



PUC Distribution Inc.
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May 2, 2012

Kirsten Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON, M4P 1E4

Attention: Ms. Walli

**Re: PUC Distribution Inc.'s Smart Meter Final Disposition Application
Responses to Board Staff Interrogatories
EB-2012-0084**

Please find enclosed PUC's interrogatory responses to Board Staff in the above noted proceedings. The responses have been electronically filed through the Board's web portal.

The primary contact for this application is Jennifer Uchmanowicz, Rates and Regulatory Affairs Officer. Phone number 705-759-3009 or email at Jennifer.Uchmanowicz@ssmpuc.com.

Sincerely,

Jennifer Uchmanowicz
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Cc: Michael Buonaguro
Counsel for VECC

Question #1

General

Responses to Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received no letters of comment. Please confirm whether PUC has received any letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from PUC to the author of the letter. If confirmed, please file that reply with the Board. Please ensure that the author's contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and confirm if PUC intends to respond.

PUC Response

PUC Distribution has received no formal letters of comment regarding the application to recover the costs for deployed smart meters that require filing with the Board.

Question #2

Application

Ref: Application, Tab 1, Schedule 2, page 1 – Stranded Meter Costs

On page 1 of its application, PUC states that it is planning to file a cost of service application for 2013 rates. PUC states that stranded meter costs will be addressed in that application. Please provide PUC's estimate of the net book value of the stranded meters as of December 31, 2012.

PUC Response

PUC's estimated NBV of the stranded meters at the end of December 31, 2012 is \$1,500,000.

Question #3

Ref: Application, Tab 1, Schedule 2, page 4 – Annual Security Audit

On page 4 of the application, PUC provides a description of its annual security audit as well as the procurement process used to select an audit partner. PUC states:

Going forward, PUC has budgeted for a security audit, as this is a prudent approach to satisfying the due diligence requirements for protection not only of the customer information, but also to ensure that access to the infrastructure is properly protected...

Therefore, PUC joined a consortium of Ontario Util-assist LDC customers in the issuance of the May 2010 "Smart Meter Network Security Audit Services" Request for Proposal.

The objective of the RFP is to select an audit partner who would complete a security audit of the Sensus AMI systems for consortium members with Sensus technology in place, and to then work with Sensus towards the implementation of viable countermeasures to resolve all security concerns. The selected audit firm will first complete an in-depth security review at one participating utility that has the Sensus solution. Once the review is complete, the audit firm would then review the technology at all remaining participating utilities to confirm that their Sensus AMI systems are configured to the same standard as that declared as the standard for the audit group. Audits are anticipated to include end-to-end from the meter to utility systems and home area network.

- a) Please confirm whether or not the RFP process has been completed and the audit partner has been selected.
- b) If the audit partner has been selected, please provide the budgeted amount for the annual security audit for 2012. Please confirm whether or not the budgeted amount has been included as part of the costs reported in the Smart Meter Model.

PUC Response

- a) PUC has completed the RFP process and the audit partner selected was Bell Worldtech.
- b) The budgeted amount for the annual security audit in 2012 was \$12,000 and has been included as part of the costs in the smart meter model.

Question #4

Ref: Application, Tab 1, Schedule 2, page 7– Business Process Redesign

On page 7 of the application, PUC states:

Actual business process redesign consultations were well underway at PUC in late 2010 and is an ongoing process leading up to and after cutover.

On Sheet 2 of the Smart Meter Model, PUC has provided \$40,000 in Business Process Redesign OM&A expenses (item 2.5.1) for 2012 only.

- a) Please confirm whether or not PUC has incurred any costs for business process redesign to date.
- b) Please provide further information on the business process redesign activities for 2012 corresponding to the \$40,000 in forecasted business process redesign expenses for 2012 in the Smart Meter Model.
- c) Does PUC view that these costs will be one-time or will continue past 2012?

PUC Response

- a) PUC has incurred costs for business process redesign to date included as part of project administration.
- b) The \$40,000 included in business process redesign for 2012 relates to consulting services to assist in documenting business processes and PUC staff time in modifying and implementing the same.
- c) PUC anticipates some of the business document process costs will continue past 2012. For example, the MDM/R's Energy IP R7.2, required in order to display register reads on a customer's bill, has resulted in business process redesign. Future requirements are envisioned which in turn will result in business process modifications.

Question #5

Ref: Guideline G-2011-0001, page 19

On page 19 of the Board's Guideline: Smart Meter Funding and Cost Recovery – Final Disposition (G-2011-0001), the Board states:

In considering the recovery of smart meter costs, the Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation.

Board staff notes that PUC has not provided any discussion of operational efficiencies and cost savings that have been achieved to date. In many smart meter cost recovery applications currently before the Board, the distributor has noted meter reading savings as a result of the smart meter deployment.

- a) Please provide an estimate of any meter reading savings that have resulted from the deployment of smart meters to date. Please provide a reconciliation accounting for how those savings have been accounted for in the costs documented in this application.

PUC Response

- a) PUC anticipates meter reading expenses to be reduced for half of the 2012 year. The estimated reduction in OM&A costs is \$55,000 in 2012. PUC has not accounted for this reduction in costs in the smart meter model. OEB staff has requested an updated model with other changes as a result of the interrogatories. PUC will reduce OM&A costs by \$55,000 on line 2.5.6 "Other AMI expenses" in the updated model.

Question #6

Ref: Application, Tab 1, Schedule 2, page 9 – Web Presentment

On page 9 of the Application, PUC states:

PUC anticipates implementing a web presentment solution in 2012 once implementation of TOU billing is complete and reliable data (current and to some extent historical) is readily available for our customers.

Board staff notes that no costs were documented in PUC's Smart Meter Model for costs related to Web Presentment.

If available, please provide any updated estimate of the costs that PUC expects to incur for the development and implementation of web presentment of TOU data.

PUC Response

For web presentment cost in 2012, PUC has included \$10,000 in OM&A 2.5.6 "other AMI expenses" and \$40,000 in Capital 1.5.6 "Capital AMI expenses".

The updated estimate of the costs that PUC expects to incur for the development and implementation of web presentment for TOU data is as follows:

\$3,750 – OM&A annual costs

\$14,750 – Capital Costs for customer connect platform and home connect license.

\$22,500 – Capital Costs for Implementation services.

\$16,800 – Capital costs for computer hardware.

Therefore, since the submission of the smart meter rate application PUC has updated the estimates resulting in OM&A being overstated by \$6,250 and capital being understated by \$14,050 in the smart meter model. OEB staff has requested an updated model with other changes as a result of the interrogatories. PUC will reduce OM&A costs by \$6,250 on line 2.5.6 "Other AMI expenses" and increase capital by \$14,050 on line 1.5.6 "capital AMI expenses".

Question #7

**Ref: Application, Tab 1, Schedule 2, page 10 – Costs Beyond Minimum
Functionality**

On page 10 of Tab 1, Schedule 2 of the Application, PUC states:

As part of the smart meter deployment program, PUC has decided to install smart meters for the general service > 50 kW customers. PUC has a total of about 3,611 general service customers of which only 372 are in the greater than 50 kW class. As a further breakdown of these 372 customers, 31 already have interval meters. Of the general service customers in the > 50 kW segment, to date approximately 158 customers have smart meters installed and it is planned to convert the remaining 183 customers to smart meters. PUC determined that these customers will have more detailed needs for data than will typical residential and general service < 50 kW customers, and providing them with better information on how much and when they consume electricity may provide these customers with opportunities for more energy conservation and load shifting. In addition, the contracted services of monthly on-site electric meter reading will be completely discontinued once all the customers have been converted to smart meters...

In other applications considered, or being considered, by the Board, some distributors that have sought to recover costs for the installation of smart meters for the GS > 50 kW class. In many of these cases, Board staff observes that the utilities are replacing interval meters with updated meters that will be able to communicate a customer's interval data using the deployed AMI network; interval meters are typically replaced when they need repair or replacement or upon re-sealing.¹

a) In determining that GS > 50 kW customers would have more detailed needs for data than typical residential and GS < 50 kW customers, did PUC seek input from any of its GS > 50 kW class customers to confirm a desire and need for that additional information? If so, please provide details regarding the customer's responses including the number of customers that were contacted.

b) Please provide the following:

i. An estimate of the remaining useful life of the 158 meters that were replaced for customers in the GS > 50 kW class, to date.

ii. An estimate of the net book value of the 158 meters that were replaced for customers in the GS > 50 kW class, as of December 31, 2011.

c) Please provide a description of how PUC plans to treat the remaining net book value of the 341 GS > 50 kW customer meters it expects to have replaced by the end of 2012.

1 Horizon Utilities Corporation's smart meter application (EB-2011-0417) currently before the Board is one example where "smart meter" deployment includes replacement of interval meters in the GS > 50 kW class.

PUC Response

- a) PUC did not seek input from the GS>50 class customers to confirm their desire and need for additional information provided by smart meters.
- b) i) The estimated remaining useful life of the 158 meters that were replaced for the GS>50 customers to date is as follows:

Estimated Remaining Useful life		
	Number of Meters	Percentage
No remaining useful life	78	49%
1 to 4 years remaining useful life	28	18%
5 to 10 years remaining useful life	30	19%
11 to 15 years remaining useful life	7	4%
16 to 20 years remaining useful life	11	7%
21 to 25 years remaining useful life	4	3%
	158	100%

- ii) The estimated NBV of the 158 meters that were replaced for customers in the GS>50 class at December 31, 2011 is \$12,000.
- c) PUC plans to treat the NBV of the GS>50 class meters as stranded meter costs and seek recovery in PUC's 2013 cost of service rate application.

Question #8
Per Meter Costs

Ref: Application, Tab 1, Schedule 4, page 1 – Smart Meter Costs Per Unit

On page 1 of Tab 1, Schedule 4 of the Application, PUC has provided tables summarizing the average costs per meter for each rate class. PUC shows an average capital cost per meter of \$499.37 for the GS < 50 kW class and an average capital cost per meter of \$862.01 for the GS > 50 kW class.

- a) Please provide a breakdown of the meter types installed, by year, for the GS < 50 kW class including the total number of each type of meter that was installed.
- b) Similarly, please provide a breakdown of the meter types installed, by year, for the GS > 50 kW class.
- c) PUC's calculation of the average capital cost per meter for the GS > 50 kW class shows \$293,945 in capital costs for 341 meters installed. On page 10 of Tab 1, Schedule 2 of the Application, PUC states that it has installed 158 meters for the GS > 50 kW class, to date. Please confirm that the average capital cost per meter shown for the GS > 50 kW class includes capital costs for meters forecasted to be installed in 2012. If so, please provide an average capital cost per meter for the GS > 50 kW meters installed to the end of 2011.

PUC Response

- a) The table below provides the breakdown of meter types installed by year for the GS<50kW rate class. The table below lists the latest install date which may differ from the install date in the smart meter model. PUC's system tacks the latest installed date and some meters were installed and then re-installed for a Sensus (the provider of PUC's Advances Metering Infrastructure) memory recall replacement program. For example, PUC included in the smart meter model 1,507 meters installed in 2010. Of those 1,507 meters 441 were removed and upgraded and re-installed in 2011. The installed date on the meter reflects the most recent replacement date.

Meter Type	2009	2010	2011	2012	Total
iSA2	1,516	319	75	11	1,921
A3D		606	7		613
iNA2		141	5	1	147
A3RL			109	2	111
A3TL			261	52	313
KV2C			6	133	139
Total	1,516	1,066	463	199	3,244
Total as in smart meter model reflecting original installation date	1,592	1507	140		3,239

- b) The table below provides the breakdown of meter types installed by year for the GS>50kW rate class. The table below lists the latest install date which may differ from the install date in the smart meter model. Refer to the explanation in a) above.

Meter Type	2009	2010	2011	2012	Total
A3D		28			28
A3RL			91	41	132
A3TL			10	16	26
KV2C				2	2
Total		28	101	59	188
Total as in smart meter model reflecting original installation date			158	0	

- c) PUC confirms the average cost per smart meter shown for the GS>50 rate class is including all installed meters forecast for 2012. The average capital forecast capital cost per meter in \$862.01. As requested, PUC calculated the average cost per meter installed to the end of 2011as \$851.75 per meter.

Question #9

Smart Meter Model, Version 2.17

10. Ref: Excel Smart Meter Model, Version 2.17, Sheet 2 – Smart Meter Costs

On sheet 2 of the Smart Meter Model, PUC has provided the costs incurred in the installation of smart meters, per year, for their smart meter deployment.

- a) Column S of sheet 2 forms the basis for the calculation of the SMIRR. In column S, PUC has shown \$287,600 in capital costs and \$356,733 in OM&A expenses for 2012. Please provide a table summarizing the amounts entered in column S that are one-time (i.e. 2012 only) expenses and amounts that are ongoing expenses for meters installed, as of December 31, 2011. Please use a format similar to column S of sheet 2 of the Smart Meter Model. For each line item, please provide a description for activities underlying the costs that are shown.
- b) Sheet 2 of the Smart Meter Model shows customer communication costs of \$13,129, \$129,661 and \$30,000 for 2010, 2011 and 2012, respectively. Please explain the significant jump in customer communication expenses for the 2011 year.
- c) Sheet 2 of the Smart Meter Model shows forecasted smart meter capital costs of \$129,000 and installation costs of \$50,000 for 2012 but no forecasted meter installations for residential and GS < 50 kW customers in 2012. Please explain the nature of these costs. If these costs are for expected customer growth in 2012, please provide the estimated number of additional customers for the forecasted capital and installation costs.
- d) On page 1 of Tab 1, Schedule 4 of the Application, PUC provided a total capital cost of \$293,945 for the installation of smart meters for the GS > 50 kW class. On Sheet 2 of the Smart Meter Model, PUC has documented \$251,318 in capital costs (under line 1.6.2) for the deployment of smart meters to customers other than the residential of GS < 50 kW classes. Please reconcile the difference between the two values.
- e) On line 2.1.2 of Sheet 2 of the Smart Meter Model, PUC has shown AMI Operating Fees of \$19,587, \$94,437 and \$150,000 for 2010, 2011 and 2012, respectively. Please explain the significant increase in AMI Operating Fees between 2011 and 2012.
- f) On line 2.5.6 of Sheet 2 of the Smart Meter Model, PUC has provided a total of \$179,702 in Other AMI expenses. Please provide a description of the nature of the these costs.
- g) On line 2.5.3 of Sheet 2 of the Smart Meter Model, PUC has provided costs for Project Management. Please explain the \$45,000 documented for Project Management costs as estimated OM&A expenses for 2012. Please describe the activities and projects for which PUC is incurring or plans to incur for project management. Does PUC expect these expenses will be one-time or that they will continue past 2012?

PUC Response

a) 2012 Capital Costs

Description	Amount \$	One-Time Cost or On-Going Cost
Smart Meters	129,000	One-Time
- \$79,000 capitalized interest on smart meter loan - \$50,000 allowance to complete deployment of smart meters, includes anticipated new installations, conversion from bulk to individual meters and Elster A3D memory upgrades.		
Installation Costs	50,000	One-Time
- Installation costs association with the completion of the smart meter deployment as described above.		
Customer Equipment	5,000	One-Time
- Meter base repairs		
AMI Interface to CIS	10,000	One-Time
- Allowance for CIS enhancements		
Program Management	12,000	One-Time
- ODS / CIS security audits		
Other AMI Capital	81,600	One-Time
- \$21,600 CIS enhancements for additional disk space capacity. - \$20,000 Staff training and department integration. - \$40,000 Smart Meter customer presentment web tools.		
Total	287,600	

2012 OM&A Costs

Description	Amount \$	One-Time Cost or On-Going Cost
Other – AMI Operating Fee	150,000	On-going
- Sensus AMI system operating costs		
Wan Maintenance	4,400	On-going
- Communication Expense – use of fibre.		
Business Process Redesign	40,000	On-going
- Consulting services to document, modify and implement business processes		
Customer Communication	30,000	One-Time

- Customer education and advertising		
Program Management	45,000	On-going
- Consulting services and utili-assist sync operator		
Other AMI Expenses	82,333	On-going
- \$10,000 ODS enhancements -metersense rule development		
- \$2,333 AS2 client license		
- \$10,000 smart meter web presentment tools		
- \$60,000 ODS fees		
Costs related to beyond minimum functionality	5,000	One-Time
- Operating expenses associated with meter base repairs for non-mandated meters		
Total	356,733	

- b) Customer communication costs increased in 2011 due to substantial completion of smart meter installations and transition to TOU pricing in fall of 2011. In anticipation for the switch to TOU pricing in the fall of 2011, PUC increased advertising to educate and inform customers on smart meters and TOU pricing. PUC's expenditures include:

- Printed Material such as brochures, inserts and posters \$7,500
- Billboard Rentals \$40,100
- Newspaper Advertisements \$35,100
- Radio Advertising \$45,300
- Window dressing in the office building \$1,000

- c) The Smart meter capital costs of \$129,000 in 2012 includes \$79,000 in capitalized interest and \$50,000 in capital upgrades. PUC has also included \$50,000 for installation costs. A portion of the \$50,000 for capital upgrades and \$50,000 for installation costs relate to the costs for anticipated new installations and conversions from bulk to individual meters for apartment buildings in 2012. The number of new installations is expected to be in the range of 150 to 200 based on the last two years. The conversion from bulk to individual meters is less predictable but expected to be no more than 50. Furthermore, PUC anticipate costs as a result of the Elster memory upgrade project, as PUC has 644 meters that must be removed from the field, sent to the vendor for memory upgrade and reinstalled. PUC also expect costs associated with meter firmware upgrades that cannot be performed over-the-air as well as costs to replace failed meters including "stale".

- d) On page 1 of Tab 1, Schedule 4 of the Application, PUC provided a total capital cost of \$293,945 for the installation of smart meters for the GS > 50 kW class. This is used for calculating the per meter cost for the GS> 50 class. Since PUC is seeking recovery of non-mandated meters, to accurately reflect the GS>50 per unit cost a portion of other costs, as listed below, have been allocated to the GS>50 rate class. In the Smart meter model, PUC has documented \$251,318 in capital costs. These costs do not include pro-rated shared costs between the rate classes. PUC calculated the portion of the shared costs relating to GS>50 in

addition to the capital costs of the meters as follows:

\$16,882	Installation costs
\$86	Computer Software
\$161	Customer Equipment
\$498	AMI Interface to the CIS
\$4,671	Professional Fees
\$9,144	Integration
\$8,545	Program Management
\$2,646	Other AMI
\$42,628	Total

- e) In 2011 costs are less due to the AMI service provider not being at the level of performance targeted for communication and accordingly monthly per meter charges did not commence until part way through the year. The increase in 2012 is a result of a full year of monthly meter fees being included and another TGB being put in place.
- f) The other AMI Expenses of \$179,702 are as follows:
 Operational Data Store monthly charges to the service provider \$167,369
 Meter Sense Rule Development \$10,000
 AS2 License \$2,333
- g) PUC costs for Project Management in OM&A Expenses for 2012 of \$45,000 relates to sync operator contracted services for daily IESO and operational activity for \$35,000 and \$10,000 for additional consulting services. PUC expect these expenses will be on-going and continue past 2012.

Question #10

Ref: Excel Smart Meter Model, Version 2.17, Sheet 3 – Taxes/PILs Rates

PUC has used the maximum taxes/PILs rates input on sheet 3, row 40, for the years 2006, 2007, 2008, 2009, 2010, 2011 and 2012 and beyond. These are summarized in the following table:

Year	2006	2007	2008	2009	2010	2011	2012 and beyond
Aggregate Federal and provincial income tax rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%

Please confirm that these are the tax rates corresponding to the taxes or PILs actually paid by PUC in each of the historical years, and that PUC forecasts it will pay for 2012. For historical years to 2011, these would be the aggregate rate derived for calculating the taxes/PILs included in the revenue requirement in cost of service applications, or as calculated in taxes/PILs calculations as part of IRM applications. Otherwise, please explain the tax rates entered and their derivation.

PUC Response

PUC confirms the tax rates used in the smart meter model correspond to the historical years 2006 to 2011 aggregate tax rates used for calculating the tax/PILs included in the revenue requirement in a cost of service application or IRM application in the corresponding years. In PUC's 2012 IRM application a tax rate was approved May 1, 2012 of 24.93%. OEB staff has requested an updated model with other changes as a result of the interrogatories. PUC will reduce the tax rate in the 2012 year to 24.93% in the updated smart meter model submitted with the interrogatory responses.

Question #11

Ref: Excel Smart Meter Model, Version 2.17, Sheet 3 – Cost of Capital Parameters

On Sheet 3 of the Smart Meter Model, PUC has provided its cost of capital parameters for the years 2006 through 2012.

- a) On sheet 2, in cell G23, PUC has input a debt capitalization of 56% for 2006. In its 2006 EDR application (RP-2005-0020/EB-2005-0412), PUC had rates approved on a deemed debt capitalization of 50%. Please explain the reason for using a different debt capitalization than that approved. Otherwise, please update the model.
- b) On sheet 2, in cell G30, PUC shows a long-term debt rate of 5.80%. It also has documented an ROE of 8.60% for 2006. A review of the 2006 EDR model used for final rate setting shows that PUC was approved a debt rate of 6.35% and an ROE of 9.00%. Please explain PUC's inputs. Otherwise, please update the model. Note that, these inputs would also be carried forward to 2007.
- c) For 2008, Board staff observes that the cost of capital parameters (ROE and deemed short-term and long-term debt rates) correspond with what PUC was approved in its cost of service rebasing application (EB-2007-0931). In 2009, 2010, 2011 and 2012, it appears that PUC has updated the cost of capital parameters with those announced by the Board for May 1 rates in each year. However, these changes in the cost of capital parameters apply for rates rebased through a cost of service application. PUC has had its rates adjusted through the IRM adjustment process in each year. The Board's policy and practice is that the cost of capital parameters from the last approved cost of service application continue until the next rebasing application. Please explain PUC's inputs. Otherwise, please update the model.

PUC Response

- a) In the smart meter application PUC has no costs included in 2006 to be recovered. Therefore PUC did not update the debt capitalization rates in the model.
- b) In the smart meter application PUC has no costs included in 2006 therefore the return rate was not updated in the model.
- c) In the model for 2007 to 2012 PUC used the cost of capital parameters that correspond to the updated rates issued by the Board May 1 for each year. PUC will update the model to reflect the approved cost of capital parameters from the last approved cost of service application through the IRM years until the next year of rebasing.

Question #12

Ref: Smart Meter Model – Interest on OM&A and Depreciation Expenses

In the Smart Meter Model Version 2.17 filed by PUC, the utility has relied upon sheet 8B to calculate the interest on OM&A and depreciation/amortization expenses. Sheet 8B calculates the interest based on the average annual balance of deferred OM&A and depreciation/amortization expenses based on the annual amounts input elsewhere in the model.

The more accurate and preferred method for calculating the interest on OM&A and depreciation/amortization expense is to input the monthly amounts from the sub-account details of Account 1556, using sheet 8A of the model. This approach is analogous to the calculation of interest on SMFA revenues on sheet 8 of the model.

Please re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from Account 1556 records. If this is not possible, please explain.

PUC Response

PUC will re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from account 1556.

Question # 13

Ref: Smart Meter Model

If PUC has changed its data inputs to the Smart Meter Model, Version 2.17 as a result of interrogatories by Board staff and/or the Vulnerable Energy Consumers Coalition, please update and re-file the smart meter model in working Microsoft Excel format.

PUC Response

As a result of interrogatories, PUC will provide an updated smart meter model to reflect the following changes:

- Detailed monthly OM&A and depreciation/amortization expenses for account 1556 included in the model.
- Updated cost of capital parameters that agree to the approved rates in PUC's most recent cost of service application in IRM term years.
- A reduction in 2012 OM&A expenses in line 2.5.6 of \$55,000 to reflect the savings associated with reduced meter reading costs in 2012.
- A reduction in 2012 OM&A expenses in line 2.5.6 of \$6,250 for a revised estimated costs for web presentment.
- An increase in 2012 capital costs of \$14,050 for a revised estimated cost related to web presentment.
- A change to the 2012 PILs rate to 24.93% for 2012.

Question # 14

Cost Allocation

Ref: Application, Tab 1, Schedule 5, pages 2 and 3 – Smart Meter Disposition Rider (SMDR) and Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

On pages 2 and 3 of Tab 1, Schedule 5 of the Application, PUC has provided tables showing the calculation of class specific SMDRs and SMIRRs.

- a) Please confirm the allocator used to allocate costs to each class in PUC's SMDR and SMIRR calculations for the following:
- i. Return (deemed interest plus return on equity);
 - ii. Amortization;
 - iii. OM&A;
 - iv. PILs; and
 - v. Smart Meter Rate Adder revenues

PUC Response

- a) PUC used the following allocators to allocate costs by rate class when calculating the SMIRR and SMDR:
- i. Return (deemed interest plus return on equity) – Number of smart meters installed by rate class.
 - ii. Amortization – Smart meter costs by rate class.
 - iii. OM&A – Number of smart meters installed by rate class.
 - iv. PILs – revenue requirement by rate class before PILs
 - v. Smart meter rate adder revenues – actual adders collected by rate class.

Question # 15

Ref: Application, Section 16 – Cost Allocation

a) If PUC has made revisions to its Smart Meter Model, Version 2.17 as a result of its responses to interrogatories, please update its proposed class-specific SMDRs.

b) Similarly, please update the calculation of class-specific SMIRRs.

PUC Response

PUC has included an updated average cost per meter by rate class and updated SMDR and SMIRR's to reflect the changes made in the model as a result of the interrogatories.

Average Costs Per Meter by Rate Class

Residential Meters

Costs		Cost Per Meter
Total Capital Cost	4,683,746	
Number of Meters Installed	29,385	
Average Cost Per Meter		\$ 159.39

General Service < 50kW

Costs		Cost Per Meter
Total Capital Cost	1,620,957	
Number of Meters Installed	3,239	
Average Cost Per Meter		\$ 500.45

General Service > 50kW

Costs		Cost Per Meter
Total Capital Cost	294,367	
Number of Meters Installed	341	
Average Cost Per Meter		\$863.24

Smart Meter Actual Cost Recovery Rate Rider - SMDR Calculated by Rate Class				
	Total	Residential	GS < 50	GS > 50
Allocators				
Average Smart Meter Unit Cost		\$ 159.39	\$ 500.45	\$ 863.24
Smart Meter Cost	\$ 6,599,069	\$ 4,673,630	\$ 1,617,444	\$ 293,945
Allocation of Smart Meter Costs	99.79%	70.82%	24.51%	4.45%
Number of meters installed	32,965	29,385	3,239	341
Allocation of Number of meters installed	100.00%	89.14%	9.83%	1.03%
Total Return (deemed interest plus return on equity)	\$ 867,283	\$ 773,096	\$ 85,216	\$ 8,971
Amortization	\$ 987,547	\$ 699,406	\$ 242,050	\$ 43,989
OM&A	\$ 511,376	\$ 455,841	\$ 50,246	\$ 5,290
Revenue Requirement before PILs	\$ 2,366,206	\$ 1,928,343	\$ 377,511	\$ 58,250
PILs	\$ 125,207	\$ 102,038	\$ 19,976	\$ 3,082
Total Revenue Requirement 2006 to 2012	\$ 2,491,413	\$ 2,030,380	\$ 397,487	\$ 61,332
	99.91%	81.50%	15.95%	2.46%
Smart Meter Rate Adder Revenues	(\$2,272,720)	(\$1,999,994)	(\$249,999)	(\$22,727)
Smart Meter True-up	\$ 218,693	\$ 178,224	\$ 34,891	\$ 4,387
Metered Customers 2012	32,965	29,385	3,239	341
Rate Rider to Recover Smart Meter Costs (per month)	\$ 0.55	\$ 0.51	\$ 0.90	\$ 1.07

Smart Meter Actual Cost Recovery Rate Rider - SMIRR By rate Classs				
	Total	Residential	GS < 50	GS > 50
Allocators				
Average Smart Meter Unit Cost		\$ 159.39	\$ 500.45	\$ 863.24
Smart Meter Cost	\$ 6,599,069	\$ 4,683,675	\$ 1,620,958	\$ 294,365
Allocation of Smart Meter Costs	100.00%	70.97%	24.56%	4.46%
Number of meters installed	32,965	29,385	3,239	341
Allocation of Number of meters installed	100.00%	89.14%	9.83%	1.03%
Total Return (deemed interest plus return on equity)	\$ 368,997	\$ 261,895	\$ 90,638	\$ 11,682
Amortization	\$ 501,497	\$ 355,936	\$ 123,185	\$ 15,877
OM&A	\$ 295,483	\$ 263,394	\$ 29,033	\$ 2,725
Revenue Requirement before PILs	\$ 1,165,977	\$ 881,224	\$ 242,856	\$ 30,284
PILs	\$ 61,002	\$ 46,104	\$ 12,706	\$ 1,584
Total 2012 Incremental Revenue Requirement	\$ 1,226,978	\$ 927,328	\$ 255,562	\$ 31,869
Metered Customers	32,965	29,385	3,239	341
Rate Rider to Recover Smart Meter Costs	\$ 3.10	\$ 2.63	\$ 6.58	\$ 7.79