
Amortization expense during year	\$ -	\$ 5,595	\$ 18,545	\$ 33,257	\$ 45,826	\$ 55,474	\$ 59,910
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 5,595	\$ 24,140	\$ 57,397	\$ 103,223	\$ 158,697	\$ 218,607
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 162,268	\$ 364,335	\$ 551,824	\$ 662,341	\$ 739,954
Closing Balance	\$ -	\$ 162,268	\$ 364,335	\$ 551,824	\$ 662,341	\$ 739,954	\$ 680,044
Average Net Book Value	\$ -	\$ 81,134	\$ 263,302	\$ 458,080	\$ 607,082	\$ 701,147	\$ 709,999
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ 3,955	\$ 6,370	\$ 6,370	\$ 18,539	\$ 18,539
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 3,955	\$ 2,414	\$ -	\$ 12,169	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 3,955	\$ 6,370	\$ 6,370	\$ 18,539	\$ 18,539	\$ 18,539
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 396	\$ 1,428	\$ 2,702	\$ 5,193	\$ 8,901
Amortization expense during year	\$ -	\$ 396	\$ 1,033	\$ 1,274	\$ 2,491	\$ 3,708	\$ 3,708
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 396	\$ 1,428	\$ 2,702	\$ 5,193	\$ 8,901	\$ 12,608
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 3,560	\$ 4,942	\$ 3,668	\$ 13,346	\$ 9,638
Closing Balance	\$ -	\$ 3,560	\$ 4,942	\$ 3,668	\$ 13,346	\$ 9,638	\$ 5,930
Average Net Book Value	\$ -	\$ 1,780	\$ 4,251	\$ 4,305	\$ 8,507	\$ 11,492	\$ 7,784
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ 2,053	\$ 4,930	\$ 4,930	\$ 30,482	\$ 31,049
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 2,053	\$ 2,676	\$ -	\$ 25,553	\$ 567	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 2,053	\$ 4,930	\$ 4,930	\$ 30,482	\$ 31,049	\$ 31,049
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ 342	\$ 1,506	\$ 3,149	\$ 9,051	\$ 19,306
Amortization expense during year	\$ -	\$ 342	\$ 1,164	\$ 1,643	\$ 5,902	\$ 10,255	\$ 10,350
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ 342	\$ 1,506	\$ 3,149	\$ 9,051	\$ 19,306	\$ 29,656
Net Book Value							
Opening Balance	\$ -	\$ -	\$ 1,711	\$ 3,424	\$ 1,780	\$ 21,431	\$ 11,742
Closing Balance	\$ -	\$ 1,711	\$ 3,424	\$ 1,780	\$ 21,431	\$ 11,742	\$ 1,393
Average Net Book Value	\$ -	\$ 855	\$ 2,567	\$ 2,602	\$ 11,606	\$ 16,587	\$ 6,568
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		\$ -	\$ -	\$ -	\$ -	\$ 1,597	\$ 1,597
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 1,597	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,597	\$ 1,597	\$ 1,597
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 240
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 160	\$ 160
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 240	\$ 399
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,517	\$ 1,357
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,517	\$ 1,357	\$ 1,198
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 758	\$ 1,437	\$ 1,277



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	\$ -	\$ 81,134	\$ 263,302	\$ 458,080	\$ 607,082	\$ 701,147	\$ 709,999
Computer Hardware	\$ -	\$ 1,780	\$ 4,251	\$ 4,305	\$ 8,507	\$ 11,492	\$ 7,784
Computer Software	\$ -	\$ 855	\$ 2,567	\$ 2,602	\$ 11,606	\$ 16,587	\$ 6,568
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 758	\$ 1,437	\$ 1,277
Total Net Fixed Assets	\$ -	\$ 83,769	\$ 270,120	\$ 464,966	\$ 627,953	\$ 730,663	\$ 725,629
Working Capital							
Operating Expenses (from Sheet 2)	\$ 961	\$ 7,884	\$ 6,679	\$ 11,808	\$ 11,136	\$ 12,509	\$ 8,488
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	14%	14%
Working Capital Allowance	\$ 144	\$ 1,183	\$ 1,002	\$ 1,771	\$ 1,670	\$ 1,689	\$ 1,146
Incremental Smart Meter Rate Base	\$ 144	\$ 84,952	\$ 271,122	\$ 466,757	\$ 629,624	\$ 732,352	\$ 726,774
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ 10,845	\$ 18,670	\$ 25,185	\$ 29,294	\$ 29,071
Deemed Long Term Debt	\$ 87	\$ 50,971	\$ 151,828	\$ 261,384	\$ 352,589	\$ 410,117	\$ 406,994
Equity	\$ 58	\$ 33,981	\$ 108,449	\$ 186,703	\$ 251,849	\$ 292,941	\$ 290,710
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 144	\$ 84,952	\$ 271,122	\$ 466,757	\$ 629,624	\$ 732,352	\$ 726,774
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ 485	\$ 835	\$ 1,126	\$ 721	\$ 715
Deemed Long Term Debt	\$ 5	\$ 3,007	\$ 9,262	\$ 15,944	\$ 21,508	\$ 23,746	\$ 23,565
Equity	\$ 5	\$ 3,058	\$ 9,294	\$ 16,000	\$ 21,584	\$ 28,064	\$ 27,850
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 10	\$ 6,066	\$ 19,040	\$ 32,779	\$ 44,217	\$ 52,530	\$ 52,130
Operating Expenses	\$ 961	\$ 7,884	\$ 6,679	\$ 11,808	\$ 11,136	\$ 12,509	\$ 8,488
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ 5,595	\$ 18,545	\$ 33,257	\$ 45,826	\$ 55,474	\$ 59,910
Computer Hardware	\$ -	\$ 396	\$ 1,033	\$ 1,274	\$ 2,491	\$ 3,708	\$ 3,708
Computer Software	\$ -	\$ 342	\$ 1,164	\$ 1,643	\$ 5,902	\$ 10,255	\$ 10,350
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 160	\$ 160
Total Amortization Expense in Year	\$ -	\$ 6,333	\$ 20,741	\$ 36,174	\$ 54,299	\$ 69,596	\$ 74,127
Incremental Revenue Requirement before Taxes/PILs	\$ 972	\$ 20,283	\$ 46,461	\$ 80,762	\$ 109,652	\$ 134,636	\$ 134,745
Calculation of Taxable Income							
Incremental Operating Expenses	\$ 961	\$ 7,884	\$ 6,679	\$ 11,808	\$ 11,136	\$ 12,509	\$ 8,488
Amortization Expense	\$ -	\$ 6,333	\$ 20,741	\$ 36,174	\$ 54,299	\$ 69,596	\$ 74,127
Interest Expense	\$ 5	\$ 3,007	\$ 9,746	\$ 16,779	\$ 22,634	\$ 24,466	\$ 24,280
Net Income for Taxes/PILs	\$ 5	\$ 3,058	\$ 9,294	\$ 16,000	\$ 21,584	\$ 28,064	\$ 27,850
Grossed-up Taxes/PILs (from Sheet 7)	\$ 2.94	\$ 956.28	\$ 3,089.25	\$ 6,845.61	\$ 6,907.44	\$ 9,537.22	\$ 12,961.68
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 975	\$ 21,239	\$ 49,550	\$ 87,607	\$ 116,560	\$ 144,173	\$ 147,707



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	\$ -	\$ -	\$ 161,148.98	\$ 360,044.45	\$ 543,156.14	\$ 649,792.83	\$ 725,573.18
Capital Additions	\$ -	\$ 167,863.52	\$ 220,611.86	\$ 220,745.05	\$ 156,342.89	\$ 133,087.27	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 167,863.52	\$ 381,760.84	\$ 580,789.50	\$ 699,499.03	\$ 782,880.10	\$ 725,573.18
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 83,931.76	\$ 110,305.93	\$ 110,372.52	\$ 78,171.45	\$ 66,543.64	\$ -
Reduced UCC	\$ -	\$ 83,931.76	\$ 271,454.91	\$ 470,416.98	\$ 621,327.59	\$ 716,336.46	\$ 725,573.18
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ 6,714.54	\$ 21,716.39	\$ 37,633.36	\$ 49,706.21	\$ 57,306.92	\$ 58,045.85
Closing UCC	\$ -	\$ 161,148.98	\$ 360,044.45	\$ 543,156.14	\$ 649,792.83	\$ 725,573.18	\$ 667,527.32

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	\$ -	\$ -	\$ 4,356.25	\$ 5,795.92	\$ 2,608.16	\$ 28,522.03	\$ 13,245.69
Capital Additions Computer Hardware	\$ -	\$ 3,955.47	\$ 2,414.10	\$ -	\$ 12,169.24	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ 2,053.16	\$ 2,876.38	\$ -	\$ 25,552.64	\$ 566.58	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ 6,008.62	\$ 9,646.74	\$ 5,795.92	\$ 40,330.04	\$ 29,088.62	\$ 13,245.69
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 3,004.31	\$ 2,645.24	\$ -	\$ 18,860.94	\$ 283.29	\$ -
Reduced UCC	\$ -	\$ 3,004.31	\$ 7,001.49	\$ 5,795.92	\$ 21,469.10	\$ 28,805.32	\$ 13,245.69
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ 1,652.37	\$ 3,850.82	\$ 3,187.75	\$ 11,808.01	\$ 15,842.93	\$ 7,285.13
Closing UCC	\$ -	\$ 4,356.25	\$ 5,795.92	\$ 2,608.16	\$ 28,522.03	\$ 13,245.69	\$ 5,960.56

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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,437.12	\$ 1,149.70
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,596.81	\$ -	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 1,596.81	\$ 1,437.12	\$ 1,149.70
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 798.40	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 798.40	\$ 1,437.12	\$ 1,149.70
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 159.68	\$ 287.42	\$ 229.94
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,437.12	\$ 1,149.70	\$ 919.76



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	\$ 5.19	\$ 3,058.27	\$ 9,294.05	\$ 16,000.44	\$ 21,583.50	\$ 28,063.73	\$ 27,850.00
Amortization	\$ -	\$ 6,333.19	\$ 20,740.92	\$ 36,173.62	\$ 54,298.76	\$ 69,596.40	\$ 74,127.07
CCA - Smart Meters	\$ -	\$ 6,714.54	\$ 21,716.39	\$ 37,633.36	\$ 49,706.21	\$ 57,306.92	\$ 58,045.85
CCA - Computers	\$ -	\$ 1,652.37	\$ 3,850.82	\$ 3,187.75	\$ 11,808.01	\$ 15,842.93	\$ 7,285.13
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 159.68	\$ 287.42	\$ 229.94
Change in taxable income	\$ 5.19	\$ 1,024.55	\$ 4,467.75	\$ 11,352.95	\$ 14,208.36	\$ 24,222.86	\$ 36,416.14
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	\$ 1.88	\$ 370.07	\$ 1,496.70	\$ 3,746.47	\$ 4,404.59	\$ 6,842.96	\$ 9,559.24
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ 162,268.07	\$ 364,335.30	\$ 551,823.83	\$ 662,340.59	\$ 739,954.06	\$ 680,044.02
Computer Hardware	\$ -	\$ 3,559.92	\$ 4,941.52	\$ 3,667.61	\$ 13,346.01	\$ 9,638.25	\$ 5,930.48
Computer Software (Including Application Software)	\$ -	\$ 1,710.96	\$ 3,423.56	\$ 1,780.38	\$ 21,431.07	\$ 11,742.50	\$ 1,392.91
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,516.96	\$ 1,357.28	\$ 1,197.60
Rate Base	\$ -	\$ 167,538.95	\$ 372,700.39	\$ 557,271.82	\$ 698,634.63	\$ 762,692.09	\$ 688,565.02
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ 167,538.95	\$ 372,700.39	\$ 557,271.82	\$ 698,634.63	\$ 762,692.09	\$ 688,565.02
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)	\$ -	\$ 376.96	\$ 838.58	\$ 1,253.86	\$ 523.98	\$ -	\$ -
Change in Income Taxes Payable	\$ 1.88	\$ 370.07	\$ 1,496.70	\$ 3,746.47	\$ 4,404.59	\$ 6,842.96	\$ 9,559.24
Change in OCT	\$ -	\$ 376.96	\$ 838.58	\$ 1,253.86	\$ 523.98	\$ -	\$ -
PILs	\$ 1.88	\$ 747.03	\$ 2,335.27	\$ 5,000.34	\$ 4,928.57	\$ 6,842.96	\$ 9,559.24
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	\$ 2.94	\$ 579.32	\$ 2,250.67	\$ 5,591.75	\$ 6,383.47	\$ 9,537.22	\$ 12,961.68
Change in OCT	\$ -	\$ 376.96	\$ 838.58	\$ 1,253.86	\$ 523.98	\$ -	\$ -
PILs	\$ 2.94	\$ 956.28	\$ 3,089.25	\$ 6,845.61	\$ 6,907.44	\$ 9,537.22	\$ 12,961.68



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	\$ -	\$ 892.39	4.14%	\$ -	\$ 892.39		\$ 0.39
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 892.39	\$ 922.59	4.14%	\$ 3.08	\$ 1,818.06		\$ 0.39
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 1,814.98	\$ 893.07	4.59%	\$ 6.94	\$ 2,714.99		\$ 0.39
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 2,708.05	\$ 893.83	4.59%	\$ 10.36	\$ 3,612.24		\$ 0.39
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 3,601.88	\$ 893.31	4.59%	\$ 13.78	\$ 4,508.97		\$ 0.39
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 4,495.19	\$ 801.45	4.59%	\$ 17.19	\$ 5,313.83		\$ 0.39
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 5,296.64	\$ 820.05	4.59%	\$ 20.26	\$ 6,136.95		\$ 0.39
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 6,116.69	\$ 866.55	4.59%	\$ 23.40	\$ 7,006.64	\$ 7,078.25	\$ 0.39
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 6,983.24	\$ 883.00	4.59%	\$ 26.71	\$ 7,892.95		\$ 0.39
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 7,866.24	\$ 862.63	4.59%	\$ 30.09	\$ 8,758.95		\$ 0.39
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 8,728.86	\$ 901.32	4.59%	\$ 33.39	\$ 9,663.58		\$ 0.39
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 9,630.19	\$ 876.16	4.59%	\$ 36.84	\$ 10,543.19		\$ 0.39
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 10,506.35	\$ 1,501.69	4.59%	\$ 40.19	\$ 12,048.23		\$ 0.82
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 12,008.04	\$ 1,564.84	4.59%	\$ 45.93	\$ 13,618.81		\$ 0.82
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 13,572.88	\$ 1,420.05	4.59%	\$ 51.92	\$ 15,044.85		\$ 0.82
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 14,992.93	\$ 1,631.87	4.59%	\$ 57.35	\$ 16,682.15		\$ 0.82
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 16,624.80	\$ 1,532.36	4.59%	\$ 63.59	\$ 18,220.75		\$ 0.82
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 18,157.16	\$ 1,547.59	5.14%	\$ 77.77	\$ 19,782.52		\$ 0.82
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 19,704.75	\$ 1,509.13	5.14%	\$ 84.40	\$ 21,298.28		\$ 0.82
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 21,213.88	\$ 1,578.66	5.14%	\$ 90.87	\$ 22,883.41	\$ 16,448.35	\$ 0.82
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 22,792.54	\$ 1,500.96	5.14%	\$ 97.63	\$ 24,391.13		\$ 0.82
2012 Q2		4.29%	Feb-08	2008	Q1	\$ 24,293.50	\$ 1,856.18	5.14%	\$ 104.06	\$ 26,253.74		\$ 0.82
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 26,149.68	\$ 1,738.07	5.14%	\$ 112.01	\$ 27,999.76		\$ 0.82
2012 Q4		4.29%	Apr-08	2008	Q2	\$ 27,887.75	\$ 1,771.09	4.08%	\$ 94.82	\$ 29,753.66		\$ 0.82
			May-08	2008	Q2	\$ 29,658.84	\$ 1,764.09	4.08%	\$ 100.84	\$ 31,523.77		\$ 0.82
			Jun-08	2008	Q2	\$ 31,422.93	\$ 1,793.69	4.08%	\$ 106.84	\$ 33,323.46		\$ 0.82
			Jul-08	2008	Q3	\$ 33,216.62	\$ 1,681.28	3.35%	\$ 92.73	\$ 34,990.63		\$ 0.82
			Aug-08	2008	Q3	\$ 34,897.90	\$ 1,861.86	3.35%	\$ 97.42	\$ 36,857.18		\$ 0.82
			Sep-08	2008	Q3	\$ 36,759.76	\$ 1,752.47	3.35%	\$ 102.62	\$ 38,614.85		\$ 0.82
			Oct-08	2008	Q4	\$ 38,512.23	\$ 1,747.71	3.35%	\$ 107.51	\$ 40,367.45		\$ 0.82
			Nov-08	2008	Q4	\$ 40,259.94	\$ 1,785.89	3.35%	\$ 112.39	\$ 42,158.22		\$ 0.82
			Dec-08	2008	Q4	\$ 42,045.83	\$ 1,774.97	3.35%	\$ 117.38	\$ 43,938.18	\$ 22,274.51	\$ 0.82
			Jan-09	2009	Q1	\$ 43,820.80	\$ 1,841.79	2.45%	\$ 89.47	\$ 45,752.06		\$ 0.82
			Feb-09	2009	Q1	\$ 45,662.59	\$ 1,821.80	2.45%	\$ 93.23	\$ 47,577.62		\$ 0.82
			Mar-09	2009	Q1	\$ 47,484.39	\$ 1,691.25	2.45%	\$ 96.95	\$ 49,272.59		\$ 0.82
			Apr-09	2009	Q2	\$ 49,175.64	\$ 1,496.27	1.00%	\$ 40.98	\$ 50,712.89		\$ 0.82
			May-09	2009	Q2	\$ 50,671.91	\$ 1,827.56	1.00%	\$ 42.23	\$ 52,541.70		\$ 0.82
			Jun-09	2009	Q2	\$ 52,499.47	\$ 1,795.30	1.00%	\$ 43.75	\$ 54,338.52		\$ 0.82
			Jul-09	2009	Q3	\$ 54,294.77	\$ 1,781.21	0.55%	\$ 24.89	\$ 56,100.87		\$ 0.82
			Aug-09	2009	Q3	\$ 56,075.98	\$ 1,715.03	0.55%	\$ 25.70	\$ 57,816.71		\$ 0.82
			Sep-09	2009	Q3	\$ 57,791.01	\$ 1,884.97	0.55%	\$ 26.49	\$ 59,702.47		\$ 0.82
			Oct-09	2009	Q4	\$ 59,675.98	\$ 1,699.26	0.55%	\$ 27.35	\$ 61,402.59		\$ 0.82
			Nov-09	2009	Q4	\$ 61,375.24	\$ 3,436.28	0.55%	\$ 28.13	\$ 64,839.65		\$ 1.56
			Dec-09	2009	Q4	\$ 64,811.52	\$ 3,598.46	0.55%	\$ 29.71	\$ 68,439.69	\$ 25,158.06	\$ 1.56
			Jan-10	2010	Q1	\$ 68,409.98	\$ 3,556.40	0.55%	\$ 31.35	\$ 71,997.73		\$ 1.56
			Feb-10	2010	Q1	\$ 71,966.38	\$ 3,534.26	0.55%	\$ 32.98	\$ 75,533.62		\$ 1.56
			Mar-10	2010	Q1	\$ 75,500.64	\$ 3,474.14	0.55%	\$ 34.60	\$ 79,009.38		\$ 1.56
			Apr-10	2010	Q2	\$ 78,974.78	\$ 3,265.50	0.55%	\$ 36.20	\$ 82,276.48		\$ 1.56
			May-10	2010	Q2	\$ 82,240.28	\$ 3,681.30	0.55%	\$ 37.69	\$ 85,959.27		\$ 1.56
			Jun-10	2010	Q2	\$ 85,921.58	\$ 3,307.36	0.55%	\$ 39.38	\$ 89,268.32		\$ 1.56
			Jul-10	2010	Q3	\$ 89,228.94	\$ 3,483.14	0.89%	\$ 66.18	\$ 92,778.26		\$ 1.56
			Aug-10	2010	Q3	\$ 92,712.08	\$ 3,361.93	0.89%	\$ 68.76	\$ 96,142.77		\$ 1.56
			Sep-10	2010	Q3	\$ 96,074.01	\$ 3,709.98	0.89%	\$ 71.25	\$ 99,855.24		\$ 1.56
			Oct-10	2010	Q4	\$ 99,783.99	\$ 3,340.95	1.20%	\$ 99.78	\$ 103,224.72		\$ 1.56
			Nov-10	2010	Q4	\$ 103,124.94	\$ 3,560.47	1.20%	\$ 103.12	\$ 106,788.53		\$ 1.56
			Dec-10	2010	Q4	\$ 106,685.41	\$ 3,536.55	1.20%	\$ 106.69	\$ 110,328.65	\$ 42,539.96	\$ 1.56
			Jan-11	2011	Q1	\$ 110,221.96	\$ 3,594.40	1.47%	\$ 135.02	\$ 113,951.38		\$ 1.56
			Feb-11	2011	Q1	\$ 113,816.36	\$ 3,730.59	1.47%	\$ 139.43	\$ 117,686.38		\$ 1.56
			Mar-11	2011	Q1	\$ 117,546.95	\$ 4,850.08	1.47%	\$ 144.00	\$ 122,541.03		\$ 2.14
			Apr-11	2011	Q2	\$ 122,397.03	\$ 4,802.50	1.47%	\$ 149.94	\$ 127,349.47		\$ 2.14
			May-11	2011	Q2	\$ 127,199.53	\$ 5,037.52	1.47%	\$ 155.82	\$ 132,392.87		\$ 2.14
			Jun-11	2011	Q2	\$ 132,237.05	\$ 4,725.36	1.47%	\$ 161.99	\$ 137,124.40		\$ 2.14
			Jul-11	2011	Q3	\$ 136,962.41	\$ 5,032.59	1.47%	\$ 167.78	\$ 142,162.78		\$ 2.14
			Aug-11	2011	Q3	\$ 141,995.00	\$ 4,240.58	1.47%	\$ 173.94	\$ 146,409.52		\$ 2.14
			Sep-11	2011	Q3	\$ 146,235.58	\$ 4,066.54	1.47%	\$ 179.14	\$ 150,481.26		\$ 2.14
			Oct-11	2011	Q4	\$ 150,302.12	\$ 4,877.67	1.47%	\$ 184.12	\$ 155,363.91		\$ 2.14
			Nov-11	2011	Q4	\$ 155,179.79	\$ 4,877.67	1.47%	\$ 190.10	\$ 160,247.57		\$ 2.14
			Dec-11	2011	Q4	\$ 160,057.47	\$ 4,877.67	1.47%	\$ 196.07	\$ 165,131.21	\$ 56,690.53	\$ 2.14
			Jan-12	2012	Q1	\$ 164,935.14	\$ 4,877.67	1.47%	\$ 202.05	\$ 170,014.86		\$ 2.14
			Feb-12	2012	Q1	\$ 169,812.81	\$ 4,877.67	1.47%	\$ 208.02	\$ 174,898.51		\$ 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	\$ 174,690.49	\$ 4,877.67	1.47%	\$ 214.00	\$ 179,782.16		\$ 2.14
			Apr-12	2012	Q2	\$ 179,568.16	\$ 4,877.67	1.47%	\$ 219.97	\$ 184,665.81		\$ 2.14
			May-12	2012	Q2	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Jun-12	2012	Q2	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Jul-12	2012	Q3	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Aug-12	2012	Q3	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Sep-12	2012	Q3	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Oct-12	2012	Q4	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Nov-12	2012	Q4	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84		
			Dec-12	2012	Q4	\$ 184,445.84		0.00%	\$ -	\$ 184,445.84	\$ 20,354.74	
Total Funding Adder Revenues Collected							\$ 184,445.84		\$ 6,098.56	\$ 190,544.40	\$ 190,544.40	



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	-	\$ 961.30	\$ -	961.30	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	961.30	\$ 358.28	\$ 3.25	1,322.84	4.59%	3.68	3.68
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	1,322.84	\$ 629.21	\$ 80.82	2,032.87	4.59%	5.06	8.74
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	2,032.87	\$ 505.27	\$ 235.12	2,773.27	4.59%	7.78	16.51
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	2,773.27	\$ 308.94	\$ 308.07	3,390.28	4.59%	10.61	27.12
2010 Q1	0.55%	4.34%	May-07	2007	Q2	3,390.28	\$ 499.32	\$ 485.91	4,375.52	4.59%	12.97	40.09
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	4,375.52	\$ 495.61	\$ 582.99	5,454.11	4.59%	16.74	56.82
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	5,454.11	\$ 867.37	\$ 786.33	7,107.82	4.59%	20.86	77.69
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	7,107.82	\$ 833.67	\$ 793.44	8,734.94	4.59%	27.19	104.87
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	8,734.94	\$ 971.76	\$ 888.64	10,595.33	4.59%	33.41	138.29
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	10,595.33	\$ 801.13	\$ 982.13	12,378.59	5.14%	45.38	183.67
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	12,378.59	\$ 499.88	\$ 1,280.67	14,159.14	5.14%	53.02	236.69
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	14,159.14	\$ 1,113.32	\$ 1,438.64	16,711.10	5.14%	60.65	297.34
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	16,711.10	\$ 363.12	\$ 840.28	17,914.50	5.14%	71.58	368.92
2012 Q2	0.00%	4.29%	Feb-08	2008	Q1	17,914.50	\$ 371.97	\$ 1,609.08	19,895.55	5.14%	76.73	445.65
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	19,895.55	\$ 676.31	\$ 1,639.98	22,211.84	5.14%	85.22	530.87
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	22,211.84	\$ 630.05	\$ 1,798.44	24,640.33	4.08%	75.52	606.39
			May-08	2008	Q2	24,640.33	\$ 346.11	\$ 2,032.15	27,018.60	4.08%	83.78	690.17
			Jun-08	2008	Q2	27,018.60	\$ 1,690.14	\$ 2,192.59	30,901.33	4.08%	91.86	782.03
			Jul-08	2008	Q3	30,901.33	\$ 449.49	\$ 2,243.26	33,594.08	3.35%	86.27	868.30
			Aug-08	2008	Q3	33,594.08	\$ 643.65	\$ 2,330.68	36,568.41	3.35%	93.78	962.08
			Sep-08	2008	Q3	36,568.41	\$ 616.89	\$ 2,533.32	38,484.84	3.35%	102.09	1,064.17
			Oct-08	2008	Q4	38,484.84	\$ 531.07	\$ 2,568.16	41,584.06	3.35%	107.44	1,171.60
			Nov-08	2008	Q4	41,584.06	\$ 535.75	\$ 639.93	42,759.74	3.35%	116.09	1,287.69
			Dec-08	2008	Q4	42,759.74	\$ 1,058.62	\$ 5,331.33	49,149.70	3.35%	119.37	1,407.06
			Jan-09	2009	Q1	49,149.70	\$ 217.83	\$ 3,371.11	52,738.63	2.45%	100.35	1,507.41
			Feb-09	2009	Q1	52,738.63	\$ 427.81	\$ 3,371.72	56,538.17	2.45%	107.67	1,615.09
			Mar-09	2009	Q1	56,538.17	\$ 647.68	\$ 4,729.21	61,915.06	2.45%	115.43	1,730.52
			Apr-09	2009	Q2	61,915.06	\$ 709.88	\$ 3,760.63	66,385.58	1.00%	51.60	1,782.11
			May-09	2009	Q2	66,385.58	\$ 831.59	\$ 4,133.13	71,350.29	1.00%	55.32	1,837.44
			Jun-09	2009	Q2	71,350.29	\$ 1,103.85	\$ 4,414.88	76,869.03	1.00%	59.46	1,896.89
			Jul-09	2009	Q3	76,869.03	\$ 1,246.08	\$ 4,546.32	82,661.43	0.55%	35.23	1,932.13
			Aug-09	2009	Q3	82,661.43	\$ 591.08	\$ 4,997.29	88,249.80	0.55%	37.89	1,970.01
			Sep-09	2009	Q3	88,249.80	\$ 1,222.56	\$ 4,776.51	94,248.86	0.55%	40.45	2,010.46
			Oct-09	2009	Q4	94,248.86	\$ 1,040.34	\$ 5,082.36	100,371.56	0.55%	43.20	2,053.66
			Nov-09	2009	Q4	100,371.56	\$ 1,781.53	\$ 5,154.49	107,307.59	0.55%	46.00	2,099.66
			Dec-09	2009	Q4	107,307.59	\$ 1,988.22	\$ 3,844.25	113,140.06	0.55%	49.18	2,148.84
			Jan-10	2010	Q1	113,140.06	\$ 1,332.74	\$ 5,232.10	119,704.90	0.55%	51.86	2,200.70
			Feb-10	2010	Q1	119,704.90	\$ 892.47	\$ 10,581.38	131,178.75	0.55%	54.86	2,255.56
			Mar-10	2010	Q1	131,178.75	\$ 602.47	\$ 5,488.95	137,270.17	0.55%	60.12	2,315.69
			Apr-10	2010	Q2	137,270.17	\$ 62.25	\$ 4,836.44	142,044.36	0.55%	62.92	2,378.60
			May-10	2010	Q2	142,044.36	\$ 167.22	\$ 10,036.22	151,913.36	0.55%	65.10	2,443.71
			Jun-10	2010	Q2	151,913.36	\$ 395.52	\$ 4,898.02	157,206.90	0.55%	69.63	2,513.33
			Jul-10	2010	Q3	157,206.90	\$ 1,110.14	\$ 6,636.41	164,953.46	0.89%	116.60	2,629.93
			Aug-10	2010	Q3	164,953.46	\$ 4,235.33	\$ 6,636.41	175,825.19	0.89%	122.34	2,752.27
			Sep-10	2010	Q3	175,825.19	\$ 483.58	\$ 7,913.87	184,222.64	0.89%	130.40	2,882.67
			Oct-10	2010	Q4	184,222.64	\$ 647.29	\$ 7,062.23	191,932.16	1.20%	184.22	3,066.90
			Nov-10	2010	Q4	191,932.16	\$ 419.82	\$ 7,062.23	199,414.21	1.20%	191.93	3,258.83
			Dec-10	2010	Q4	199,414.21	\$ 1,246.55	\$ 3,319.33	203,980.10	1.20%	199.41	3,458.24
			Jan-11	2011	Q1	203,980.10	\$ 677.76	\$ 6,594.37	211,252.22	1.47%	249.88	3,708.12
			Feb-11	2011	Q1	211,252.22	\$ 1,942.58	\$ 6,664.11	219,858.91	1.47%	258.78	3,966.90
			Mar-11	2011	Q1	219,858.91	\$ 787.72	\$ 6,829.91	227,476.54	1.47%	269.33	4,236.23
			Apr-11	2011	Q2	227,476.54	\$ 936.13	\$ 6,657.90	235,070.57	1.47%	278.66	4,514.89
			May-11	2011	Q2	235,070.57	\$ 740.65	\$ 6,985.66	242,796.89	1.47%	287.96	4,802.85
			Jun-11	2011	Q2	242,796.89	\$ 816.61	\$ 6,702.43	250,315.92	1.47%	297.43	5,100.28
			Jul-11	2011	Q3	250,315.92	\$ 669.74	\$ 6,706.70	257,692.37	1.47%	306.64	5,406.91
			Aug-11	2011	Q3	257,692.37	\$ 824.10	\$ 5,884.70	264,401.17	1.47%	315.67	5,722.59
			Sep-11	2011	Q3	264,401.17	\$ 1,676.81	\$ 5,365.57	267,498.98	1.47%	323.89	6,046.48
			Oct-11	2011	Q4	267,498.98	\$ 813.40	\$ 5,973.18	278,522.47	1.47%	319.37	6,365.85
			Nov-11	2011	Q4	278,522.47	\$ 1,311.75	\$ 9,711.73	289,545.96	1.47%	327.69	6,693.54
			Dec-11	2011	Q4	289,545.96	\$ 707.34	\$ 6,177.24	296,430.54	1.47%	341.19	7,034.73
			Jan-12	2012	Q1	296,430.54	\$ 707.34	\$ 6,177.24	303,315.12	1.47%	354.69	7,389.42
			Feb-12	2012	Q1	303,315.12	\$ 707.34	\$ 6,177.24	310,199.71	1.47%	363.13	7,752.55
			Mar-12	2012	Q1	310,199.71	\$ 707.34	\$ 6,177.24	317,084.29	1.47%	371.56	8,124.11
			Apr-12	2012	Q2	317,084.29	\$ -	\$ -	317,084.29	0.00%	379.99	8,504.10
			May-12	2012	Q2	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Jun-12	2012	Q2	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Jul-12	2012	Q3	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Aug-12	2012	Q3	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Sep-12	2012	Q3	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Oct-12	2012	Q4	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Nov-12	2012	Q4	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
			Dec-12	2012	Q4	317,084.29	\$ -	\$ -	317,084.29	0.00%	-	8,504.10
						\$	53,807.70	\$ 263,276.59	\$ 317,084.29			



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	\$ 961.30	\$ -	\$ 961.30	\$ 480.65	4.37%	\$ 20.98
2007	\$ 7,883.76	\$ 6,333.19	\$ 15,178.25	\$ 8,069.78	4.73%	\$ 381.50
2008	\$ 6,679.39	\$ 20,740.92	\$ 42,598.55	\$ 28,888.40	3.98%	\$ 1,149.76
2009	\$ 11,808.46	\$ 36,173.62	\$ 90,580.63	\$ 66,589.59	1.14%	\$ 757.46
2010	\$ 11,136.44	\$ 54,298.76	\$ 156,015.83	\$ 123,298.23	0.80%	\$ 983.30
2011	\$ 12,509.00	\$ 69,596.40	\$ 238,121.22	\$ 197,068.52	1.47%	\$ 2,896.91
2012	\$ 8,488.07	\$ 74,127.07	\$ 320,736.35	\$ 279,428.79	1.47%	\$ 4,107.60
Cumulative Interest to 2011						\$ 6,189.90
Cumulative Interest to 2012						\$ 10,297.51



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 decision will be filed 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 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

X Smart Meter Funding Adder (SMFA)

X Smart Meter Disposition Rider (SMDR)

<input checked="" type="checkbox"/>	Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)
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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)	\$ 974.53	\$ 21,238.80	\$ 49,549.88	\$ 87,607.13	\$ 116,559.85	\$ 144,172.76	\$ 147,706.89	\$ 567,809.84
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ 297.34	\$ 1,109.73	\$ 741.78	\$ 1,309.40	\$ 3,576.48		\$ 7,034.73
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ 297.34	\$ 1,109.73	\$ 741.78	\$ 1,309.40	\$ 3,576.48		\$ 7,034.73
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ 6,983.24	\$ 15,809.30	\$ 21,028.26	\$ 24,589.18	\$ 41,811.98	\$ 54,713.18	\$ 19,510.70	\$ 184,445.84
SMFA Interest (from Sheet 8)	\$ 95.01	\$ 639.05	\$ 1,246.25	\$ 568.88	\$ 727.98	\$ 1,977.35	\$ 844.04	\$ 6,098.56
Net Deferred Revenue Requirement	-\$ 6,103.72	\$ 5,087.79	\$ 28,385.09	\$ 63,190.85	\$ 75,329.29	\$ 91,058.72	\$ 127,352.15	\$ 384,300.18
Number of Metered Customers (average for 2012 test year)	2281							

Calculation of Smart Meter Funding Adder (per metered customer per month)

Net Deferred Revenues from 2006 to April 30, 2012	\$	384,300.18
SMFA	May 1, 2012 to April 30, 201X	\$ 4.65
Check: Forecasted SMFA Revenues for 2012 test year	\$	127,279.80

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	\$	427,137.68	
SMFA Revenues collected from 2006 to 2012 test year (inclusive)	\$	190,544.40	
Plus Simple Interest on SMFA Revenues			
Net Deferred Revenue Requirement	\$	236,593.29	
SMDR			} Match
May 1, 2012 to April 30, 201X	\$	8.64	
Check: Forecasted SMDR Revenues	\$	236,494.08	

Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)

Incremental Revenue Requirement for 2012	\$	147,706.89	} Match
SMIRR	\$	5.40	
Check: Forecasted SMIRR Revenues	\$	147,808.80	

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 6

Reference: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Cost Beyond Minimum Functionality, Page 17

Preamble: The Guideline indicates that costs for TOU rate implementation, CIS upgrades, web presentation, etc. may be recoverable and that in its application a distributor should show how these costs are required for its smart meter deployment program and how they are incremental to the distributor’s normal operating costs. Sheet 2 of the Smart Meter Model shows audited costs under Capital Costs Beyond Minimum Functionality (category 1.6.3) & OM&A Costs Beyond Minimum Functionality (category 2.6.3) for 2007, 2008, 2010 and 2011.

a) Please demonstrate how these costs are incremental to normal operating costs.

Response:

a) As an early adopter of Smart Meters and one of the first utilities in Ontario to begin billing customers on Time-of-Use rates, Horizon Utilities incurred incremental costs relating to Customer Information System (“CIS”) upgrades, web presentment enhancements and integration to the provincial MDM/R that were outside of normal operating costs. These costs, as referenced above, and found in Sheet 2 of the Smart Meter Model, version 2.17 (categories 1.6.3 and 2.6.3) were not included in Horizon Utilities’ 2008 or 2011 Cost of Service Applications (EB-2007-0697 and EB-2010-0131, respectively), as part of Customer Service expenses. Annual Customer Service operating expenses averaged approximately \$6.83 million (Miscellaneous Customer Accounts Expenses OEB account number 5340) over the three year period 2009, 2010, and 2011.

Horizon Utilities' Customer Service department was primarily responsible for the implementation of mandatory Time-of-Use rates for its customers. Customer Service, as noted in Horizon Utilities' 2011 Cost of Service Application (EB-2010-0131) at Exhibit 4, Tab 2, Schedule 3, Page 4, is responsible for the customer care activities for approximately 235,000 customers. These activities include conventional meter reading, billing, call centre, collections and other related functions. Included in the Customer Service budget are costs for activities such as:

- responding to normal customer call volumes;
- answering customer correspondence with ten days;
- obtaining and validating timely conventional meter reads;
- rendering approximately 1.6 million electricity bills per year including specialized billing scenarios for Feed-in Tariff ("FIT") and microFIT customers;
- maintaining the existing CIS;
- performing payment processing;
- mailing of bills and notices;
- managing collections processes to maximize collections and minimize bad debt and risk for the corporation; and
- investing in employees through training to competently perform their required tasks.

Horizon Utilities' previous rate applications, including its most recent Cost of Service Application (EB-2010-0131), did not include project or operational costs related to the implementation of items such as Time-of-Use rates, CIS upgrades, MDM/R integration, web presentation and the other items covered in category 1.6.3 and category 2.6.3 and included in the Application. In Horizon Utilities' 2011 Cost of Service Application proceeding (EB-2010-0131), at Exhibit 2, Tab 1, Schedule 1, Page 1 Horizon Utilities stated that: "Horizon Utilities includes in net fixed assets those distribution assets that

are associated with activities that enable the conveyance of electricity for distribution purposes. Non-distribution assets such as smart meter assets are not included.” Further, in response to Interrogatory # 6 from the Consumers Council of Canada in the Cost of Service Application proceeding (EB-2010-0131), Horizon Utilities stated “Horizon Utilities has excluded expenditures related to its Smart Meter program”. These expenditures were, and continue to be, incremental to normal operating costs.

Horizon Utilities was required, pursuant to O. Reg. 393/07, to register installed Residential and GS<50 kW smart meters with the MDM/R. Interacting with the provincial MDM/R was not a business as usual function, but rather a completely new activity for the department and the utility. Significant resources were dedicated to developing, testing and integrating Horizon Utilities’ internal systems and processes with the provincial MDM/R. Without the implementation of TOU rates, integration with the provincial MDM/R would not have been required or undertaken by Horizon Utilities.

Horizon Utilities’ CIS upgrade costs as included in the Model were solely required for the implementation of TOU rates. The Horizon Utilities CIS did not have the functionality required to bill the TOU rate structure or perform variance analysis with the large volumes of transactional TOU data or between multiple systems. Without the implementation of TOU rates, these CIS upgrade activities would not have been required or undertaken by Horizon Utilities.

Horizon Utilities began providing Smart Meter web presentment services to customers in 2008. The web presentment data provides customers with timely information and the visibility they require to better understand their usage patterns to make informed decisions to manage their own electricity costs. Horizon Utilities’ web presentment is a valuable customer educational tool which has received positive feedback. Without Smart Meters and the implementation of TOU rates, Horizon Utilities would not have implemented web presentment to provide customers with visibility into their hourly usage patterns. This additional Smart Meter web presentment tool would not have been required or developed.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: March 7, 2012

Question 7

Reference: 2.0 Manager’s Summary, Page 21

Preamble: The deployment of smart meters and the implementation of TOU rates have required additional incremental human resources.

- a) Page 20, Table 6 – Please provide a breakdown of the Customer Communication, Change Management and Administrative costs.
- b) Page 21 – Please advise of the name and cost of the external project management firm retained in 2009 to assist internal staff to manage the project. Please advise if this firm continues to provide assistance.
- c) Page 21 - Please confirm the titles of the three new permanent positions created in 2010 and annual salary costs including benefits to manage the meter data collection process through AMI.
- d) Page 21 – Please confirm the annual cost of the five full time contract staff to support the expected escalation in call volumes. Please discuss the escalation in call volumes and advise of the length of these contracts.
- e) Please provide a breakdown of the total number and cost of additional incremental permanent and contract staff hired by year for the deployment of smart meters.
- f) Page 23 - Please advise of the staffing arrangements for the TOU Community Road Show.
- g) Page 30 – Please provide a copy of the customer survey. Please advise of the number of customers provided with a survey and the number of surveys completed.

Response:

- a) The following table provides a further breakdown of the costs included in Customer Communication, Change Management, and Administration costs:

Cost Breakdown:	Customer Communication	Change Management	Administration Costs	TOTAL
Community Relations	\$ 233,765	\$ 15,092	\$ -	\$ 248,857
Labour and Benefits	\$ 217,088	\$ 95,168	\$ 335	\$ 312,592
Outside Services	\$ 76,151	\$ 67,988	\$ 200,491	\$ 344,630
Travel, Memberships, Meals & Accommodations	\$ 58,515	\$ 27,093	\$ -	\$ 85,609
Postage, Office & Safety Supplies	\$ 10,508	\$ 1,286	\$ 6,258	\$ 18,052
Data Communications	\$ 3,791	\$ 14,184	\$ 20,745	\$ 38,720
Repairs & Maintenance	\$ -	\$ -	\$ 64,553	\$ 64,553
IT Maintenance Contracts/Software	\$ -	\$ -	\$ 46,661	\$ 46,661
Training/Change Management Cost	\$ -	\$ 66,052	\$ -	\$ 66,052
TOTAL	\$ 599,818	\$ 286,864	\$ 339,043	\$ 1,225,725

The most significant costs included in these categories are community relations (communication materials to educate customers regarding Smart Meters), labour and benefit costs, and outside service contract costs as described below. These costs were necessary for the successful roll-out of Smart Meters and implementation of Time-of-Use rates. The following is an explanation of the costs in the above-noted categories included in Table 6 on page 20 of the Application.

Customer Communication category:

- Community relations - costs related to Smart Meters and Time-of-Use Customer Communication Plan print materials as described in the Application on page 21;
- Labour and benefits - costs related to the Time-of-Use Community Road Show staff as described beginning on page 21 of the Application.

Change Management category:

- Labour and benefits - costs related to the creation or modification of Smart Meter related business processes, such as the meter installation and the automation of uploading the installation files to the back office system, which are noted on page 15 of the Application;
- Training/change management costs - includes costs primarily related to business process documentation and training materials related to the management of Smart Meter data or Time-of-Use billing for staff.

Administration Costs category:

- Outside services – costs primarily related to legal fees and contract management for the development and execution of the agreements with Elster, Olameter Inc., and Ozz Electric Inc., as noted on page 16 of the Application;
- Repairs and Maintenance – refers to costs related to the maintenance and repairs of Smart Meter collectors and repairs required to customer-owned equipment that was discovered to be faulty or damaged during the installation of a Smart Meter. These costs are captured in the Administration Costs category of Table 6 and the Smart Meter Model, version 2.17 (Appendix 2). It may have been more appropriate to reflect these costs in the Smart Meter Maintenance and Collector Maintenance categories of Table 6 and the Smart Meter Model, version 2.17 (Appendix 2), but this does not affect the overall amounts being requested in the Application;
- IT maintenance contracts/software - includes costs of third-party hardware and software purchases and maintenance related to the business process noted above in the Change Management category and meter reading data systems.

b) Bohdex Client Innovations was retained for project management at a cost of \$69,950. This assistance was not required beyond early 2010.

c) Please refer to Horizon Utilities' response to Board Staff Interrogatory # 5.

d) The annual costs for the five full-time equivalent contract Customer Service Representatives was \$157,730. The contracts were six months to twelve months in length from December 2009 to June 2011, while customers were migrating to Time-of-Use rates.

Customer call volumes (calls answered) increased by approximately 5% from 2008 before the implementation of Time-of-Use rates to 2010 when migrations were at their peak.

During this time period, customer call volumes were as follows:

	2008	2009	2010	2011
Call Volumes	304,800	312,500	319,500	299,500

In particular, Horizon Utilities experienced higher than normal call volumes between June 2010 and November 2010, with a 5-year record high of 31,715 calls per month received in the Customer Care department in September 2010. These calls were the result of higher than usual customer consumption from a hot summer and changes in rates due to the implementation of Time-of-Use pricing. Customers questioned the accuracy of their Smart Meters; required assistance to understand their consumption as reported by their Smart Meters; and requested support in understanding the impacts of Time-of-Use rates.

In addition to the increase in call volumes from the implementation of Time-of-Use rates, the average length of customer calls increased with the implementation of Time-of-Use rates. In 2009, the average customer call length was 182 seconds. Horizon Utilities customers began receiving Time-of-Use bills in early 2010 and this migration of customers continued through to mid-2011. The average length of customer calls was 189 seconds in 2010 and 198 seconds in 2011, an increase of approximately 9% over 2008 call lengths.

During this same time period, the percentage of abandoned customer calls also increased from 3.3% in 2009 to 3.6% in 2010 to 4.7% in 2011.

The five full time equivalent Customer Service Representatives were necessary to ensure that Horizon Utilities' customers were provided with a continued satisfactory level of service availability during a period of significant change.

e) The following table reflects the cost of additional incremental permanent and contract staff hired by year for the deployment of Smart Meters and the implementation of Time-of-Use rates, included as part of operating expenses:

INCREMENTAL HUMAN RESOURCES BY CATEGORY	2009	2010	2011	Total
New Permanent Positions	\$ 288,841	\$ 320,243	\$ 333,469	\$ 942,553
Smart Meter Deployment Incremental Backfill	\$ 177,237	\$ 54,904	\$ 41,692	\$ 273,833
Customer Care Contract Employees	\$ 11,206	\$ 157,735	\$ 92,857	\$ 261,798
Time-of-Use Community Road Show Contract Employees	\$ 20,762	\$ 72,212	\$ 98,337	\$ 191,311
TOTAL	\$ 498,045	\$ 605,094	\$ 566,355	\$ 1,669,495

As described in Section 5.2, Page 21 of the Application, new permanent full-time employees and contract staff were required to manage the deployment of Smart Meters, manage the AMI and meter data collection process, participate in the Horizon Utilities Time-of-Use Community Road Show, and provide additional support as Customer Service Representatives in the Customer Care department.

The following is a summary of the total number of incremental full-time and contract staff by category:

As noted in response to part c), three new permanent full-time positions were added.

The Smart Meter Deployment Incremental Backfill consists of 2 full-time equivalent employees in 2009, reducing to 0.5 full-time equivalents in 2011, to manage the deployment of Smart Meters and troubleshoot meter communication issues.

The Customer Care Contract Employees are discussed in part d). The equivalent of five full-time employees was retained throughout the timeframe of customer migrations to Time-of-Use rates.

The Time-of-Use Community Road Show Contract Employees were engaged part-time. There was a team lead and a maximum of four team members. See section (f) below for a further discussion of these positions.

f) Horizon Utilities employed five part-time contract staff comprised of one team lead and four team members to organize and staff the Time-of-Use Community Road Show. Depending on the event schedule, the team generally worked between zero and an average of 24-hours per week. The team members were paid \$18.03 per hour, including 4% vacation pay and were not entitled to benefits. The need for these positions ended in March 2011.

g) Horizon Utilities engaged Northstar Research Partners to conduct a series of three

customer surveys related to Horizon Utilities' Smart Metering and Time-of-Use communications messaging. The surveys were Computer-Assisted Telephone Interviews ("CATI") and designed to target approximately 200 customers at different stages of the communications campaign.

The three surveys were completed in March, April, and July 2010. For the March survey, 3,699 customer telephone numbers were dialed to obtain 204 survey respondents. The April survey had 3,184 customer telephone numbers dialed to obtain 200 survey respondents; the July survey had 2,424 customer telephone numbers dialed to obtain 202 customer respondents. It is important to note that the overall number of telephone numbers dialed includes lines that were busy, lines where there was no answer, lines where there was an answering machine, and lines where the person who answered was not interested in responding to a survey.

The survey questions are attached to Horizon Utilities' response to this interrogatory as Appendices 1 through 3.

VECC 7 - APPENDIX 1

STUDY SPECS:

Methodology: CATI

Sample size: n=200

Sampling based on lists provided

Timing: 15 minutes

TELEPHONE INTRODUCTION

Good [MORNING / AFTERNOON / EVENING].

May I please speak with [INSERT NAME]?

[IF NO / REFUSED] May I please speak with the person who sees or handles the electricity bill? **[IF APPROPRIATE PERSON IS NOT AVAILABLE, SCHEDULE CALLBACK]****[ONCE APPROPRIATE PERSON IS ON THE PHONE]** Hi my name is _____. I'm calling from The Logit Group, a public opinion and marketing research firm on behalf of Horizon Utilities. You may have noticed that you receive an electrical bill from Horizon Utilities every two months. We, The Logit Group, have been commissioned to conduct a short survey to better understand the changes in the way electricity is going to be billed in Ontario.

Please be assured we are not selling anything and your participation in this study will in no way result in sales or solicitation calls. Furthermore, any information you provide will remain strictly confidential and your answers will be combined with other customers who participate in this study and reported in aggregate. Any personal information we ask is for classification purposes only.

Is this a good time or should we call back when it is more convenient? **[SCHEDULE CALLBACK IF NECESSARY]**

Great, let's begin.

SECTION 1: AWARENESS OF RECEIVING "COMING SOON! A NEW WAY TO MANAGE YOUR ELECTRICITY COSTS" AND RECALL OF KEY BROCHURE MESSAGES

To start, I have a couple of questions that will ensure a good representation of all Horizon Utility customers.

16. DO NOT ASK: RECORD GENDER

Male 1

Female 2

17. Please tell me what year you were born. [RECORD FULL YEAR BORN]

YEAR BORN: _____

Refused X

1. Some of our questions differ depending on the type of home you live in. How would you classify your home? [READ LIST. RECORD ONE MENTION ONLY]

Apartment 1

Condominium 2

House 3

2a. Do you currently have a smart meter installed in your home? [DO NOT READ RESPONSES. ONE MENTION ONLY]

Yes 1 CONTINUE

No 2 SKIP TO Q3a

Not Sure 3

2b. Where is your smart meter located? [ROTATE. READ LIST. RECORD ONE MENTION ONLY]

Basement 1

Outside 2

Living room / dining room 3

[MENTION ONLY TO THOSE LIVING IN APARTMENTS / CONDOS] Utility room 4

Other (Please specify _____) 5

[DO NOT READ] Don't know X

3a. Have you ever heard of Time-of-Use billing? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1	CONTINUE
No	2	SKIP TO Q4
Not Sure	3	

3b. Specifically, where or how did you hear about Time-of-Use billing? **[ROTATE. DO NOT READ RESPONSES. MULTIPLE MENTIONS. PROBE.]**

There was an insert in my bill / a brochure	1	IF ONLY ONE MENTIONED, PROBE OTHER RESPONSES
Something / brochure left behind by a serviceman who installed the smart meter	2	
Newspaper, radio, TV	3	
Neighbours / friends	4	
Kiosk at local mall or other community event	5	
The Horizon Utilities website / Internet	6	
Billboard	7	
Other (Please specify) _____		

3c. Thinking back to your last utilities bill, do you recall receiving a pamphlet titled "*Coming Soon! A new way to manage your electricity costs?*" along with your bill? **[RECORD ONE MENTION ONLY]**

Yes	1
No	2
[DO NOT READ] Not Sure	3

4. **[ASK IF "YES" TO Q3a AND / OR Q3c]** To the best of your knowledge, what have you heard about Time-of-Use electricity billing? Specifically, what does it mean, how does it work and how does it affect you? **[REPEAT QUESTION IF NEEDED. DO NOT READ LIST. RECORD MULTIPLE MENTIONS. PROBE.]**

A new way of managing my electricity costs	1
Ontario is moving to Time-of-Use rates for electricity	2
Horizon Utility customers will be switched to Time-of-Use billing for electricity rates throughout 2010	3
My cost of electricity will vary based on when I use it	4
I can save money by shifting when I use electricity	5

I will be charged different rates for peak demand periods compared to lower demand periods 6

The rates are lowest (cheapest) at night and on weekends 7

The rates are highest (most expensive) during the day 8

Other (Please specify) _____ X

5. **[ASK IF "YES" TO Q3c]** You mentioned earlier that you have heard of or have received a pamphlet regarding the Time-of-Use billing. I am now going to read you 7 statements relating to what you may have read or seen about the Time-of-Use billing. Please tell me whether you recall any of the statements. **[ROTATE STATEMENTS. READ EACH STATEMENT AND LET RESPONDENT ANSWER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Recall	Do Not Recall	[DO NOT READ] Unsure / Don't know
All of Ontario is moving to Time-of-Use billing for electricity	1	2	3
Horizon Utilities' customers will be switched to Time-of-Use billing rates starting in 2010	1	2	3
My cost of electricity will vary based on when I use it	1	2	3
Rates will be different depending on the time of day and the day of the week	1	2	3
I can save money by shifting when I use electricity	1	2	3
There are low rates on evenings, weekends and holidays	1	2	3
I will get plenty of advance notice before my billing changes	1	2	3

6. **[ASK IF "YES" TO Q3c]** Thinking specifically of the information in the Time-of-Use billing pamphlet, how many different rate categories will there be in the new Time-of-Use electricity billing? **[READ LIST. ALLOW ONE MENTION ONLY]**

1 category 1

2 categories 2

3 categories 3

More than 3 categories 4

[DO NOT READ] Don't know / don't recall X

7. **[ASK IF “YES” TO Q3c]** Do you recall any other additional information specific to the rates for Time-of-Use billing in the pamphlet? **[PROBE]**

--

8. **[ASK IF “YES” TO Q5c]** The pamphlet you received with your utilities bill was designed to explain Horizon Utilities’ move to Time-of-Use billing for electricity. Please use a 5-point scale where 1 means Not At All Helpful and 5 means Very Helpful. How helpful did you find the pamphlet? **[READ LIST. ONE MENTION ONLY]**

	Not At All Helpful	Somewhat unhelpful	Neither helpful or unhelpful	Somewhat helpful	Very helpful
Helpfulness of pamphlet	1	2	3	4	5

9. **[ASK ALL]** Now I’d like you to think specifically about Horizon Utilities. To the best of your knowledge, do you know where you could find help or support from Horizon Utilities if you had any questions and / or concerns about Time-of-Use billing? **[DO NOT READ LIST. ALLOW MULTIPLE MENTIONS] CHECK IF THIS IS MENTIONED IN THE PAMPHLET**

Information on the bill	1
Horizon Utilities’ website / Internet	2
Horizon Utilities’ Customer Care centre number	3
Community Outreach team at local malls and community centres	4
Local newspapers	5
No help will be provided	6
Other (Please specify _____)	X
Don’t know / Don’t recall	X

10. Horizon Utilities is currently researching useful ways to help customers, like you, transition to Time-of-Use billing for electricity. Using a 5-point scale, please tell me how useful you find each of the following options is to you, where 1 means Not At All Useful and 5 means Very Useful.

	Not At All useful	Somewhat not useful	Neither useful or not useful	Somewhat useful	Very useful
Having the usage and cost information displayed by the Time-of-Use rate period on my bill	1	2	3	4	5
The ability to see the electricity consumption patterns for my household on Horizon Utilities' website	1	2	3	4	5
The ability to get tips on saving electricity on Horizon Utilities' website	1	2	3	4	5
The ability to call Horizon Utilities' Customer Care Centre	1	2	3	4	5
Information kiosks set up in local malls and community centres	1	2	3	4	5

SECTION 2: ATTITUDE TOWARDS TIME-OF-USE BILLING FOR ELECTRICITY

The next couple of questions are going to focus on your impressions on environmental conservation and the Time-of-Use billing program.

- 11a. For this question I'm going to read you some statements about Time-of-Use billing for electricity. Please tell me the degree in which you agree or disagree with each statement. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree. **[READ EACH STATEMENT AND RECORD NUMBER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
I believe climate change is a serious problem for Canadians	1	2	3	4	5
I believe it is important to reduce the amount of electricity I currently use	1	2	3	4	5
I believe children are more aware of saving electricity than I am	1	2	3	4	5
I believe it is important to use electricity at non-peak demand times when I can	1	2	3	4	5
I believe it will be easy for me to shift when I use electricity to mid-peak and off-peak demand times	1	2	3	4	5
I believe it will be easy for Ontario residents to shift when they use electricity to off-peak demand times	1	2	3	4	5
Information I see on my Time-of-Use electrical bill will help me understand how I use electricity	1	2	3	4	5
Information I see on my Time-of-Use electrical	1	2	3	4	5

bill will encourage me to shift the time of day that I use electricity					
Information I see on my Time-of-Use electrical bill will help me manage my electricity costs	1	2	3	4	5
Shifting the time when I use electricity will help the environment	1	2	3	4	5
Shifting the time when I use electricity will mean Ontario won't have to build new power plants	1	2	3	4	5
Changing to Time-of-Use billing for electricity will decrease my electricity costs	1	2	3	4	5
I plan to make lifestyle changes so I can shift the time of day when I use electricity	1	2	3	4	5
I plan to make lifestyle changes so I can reduce my electricity consumption	1	2	3	4	5
I believe that my household wastes electricity	1	2	3	4	5

- 11b. **[ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "I BELIEVE IT WILL BE EASY FOR ME TO SHIFT WHEN I USE ELECTRICITY TO MID-PEAK AND OFF-PEAK DEMAND TIMES"]** Why do you think it will be difficult to shift when you use electricity? **[PROBE]**

- 11c. **[ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "CHANGING TO TIME-OF-USE BILLING FOR ELECTRICITY WILL DECREASE MY ELECTRICITY COSTS"]** You don't believe Time-of-Use billing will decrease your electricity costs, by what percent do you think your bill will increase?

Percent Increase: _____%

Don't know X

- 11d. **[ASK IMMEDIATELY IF CODES 4 OR 5 SELECTED FOR "I BELIEVE THAT MY HOUSEHOLD WASTES ELECTRICITY"]** Specifically, what do you think wastes electricity in your household? **[PROBE]**

12. To the best of your knowledge, whom do you believe is primarily responsible for driving this shift from the old way in which your electricity was being billed to Time-of-Use billing? **[DO NOT READ LIST. RECORD ALL MENTIONS]**

The federal government	1
The provincial government	2
The local municipal government	3
Horizon Utilities	4
Environmental Groups	5
No one	6
Other (Please specify) _____	X
Don't know	X

13. Approximately, how much was your last bimonthly electricity bill? Please do not include water or sewage charges that are also included on the same bill. **[READ LIST. RECORD ONE MENTION ONLY]**

Less than \$75	1
\$75 to \$150	2
\$150.01 to \$300	3
More than \$300	4

- 14a. I am going to read you some statements regarding how you use electricity. Again, using a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree, please tell me to what degree you agree or disagree with each statement. **[READ STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
I am using less electricity today than I did at this time last year	1	2	3	4	5
I pay attention to what time of day I use electricity for things like laundry, heating and air conditioning	1	2	3	4	5
I follow good electrical energy conservation practices like turning lights out, putting full loads in the dishwasher or laundry machines	1	2	3	4	5
I hang my laundry to dry rather than use a clothes dryer	1	2	3	4	5
I turn down the heat at night during the winter months	1	2	3	4	5
I only use the air conditioner on the hottest summer days	1	2	3	4	5
I have replaced my light bulbs with CFLs	1	2	3	4	5

(compact fluorescent lights)					
I have turned down the temperature of my electrical water heater	1	2	3	4	5
I have changed my routine to do more things at off-peak hours	1	2	3	4	5
I have changed my routine to do more things at mid-peak hours	1	2	3	4	5
I have a refrigerator or freezer in my home that is more than 15 years old	1	2	3	4	5
I have installed a programmable thermostat in my home	1	2	3	4	5
I follow local programs for recycling and composting my trash	1	2	3	4	5
I have gone to the Horizon Utilities' website to see my consumption online	1	2	3	4	5

14b. Is there anything else that you have done to shift or reduce your energy usage? **[PROBE]**

15. The next couple of statements are about Horizon Utilities. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree and tell me the degree in which you agree or disagree with the following statements. **[READ EACH STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT STATEMENT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
Horizon Utilities is a company that I respect	1	2	3	4	5
Horizon Utilities is a company that I have a good feeling about	1	2	3	4	5
Horizon Utilities is a company I trust	1	2	3	4	5
Horizon Utilities cares about me as a customer	1	2	3	4	5
It is important to me that Horizon Utilities takes a leadership role in promoting energy conservation	1	2	3	4	5

SECTION 3: CLASSIFICATIONS / DEMOGRAPHICS

The next few questions are for classification purposes only and will never be used to identify who you are or used in any other way. As stated at the beginning of our call, all your answers will be reported along with all other responses provided by other participants.

18. What is the highest level of formal education you have completed? **[READ LIST. RECORD ONE MENTION]**

Primary school or less	1
Some high school	2
Graduated high school	3
Some college / CEGEP / Trade school	4
Some university	5
University undergraduate degree	6
University graduate degree	7
Prefer not to answer	X

19. Which of the following broad categories includes the total annual income for your household before taxes? **[READ LIST. RECORD ONE MENTION ONLY]**

Under \$25,000	1
Between \$25,000 and \$49,999	2
Between \$50,000 and \$99,999	3
Between \$100,000 and \$149,999	4
Between \$150,000 and \$249,999	5
Between \$250,000 and \$499,999	6
Over \$500,000	7
Prefer not to answer	X

20a. How many people currently live in your household?

in Household

20b. And of those, how many are under 18 years of age?

of Children

21. Thinking of a typical Monday to Friday week, how many days are you or someone in your household at home from 9AM to 5PM? **[READ LIST. RECORD ONE MENTION ONLY]**

No one is home from 9AM to 5PM on weekdays	1
1 day	2
2 days	3
3 days	4
5 days	5
5 days	6
[DO NOT READ] Prefer not to answer	X

22. Does anyone in your household have shift work?

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

23. How many finished rooms are there in your house? By finished rooms, I mean rooms that have been renovated or transformed into livable areas i.e. a finished basement. Please exclude bathrooms, washrooms and powder rooms.

Less than 2 rooms	1
2 to 3 rooms	2
4 to 6 rooms	3
7 to 8 rooms	4
More than 8 rooms	5

24. Approximately, how old is your home?

0 to 10 years old	1
11 to 25 years old	2
26 to 50 years old	3
Over 50 years old	4
[DO NOT READ] Don't know	X

25. Do you currently own or rent your home?

Own	1
Rent	2

26. Are you a newcomer to Canada?

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

27. What is the main language you speak at home? **[DO NOT READ LIST. RECORD ONE MENTION]**

English	1
Italian	2
German	3
French	4
Polish	5
Dutch	6
Ukrainian	7
Portuguese	8
Croatian	9
Filipino	10
Chinese	11
Spanish	12
Greek	13
Korean	14
Vietnamese	15
Arabic	16
Turkish	17
Iranian	18
Other (Please specify) _____	
[DO NOT READ] Prefer not to answer	X

- Yes WRITE EMAIL: _____
- No X

WRITE EMAIL: _____

X

Those are all the questions we have for you today. Thank you for participating.

VECC 7 - APPENDIX 2

STUDY SPECS:

Methodology: CATI

Sample size: n= 200

Sampling based on lists provided

Timing: 15 minutes

TELEPHONE INTRODUCTION

Good [MORNING / AFTERNOON / EVENING].

May I please speak with [INSERT NAME]?

[IF NO / REFUSED] May I please speak with the person who sees or handles the electricity bill? **[IF APPROPRIATE PERSON IS NOT AVAILABLE, SCHEDULE CALLBACK]****[ONCE APPROPRIATE PERSON IS ON THE PHONE]** Hi my name is _____. I'm calling from The Logit Group, a public opinion and marketing research firm on behalf of Horizon Utilities. You may have noticed that you receive an electrical bill from Horizon Utilities every two months. We, The Logit Group, have been commissioned to conduct a short survey to better understand the changes in the way electricity is going to be billed in Ontario.

Please be assured we are not selling anything and your participation in this study will in no way result in sales or solicitation calls. Furthermore, any information you provide will remain strictly confidential and your answers will be combined with other customers who participate in this study and reported in aggregate. Any personal information we ask is for classification purposes only.

Is this a good time or should we call back when it is more convenient? **[SCHEDULE CALLBACK IF NECESSARY]**

Great, let's begin.

SECTION 1: AWARENESS OF RECEIVING "COMING SOON! A NEW WAY TO MANAGE YOUR ELECTRICITY COSTS" AND RECALL OF KEY BROCHURE MESSAGES

To start, I have a couple of questions that will ensure a good representation of all Horizon Utility customers.

16. DO NOT ASK: RECORD GENDER

Male 1

Female 2

17. Please tell me what year you were born. [RECORD FULL YEAR BORN]

YEAR BORN: _____

Refused X

1. Some of our questions differ depending on the type of home you live in. How would you classify your home? [READ LIST. RECORD ONE MENTION ONLY]

Apartment 1

Condominium 2

House 3

2a. Do you currently have a smart meter installed in your home? [DO NOT READ RESPONSES. ONE MENTION ONLY]

Yes 1 CONTINUE

No 2 SKIP TO Q3a

Not Sure 3

2b. Where is your smart meter located? [ROTATE. READ LIST. RECORD ONE MENTION ONLY]

Basement 1

Outside 2

Living room / dining room 3

[MENTION ONLY TO THOSE LIVING IN APARTMENTS / CONDOS] Utility room 4

Other (Please specify _____) 5

[DO NOT READ] Don't know X

3a. Have you ever heard of Time-of-Use billing? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1
No	2
Not Sure	3

3bi. Are you aware your next household electricity bill will reflect the new Time-of-Use rates? **[DO NOT READ RESPONSES. MULTIPLE MENTIONS. PROBE.]**

Yes	1	SKIP TO Q3c
No	2	CONTINUE
Not Sure	3	

3bii. Would you like Horizon Utilities to send you another information package?

Yes	1	
No	2	SKIP TO Q4
Not Sure	3	

3c. (Similar to Q3b) How did you become aware of this billing change to Time-of-Use rates? **[DO NOT READ. RECORD MULTIPLE RESPONSES. PROBE.]**

As a bill insert / brochure	1
As a letter from Horizon addressed to me [Letter reads: Importance Notice About Your Electricity Rates] / Information package	2
Left behind by serviceman that installed the smart meter	3
Newspaper, radio, TV	4
Billboard	5
Neighbours / friends	6
Kiosk at local mall or other community event	7
Horizon Utilities website or internet	8
Other (Please specify) _____	X
Don't know	X

- 3d. **[ASK IF CODE 2 WAS NOT MENTIONED IN Q3c]** Do you recall receiving an information package that includes a letter and / or pamphlet from Horizon Utilities addressed to you titled "*Important Notice About Your Electricity Rates*"? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1	CONTINUE
No	2	SKIP TO Q9
Don't know / Not Sure	3	

4. **[ASK IF "YES" TO Q3a AND / OR Q3bi AND / OR Q3d]** To the best of your knowledge, what have you read or heard about the change to Time-of-Use rates from the old way electricity was billed? Specifically, what does it mean, how does it work and how does it affect you? **[REPEAT QUESTION IF NEEDED. DO NOT READ LIST. RECORD MULTIPLE MENTIONS. PROBE.]**

Time-of-Use billing is a new way of managing my electricity costs	1
My next bill will use Time-of-Use rates for electricity	2
This change is part of Ontario's energy conservation plan	3
My cost of electricity will vary base on when I use it	4
I can save money by shifting when I use electricity	5
I will be charged different rates for peak demand periods compared to lower demand periods	6
The rates are lowest (cheapest) at night and on weekends	7
The rates are highest (most expensive) during the day	8
Other (Please specify) _____	X

5. **[ASK IF CODE 2 IN Q3c AND / OR "YES" TO Q3d]** You mentioned earlier that you have received an information package that includes a letter or pamphlet from Horizon Utilities titled "*Important Notice About Your Electricity Rates*". I am now going to read you 10 statements relating to what you may have read. Please tell me whether you recall any of the statements. **[ROTATE STATEMENTS. READ EACH STATEMENT AND LET RESPONDENT ANSWER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Recall	Do Not Recall	[DO NOT READ] Unsure / Don't know
The change to Time-of-Use electricity rates is part of Ontario's energy conservation plan.	1	2	3
Reducing peak demand electricity use may mean Ontario will need to build fewer electricity-generating plants.	1	2	3
Your next bill will reflect the Time-of-Use rate pricing for your electricity use.	1	2	3
Your cost of electricity will vary based on when you use it.	1	2	3

You can manage electricity costs by shifting when you use electricity.	1	2	3
Electricity rates will be different depending on the time of day and the day of the week.	1	2	3
The lowest electricity rates are evenings, weekends and holidays.	1	2	3
A tip about running your dishwasher after 9PM on weekends or holidays.	1	2	3
A tip about running your clothes dryer after 9PM on weekends or holidays.	1	2	3
You can go to the Horizon Utilities website and view your household electricity consumption profile.	1	2	3

7. **[ASK IF CODE 2 IN Q3c AND / OR "YES" TO Q3d]** Do you recall any other additional information from the information package? **[PROBE]**

8. **[ASK IF CODE 2 IN Q3c AND / OR "YES" TO Q3d]** The information package you received was designed by Horizon Utilities to explain the move to Time-of-Use billing for electricity. Please use a 5-point scale where 1 means Not At All Helpful and 5 means Very Helpful. How helpful did you find the information package? **[READ LIST. ONE MENTION ONLY]**

	Not At All Helpful	Somewhat unhelpful	Neither helpful or unhelpful	Somewhat helpful	Very helpful
Helpfulness of pamphlet	1	2	3	4	5

9. **[ASK ALL]** Now I'd like you to think specifically about Horizon Utilities. To the best of your knowledge, do you know where you could find help or support from Horizon Utilities if you had any questions and / or concerns about Time-of-Use billing? **[DO NOT READ LIST. ALLOW MULTIPLE MENTIONS] CHECK IF THIS IS MENTIONED IN THE PAMPHLET**

Information on the bill	1
Horizon Utilities' website / Internet	2
Horizon Utilities' Customer Care centre number	3
Community Outreach team at local malls and community centres	4
Local newspapers	5
No help will be provided	6

Other (Please specify _____)

X

Don't know / Don't recall

X

- 10a. Horizon Utilities is currently researching useful ways to help customers, like you, transition to Time-of-Use billing for electricity. Using a 5-point scale, please tell me how useful you find each of the following options is to you, where 1 means Not At All Useful and 5 means Very Useful. **[READ AND RECORD NUMBER FOR EACH STATEMENT BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Not At All useful	Somewhat not useful	Neither useful or not useful	Somewhat useful	Very useful
Having the usage and cost information displayed by the Time-of-Use rate period on my bill	1	2	3	4	5
The ability to see the electricity consumption patterns for my household on Horizon Utilities' website	1	2	3	4	5
The ability to get tips on saving electricity on Horizon Utilities' website	1	2	3	4	5
The ability to call Horizon Utilities' Customer Care Centre	1	2	3	4	5
Information kiosks set up in local malls and community centres	1	2	3	4	5

- 10b. Do you recall receiving static cling decals for your dishwasher and clothes dryer from Horizon Utilities? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes

1

CONTINUE

No

2

SKIP TO Q11a

Not Sure

3

- 10c. **[ASK IF "YES" AT Q10b]** Have you put these decals on your dishwasher and / or clothes dryer? **[READ LIST. RECORD ONE MENTION ONLY]**

Yes

1

No

2

Have a natural gas dryer

4

[DO NOT READ] Don't know

3

SECTION 2: ATTITUDE TOWARDS TIME-OF-USE BILLING FOR ELECTRICITY

The next couple of questions are going to focus on your impressions on environmental conservation and the Time-of-Use billing program.

- 11a. For this question I'm going to read you some statements about Time-of-Use billing for electricity. Please tell me the degree in which you agree or disagree with each statement. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree. **[READ EACH STATEMENT AND RECORD NUMBER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
I believe climate change is a serious problem for Canadians	1	2	3	4	5
I believe it is important to reduce the amount of electricity I currently use	1	2	3	4	5
I believe children are more aware of saving electricity than I am	1	2	3	4	5
I believe it is important to use electricity at non-peak demand times when I can	1	2	3	4	5
I believe it will be easy for me to shift when I use electricity to mid-peak and off-peak demand times	1	2	3	4	5
I believe it will be easy for Ontario residents to shift when they use electricity to off-peak demand times	1	2	3	4	5
Information I see on my Time-of-Use electrical bill will help me understand how I use electricity	1	2	3	4	5
Information I see on my Time-of-Use electrical bill will encourage me to shift the time of day that I use electricity	1	2	3	4	5
Information I see on my Time-of-Use electrical bill will help me manage my electricity costs	1	2	3	4	5
Shifting the time when I use electricity will help the environment	1	2	3	4	5
Shifting the time when I use electricity will mean Ontario won't have to build new power plants	1	2	3	4	5
Changing to Time-of-Use billing for electricity will decrease my electricity costs	1	2	3	4	5
I plan to make lifestyle changes so I can shift the time of day when I use electricity	1	2	3	4	5
I plan to make lifestyle changes so I can reduce my electricity consumption	1	2	3	4	5
I believe that my household wastes electricity	1	2	3	4	5

- 11b. **[ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "I BELIEVE IT WILL BE EASY FOR ME TO SHIFT WHEN I USE ELECTRICITY TO MID-PEAK AND OFF-PEAK DEMAND TIMES"]** Why do you think it will be difficult to shift when you use electricity? **[PROBE]**

- 11c. **[ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "CHANGING TO TIME-OF-USE BILLING FOR ELECTRICITY WILL DECREASE MY ELECTRICITY COSTS"]** You don't believe Time-of-Use billing will decrease your electricity costs. By what percent do you think your bill will increase? **[RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE]**

Percent Increase: _____ %

Don't know X

- 11d. **[ASK IMMEDIATELY IF CODES 4 OR 5 SELECTED FOR "I BELIEVE THAT MY HOUSEHOLD WASTES ELECTRICITY"]** Specifically, what do you think wastes electricity in your household? **[PROBE]**

12. To the best of your knowledge, whom do you believe is primarily responsible for driving this shift from the old way in which your electricity was being billed to Time-of-Use billing? **[DO NOT READ LIST. RECORD ALL MENTIONS]**

The federal government	1
The provincial government	2
The local municipal government	3
Horizon Utilities	4
Environmental Groups	5
No one	6
Other (Please specify) _____	X
Don't know	X

13. Approximately, how much was your last bimonthly electricity bill? Please do not include water or sewage charges that are also included on the same bill. **[READ LIST. RECORD ONE MENTION ONLY]**

Less than \$75	1
\$75 to \$150	2
\$150.01 to \$300	3
More than \$300	4

- 14a. I am going to read you some statements regarding how you use electricity. Again, using a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree, please tell me to what degree you agree or disagree with each statement. **[READ STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree	D/K / N/A
I am using less electricity today than I did at this time last year	1	2	3	4	5	9
I pay attention to what time of day I use electricity for things like laundry, heating and air conditioning	1	2	3	4	5	9
I follow good electrical energy conservation practices like turning lights out, putting full loads in the dishwasher or laundry machines	1	2	3	4	5	9
I hang my laundry to dry rather than use a clothes dryer	1	2	3	4	5	9
I turn down the heat at night during the winter months	1	2	3	4	5	9
I only use the air conditioner on the hottest summer days	1	2	3	4	5	9
I have replaced my light bulbs with CFLs (compact fluorescent lights)	1	2	3	4	5	9
I have turned down the temperature of my electrical water heater	1	2	3	4	5	9
I have changed my routine to do more things at off-peak hours	1	2	3	4	5	9
I have changed my routine to do more things at mid-peak hours	1	2	3	4	5	9
I have a refrigerator or freezer in my home that is more than 15 years old	1	2	3	4	5	9
I have installed a programmable thermostat in my home	1	2	3	4	5	9
I follow local programs for recycling and composting my trash	1	2	3	4	5	9
I have gone to the Horizon Utilities' website to see my consumption online	1	2	3	4	5	9

14b. Is there anything else that you have done to shift or reduce your energy usage? **[PROBE]**

--

15. The next couple of statements are about Horizon Utilities. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree and tell me the degree in which you agree or disagree with the following statements. **[READ EACH STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT STATEMENT]**

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
Horizon Utilities is a company that I respect	1	2	3	4	5
Horizon Utilities is a company that I have a good feeling about	1	2	3	4	5
Horizon Utilities is a company I trust	1	2	3	4	5
Horizon Utilities cares about me as a customer	1	2	3	4	5
It is important to me that Horizon Utilities takes a leadership role in promoting energy conservation	1	2	3	4	5

SECTION 3: CLASSIFICATIONS / DEMOGRAPHICS

The next few questions are for classification purposes only and will never be used to identify who you are or used in any other way. As stated at the beginning of our call, all your answers will be reported along with all other responses provided by other participants.

18. What is the highest level of formal education you have completed? **[READ LIST. RECORD ONE MENTION]**

Primary school or less	1
Some high school	2
Graduated high school	3
Some college / CEGEP / Trade school	4
Some university	5
University undergraduate degree	6
University graduate degree	7
Prefer not to answer	X

19. Which of the following broad categories includes the total annual income for your household before taxes? **[READ LIST. RECORD ONE MENTION ONLY]**

Under \$25,000	1
Between \$25,000 and \$49,999	2
Between \$50,000 and \$99,999	3
Between \$100,000 and \$149,999	4
Between \$150,000 and \$249,999	5
Between \$250,000 and \$499,999	6
Over \$500,000	7
Prefer not to answer	X

- 20a. How many people currently live in your household, including yourself? **[RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE.]**

in Household

- 20b. **[ASK ONLY IF 2+ MENTIONED IN Q20a]** And of those, how many are under 18 years of age? ? **[RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE.]**

of Children

21. Thinking of a typical Monday to Friday week, how many days are you or someone in your household at home from 9AM to 5PM? **[READ LIST. RECORD ONE MENTION ONLY]**

No one is home from 9AM to 5PM on weekdays	1
1 day	2
2 days	3
3 days	4
5 days	5
5 days	6
[DO NOT READ] Prefer not to answer	X

22. Does anyone in your household have shift work? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

23. How many finished rooms are there in your home? By finished rooms, I mean rooms that have been renovated or transformed into livable areas i.e. a finished basement. Please exclude bathrooms, washrooms and powder rooms. **[DO NOT READ. RECORD ONE MENTION ONLY]**

Less than 2 rooms	1
2 to 3 rooms	2
4 to 6 rooms	3
7 to 8 rooms	4
More than 8 rooms	5

24. Approximately, how old is your home? **[DO NOT READ. RECORD ONE MENTION ONLY]**

0 to 10 years old	1
11 to 25 years old	2
26 to 50 years old	3
Over 50 years old	4
[DO NOT READ] Don't know	X

25. Do you currently own or rent your home? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Own	1
Rent	2

26. Are you a newcomer to Canada? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

27. What is the main language you speak at home? [DO NOT READ LIST. RECORD ONE MENTION]

English	1
Italian	2
German	3
French	4
Polish	5
Dutch	6
Ukrainian	7
Portuguese	8
Croatian	9
Filipino	10
Chinese	11
Spanish	12
Greek	13
Korean	14
Vietnamese	15
Arabic	16
Turkish	17
Iranian	18

Other (Please specify) _____

[DO NOT READ] Prefer not to answer X

28. And finally, Horizon Utilities is creating a customer advisory group where customers are given the opportunity to voice their opinions about various programs offered by Horizon Utilities. This advisory group will be asked to complete online surveys only. Would you like to provide your email address and be part of our panel?

Yes WRITE EMAIL: _____

No X

29. **[ASK ONLY IF “YES” MENTIONED AT Q3bii]** You mentioned earlier you want Horizon Utilities to send you another information package regarding the change to Time-of-Use billing for electricity. Could you please provide me with your name and mailing address where you would like Horizon Utilities to send this package?

NAME:	
MAILING ADDRESS:	

Those are all the questions we have for you today. Thank you for participating.

VECC 7 - APPENDIX 3

STUDY SPECS:

Methodology: CATI

Sample size: n= 200

Sampling based on lists provided

Timing: 15 minutes

TELEPHONE INTRODUCTION

Good [MORNING / AFTERNOON / EVENING].

May I please speak with [INSERT NAME]?

[IF NO / REFUSED] May I please speak with the person who sees or handles the electricity bill? [IF APPROPRIATE PERSON IS NOT AVAILABLE, SCHEDULE CALLBACK]

[ONCE APPROPRIATE PERSON IS ON THE PHONE] Hi my name is _____. I'm calling from The Logit Group, a public opinion and marketing research firm on behalf of Horizon Utilities. Your household receives an electrical bill from Horizon Utilities every two months. We, The Logit Group, have been commissioned to conduct a short survey to better understand how changes in electricity billing have affected you and your use of electricity.

Please be assured we are not selling anything and your participation in this study will in no way result in sales or solicitation calls. Furthermore, any information you provide will remain strictly confidential and your answers will be combined with other customers who participate in this study and reported in aggregate. Any personal information we ask is for classification purposes only.

Is this a good time or should we call back when it is more convenient? [SCHEDULE CALLBACK IF NECESSARY]

Great, let's begin.

SECTION 1: TIME-OF-USE AWARENESS & MESSAGE RECALL AND COMMUNICATION MATERIALS EVALUATION

To start, I have a couple of questions that will ensure a good representation of Horizon Utility customers.

1. Some of our questions differ depending on the type of home you live in. How would you classify your home? [READ LIST. RECORD ONE MENTION ONLY]

Apartment	1
Condominium	2
House	3

- 2a. Do you currently have a smart meter installed in your home? [DO NOT READ RESPONSES. ONE MENTION ONLY]

Yes	1	CONTINUE
No	2	SKIP TO Q3a
Not Sure	3	

- 2b. Where is your smart meter located? [ROTATE. READ LIST. RECORD ONE MENTION ONLY]

Basement	1
Outside	2
Living room / dining room	3
[MENTION ONLY TO THOSE LIVING IN APARTMENTS / CONDOS] Utility room	4
Other (Please specify _____)	5
[DO NOT READ] Don't know	X

- 3a. Have you ever heard of Time-of-Use billing for electricity? [DO NOT READ. RECORD ONE MENTION ONLY]

Yes	1
No	2
Not Sure	3

3bi. Are you aware that your household electricity bill currently reflects Time-of-Use rates? [DO NOT READ RESPONSES. MULTIPLE MENTIONS. PROBE.]

Yes	1	SKIP TO Q4
No	2	CONTINUE
Not Sure	3	

3bii. Would you like Horizon Utilities to send you another information package outlining the Time-of-Use billing and how it affects you? [DO NOT READ. RECORD ONE MENTION ONLY]

Yes	1	
No	2	ASK Q4, THEN SKIP TO Q9
Not Sure	3	

4. [ASK ALL] To the best of your knowledge, what have you read or heard about the change to Time-of-Use rates from the old way electricity was billed? Specifically, what does it mean, how does it work and how does it affect you? [REPEAT QUESTION IF NEEDED. DO NOT READ LIST. RECORD MULTIPLE MENTIONS. PROBE.]

Time-of-Use billing is a new way of managing my electricity costs	1
My next bill will use Time-of-Use rates for electricity	2
This change is part of Ontario's energy conservation plan	3
My cost of electricity will vary based on when I use it	4
I can save money by shifting when I use electricity	5
I will be charged different rates for peak demand periods compared to lower demand periods	6
The rates are lowest (cheapest) at night and on weekends	7
The rates are highest (most expensive) during the day	8
Other (Please specify) _____	X

5. [ASK IF "YES" TO Q3a AND / OR Q3bi] I am now going to read you 10 statements relating to what you may have read in the Time-of-Use materials you have received in the mail with your electricity bill. Please tell me whether you recall any of the statements. [ROTATE STATEMENTS. READ EACH STATEMENT AND LET RESPONDENT ANSWER BEFORE MOVING ONTO THE NEXT]

ROTATE STATEMENTS	Recall	Do Not Recall	[DO NOT READ] Unsure / Don't know
The change to Time-of-Use electricity rates is part of Ontario's energy conservation plan.	1	2	3
Reducing peak demand electricity use may mean Ontario will need to build fewer electricity-generating plants.	1	2	3
Your cost of electricity will vary based on when you use it.	1	2	3
You can manage electricity costs by shifting when you use electricity.	1	2	3
Electricity rates differ depending on the time of day and the day of the week.	1	2	3
The lowest electricity rates are on evenings, weekends and holidays.	1	2	3
A tip about running your dishwasher after 9PM on weekends or holidays.	1	2	3
A tip about running your clothes dryer after 9PM on weekends or holidays.	1	2	3
You can go to the Horizon Utilities website and view your household electricity consumption profile.	1	2	3

7. [ASK IF "YES" TO Q3a AND / OR Q3bi] Do you recall any further suggestions from the information package?
[PROBE]

8. [ASK IF "YES" TO Q3a AND / OR Q3bi] The information package you received was designed by Horizon Utilities to explain Time-of-Use billing for electricity. Please use a 5-point scale where 1 means Not At All Helpful and 5 means Very Helpful. How helpful did you find the information package? [READ LIST. ONE MENTION ONLY]

	Not At All Helpful	Somewhat unhelpful	Neither helpful or unhelpful	Somewhat helpful	Very helpful
Helpfulness of information package	1	2	3	4	5

9. **[ASK ALL]** Now I'd like you to think specifically about Horizon Utilities. To the best of your knowledge, do you know where you could find help or support from Horizon Utilities if you had any questions and / or concerns about Time-of-Use billing? **[DO NOT READ LIST. ALLOW MULTIPLE MENTIONS]**

	Yes	No
Information on the bill	<input type="checkbox"/>	<input type="checkbox"/>
Horizon Utilities' website / Internet	<input type="checkbox"/>	<input type="checkbox"/>
Horizon Utilities' Customer Care centre number	<input type="checkbox"/>	<input type="checkbox"/>
Community Outreach team at local malls and community centres	<input type="checkbox"/>	<input type="checkbox"/>
Local newspapers	<input type="checkbox"/>	<input type="checkbox"/>
No help will be provided	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify _____)	X	X
Don't know / Don't recall	X	X

- 10ai. Horizon Utilities is assessing useful ways to help customers like you, transition to Time-of-Use billing for electricity. Using a 5-point scale, please tell me how useful you find each of the following options is to you, where 1 means Not At All Useful and 5 means Very Useful. **[READ AND RECORD NUMBER FOR EACH STATEMENT BEFORE MOVING ONTO THE NEXT]**

ROTATE STATEMENTS	Not At All useful	Somewhat not useful	Neither useful or not useful	Somewhat useful	Very useful
Having the usage and cost information displayed by the Time-of-Use rate period on my bill	1	2	3	4	5
The ability to see the electricity consumption patterns for my household on Horizon Utilities' website	1	2	3	4	5
The ability to get tips on saving electricity on Horizon Utilities' website	1	2	3	4	5
The ability to call Horizon Utilities' Customer Care Centre	1	2	3	4	5
Information kiosks set up in local malls and community centres	1	2	3	4	5

- 10b. Do you recall receiving static cling decals for your dishwasher and clothes dryer from Horizon Utilities? **[DO NOT READ. RECORD ONE MENTION ONLY]**

Yes	1	CONTINUE
No	2	SKIP TO Q10d
Not Sure	3	

10c. [ASK IF "YES" AT Q10b] Have you put these decals on your dishwasher and / or clothes dryer? [READ LIST. RECORD ONE MENTION ONLY]

Yes	1
No	2
Have a natural gas dryer	3
[DO NOT READ] Don't know	4

10d. [ASK ALL] For the past 4 months, your household should have been billed based on Time-of-Use rates. Has your electricity bill increased, decreased or stayed about the same during this time? [DO NOT READ. RECORD ONE MENTION ONLY]

Increased	1
Decreased	2
Stayed about the same	3
[DO NOT READ] Don't know	4

10e. To the best of your knowledge, how any Time-of-Use pricing levels are there? [DO NOT READ, BUT PROMPT IF RESPONDENT DOESN'T KNOW. RECORD ONE MENTION ONLY.]

0	1
1	2
2	3
3	4
4	5
5+	6

10f. To the best of your knowledge, are weekends considered off-peak, mid-peak or on-peak times? [DO NOT READ. RECORD ONE MENTION ONLY]

Off-peak	1
Mid-peak	2
On-peak	3
[DO NOT READ] Don't know	4

SECTION 2: ATTITUDE TOWARDS TIME-OF-USE BILLING FOR ELECTRICITY

The next couple of questions are going to focus on your impressions of environmental concerns and the Time-of-Use billing program.

- 11a. I'm going to read you some statements. Please tell me the degree to which you agree or disagree with each statement. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree. [READ EACH STATEMENT AND RECORD NUMBER BEFORE MOVING ONTO THE NEXT]

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
I believe climate change is a serious problem for Canadians	1	2	3	4	5
I believe it is important to reduce the amount of electricity I currently use	1	2	3	4	5
I believe children are more aware of saving electricity than I am	1	2	3	4	5
I believe it is important to use electricity at non-peak demand times when I can	1	2	3	4	5
I believe it will be easy for me to shift when I use electricity to mid-peak and off-peak demand times	1	2	3	4	5
I believe it is easy for Ontario residents to shift when they use electricity to off-peak demand times	1	2	3	4	5
Information I see on my Time-of-Use electrical bill helps me understand how I use electricity	1	2	3	4	5
Information I see on my Time-of-Use electrical bill encourages me to shift the time of day that I use electricity	1	2	3	4	5
Information I see on my Time-of-Use electrical bill helps me manage my electricity costs	1	2	3	4	5
Shifting the time when I use electricity helps the environment	1	2	3	4	5
Shifting the time when I use electricity means Ontario won't have to build new power plants	1	2	3	4	5
Changing to Time-of-Use billing for electricity decreases my electricity costs	1	2	3	4	5
I plan to make lifestyle changes so I can shift the time of day when I use electricity	1	2	3	4	5
I plan to make lifestyle changes so I can reduce my electricity consumption	1	2	3	4	5
I believe that my household wastes electricity	1	2	3	4	5

- 11b. [ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "I BELIEVE IT WILL BE EASY FOR ME TO SHIFT WHEN I USE ELECTRICITY TO MID-PEAK AND OFF-PEAK DEMAND TIMES"] Why do you think it will be difficult to shift when you use electricity? [PROBE]

- 11c. [ASK IMMEDIATELY IF CODES 1 OR 2 SELECTED FOR "CHANGING TO TIME-OF-USE BILLING FOR ELECTRICITY WILL DECREASE MY ELECTRICITY COSTS"] You don't believe Time-of-Use billing will decrease your electricity costs. By what percent do you think your bill will increase? [RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE]

Percent Increase: _____ %

Don't know X

- 11d. [ASK IMMEDIATELY IF CODES 4 OR 5 SELECTED FOR "I BELIEVE THAT MY HOUSEHOLD WASTES ELECTRICITY"] Specifically, what do you think wastes electricity in your household? [PROBE]

12. To the best of your knowledge, who do you believe is primarily responsible for driving this shift from the old way in which your electricity was being billed to Time-of-Use billing? [DO NOT READ LIST. RECORD ALL MENTIONS]

The federal government	1
The provincial government	2
The local municipal government	3
Horizon Utilities	4
Environmental Groups	5
No one	6
Other (Please specify) _____	X
Don't know	X

13. Approximately, how much was your last bimonthly electricity bill? Please do not include water or sewage charges that are included on the same bill. [READ LIST. RECORD ONE MENTION ONLY]

Less than \$75	1
\$75 to \$150	2
\$150.01 to \$300	3
More than \$300	4

- 14a. I am going to read you some statements regarding how you use electricity. Again, using a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree, please tell me to what degree you agree or disagree with each statement. [READ STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT]

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree	D/K / N/A
I am using less electricity today than I did at this time last year	1	2	3	4	5	9
I pay attention to what time of day I use electricity for things like laundry, heating and air conditioning	1	2	3	4	5	9
I follow good electrical energy conservation practices like turning lights out, putting full loads in the dishwasher or laundry machines	1	2	3	4	5	9
I hang my laundry to dry rather than use a clothes dryer	1	2	3	4	5	9
I turn down the heat at night during the winter months	1	2	3	4	5	9
I only use the air conditioner on the hottest summer days	1	2	3	4	5	9
I have replaced my light bulbs with CFLs (compact fluorescent lights)	1	2	3	4	5	9
I have turned down the temperature of my electrical water heater	1	2	3	4	5	9
I have changed my routine to do more things at off-peak hours	1	2	3	4	5	9
I have changed my routine to do more things at mid-peak hours	1	2	3	4	5	9
I have a refrigerator or freezer in my home that is more than 15 years old	1	2	3	4	5	9
I have installed a programmable thermostat in my home	1	2	3	4	5	9
I follow local programs for recycling and composting my trash	1	2	3	4	5	9
I have gone to the Horizon Utilities' website to see my consumption online	1	2	3	4	5	9

- 14b. Are there any other lifestyle changes your household has made to shift or reduce your electricity usage at peak times? [PROBE]

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15. The next couple of statements are about Horizon Utilities. Please use a 5-point scale where 1 means Strongly Disagree and 5 means Strongly Agree and tell me the degree in which you agree or disagree with the following statements. [READ EACH STATEMENT AND RECORD ANSWER BEFORE MOVING ONTO THE NEXT STATEMENT]

ROTATE STATEMENTS	Strongly Disagree				Strongly Agree
Horizon Utilities is a company that I respect	1	2	3	4	5
Horizon Utilities is a company that I have a good feeling about	1	2	3	4	5
Horizon Utilities is a company I trust	1	2	3	4	5
Horizon Utilities cares about me as a customer	1	2	3	4	5
It is important to me that Horizon Utilities takes a leadership role in promoting energy conservation	1	2	3	4	5

SECTION 3: CLASSIFICATIONS / DEMOGRAPHICS

The next few questions are for classification purposes only and will never be used to identify who you are or used in any other way. As stated at the beginning of our call, all your answers will be reported along with all other responses provided by other participants.

18. What is the highest level of formal education you have completed? [READ LIST. RECORD ONE MENTION]

Primary school or less	1
Some high school	2
Graduated high school	3
Some college / CEGEP / Trade school	4
Some university	5
University undergraduate degree	6
University graduate degree	7
Prefer not to answer	X

19. Which of the following broad categories includes the total annual income for your household before taxes? [READ LIST. RECORD ONE MENTION ONLY]

Under \$25,000	1
Between \$25,000 and \$49,999	2
Between \$50,000 and \$99,999	3
Between \$100,000 and \$149,999	4
Between \$150,000 and \$249,999	5
Between \$250,000 and \$499,999	6
Over \$500,000	7
Prefer not to answer	X

- 20a. How many people currently live in your household, including yourself? [RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE.]

in Household

- 20b. [ASK ONLY IF 2+ MENTIONED IN Q20a] And of those, how many are under 18 years of age? ? [RECORD ONE NUMBER ONLY. DO NOT RECORD RANGE.]

of Children

21. Thinking of a typical Monday to Friday week, how many days are you or someone in your household at home from 9AM to 5PM? [READ LIST. RECORD ONE MENTION ONLY]

No one is home from 9AM to 5PM on weekdays	1
1 day	2
2 days	3
3 days	4
5 days	5
5 days	6
[DO NOT READ] Prefer not to answer	X

22. Does anyone in your household have shift work? [DO NOT READ. RECORD ONE MENTION ONLY]

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

23. How many finished rooms are there in your home? By finished rooms, I mean rooms that have been renovated or transformed into livable areas i.e. a finished basement. Please exclude bathrooms, washrooms and powder rooms. [DO NOT READ. RECORD ONE MENTION ONLY]

Less than 2 rooms	1
2 to 3 rooms	2
4 to 6 rooms	3
7 to 8 rooms	4
More than 8 rooms	5

24. Approximately, how old is your home? [DO NOT READ. RECORD ONE MENTION ONLY]

0 to 10 years old	1
11 to 25 years old	2
26 to 50 years old	3
Over 50 years old	4
[DO NOT READ] Don't know	X

25. Do you currently own or rent your home? [DO NOT READ. RECORD ONE MENTION ONLY]

Own	1
Rent	2

26. Are you a newcomer to Canada? [DO NOT READ. RECORD ONE MENTION ONLY]

Yes	1
No	2
[DO NOT READ] Prefer not to answer	X

27. What is the main language you speak at home? [DO NOT READ LIST. RECORD ONE MENTION]

- | | |
|------------------------------------|----|
| English | 1 |
| Italian | 2 |
| German | 3 |
| French | 4 |
| Polish | 5 |
| Dutch | 6 |
| Ukrainian | 7 |
| Portuguese | 8 |
| Croatian | 9 |
| Filipino | 10 |
| Chinese | 11 |
| Spanish | 12 |
| Greek | 13 |
| Korean | 14 |
| Vietnamese | 15 |
| Arabic | 16 |
| Turkish | 17 |
| Iranian | 18 |
| Other (Please specify) _____ | |
| [DO NOT READ] Prefer not to answer | X |

28. And finally, Horizon Utilities is creating a customer advisory group where customers are given the opportunity to voice their opinions about various programs offered by Horizon Utilities. This advisory group will be asked to complete online surveys only. Would you like to provide your email address and be part of our panel?

Yes WRITE EMAIL: _____

No X

29. [ASK ONLY IF "YES" MENTIONED AT Q3bii] You mentioned earlier you want Horizon Utilities to send you another information package regarding Time-of-Use billing for electricity. Could you please provide me with your name and mailing address where you would like Horizon Utilities to send this package?

NAME:	
MAILING ADDRESS:	

Those are all the questions we have for you today. Thank you for participating.

**HORIZON UTILITIES CORPORATION (“HORIZON UTILITIES”)
RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES (“VECC”)**

DELIVERED: MARCH 7, 2012

Question 8

Reference: 2.0 Manager’s Summary, Page 31

Preamble: Horizon indicates that the costs of providing meters to the GS>50 kW customer class will be borne by only those customers in that class.

a) Please discuss in the context of the information provided in Table 9 on Page 34.

Response:

Table 9 on Page 34 of the Application was developed based on the direct attribution of meter capital costs to each specific customer class. As such, the cost of the specific meter type required to service GS>50 kW customers is borne only by this customer class. Operating, Maintenance and Administration (“OM&A”) costs were allocated based on the number of smart meters in each customer class.

The response to VECC Interrogatory #3 provides details of the capital cost of GS>50 kW Smart Meters, the specific types of meters and the associated unit costs of meters in this customer class.

The response to VECC Interrogatory #5 provides a detailed breakdown of costs incurred for the GS>50 kW customer class. Appendix 3 in Horizon Utilities’ response to VECC Interrogatory #5 provides a detailed cost breakdown for the GS>50 kW customer class and reconciles to the total revenue requirement displayed in the recast Table 9 of VECC Interrogatory #5 response. Appendix 3 verifies that only costs associated with the GS>50 kW class will be recovered from this customer class.