

117 Gorrie Street, Box 1480 Atikokan, Ontario POT 1C0

 Telephone
 (807)597-6600

 Fax
 (807)597-6988

 e-mail wilf.thorburn@athydro.com

June 30, 2010

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

Dear Ms. Walli:

# Re: Board staff Interrogatories Utility-specific Smart Meter Funding Adder Atikokan Hydro Inc. ("Atikokan") EB-2010-0185

Atikokan Hydro Inc. ("Atikokan") is pleased to submit to the Ontario Energy Board (the "Board") its responses to the Board Staff Interrogatories regarding our application EB-2010-0185. This response includes comments to each question.

Atikokan's 2010-0185 Utility-specific Smart Meter Funding Adder application will be sent to you in the following form:

(a) Electronic filing through the Board's web portal at <u>www.errr.oeb.gov.on.ca</u>, consisting of one (1) electronic copy of the application in searchable /unrestricted PDF format and

(b) Two (2) paper copies of the application along with a CD of the above (item (a)).

We would be pleased to provide any further information or details that you may require relative to this application.

Yours truly, Well Thorburn

Wilf Thorburn CEO/Secretary/Treasurer Atikokan Hydro Inc.

# Board staff Interrogatories Utility-specific Smart Meter Funding Adder Atikokan Hydro Inc. ("Atikokan") EB-2010-0185

# 1. Ref: Application, pg. 6

In its application Atikokan stated that "... as of September 30, 2009, 96% of Smart Meters have been installed, and 100% will be installed by Q3 Of [sic] 2010".

- a. Please provide statistics on:
  - i. smart meters actually deployed as of December 31, 2009;

# Response:

The following table shows that 100 % of the residential customers have smart meters installed as of December 31, 2009. 68 of the GS < 50 kW class are not installed or purchased as of December 31, 2009. They will be installed by Q4 of 2010

	Resid	ential	GS < 50 kW		
Month	Meters	Meters	Meters	Meters not	
	Installed	not	Installed	Installed	
		Installed			
Apr-09					
May-09	240				
Jun-09	791		159	68	
Jul-09	421				
Aug-09					
Sep-09					
Oct-09					
Nov-09					
Dec-09					
Total	1452	0	159	68	

- ii. costs, showing:
  - I. capital costs;
  - II. one-time operating expenses; and
  - III. ongoing operating expenses as of December 31, 2009 for smart meters deployed as of December 31, 2009.

			ODS /	· ·	Service		Outside	Training	<b>-</b>
	Meters	Collectors	MAS	Conversion	Support	Installation	Services	/Travel	Total
Jan					\$150		\$7,323	\$2,550	\$10,023
Feb					\$150			\$158	\$308
Mar	\$825			\$17,869	\$150	\$864		\$229	\$19,936
Apr	\$9,182			\$2,006	\$150	\$405	\$6,099	\$231	\$18,073
May	\$169,686	\$2,773	\$4,000		\$150	\$5,665	\$2,432	\$447	\$185,153
Jun	\$8,633	\$7,055	\$807		\$60,633	\$15,389			\$92,518
Jul		\$10,318	\$343		\$802	\$7,750	\$3,387	\$300	\$22,900
Aug	\$7,546		\$2,000		\$150	\$793		\$150	\$10,639
Sep			\$2,000		\$150	\$1,122		\$1,853	\$5,125
Oct			\$2,000		\$150			\$150	\$2,300
Nov	\$8,318		\$2,237		\$150		\$7,889	\$150	\$18,744
Dec					\$150		\$8,193	\$0	\$8,343
Total	\$204,191	\$20,146	\$13,387	\$19,875	\$62,935	\$31,988	\$35,323	\$6,217	\$394,061

The table below shows by month the capital costs of the smart meter installation for Atikokan as of December 31, 2009.

The costs in the table below are one time operational costs ending December 31, 2009.

Year	Kinetic set up	Elster Mas / Training	Total
Jan-09			\$0.00
Feb-09			\$0.00
Mar-09			\$0.00
Apr-09			\$0.00
May-09		\$4,405.65	\$4,405.65
Jun-09		\$22,564.50	\$22,564.50
Jul-09			\$0.00
Aug-09			\$0.00
Sep-09			\$0.00
Oct-09			\$0.00
Nov-09	\$2,000.00		\$2,000.00
Dec-09			\$0.00
Total	\$2,000.00	\$26,970.15	\$28,970.15

The table below indicates the ongoing operational costs of the system. These costs are for the period ending December 31, 2009.

Year	Tbay Tel Cell Modems	CIS Service Charges	Total
Jan-09			\$0.00
Feb-09			\$0.00
Mar-09	\$0.00	\$0.00	\$0.00
Apr-09		\$2,100.00	\$2,100.00
May-09		\$2,100.00	\$2,100.00
Jun-09		\$720.49	\$720.49
Jul-09		\$2,100.00	\$2,100.00
Aug-09	\$512.37	\$2,100.00	\$2,612.37
Sep-09	\$501.26	\$2,100.00	\$2,601.26
Oct-09	\$426.67	\$2,100.00	\$2,526.67
Nov-09	\$312.92	\$2,100.00	\$2,412.92
Dec-09	\$698.15	\$2,100.00	\$2,798.15
Total	\$2,451.37	\$17,520.49	\$19,971.86

b. Please update the smart meter model to represent the smart meter deployment and costs as of December 31, 2009.

#### **Response:**

The model as submitted is current to December 31, 2009.

c. Please explain any delays in achieving full deployment in 2009.

#### **Response:**

Our goal was to deploy the Rex 2 meters in 2009 to all Residential customers and most of the GS <50 kW customers (i.e: 159). The 68 meters remaining were not available at the time the standard Rex 2 meters were ordered. The A3 style meters were available by late Q3 and the 600 V Rex 2 meters were not available until late Q4 or early Q1 2010. We wanted to order all of the meters at once to economize as much as possible on freight, as well as manpower to do the installations.

#### 2 Ref: Application, pg. 7

As stated in the Guideline G-2008-0002: Smart Meter Funding and Cost Recovery, the Board recognizes that significant smart meter related costs may accrue during the term of an IRM plan. A distributor that has achieved at least 50% of smart meters within its service area may seek cost recovery by way of the disposition of the balance in its smart meter related deferral accounts.<sup>1</sup>

a. Given the extent of deployment of its smart meters, please state why Atikokan did not consider filing a smart meter cost recovery application?

# **Response:**

Given the extent of deployment of its smart meters, Atikokan did consider filing a smart meter cost recovery application.

b. The Smart Meter Funding Adder is a tool designed to provide advance funding and thus to mitigate the anticipated rate impact of smart meter costs when recovery of those costs is approved by the Board. Given that in Atikokan's case, 96% of Smart Meters have already been installed, please explain why further advance funding is required and why Atikokan believes that the smart meter funding adder is an appropriate alternative to seeking disposition of actual and audited costs for installed smart meters, in accordance with Guideline G-2008-0002.

#### Response:

Atikokan decided not to pursue this option at this time for the following reasons.

- i. Current cost information and related deferral account balances have not been audited.
- ii. Atikokan believed the time needed by the Board to review and approve a smart meter funding adder application would be shorter than a smart meter cost recovery application.
- iii. Atikokan would prefer to have one application to seek full smart meter cost recovery once smart meters are 100% deployed.
- iv. If possible, Atikokan would prefer to seek recovery of smart meter cost and include the costs in the rate base and revenue requirement as part of the next rebased cost of service application in 2012.

#### 3. Ref: Application, pp. 5-6

Atikokan states that "[It] participated as a working member of the Northwestern buying group of five distributors, which together purchased the same type of smart meter technology and support services".

a. Please explain what operational efficiencies are expected and/or have been explored by the Applicant and the other members of the Northwestern buying group.

The main operational efficiencies that have been explored by the group are:

- a common shared AMI coordinator / operator to bring the group through all aspects of getting the AMR functions to a working and verified state by working with each LDC as needed including ODS [Operational Data System] functions and training
- The same common coordinator verifies all tests and testing with each LDC to get to the MDM/R stage and have all meters registered with the Smart Meter Entity.
- b. Please describe further the support services that Atikokan will be receiving as part of being a working member of the Northwestern buying group.

# Response:

Atikokan will continue to receive support on an as needed basis. Since the initial work on smart meters has started, the scope has expanded considerably. All 5 LDCs take part in the decision making, and then share in the costs of all aspects of deploying smart meters. We will be reviewing business processes and the necessary changes to ensure a smooth transition to the MDM/R process. We will then be testing individually with assistance from Thunder Bay Hydro and Util-Assist, but learning from the testing results that other members have experienced. Atikokan will be the second test group to go. Any CIS or billing processes that need to be changed, created, or updated will be done once by Thunder Bay Hydro, and shared by the rest of the group.

c. Please provide the terms of reference, including one-time and incremental costs, for contracting CIS services from Thunder Bay Hydro.

#### **Response:**

There are no terms of reference for contracting CIS services from Thunder Bay Hydro. Our existing agreement for wholesale market settlement was simply expanded to include CIS and billing services.

d. What other options did the Applicant consider when contracting for CIS services related to Smart Meters?

#### **Response:**

There were no other realistic options to consider. To remain on our own would have meant that we would need more permanent staff, and additional hardware and software, and training expenses. Atikokan has

had a good working relationship with Thunder Bay Hydro as our MSP [Meter Service Provider] for our wholesale metering as well as our wholesale market settlement rate provider. This was a natural progression of a contract expansion on our current contractual arrangement with Thunder Bay Hydro.

- e. Did Atikokan prepare a business case for managing its own billing system including all related smart meter and AMI system costs?
  - i. If yes, please provide the business case.
  - ii. If, not, please estimate the cost for managing the billing system on its own after deploying smart meters.

# Response:

Atikokan did not prepare a detailed business case for managing its own billing system. The issue is not operating its existing system or obtaining services contracted from Thunder Bay Hydro for the existing system. The issue is operating the ancillary services to be able to use and interface the smart meters with the billing system as well as with the MDM/R and all future enhancements of the smart meter entity in order to remain compliant with the move to smart meters.

However, at the time Atikokan decided to go with the Thunder Bay Hydro CIS option a cost comparison was conducted. The following table outlines the cost comparison between an Atikokan stand alone solution and contracting the service from Thunder Bay Hydro for a CIS system which supports smart meters. The comparison shows that the first year savings are \$114,921.28 and the estimated continued savings would be \$77,921.38 per year. Atikokan would also benefit from the synergy gained with one person virtually being the smart meter operational expert for 5 LDCs.

Identified items at time decision made to go with Thunder Bay Hydro CIS						
		lydro stand	Cost as			
	alc	one	NWG			
Additional service required	Initial Cost	On going				
New Staff members to set up and	\$95,000.00	\$95,000.00	\$25,200.00			
integrate AMCC and AMRC systems [inc						
training]						
AMCC with backup unit	\$10,000.00					
Additional software	\$35,000.00	\$16,000.00	\$7,878.72			
Additional backup and security software	\$8,000.00					
Minimum cost of stand alone	\$148,000.00	\$111,000.00	\$33,078.72			
Savings	\$114,921.28	\$77,921.28				

# 4. Ref: Application, pg. 5, Table 1

In Table 1 - Summary of Smart Meter Revenue Requirement and Smart Meter Funding Adder Calculation, Atikokan provided two scenarios for calculating the Smart Meter Funding Adder. In calculating scenario 1 the applicant used a timeframe of 22 month. Please recalculate scenario 1 using a timeframes of:

a. 34 months (i.e. a sunset of April 30, 2013); and

Response:

The smart meter funding adder per metered customer per month over a 34 month timeframe is \$4.23

b. 46 months (i.e. a sunset of April 30, 2014).

The smart meter funding adder per metered customer per month over a 46 month timeframe is \$3.13

# 5. Ref: Smart Meter Spreadsheet, Sheet 2

a. Please provide a break down of the 2009 operating expenses of \$33,841 identified for AMI interface to CIS; and

#### **Response:**

The following table provides a break down of the one time 2009 operating expenses of \$33,841 identified for AMI interface to CIS. The \$33,841 covers the cost of data input for the billing conversion, due diligence charges on various legal costs, additional IS set up charges, as well as contractual service obligations to a hub provider that were not compatible with the Thunder Bay Hydro billing system. The legal fees in the following table were Atikokan's share of the entire costs of that portion of due diligence. Atikokan's share of the costs are 1/5 and in this case Atikokan's share was in total \$2,578.15.

Company	Description	Cost
TBay Hydro	Misc CIS/billing data entry for conversion	\$17,868.60
Legal Fee Elster	Final Elster contact/Initial TbayTel * Olameter	\$824.65
Legal Fee Accenture	Accenture contract	\$1,188.30
Legal Fee Tbay Tel	TBay tel contract	\$565.20
TBay Hydro	CS setup /conversion	\$7,428.51
	Printer /conversion	\$2,006.07
Spi Group	Hub support	\$1,800.00
Spi Group	Hub support & maint. Annual fee	\$2,160.00

Total \$33,841.33		
	Total	<b><i><u><u></u></u></i> (1 ) ( ) ) ) ) ) ) ) ) ) )</b>

b. Please provide a break down of the 2009 operating expenses of \$30,389 identified for Professional Fees.

#### Response:

The following tables provides a break down of the one time 2009 operating expenses of \$30,389 identified for Professional Fees. In the table below, \$22,110 were shared costs between the 5 LDCs. The \$22,110 represents 1/5 of the cost that Atikokan would have been responsible for if it had remained a stand alone entity in the smart metering procurement process. The \$22,110 is comprised of the TBay Hydro contract reviews and the Util-Assist services. \$8,277 are Atikokan's sole costs.

Company	Description	Cost
TBay Hydro	Startup Accenture contract	\$342.60
TBay Hydro	Accenture and TBay tel Contracts	\$807.20
TBay Hydro	Olameter contract	\$272.20
Util-assist	Smart meter project & assistance	\$4,505.96
Util-assist	Smart meter project & assistance	\$4,089.24
Util-assist	Smart meter project & assistance	\$3,386.64
Util-assist	Smart meter project & assistance	\$4,462.83
Util-assist	Smart meter project & assistance	\$4,244.86
Atik Hotel	Jan Robertson lodging costs for training	\$170.78
Atik Hotel	L Klukie billing on site training expense – lodging costs	\$157.50
BDO	Setup new acct system	\$2,900.00
Meyers Books	Setup new acct system	\$900.00
Meyers		
Books	Setup new acct system	\$3,948.00
Tire &Auto	Jan Robertson training	\$200.84
Total		\$30,388.65

c. Please provide a break down of the estimated operating costs of \$44,536 for 2009, and \$42,559 for each of 2010 and 2011 for Wide Area Network costs.

#### **Response:**

Please see the table in response to part d The ongoing 2010 and 2011 are broken out. There is a \$4,260 cost that pertains to 2010 only. This means the ongoing costs in the model for 2011 should be adjusted to \$38,299. This reduces the smart meter funder adder in Scenario 1 to \$6.43 from \$6.54. The proposed smart meter funder adder for Scenario 2 is

unchanged. The smart meter funder adders outlined in response to question 4 would be adjusted by a factor of 0.98 (i.e. 6.43/6.54 = .98).

- d. For each of the 2009, 2010 and 2011 estimated operating costs, please provide a breakdown between:
  - i. one-time; and

ii. on-going;

operating expenses. Please provide further details on each of these types of costs.

# Response:

The table below contains one time operational costs for the set up of the ODS system, and the first year of Elster MAS software commissioning and support for all three years requested. The one time costs total \$26,970.15. The 2009 ongoing costs of \$19,971.86 are comprised of the cell phone fees of \$2,451.37 for data collection to populate the collectors and gather the data from the meters and Thunder Bay Hydro AMR / ODS fees of \$17,520.49 for a total operating cost of \$48,942.01 for 2009.

In 2010, there is a one time cost of \$4,260 to terminate a contract with SPI for hub services. This service is not compatible with the Thunder Bay Hydro CIS system. The remaining ongoing costs are \$3,600 for cell fees to operate the collectors, \$2,820 for ODS fees to ensure the data is acceptable to the IESO for MDM/R functions, \$24,000 for AMR / ODS field services and \$7,878.72 for MAS software support from Elster to allow the collectors to read the meters. The total ongoing costs will be \$38,298.72

Year	Cell collectors	Kinetic set up	AMR / ODS service	Elster MAS	SPI hub support	Total
2009 one time 2009 on		\$2,000.00		\$26,970.15		\$28,970.15
going	\$2,451.37		\$17,520.49			\$19,971.86 \$48.042.01
2010 one time 2010 on					\$4,260.00	\$48,942.01 \$4,260.00
going	\$3,600.00	\$2,820.00	\$24,000.00	\$7,878.72		\$38,298.72 42558.72
2011 one time 2011 on						\$0.00
going	\$3,600.00	\$2,820.00	\$24,000.00	\$7,878.72		\$38,298.72

# 6. Ref: Smart Meter Expenses, Sheet 2

Atikokan shows estimated operating expenses for the Wide Area Network of \$42,559 for each of 2010 and 2011. Based on 1679 meter customers, this works out to \$42,559/1 679 = \$25.34 per metered customer per year, or \$2.11 per month.

a. Please provide details on the services provided for this incremental amount of \$2.11 per month per metered customer.

#### **Response:**

The cost per month of the services provided are as follows: For 2010, \$0.21 is for the pay out of the SPI hub contract, the Elster MAS support is \$0.39, the AMR / ODS service is \$1.19, the ODS System charges are \$0.14, and the cell phone charges to operate the collectors are \$0.18 per month per customer for a total of \$2.11 in 2010. However, this will reduce to \$1.90 in 2011 since the pay out of the SPI hub contract does not impact 2011.

Year	Cell collectors	ODS System	AMR / ODS field service	Elster MAS	SPI hub support	
2010 one time 2010 on					\$4,260.00	\$4,260.00
going	\$3,600.00	\$2,820.00	\$24,000.00	\$7,878.72	0.21	\$38,298.72
2011 one time 2011 on	\$3.600.00	\$2,820.00	\$24,000.00	\$7,878.72	0.21	\$0.00 \$38,298.72
going	φ3,000.00	φ <b>Ζ,ΟΖ</b> Ο.ΟΟ	φ24,000.00	φ1,010.1Z		φ30,290.72
Cost per month	0.18	0.14	1.19	0.39		1.90

b. Please provide any information that Atikokan has about the ongoing operating expenses per month per metered customer for smart meters and smart meter-related services for other Ontario distributors or for distributors elsewhere where smart meters have been deployed. Please explain how Atikokan's costs compare to other comparator utilities.

#### **Response:**

Atikokan does not have any information about the ongoing operating expenses per month per metered customer for smart meters and smart meter-related services for other Ontario distributors or for distributors elsewhere where smart meters have been deployed

# 7. Ref: Application, pg. 5

On page 5 of its application, Atikokan stated that "the budgeted costs were determined with the aid of Util-Assist, Atikokan Hydro's consultant on the Smart Metering Procurement and Implementation process".

a. Please provide the terms of reference and estimated costs for these consultation services for the purpose of filing this application.

#### **Response:**

During the Northwest group's early discussions on doing a cooperative smart meter venture it was decided that Thunder Bay Hydro would hire an engineer to develop and assist in deploying a smart meter system for all 5 LDCs. The cost would be shared amongst the 5 LDCs. Thunder Bay Hydro scoped the description and duties of the position and set a salary of \$60,000 plus benefits for the position. Thunder Bay Hydro was not able to fill the position. Util-Assist was then invited to offer services. The Util-Assist offer on a consulting basis came in at the desired price.

b. Has Atikokan factored these costs into the costs to be recovered as part of its smart meter costs through either the increased smart meter funding adder or as part of disposition of smart meter costs in a subsequent application?

#### **Response:**

Atikokan has factored these costs into this application.

c. If Atikokan has factored these consultation costs in the costs in this application, please identify where these costs are included.

#### Response:

These costs are part of the amount in section 1.5.3. – Professional Fees - and are included in the cost breakdown shown in response to 5b. The total for Util-Assist in that section is \$20,689.53.

d. If Atikokan has not factored in the consultation costs related to this application, how is Atikokan proposing that these costs be recovered from ratepayers?

Not applicable

# 8. Ref: Application, pp. 5-6

Atikokan states:

In order to reduce the cost of installing smart meters in Atikokan, Atikokan Hydro participated as a working member of the Northwestern buying group of 5 distributors which together purchased the same type of smart meter technology and support services. As Thunder Bay Hydro was the biggest distributor in the group, one of the critical requirements for the smart meter technology purchased by the group was it had to be compatible with the Thunder Bay Hydro billing system. Atikokan Hydro did not have the same billing system as Thunder Bay Hydro. As a result, with the installation of smart meters Atikokan Hydro moved to the same billing system as Thunder Bay Hydro. For Atikokan Hydro, this somewhat decreased the value of being part the Northwestern buying group but Atikokan Hydro believes other factors have contributed to increase the value of being in the group such as: accessing AMI services on a shared basis rather than on a stand alone basis; synergy in various future efforts such as moving to TOU rates. All of the CIS improvements and updates will be done on one system but shared with 5 LDCs.

a. Are the computer hardware and software costs identified in this application related to Atikokan's own costs for converting to the same billing system as Thunder Bay Hydro, or do they represent Atikokan Hydro's share of costs for the Thunder Bay Hydro CIS and billing system? Please support your response with a full explanation.

#### **Response:**

The computer hardware and software costs in this application are related to the hardware and software necessary to operate the smart meter system. They are for a server [for the MAS system] housed at Thunder Bay Hydro , the sharing of various backup and security devices, the interface between the meters / collectors / ODS / and eventually the Smart Meter Entity.

b. If yes, please describe any or all savings or avoided costs related to replacing Atikokan's current CIS and billing system.

The table in 3(e) shows some of the cost savings by Atikokan purchasing CIS services from Thunder Bay Hydro as opposed to continue to operate its own original billing / CIS system. All costs were to install and set up our customers on the new system. The hardware and software costs in this application are to operate the ancillary services necessary to have a functioning smart meter system capable of reading the meters [MAS], ensuring the data is delivered to the smart meter entity in a timely and acceptable format [ODS] and finally producing a bill for the customer.

Please provide the actual or estimated conversion date to Thunder Bay Hydro's billing system (i.e. when Atikokan Hydro's bills will be prepared using the Thunder Bay's CIS and billing system, as opposed to Atikokan Hydro's existing CIS and billing systems).

#### **Response:**

The system was converted and functioning as of January 1, 2009