



September 13, 2012

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

Dear Ms. Walli:

Re: Fort Frances Power Corporation –
Response to Interrogatories - for 2012 Smart Meter Rate Application EB-2012-0327

This letter acknowledges the receipt of Board Staff Interrogatories dated August 28th, 2012. Fort Frances Power Corporation submits two (2) hard copies of Fort Frances Power Corporation's response to Board Staff Interrogatories for the Application for the Recovery of Costs related to Smart Meter Deployment and encloses the following:

- Responses to Board Staff Interrogatories
- Appendix A – FFPC_2012_Smart_Meter_model_Appendix_A_Revised_20120912.xls
- Appendix D – Guelph Model_ FFPC_Smart_Meter_Appendix_D_20120912.xlsx

An electronic copy has been submitted through the OEB's RESS on-line filing system, and via email to all interveners.

If you have any further questions, please do not hesitate to contact me at (807)274-9291 or via email at ffpc@fort-frances.com.

Yours truly,

A handwritten signature in black ink, appearing to read 'Joerg Ruppenstein', with a long horizontal flourish extending to the right.

Joerg Ruppenstein
President and CEO

/LC

**Fort Frances Power Corporation ("FFPC")
2012 Smart Meter Cost Recovery
EB-2012-0327
Response to Board Staff Interrogatories**

Interrogatory:

1. Manager's Summary

On page 2 of its Application, FFPC states that it is seeking approval for:

- A Smart Meter Disposition Rider (SMDR) for all capital and operating, maintenance, and administrative (OM&A) expenses for meters installed up to December 31, 2011 of \$1.20 per month per RES metered customer (charge) and \$8.05 per month per GU<50kW metered customer (charge), GS>50kW of \$13.47 per month over a one year period. The request to collect this over a one year period is in keeping with the Stable for the Utility and Stable for the customers outlined in the "Principles of Rate-Making".*
- A smart meter incremental revenue requirement rate rider (SMIRR) for the revenue requirement for the smart meters installed up to December 31, 2011 in 2012 of \$2.9904 per month per RES metered customer (charge), \$6.10 per month per GU<50kW customer (charge) and \$8.43 per month per GS>50kW customer (charge) until smart meters are incorporated into FFPC's rate base.*

The SMIRR is a fixed monthly charge for a ratepayer in a metered customer class. Why is FFPC proposing a rate of \$2.9904 per month for Residential customers, and how does it propose to implement the fractional charge?

Response:

Please amend the text in the Manager's Summary to read the SMIRR rate for Residential customers to **'\$2.99 per month'** as represented in the table "Smart Meter Incremental Revenue Requirement Rate Rider", page 12 of the Manager's Summary, as FFPC did not intend to implement a fractional charge.

Interrogatory

2. Ref: Application, page 3 – Procurement of Smart Meters and Installation Services

On Page 3 of the application, FFPC states that:

FFPC was part of the Northwest Group (Thunder Bay Hydro, Kenora Hydro, Fort Frances Power, Atikokan Hydro and Sioux Lookout Hydro), who contracted with Util-Assist Inc. (Util-Assist) to manage the various smart meter related procurements, develop the overall project plan and to monitor and guide the project through to time-of-use (TOU) bill production.

The Northwest Group contracted with Kinetiq Canada Ltd. (Kinetiq) to prove that the Elster automated metering infrastructure (AMI) system was meeting the provincial standard, to integrate the AMI data with the meter data management repository (MDM/R), to reconcile the meter data sent to the MDM/R matched the data received back to the utility, and finally to automate business processes so as to avoid increasing staffing in the Billing Department.

Please confirm that participation in the Northwest Group – and contracts with Util-Assist and Kinetiq – were/are cost effective for FFPC and its ratepayers. Please provide quantitative examples that demonstrate the benefits, such as reduced costs.

Response:

FFPC participated in the Norwest Group with the intent of cost sharing all practical aspects of implementing and operating the mandated Smart Meter (AMI) system. All participating LDC's basically required the same deliverables (as further discussed below) to successfully deploy and operate their AMI System. The group was therefore able to essentially split all costs incurred among the five members (in some instances split equally and in some instances split based on customer counts). The AMI System that the Northwest Group deployed and operates can be thought of a "regional system" due to the high degree of system integration (system commonality) and cost sharing of resources/service providers. In addition to sharing a common AMI system the group also shares a common customer information system (CIS) which is administered by Thunder Bay Hydro.

FFPC confirms that participation in the Northwest Group and the contracts with Util-Assist and Kinetiq were/are cost effective for FFPC and its ratepayers as detailed in the chart below.

The Northwest Group jointly contracted Util-assist to provide the following services to Group:

- Assistance In London RFP Process & Procurement and Selection Services
 - Utility orientation of AMI Technology before RFP evaluation process
 - Involvement in London RFP Process
 - RFP Evaluation and scoring services
 - Final Vendor Negotiations
 - AMI Selection Report
- Procurement and Selection Services of major AMI system components
 - Utility Orientation of AMI Technology before RFP evaluation process
 - Project Management for the selection of a common AMI system via the London RFP process.
 - Procurement of Smart Meter Installation Service Provider
 - Procurement of WAN Service Provider
 - Procurement of Operational Data Store (ODS) Service Provider
- AMI Project Facilitation
 - Perform utility interviews to verify the needs of all departments and look for synergies with the AMI system

- Development report listing corporate needs, systems that achieve those needs and budgets
 - Business case preparation
 - Development of detailed project plan
- AMI System Implementation
 - Aid in the configuration and testing of Work Force Management Tools
 - Inventory Control assistance
 - Project manage the smart meter implementation process to ensure maximum amount of information is collected in the field
 - Procurement of Recycle service provider
- Acceptance Testing
 - End-to-end testing of deployed networks
 - Document results using standardized test scripts
 - Facilitate the analysis of data from the installation process to a temporary MDM/R to verify the quality of the data coming from the AMI network
- Back Office Integration
 - Facilitate the change management process to make sure all departments are using the features of the AMI system(s) deployed
 - Project Management of integration into Time-of-Use (TOU) market place
 - Bill print modification
 - CIS TOU setups and testing
 - Aid in the integration into Smart Meter Entity MDM/R
- Live TOU Billing
 - Project Manage customer education and back office changes to facilitate the transition to live TOU billing

Kinetiq (also commonly referred to as Savage Data) was contracted by the group during the RFP process and is utilized to perform the Operational Data Store (ODS) function that includes “cleaning” data. The total monthly fixed fee to the Northwest Group is \$1,195 for ODS services, which is shared among the five utilities in the Northwest Group based on the number of customers (FFPC’s share of the \$1,195 is \$72). Had FFPC approached Savage Data on its own, FFPC’s monthly fixed service charge would have been approximately \$350. In addition FFPC was able to reduce the variable portion of the monthly ODS charge by pooling the group’s meters (65,000) to obtain a favourable cost of 0.12 \$/Meter. Again had FFPC approached Savage Data on its own, FFPC would have incurred a monthly cost of 0.15 \$/Meter thus saving 0.03 \$/Meter per month.

Quantitative examples of reduced costs are below:

NORTHWEST GROUP - COST EFFECTIVE QUANTITATIVE EXAMPLES					
Contractor	Description	Annual Cost to Group	Total Cost Three Years	FFPC Cost (1/5)	Potential Savings
Util-assist	Project Manager Consulting Service, 2008-2010	\$64,896	\$194,688	\$38,938	\$155,750
		Cost per metering point without Group	Cost per metering point with Group	Total Monthly Savings	Annual Savings
Savage Data	Smart Assistant - Smart Meter analysis and reporting	\$0.15	\$0.12	\$114	\$1,370
		Monthly Cost Without Group	FFPC Cost/Month - 6% of Group Cost \$1195	Monthly Savings	Annual Savings
Kinetiq	Operational Data Store-Monthly Cost to NW Group	\$350	\$73	\$277	\$3,324

Interrogatory

3. Ref: Application, page 12 – Web Presentment

On page 12 of its Application, FFPC states that it forecasted 2012 TOU billing expense of \$12,000 for web presentment.

Please confirm that FFPC has procured the same vendor for web presentment services as the rest of the Northwest Group. If not, please describe FFPC's procurement process and discuss how FFPC determined that the chosen option was most beneficial and cost effective for FFPC and its cost payers.

Response:

FFPC confirms its participation with the Northwest Group to procure a common web presentment services solution for all group participants. The group is currently in the RFP stage of the procurement process.

Interrogatory

4. Ref: O. Reg. 426/06 and O. Reg. 393/07 – Provincial MDM/R Costs

O. Reg. 426/06 s. 2(1) states that, “No distributor shall recover any costs associated with meter data functions to be performed by the Smart Meter Entity.” O. Reg. 393/07 defines the exclusive authority of the Smart Meter Entity as, among other functions, “providing all services, as specified by the Smart Meter Entity, performed on smart metering data to produce billing quantity data, including validation, estimating and editing services.”

- a) Are there any functions performed by smart meter-related contractors for FFPC which are duplicative of functions performed (or to be performed) by the provincial MDM/R?*
- b) If yes, please identify the nature and quanta of all such costs, and provide support for how these should be recoverable in accordance with O.Reg. 426/07.*

Response:

No. The systems which interact with the MDMR enable the Northwest Group Utilities to interface with the MDMR but do not duplicate any functions.

Interrogatory

5. Ref: Application, page 6-7 – Smart Meter Cost Variances

FFPC has provided a variance table on page 6 which shows the differences between the budgeted and cumulative actual expenditures as of 2011, based on its expenditures for smart meters from 2008 to 2011. Listed below the table are explanations of the variances. Board staff would like additional information on this table.

- a) The line descriptions for smart meters and computer hardware/software state that the costs are unit costs. However, the table entries appear to be total costs. Please confirm that the table cell entries represent total costs for each category rather than unitized costs (i.e. per smart meter).*
- b) FFPC states that “the Computer and Hardware costs were \$34,946 greater than expected and the incremental OM&A Costs had higher than anticipated software costs”. It is unclear what incremental OM&A costs are referenced in this statement. Please provide a detailed explanation of the quoted statement.*
- c) Please identify Other Incremental OM&A and Other Admin Expenses and state detailed reasons for the variances in the Incremental OM&A Costs. Specifically, please explain in detail the unfavourable variance (i.e. cost overrun) of \$128,287 for Incremental AMI Admin Expenses. Further, please identify which OM&A expenses are one-time costs, and which are recurring (e.g. annual security audits, TOU billing, etc.).*

Response

- a) The table cell entries represent total costs for each category and not unitized costs.
- b) Please amend this statement to exclude any reference to OM&A costs. The line should read: "The Computer and Hardware costs were \$34,946 greater than expected due to higher than anticipated software costs".
- c) Please reference the table below detailing Incremental AMI Admin Expenses:

Incremental AMI Admin Expenses	2008	2009	2010	2011
Project Manager Consulting Fees	\$21,452.10			
Employee Training	\$3,997.14	\$14,877.10		
Call Centre		\$2,702.48		
Advertising		\$2,311.81		
Elster Service Agreement		\$26,151.66		
MAS/ODS Service Fees			\$29,896.15	\$30,300.60
	\$25,449.24	\$46,043.05	\$29,896.15	\$30,300.60

All 2008 and 2009 costs illustrated in the above table are one-time costs and all 2010 and 2011 costs illustrated in the above table are recurring MAS/ODS monthly fees. The variance between the budgeted and actual costs is due to understated budget projections in the planning stage of the Smart Meter initiative.

Interrogatory

6. Ref: Smart Meter Program Summary Actual Costs

On page 4 of its Application, FFPC lists smart meter actual costs as at December 31, 2011. In the table on sheet 4, FFPC documents \$619,382 for smart meter capital costs, \$90,665 for Computer Hardware/Software capital costs, and \$54,402 for capital costs "beyond minimum functionality". This is a total amount of \$764,449. However, at the bottom of the table, FFPC documents a total capital cost of \$790,261 for "minimum functionality" and \$54,402 for capital costs "beyond minimum functionality", for an aggregate total of \$844,663. Finally, sheet 2 of Smart Meter Model Version 2.17 documents total capital costs of \$870,111 from 2006 to 2011, as no capital costs are claimed for 2012. Please provide a reconciliation of the capital costs shown in the table on sheet 4 and with the Smart Meter Model.

Response

Please accept the amended table below to reconcile with the Smart Meter Model.

FFPC Smart Meter Program Summary Actual Costs as at December 31, 2011						
FFPC -TOTAL METERS INSTALLED 3776		Revision- Aug 30, 2012				
Year	2008	2009	2010	2011	2011 LTD	UNIT COST/METER
Smart Meter Unit Costs (AMI)	\$0	\$359,486	\$102,361		\$461,847	\$122.31
Smart Meter Other Unit Costs	\$0	\$19,782			\$19,782	\$5.24
Smart Meter Installation Costs Other	\$0	\$76,408	\$25,459	\$23,672	\$125,539	\$33.25
Smart Meter Other Equipment	\$0	\$12,214	\$0	\$0	\$12,214	\$3.23
Smart Meter Unit Costs					\$619,382	\$164.03
AMI Computer Hardware Costs	\$25,449	\$13,840	\$14,732		\$54,021	\$14.31
AMI Computer Software Costs	\$0	\$28,941	\$4,019		\$32,960	\$8.73
Other Computer Hardware Costs	\$0				\$0	\$0.00
Other Computer Software Costs	\$0	\$29,133			\$29,133	\$7.72
Computer Hardware/Software Costs					\$116,114	\$30.75
Incremental AMI O&M Expenses	\$0	\$33,519	\$13,186	\$12,752	\$59,457	\$15.75
Incremental AMI Admin Expenses		\$46,043	\$29,896	\$30,301	\$106,240	\$28.14
Incremental Other O&M Expenses	\$0	\$652		\$11,307	\$11,959	\$3.17
Incremental Other Admin Expenses	\$0	\$21,797		\$2,119	\$23,916	\$6.33
Incremental OM&A Costs					\$201,572	\$53.38
Recoverable Rate Adder Costs:					\$937,068	\$248.16
Safety & Maintenance Capital Budget	\$0	\$0	\$0	\$0	\$0	\$0.00
TOU Billing Budget	\$0	\$0	\$0	\$0	\$0	\$0.00
CAPITAL-Beyond Minimum Functionality	\$0	\$18,523	\$35,879	\$0	\$54,402	\$14.41
TOTAL SMART METER COST:	\$25,449	\$660,338	\$225,532	\$80,151	\$991,470	\$262.57
	2008	2009	2010	2011	TOTAL	UNIT COST/METER
CAPITAL-Minimum Functionality	\$25,449	\$620,018	\$146,570	\$23,672	\$815,709	\$216.02
CAPITAL-Beyond Minimum Functionality		\$18,523	\$35,879	\$0	\$54,402	\$14.41
TOTAL	\$25,449	\$638,541	\$182,449	\$23,672	\$870,111	\$230.43
OPERATING	\$0	\$21,797	\$43,082	\$56,479	\$121,358	\$32.14
TOTAL	\$25,449	\$660,338	\$225,531	\$80,151	\$991,469	\$262.57

Interrogatory

7. Ref: Smart Meter Program Summary Actual Costs, Page 4

In a Smart Meter Program Summary FFPC calculated the average per meter cost of \$248.57 for installed residential and GS<50 kW smart meters and \$262.57 including capital costs beyond minimum functionality (GS>50 kW).

In applications to date, smart meter costs have typically averaged below \$200 per meter on even a total cost (capex plus OM&A) basis. Please provide further explanation of FFPC's circumstances that support its higher than average costs, and of efforts that FFPC took during its smart meter deployment, or is taking ongoing, to control its capital and operating costs for the program and ongoing operations for smart meters, AMI, and TOU billing.

Costs beyond Minimum Functionality

The Board's G-2011-0001 Guideline Smart Meter Funding and Cost Recovery – Final Disposition December 15, 2011 (the "Guideline") at page 17 states the following:

"Costs for other matters such as CIS changes or TOU bill presentment may be recoverable, but the distributor will have to support these costs and will have to demonstrate how they are required for the smart meter deployment program and that they are incremental to the distributor's normal operating costs."

Response

FFPC believes that the average per meter costs of \$248.57 for installed residential and GS<50 kW and \$262.57 including capital costs beyond minimum functionality (GS>50 kW) are reasonable when compared to smaller, northern LDCs rather than large LDCs with higher customer counts over which to spread capital and operating costs. FFPC, within its proper comparator, 'Small Northern Utilities Cohort Group', incurred lower than average costs relative to this comparable group.

The Northwest Utilities formed a "Northwest Working Group" to implement the Government mandated smart meter initiative and to operate a commonly deployed Advanced Metering Infrastructure (AMI) system. The objective of the working group was to deploy a common Smart Meter System (network) that met the technical requirements of all working group LDCs, implement Time-of-Use rates, and to engage in all practical capital and operational cost sharing opportunities such as sharing of costs for consultants, contract procurement, project management, AMI development / setup / configuration, security audit / testing, operating AMI systems, software purchases, and leveraging group purchasing power (more favourable per unit pricing).

In addition to the many previously mentioned synergies gained through participation in the Northwest Group, FFPC also realized further cost savings and overall customer benefits .

FFPC made a business decision early in the planning stages of the Smart Meter Deployment initiative to convert 100% of its conventional meters to smart meters, as well as purchasing all commercial meters (single phase and three phase transformer rated meters) capable of measuring demand.

Advantages and cost savings realized by this approach included:

- reducing the overall number of necessary spare meters, as the number of unique meter types was reduced (entire meter inventory was standardized and thereby reduced)
- minimize external contractor costs by utilizing the internal line-crew to perform commercial and difficult meter installations

- The Northwest Working Group's contractual pricing schedule with Elster Metering was in US dollars (updated quarterly) and therefore the timing of major purchases had the potential of significantly impacting material costs, as the US exchange rate was very volatile throughout the smart meter rollout timeline.
- FFPC only required six collectors to backhaul all smart meter information to an Operational Data Store and Billing System due to the increased smart meter network communication performance and service territory signal coverage, as all GU over 50 kW meters act as repeaters (also many GU>50 customers are located in lower customer density areas),
- FFPC chose to utilize standalone collectors that could be mounted on the communication range of distribution poles to minimize interference with building, vegetation etc. FFPC has experienced first class communication success rates among its mesh network.
- reduced installation and operating costs as repeaters were no longer required to allow for service area communication coverage
- lower per unit meter pricing (FFPC was able to take advantage of the group purchasing power)
- FFPC will not be required to perform any meter changes when customers transition between GU>50 KW and GU50<KW rate classes
- FFPC utilized its existing Customer Information System (CIS) as part of the smart meter / transition to TOU rates project (four of the five northern utilities were already cost sharing a common CIS system hosted by Thunder Bay Hydro). This again minimized smart meter project expenses as all billing system conversion costs were incurred prior to the mandated smart meter initiative.

Interrogatory

8. Ref: Remote Disconnect Technology

On page 9 of its application, FFPC states that it is seeking to recover \$18,723 in costs incurred for the capability to perform remote disconnect service for about 200 meters, mostly residential (89%). This corresponds with row 2.6.3 of Sheet 2 of the Smart Meter Model, where FFPC documents \$18,523 in 2009.

a) Please identify which amount is correct and if necessary update Sheet 2 of the Smart Meter Model.

b) What is the annual impact on OM&A for operating these 200 meters?

c) Are the ongoing OM&A costs for operating these meters incremental to OM&A costs related to

high risk or bad credit accounts that may have not been factored into FFPC's distribution revenue requirement at the time of the last rebasing?

d) What benefits or cost savings are realized for FFPC for the installation of these remote disconnect customers? How do FFPC's ratepayers share in or benefit from these savings?

Response

- a) The correct amount is \$18,523 as stated in the model.
- b) FFPC's underlying objective in purchasing and installing the 200 single-phase meters with the capability of performing remote disconnects was for the safety of its crew (and customers). FFPC has deployed the majority of the 200 meters in customer locations that are hazardous due to the type of legacy meter bases (pedestal style meter bases) as well as in locations with poor accessibility (locked basements with poor access / lighting / awkward heights). FFPC has not yet invested in additional AMI support components to be able to perform remote disconnects from its office location(s) as well as FFPC has not developed processes for true remote disconnection (from FFPC office location(s)). The following picture is of a typical "pedestal style" smart meter installation which represent approximately 100 meters installed:



Remote disconnects for these 200 meters must still be performed via a handheld device while being in close proximity to the smart meter. This means that in order to perform a remote disconnect FFPC is still required to dispatch its crew to the customer location similar to any other customer disconnect. Again the main advantage is that the meter can be disconnected without physically touching the meter which could endanger FFPC's crew due potential hazards associated with the meter bases. As the disconnection process is currently still very similar to traditional meters for these 200 meters, FFPC believes that there is currently no additional OM&A impact (savings or expense) through operating them.

- c) FFPC believes that there is currently no additional OM&A impact from operating these meters.
- d) As previously mentioned the benefits of these meters are strictly in the realm of safety. FFPC's customers share in the benefit of minimizing exposure to personal injury as well as possible property damage. Any Safety related costs that FFPC incurs would ultimately be passed on to rate payers.

As previously mentioned benefits include:

Improved safety conditions for FFPC staff. The majority of these meters are installed on customer owned pedestal services that are often unstable when meter removals are performed, increasing the risk of electrical contact or fault which could injure personnel and possibly damage property. These pedestal services are often inaccessible in the winter due to our climatic snow load and associated snow removal (snow banks often cover pedestals). Other disconnect meters were installed in small business and residential inaccessible locations within buildings that may increase the chance of injury to our staff due to trips, falls or obstacles due to their poor ergonomic location.

9. Ref: Installation of Smart Meters for GS > 50 kW

On page 9 of its application, FFPC states that it has a stable rate base of 47 customers in the GS >50 kW class and corresponding capital costs related to this customer class were recorded in row 1.6.2 of Sheet 2 of the Smart Meter Model. On row 103 "1.6.2 Costs for deployment of smart meters to customers other than residential and small general service", FFPC documents \$25,703 for 2010. However, no OM&A costs related to deployment of smart meters directly allocated to this customer class have been identified.

- a) *Please explain why no OM&A costs for deployment of 47 smart meters to GS > 50 kW customers were recorded in row 2.6.2 of Sheet 2 of the Smart Meter Model.*

Response: FFPC did not include the OM&A costs due to the lack of materiality as shown below:

	2009	2010	2011	2012 and later
INITIAL TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	\$21,797	\$43,082	\$54,360	\$60,800
GS>50 kW Percentage of Rate Base - 1.2 %	\$262	\$517	\$652	\$730
REVISED TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	\$21,536	\$42,565	\$53,707	\$60,070

- b) *If required, please revise applicable tables in the application and schedules of the Smart Meter Model.*

Response: FFPC does not seek to revise applicable tables in application.

10. Ref: Smart Meter Model, Sheet 2 – Cost of Capital

On Sheet 2 of the Smart Meter Model, FFPC, documents a Return on Equity of 8.00% for 2006 to 2010 inclusive, 8.50% for 2011 and 0.00% for 2012. FFPC also documents debt rates of 0% for all years.

FFPC last rebased its distribution rates in 2006 in its 2006 EDR application considered under file number RP-2005-0020/EB-2005-0366. In the Board's Decision RP-2005-0020/EB-2005-0366, the Board approved the deemed debt rate of 6.25% and an ROE of 0%, as proposed by FFPC. Since FFPC has not rebased its rates through a cost of service rates application since then, those cost of capital rates should continue to apply until the utility is next approved rates through a cost of service application.

Please provide an explanation for the debt rates and ROE input into the smart meter model, and why the cost of capital rates approved in FFPC's 2006 EDR rates application should not apply.

Response: FFPC has changed the model to the 2006 EDR rate application deemed debt rate of 6.25%.

FFPC chose to finance its entire Smart Meter (AMI) install program entirely through existing cash equity and believes that it should be compensated for the use of this equity. FFPC believes an ROE of 3% during the installation period for this project is fair and reasonable. This is based on the Bank of Canada prime rate of 3% during the install program of this project and FFPC's current interest rate of return on investments of 1.15%. When the loss of potential interest income is offset against the estimated cost of borrowing for the construction work-in-process, the ROE of 3% is reasonable and within FFPC's not-for-profit threshold.

FFPC has adjusted the model to represent the ROE rate of 3%.

11. Ref: Smart Meter Model, Sheet 2 – Taxes/PILs Rates

FFPC has used the maximum taxes/PILs rates input on Tab 3 Cost of Service Parameters, 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 Corporate	18.50%	18.50%	16.50%	16.50%	16.00%	15.50%	15.50%

Please confirm that these are the tax rates underpinning FFPC's rates for each of the respective years. This should be readily available from spreadsheets used in annual cost of service or Incentive Regulation Mechanism ("IRM") rates applications. If required, please correct the affected models.

Response: FFPC confirmed the tax rates with our external audits, BDO Canada during the application process. As the model is deemed to be correct, no changes were made to it.

12. Ref: Smart Meter Model, sheet 8A – Interest on Depreciation and OM&A expenses

Please update sheet 8A providing actual or estimated monthly OM&A and depreciation expenses for all months in 2012.

Response: FFPC has updated sheet 8A.

13. Ref: Application, page 13 – Stranded Meters

On page 13 of its Application, FFPC states that it is not seeking disposition of its stranded meter costs in this Application. FFPC states that it continues to recover these costs by including the net book value of stranded meters in its rate base.

- a) Please confirm that FFPC continues to record depreciation expense for conventional meters in rate base but stranded by replacement by smart meters.

Response: FFPC continues to record depreciation on the net book value of the stranded meter assets.

- b) Please provide FFPC's estimate of the NBV of stranded meters as of December 31, 2012, and an estimate of the depreciation expense for each of 2012 and 2013.

Response: FFPC estimates that based on the NBV of the stranded meter assets of \$122,144 as of December 31, 2012, the depreciation expense for 2012 to be \$10,939 and \$9,969 for 2013.

14. Ref: Smart Meter Model – Cost Allocation

The design for Smart Meter Model, Version 2.17, as issued by the Board with Guideline G-2011-0001, assumed a May 1, 2012 effective date and allowed for interest calculations on SMFA revenues and OM&A and depreciation expenses to that date.

FFPC filed its application on July 18, 2012 and has proposed an effective date of November 1, 2012.

With the SMDR and SMIRR to be implemented later in 2012, it is appropriate that interest charges on the SMFA revenues recorded in the sub-account of Account 1555 – Smart Meter capital costs and on the OM&A and depreciation expenses recorded in the sub-accounts of Account 1556 – Smart Meter Operating Expenses be taken into account in the determination of the net deferred revenue requirement to be recovered via the SMDR. It is noted that these interest charges may largely be offsetting and hence that they may be of a minimal impact on the SMDRs.

Accordingly, Board staff has revised the model to allow for the interest to be calculated up to the end of any month in 2012, and for this to be factored into the calculation of the uniform SMDR. Board staff has assumed an implementation date of November 1, 2012, and hence interest should be calculated up to the end of October 2012. The model is labeled as Version 2.17 FFPC and attached to these IRs.

FFPC should revise this model to reflect any other adjustments that it feels appropriate as result of responses to interrogatories from Board staff and VECC.

- a) If FFPC has made revisions to its Smart Meter Model, Version 2.17 as a result of its responses to interrogatories, please update the attached Smart Meter Model V. 2.17FFPC.

Response: FFPC has attached the revised model named "FFPC_2012_Smart_Meter_model_Appendix_A_Revised_20120912.xls, however FFPC was unable to adjust the interest charges on SMFA revenues on the spreadsheet due to cell protection.

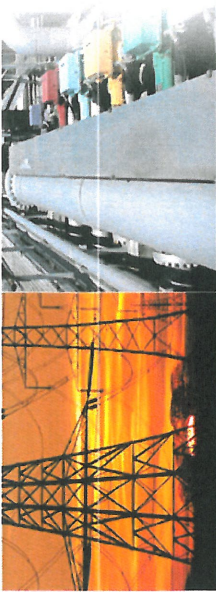
- b) Similarly, please update the calculation of class-specific SMIRRs and SMDRs to correspond with the updated Smart Meter Model in a). Where possible, please provide the calculations for the class-specific SMIRRs and SMDRs (i.e. Appendix D of FFPC's Application) in working Microsoft Excel spreadsheets.

Response: FFPC has attached the revised class-specific calculated SMIRRs and SMDRs within the 'Guelph Model' FFPC_Smart_Meter_Appendix_D_20120912.xlsx. FFPC adjusted the SMFA revenue interest charges to include October 2012 interest charges.

Please find below a revised SMIRR calculation revision effective September 12, 2012. FFPC proposes this rate rider until April 30, 2014, the effective date of FFPC's next anticipated COS rebasing application, which is currently pending Board approval.

SMIRR Rate Rider Calculation - Revised 2012/09/12			
Effective November 1, 2012 - April 30, 2014 - 18 month period			
Amortization			\$68,266
OM&A			\$72,800
PILs			\$11,048
TOU Web Presentation			\$12,000
Incremental Revenue Requirement			\$164,114
TOTAL CUSTOMERS	3777	Costs Allocated % as per SMDR	Rate Rider/ Month /Until Rebasing
RES	3308	76.93%	\$3.18
GS<50 kW	422	20.00%	\$6.48
GS>50 kW	47	3.08%	\$8.96

SMDR & SMIRR - Customer Impact- Revised September 12, 2012					
SMDR Recovery over a one year- Nov 1, 2012 - Oct 31, 2013			SMIRR Recovery over 18 months		
	SMDR	SMIRR	Typical Monthly Bill	Proposed Bill Total	Percentage Increase
Residential	\$0.38	\$3.18	\$84.80	\$88.36	4.20%
GS<50 kW	\$5.91	\$6.48	\$221.76	\$234.15	5.59%
GS>50 kW	\$10.04	\$8.96	\$16,816.00	\$16,835.00	0.11%



Ontario Energy Board Smart Meter Model

Fort Frances Power 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)	\$ -	\$ -	\$ 991.56	\$ 51,973.91	\$ 110,128.89	\$ 133,764.13	\$ 152,114.22	\$ 448,972.70
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B)	\$ -	\$ -	\$ 40.16	\$ 148.77	\$ 743.56	\$ 2,910.20	\$ -	\$ 3,842.68
(Check one of the boxes below)								
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 40.16	\$ 148.77	\$ 743.56	\$ 2,910.20	\$ -	\$ 3,842.68
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								
SMFA Revenues (from Sheet 8)	\$ 6,899.70	\$ 12,724.68	\$ 11,828.92	\$ 31,034.23	\$ 51,635.64	\$ 91,388.45	\$ 37,090.72	\$ 242,602.34
SMFA Interest (from Sheet 8)	\$ 71.94	\$ 587.08	\$ 936.34	\$ 413.49	\$ 702.33	\$ 2,073.04	\$ 2,513.37	\$ 7,297.59
Net Deferred Revenue Requirement	\$ -	\$ 13,311.76	\$ 11,733.55	\$ 20,674.95	\$ 58,534.48	\$ 43,212.84	\$ 112,510.13	\$ 202,915.45
Number of Metered Customers (average for 2012 test year)	3730							

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	\$ 300,701.17
SMFA Revenues collected from 2006 to 2012 test year (inclusive)	\$ 249,899.93
Plus Simple Interest on SMFA Revenues	\$ 50,801.24
Net Deferred Revenue Requirement	\$ 1.13
SMDR	November 1, 2012 to October 31, 2013
Check: Forecasted SMDR Revenues	\$ 50,578.80

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

Incremental Revenue Requirement for 2012	\$ 152,114.22
SMIRR	\$ 3.40
Check: Forecasted SMIRR Revenues	\$ 152,184.00

SPECIFIC SMDR'S - GUELPH MODEL ADAPTATION- BEYOND MINIMUM FUNCTIONALITY & GS>50 KW RATE CLASS ADDED

	2008	2009	2010	2011	Total 2009 to 2011	Explanation Allocator	ID and Factors	Total	RES	GU<50kW	GU>50kW
Revenue Requirement for the Historical Years Including Interest	1,032	52,123	110,872	136,674	300,701	Calculated Percentage of Meter Capital					
Total Return on Capital	148	3,997	8,429	8,921	21,495	Meter Capital	CPMC	100.00%	71.13%	24.77%	4.10%
					Allocated per Class			\$21,495.00	\$15,289.39	\$5,324.31	\$881.30
Amortization and Interest Expense	888	28,260	61,349	70,387	160,884	Calculated Percentage of Meter Capital	CPMC	100.00%	71.13%	24.77%	4.10%
					Allocated per Class			\$160,884.00	\$114,436.79	\$39,850.97	\$6,596.24
Operating Expenses (Note 1)		21,797	43,082	56,479	121,358	Number of Smart Meters Installed for each Class		3,832	3,350	435	47
					Allocated per Class			\$121,358.00	\$106,093.24	\$13,776.29	\$1,488.47
Grossed-up Taxes/PILs	-4	-1,931	-1,988	887	-3,036	Revenue Requirement allocated to each Class before PILs					
					Allocated per Class			\$303,737.00	\$235,819.42	\$58,951.56	\$8,966.01
								-\$3,036.00	-\$2,357.13	-\$589.25	-\$89.62
TOTAL REVENUE REQUIREMENT					\$300,701			Total	RES	GU<50kW	GU>50kW
								\$300,701.00	\$233,462.29	\$58,362.32	\$8,876.39

Revenue Generated from Smart Meter Funding Adder

Percentage of costs allocated to metered customer classes

\$250,197.12

Revenues Generated from SMFA

Net Deferred Revenue Requirement

\$250,197.12

\$50,503.88

Number of Metered Customers

(2012)

Smart Meter Disposition Rate Rider - 12 MONTH PERIOD

Anticipated Revenue

\$14,922.76

\$5.91

\$30,829.23

\$5,577.32

\$10.04

\$55,777.32

\$10,026.72

\$12,043.20

\$12,021.36

\$34,885.36

\$45,924.00

\$90,792.00

\$38,920.00

\$242,612.64

\$100.00%

\$1.28%

\$11.37%

\$31%

\$100%

\$100%

\$572,956.00

\$18,723.00

RES -120 , GS<50 kW 15 - 55 spare)

\$10,176.00

\$25,703.00

\$627,558.00

\$100.00%

Smart Meter Funding Adder Revenues

2006 (May 1, 2006)

Residential

3,380

GS < 50 kW

432

GS > 50 kW

47

Total

\$ 7,030.40

\$ 898.56

\$ 97.76

\$ 8,026.72

\$ 10,520.64

\$ 1,375.92

\$ 146.64

\$ 12,043.20

\$ 10,498.80

\$ 1,382.16

\$ 140.40

\$ 12,021.36

\$ 30,482.88

\$ 3,995.68

\$ 406.80

\$ 34,885.36

\$ 40,140.00

\$ 5,220.00

\$ 564.00

\$ 45,924.00

\$ 79,392.00

\$ 1,104.00

\$ 90,792.00

\$ 33,850.00

\$ 4,414.00

\$ 656.00

\$ 38,920.00

\$ 211,914.72

\$ 27,582.32

\$ 3,115.60

\$ 242,612.64

\$ 87.35%

\$ 11.37%

\$ 1.28%

\$ 31%

\$ 100%

\$ 100%

\$ 572,956.00

\$ 429,717.00

\$143,235.00

\$2,059.53

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