

EB-2010-0185

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sch.B, as amended;

**AND IN THE MATTER OF
an Application by Atikokan Hydro Inc.
FOR APPROVAL OF A UTILITY-SPECIFIC SMART METER FUNDING ADDER**

Information Requests of the Vulnerable Energy Consumers Coalition (VECC)

VECC Question #1

References: Utility Information Sheet and Evidence

Preamble: 1,679 meters (residential plus small general service with no demand customers) will be installed. Total installed costs are estimated to be \$394,000, or \$235 per installed meter.

- a) Provide Breakdown of Residential and Commercial meter installations in 2009 and 2010

Response:

As per response to OEB staff IR 1a, Atikokan Hydro has installed 1,452 Residential smart meters and 159 Commercial smart meters in 2009. For 2010, Atikokan Hydro expects to install a further 68 Commercial meters for a total of 1,679 meters. However, the cost of the 68 meters are not currently known. As a result, the \$394,000 mentioned above in the preamble represents the cost of the 1,611 (i.e. 1,452 plus 159) meters installed in 2009 and the unit cost of these meters is \$245 per installed meter (i.e. \$394,000/1,611). All meters installed in 2009 are the same

- b) Support/details of the 2009-2010 *Residential Class SM* Unit costs (procurement and installation separately)

Response:

The table below breaks out the meter unit costs as follows. The unit cost is derived from the total cost of \$394,061.35 divided by the total number of meters currently installed [1611] times the number of residential customers [1452] for a total of \$244.61. The procurement costs include the cost of the meters, collectors, software to manage them, conversion of the billing system, and support contracts. Of the \$244.61 per meter, the procurement costs are \$220.89 and the installation is \$23.72 per meter.

| Total Cost | Number of Installed Meters | Unit Cost | Number of Residential Meters | Residential Total Cost |
|-----------------------------|----------------------------------|-----------|------------------------------------|---------------------------|
| \$394,061.35 | 1,611 | \$244.61 | 1,452 | \$355,168.89 |
| Procurement \$355,856.37 | 1,611 | \$220.89 | 1,452 | \$320,734.61 |
| Installation \$38,204.98 | 1,611 | \$23.72 | 1,452 | \$34,434.28 |
| Total Residential Cost | | | | \$355,168.89 |

- c) Provide Support/details of the 2009-2010 *Residential Class* SM AMI, communications and back office costs (procurement and installation)

Response:

The “Functional Specification for an Advanced Metering Infrastructure (AMI)” document released by the Ministry of Energy on November 22, 2005 defines AMI as:

| | |
|------|---|
| AMI: | Means the advanced metering infrastructure. It includes the meter, AMCD, LAN, AMRC, AMCC, and connection to the WAN. An AMI does not include the WAN. |
|------|---|

From the above definition, the total AMI costs would be \$394,061.35, of which \$355,168.89 would be residential AMI costs. Costs for the back office and communications are not tracked as separate items, just as a total cost.

- d) Provide Support/details of the 2010 *Commercial Class* SM Unit costs (procurement and installation separately)

Response:

There are no 2010 Commercial Class costs available at this time.

- e) Provide Support/details of the 2010 *Commercial Class* SM Unit costs (procurement and installation separately)

Response:

Please see response to part d)

- f) Provide a schedule that gives a breakdown of the 2009 and 2010 Capital Costs between the Residential and GS<50kw classes.

Response:

The capital cost for meters installed in 2009 by rate class is as follows

| Rate Class | Capital Cost |
|-------------|--------------|
| Residential | \$355,169 |
| GS < 50 kW | \$38,892 |
| Total | \$394,061 |

- g) Provide a breakdown of the O&M costs for meters installed in 2009 and 2010 between the Residential, GS<50kw classes.

Response:

The 2010 O&M costs for meters installed in 2009 by rate class is as follows

| Rate Class | 2010 O&M Cost |
|-------------|---------------|
| Residential | \$38,358 |
| GS < 50 kW | \$4,200. |
| Total | \$42,559 |

- h) Are any SM to be installed in other classes? If so provide details of costs.

Response:

By the end of 2010 Atikokan Hydro expects to install SM for 13 customers in the GS > 50 kW class but the costs of these meters are not known at this time and have not been included in the costs that support the proposed smart meter funding adder.

VECC Question #2

References: Utility Information Sheet and Evidence

- a) Calculate the Net Fixed assets and SM Rate Adder Revenue Requirement by rate class (Residential, GS<50kW)

Response:

The Net Fixed assets and SM Rate Adder Revenue Requirement by rate class is as follows

| Rate Class | Net Fixed Assets | SM Rate Adder Revenue Requirement |
|-------------|------------------|-----------------------------------|
| Residential | \$327,133 | \$88,631 |
| GS < 50 kW | \$35,823 | 9,706 |
| Total | \$362,956 | \$98,337 |

- b) Calculate the SM revenue requirement and SM Rate Adder by rate class (Residential, GS<50kw). Include the Impact of HST and Compare to the aggregate \$4.88 /metered customer per month

Response:

The SM revenue requirement and SM Rate Adder by rate class (Residential, GS<50kw) including the Impact of HST and comparing to the aggregate \$4.88 /metered customer per month is as follows

| Rate Class | SM Revenue Requirement (A) | Number of Meters (B) | SM Rate Adder (C) = (A)/(B)/12 | SM Rate Adder plus HST @13% (D) = (C) + 13% |
|-------------|-------------------------------|----------------------------|---|---|
| Residential | \$88,631 | 1,452 | \$5.09 | \$5.75 |
| GS < 50 kW | 9,706 | 227 | \$3.56 | \$4.02 |
| Total | \$98,337 | 1,679 | \$4.88 | \$5.51 |

- c) Provide a cash flow projection showing SM rate adder revenue and SM expenditures by Class per Month for the 2009, 2010 and 2011 rate years

Response:

The following table provides a monthly cash flow analysis from January 2009 to April 2012. Although, the months of January 2009 to April 2009 are not part of the 2009 rate year, Atikokan Hydro has included the information for these months to have the total capital cost of the smart meters (i.e. 394,061) included in the analysis. The analysis has not been completed on class basis since revenues and costs are not tracked on a rate class basis as it is Atikokan Hydro's understanding that this level of granularity is not required by the Board in tracking SM costs. The cash flow analysis includes SM Adder Revenues, Capital Expenditures, OM&A Expenses, Deemed Interest and Deemed PILs. Information provided after May 2010 is on a forecast basis.

| Month | Smart Meter Funding Adder Revenue (A) | Capital Expenditures (B) | OM&A (C) | Deemed Interest (D) | Deemed PILs (E) | Cash Flow (F) = (A) - (B) - (C) - (D) - (E) |
|--------|---------------------------------------|--------------------------|----------|---------------------|-----------------|---|
| Jan-09 | \$601 | \$10,023 | | | | (\$9,422) |
| Feb-09 | \$248 | \$308 | | | | (\$60) |
| Mar-09 | \$445 | \$19,936 | | | | (\$19,491) |
| Apr-09 | \$401 | \$18,073 | \$2,100 | | | (\$19,772) |
| May-09 | \$454 | \$185,153 | \$2,100 | \$474 | \$6 | (\$187,280) |
| Jun-09 | \$1,146 | \$92,518 | \$720 | \$474 | \$6 | (\$92,572) |
| Jul-09 | \$1,783 | \$22,900 | \$24,665 | \$474 | \$6 | (\$46,261) |
| Aug-09 | \$1,570 | \$10,639 | \$7,018 | \$474 | \$6 | (\$16,566) |
| Sep-09 | \$1,801 | \$5,125 | \$2,601 | \$474 | \$6 | (\$6,405) |
| Oct-09 | \$1,559 | \$2,300 | \$2,527 | \$474 | \$6 | (\$3,748) |
| Nov-09 | \$1,783 | \$18,744 | \$4,413 | \$474 | \$6 | (\$21,854) |
| Dec-09 | \$1,564 | \$8,343 | \$2,798 | \$474 | \$6 | (\$10,057) |
| Jan-10 | \$1,785 | | \$3,192 | \$474 | \$6 | (\$1,887) |
| Feb-10 | \$1,560 | | \$3,192 | \$474 | \$6 | (\$2,111) |
| Mar-10 | \$1,781 | | \$7,452 | \$474 | \$6 | (\$6,150) |
| Apr-10 | \$1,548 | | \$3,192 | \$474 | \$6 | (\$2,123) |
| May-10 | \$2,391 | | \$3,192 | \$942 | \$59 | (\$1,802) |
| Jun-10 | \$2,391 | | \$3,192 | \$942 | \$59 | (\$1,802) |

| | | | | | | |
|--------|-----------|-----------|-----------|----------|---------|-------------|
| Jul-10 | \$2,391 | | \$3,192 | \$942 | \$59 | (\$1,802) |
| Aug-10 | \$2,391 | | \$3,192 | \$942 | \$59 | (\$1,802) |
| Sep-10 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Oct-10 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Nov-10 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Dec-10 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Jan-11 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Feb-11 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Mar-11 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| Apr-11 | \$8,195 | | \$3,192 | \$942 | \$59 | \$4,002 |
| May-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Jun-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Jul-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Aug-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Sep-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Oct-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Nov-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Dec-11 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Jan-12 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Feb-12 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Mar-12 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Apr-12 | \$8,195 | | \$3,192 | \$861 | \$171 | \$3,971 |
| Total | \$193,486 | \$394,061 | \$142,566 | \$27,312 | \$2,839 | (\$373,292) |

- d) Comment on the apparent cross subsidy between the Residential and GS<50 kw classes in respect of the proposed SM funding adder for 2010 and beyond.

Response:

Based on the response to part b) it appears the GS < 50 kW class would be subsidizing the Residential class in 2010 once the proposed smart meter funding adder was approved. However, it is Atikokan Hydro's view this cross subsidization will be addressed when the remaining 68 Commercial meters are installed and Atikokan Hydro seeks full smart meter cost recover for all deployed smart meters in its 2012 cost of service rate application.