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September 26, 2011

Delivered By RESS and Courier

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

Attention: Kirsten Walli
Board Secretary

**Re: Haldimand County Hydro Inc. (EB-2011-0320)
Application for Extension to Mandated Time-of-Use Pricing Date for Certain
Regulated Price Plan Consumers
Responses to Interrogatories**

Dear Ms. Walli:

Haldimand County Hydro Inc. filed an application with the Ontario Energy Board (the "Board") on August 19, 2011 for a licence amendment granting an extension in relation to the mandated date for the implementation of time-of-use ("TOU") pricing rates for certain Regulated Price Plan consumers.

Pursuant to the *Notice of Application and Written Hearing*, issued September 2, 2011, Board Staff filed interrogatories on September 19, 2011. Haldimand County Hydro was required to file responses by September 26, 2011.

Two hard copies of Haldimand County Hydro's responses to these interrogatories are now enclosed. An electronic copy in PDF format was submitted through the Board's *Regulatory Electronic Submission System* ("RESS") today.

Yours truly,
HALDIMAND COUNTY HYDRO INC.

Original signed by

Jacqueline A. Scott
Finance Manager

**Haldimand County Hydro Inc.
Application for Extension to Mandated Time-of-Use Pricing Date for Certain
Regulated Price Plan Consumers
EB-2011-0320
Board Staff Interrogatories**

Board Staff question 1

Preamble

Haldimand County Hydro Inc. ("Haldimand County") filed an application dated August 19, 2011 with the Ontario Energy Board for a licence amendment granting an extension in relation to the mandated date for the implementation of time-of-use ("TOU") pricing rates for certain Regulated Price Plan consumers.

Haldimand County has applied for an extension to its September 2011 TOU pricing date and requested a new date of January 31, 2012 for approximately 416 General Service <50kW and 40 Residential customers. Haldimand County states the extension is necessary due to an issue with certain three phase meters for these customers that are delivering suspect interval data due to improper time-alignment of the consumption intervals.

Questions

- a) Please confirm the status of Haldimand County's smart meter deployment and TOU implementation as of September 1, 2011.

Response

The following table provides a summary of Haldimand County Hydro's smart meter deployment and TOU implementation for the month of August 1 to August 31, 2011 as reported to the Board on September 14, 2011.

| Description | Residential Class | General Service Less Than 50 kW Class | Total |
|--|-------------------|---------------------------------------|--------|
| Total Number of RPP-eligible consumers | 18,491 | 2,358 | 20,849 |
| Number of smart meters installed in the period | 13 | 15 | 28 |
| Number of smart meters registered with the MDM/R in the period | 13 | 15 | 28 |
| Number of RPP consumers being charged TOU prices added in the period | 0 | 0 | 0 |
| Total cumulative number of smart meters installed in the service area at the end of the period | 18,412 | 2,263 | 20,675 |
| Total cumulative number of smart meters registered with the MDM/R at the end of the period | 18,412 | 2,263 | 20,675 |
| Total cumulative number of consumers being charged TOU prices at the end of the period | 0 | 0 | 0 |

- b) Please provide greater detail on the firmware problem encountered including any solution as well as the schedule for delivery of the upgrade.

Response

The following is extracted from Haldimand County Hydro's application in this proceeding, dated August 19, 2011:

"Sensus Metering Systems Inc. ("Sensus") was selected as the supplier of AMI Technology and Smart Meters for HCHI. On June 2, 2011, HCHI was notified by Sensus that it had investigated and confirmed that the interval data delivered from certain three phase meters is suspect due to improper time alignment of the consumption intervals. Sensus recommended that the meters should not be relied on for Time-Of-Use interval billing of customers. A copy of the Sensus Product Information Notice (PIN: EM-25-May-2011-1) is attached for your reference. This Product Information Notice applies to approximately 416 of 2,357 meters in the General Service <50 kW RPP Customer class and 40 of 18,485 meters in the Residential Customer class."

A copy of the "Sensus Product Information Notice (PIN: EM-25-May-2011-1)" is now included as Attachment A for your convenient reference.

Sensus indicated that the following three items needed to occur to fix this firmware problem:

1. Measurement Canada approval for the meter was required for the firmware upgrade.
 - a. Please refer to Measurement Canada's "MODIFICATION ACCEPTANCE LETTER (MAL) for Approved Meters and Devices", dated July 29, 2011 now included as Attachment B. A description of the modifications is provided as: *"The firmware of the Flexnet FLXA2C module has been updated to version v2.1.3.0."*
2. The Regional Network Interface ("RNI") required upgrading.
 - a. Please refer to an email on August 8, 2011 from Greg Moryc, KTI Limited, the Canadian distributor for Sensus ("KTI/Sensus"), indicating in the subject line "NEPA RNI Update – Thursday, September 15th at 10 AM", a copy of which is included as Attachment C. This RNI upgrade occurred as indicated.

3. The affected Elster ALPHA A3 meters could be upgraded with the new firmware using “over the air” communications provided that items (1) and (2) above were completed.
 - a. Please refer to an email on September 22, 2011 from Stephen Ivins, KTI/Sensus, indicating that the meters are scheduled to be upgraded by the middle to end of October 2011, a copy of which is included as Attachment D.

- c) Are there any other factors (internal and/or external) that Haldimand County has identified that may hinder its ability to comply with their requested mandatory TOU date?

Response

Further with respect to the General Service <50 KW Customer class, an additional 59 services require a 600 Volt 2 element delta meter that neither Sensus nor Elster manufactures or supplies. Accordingly, these meters were ordered from Canadian General Electric on April 29, 2011, and to date September 26, 2011, none of these meters have been received due to delays according to Canadian General Electric; however, they have now confirmed delivery during the week of October 3 to 7, 2011. These meters will be installed as soon as possible following their delivery. The accounts will be switched to TOU pricing at the earliest possible date following confirmation that the meter data is transmitting correctly and the TOU notifications have been provided to the customers.

- d) Please provide the details of and rationale for Haldimand County's proposed TOU billing implementation schedule for its affected General Service <50kW and Residential customers, including:
- i. billing cycle dates
 - ii. number of customers on each billing date.

Response

The following table provides the details for Haldimand County Hydro's proposed billing schedule, including billing cycle, date, and number of customers, for its affected General Service <50 kW and Residential Customers.

| Cycle | Reading Start Date | Reading End Date | Bill Date | Residential | General Service <50 kW |
|-------|--------------------|------------------|------------------|-------------|------------------------|
| 17 | (Wed) 01-Feb-12 | (Thu) 01-Mar-12 | (Mon) 19-Mar-12 | 1 | 10 |
| 18 | (Thu) 02-Feb-12 | (Fri) 02-Mar-12 | (Tue) 20-Mar-12 | 2 | 15 |
| 19 | (Fri) 03-Feb-12 | (Mon) 05-Mar-12 | (Wed) 21-Mar-12 | 0 | 17 |
| 21 | (Mon) 06-Feb-12 | (Tue) 06-Mar-12 | (Thu) 22-Mar-12 | 36 | 16 |
| 25 | (Tue) 07-Feb-12 | (Wed) 07-Mar-12 | (Fri) 23-Mar-12 | 0 | 14 |
| 1 | (Wed) 08-Feb-12 | (Thu) 08-Mar-12 | (Mon) 26-Mar-12 | 0 | 16 |
| 2 | (Thu) 09-Feb-12 | (Fri) 09-Mar-12 | (Tue) 27-Mar-12 | 0 | 3 |
| 3 | (Fri) 10-Feb-12 | (Mon) 12-Mar-12 | (Wed) 28-Mar-12 | 0 | 6 |
| 4 | (Mon) 13-Feb-12 | (Tue) 13-Mar-12 | (Thu) 29-Mar-12 | 0 | 11 |
| 5 | (Tue) 14-Feb-12 | (Wed) 14-Mar-12 | (Fri) 30-Mar-12 | 0 | 3 |
| 6 | (Wed) 15-Feb-12 | (Thu) 15-Mar-12 | (Mon) 02-Apr-12 | 0 | 16 |
| 7 | (Thu) 16-Feb-12 | (Fri) 16-Mar-12 | (Tue) 03-Apr-12 | 0 | 10 |
| 8 | (Fri) 17-Feb-12 | (Mon) 19-Mar-12 | (Wed) 04-Apr-12 | 0 | 4 |
| 9 | (Mon) 20-Feb-12 | (Tue) 20-Mar-12 | (Thu) 05-Apr-12 | 0 | 50 |
| 10 | (Tue) 21-Feb-12 | (Wed) 21-Mar-12 | (Fri) 06-Apr-12 | 0 | 75 |
| 11 | (Thu) 23-Feb-12 | (Thu) 22-Mar-12 | (Mon) 09-Apr-12 | 0 | 13 |
| 12 | (Fri) 24-Feb-12 | (Fri) 23-Mar-12 | (Tue) 10-Apr-12 | 0 | 3 |
| 13 | (Mon) 27-Feb-12 | (Mon) 26-Mar-12 | (Wed) 11-Apr-12 | 1 | 22 |
| 14 | (Tue) 28-Feb-12 | (Tue) 27-Mar-12 | (Thu) 12-Apr-12 | 0 | 7 |
| 15 | (Wed) 29-Feb-12 | (Wed) 28-Mar-12 | (Fri) 13-Apr-12 | 0 | 100 |
| 16 | (Thu) 01-Mar-12 | (Thu) 29-Mar-12 | (Mon) 16-Apr-12 | 0 | 4 |
| | | | Sub Total | 40 | 415 |
| | | | Total | 455 | |

ATTACHMENT A

Sensus Metering Systems Inc.

Product Information Notice

(PIN: EM-25-May-2011-1)



| | | | |
|---|---|---|--|
| Subject: <u>Suspect Interval Data on Elster ALPHA A3 Meters</u> | | PIN: <u>EM-25-May-2011-1</u> | |
| | | Date: <u>May 25, 2011</u> | |
| Distribution: | Sensus Internal & Sales: <input checked="" type="checkbox"/> | Distributors & Agents: <input checked="" type="checkbox"/> | Customers: <input checked="" type="checkbox"/> |

Dear Valued Sensus Customer:

Sensus has investigated and confirmed that interval data delivered in the FlexNet Supervisory Message from Elster ALPHA A3 meters running FlexNet communications firmware version 1.2.B is suspect due to improper time-alignment of the consumption intervals. This is caused by delays of metrology register read requests from the FlexNet communications board or by metrology real-time clock adjustments by the network.

Therefore, Sensus recommends that ALPHA A3 meters (w/512k Flash) with FlexNet board firmware Version 1.2.B should not be relied on for time aligned Time-Of-Use (TOU) interval billing of customers.

Sensus has developed a firmware update for the FlexNet communications (radio) module in the Elster ALPHA A3 meters that addresses these issues. Therefore, any customers intending to use the Elster ALPHA A3 meters for TOU billing purposes are required to execute the following actions before initiating TOU billing. **To be clear, Elster meter metrology firmware will not be updated.**

Actions for Resolution:

1. Sensus will release V2.1.3.0 FlexNet radio firmware from System Test week of May 30, 2011
2. Elster FlexNet radio firmware Version 2.1.3.0 will be immediately submitted to Measurement Canada for approval. It is expected that Sensus will receive Measurement Canada approval (via a Modification Acceptance Letter) to load this firmware image within the next 2-3 weeks with work commencing immediately upon receipt of the approval.
3. Sensus will distribute this new firmware to customers for over-the-air update of their Elster meter populations. In the coming days, Sensus' Project Management will be working on a deployment schedule for all Canadian customers and your specific Project Manager will be in contact with you directly to schedule the upgrade.
4. Sensus AEMs and Project Managers will aid customers in over the air updating of all Elster meters in their meter populations. There are no RNI FlexWare version dependencies, however on-air firmware upgrades are most efficient when run using FlexWare version 2.2.x or greater.

Important: To the extent that these same meters are being used as consumption meters, all reported consumption data is accurate and can be used for billing purposes.

Sincerely,
Chuck Armatys

ATTACHMENT B

Measurement Canada

MODIFICATION ACCEPTANCE LETTER (MAL-E265)

FOR

Approved Meters and Devices

July 29, 2011



Measurement Canada
An Agency of Industry Canada

Mesures Canada
Un organisme d'Industrie Canada

MAL No. - N° De LAM

MAL-E265

Date: July 29, 2011

File number: 26681-AP-AE-11-0040

MODIFICATION ACCEPTANCE LETTER (MAL) FOR Approved Meters and Devices

Type of Device

Electronic Polyphase Energy-Demand Meter

Purpose

The purpose of this letter is to convey details of modifications to meters which have previously received approval of type recognition from An Agency of Industry Canada. These modifications have been evaluated by the Approval Services Laboratory in accordance with national requirements and shall be considered to be included within the scope of the originally issued Notices of Approval specified in this document and any subsequent revisions to these Notices of Approval.

Scope

The modifications described in this letter affect meters identified in the following Notices of Approval:

Approval Numbers

AE-1168

Applicant

Elster Metering
1100 Walker's Line, Suite 101,
A Division of Canadian Meter Company
Burlington, Ontario
L7N 2G3

Description of Modifications

The firmware of the Flexnet FLXA2C module has been updated to version v2.1.3.0

Original copy signed by:

Isabelle Tremblay
Laboratory Manager - Electricity Measurement

ATTACHMENT C

KTI/Sensus

Email from Greg Moryc

August 8, 2011

-----Original Message-----

From: Greg Moryc [<mailto:greg.moryc@ktild.on.ca>]

Sent: August 8, 2011 2:04 PM

To: nepa@util-assist.com

Cc: Sukhdev Sukhi; Denko Denev; Jose Manriquez

Subject: NEPA RNI Update -- Thursday, September 15th @ 10 AM

We will proceed with the NEPA RNI upgrade on Thursday, September 15th.

The original plan was to do the update in evening/on a weekend; however, due to lack of development support we are unable to upgrade outside of business hours -- it introduces too much risk.

The upgrade will commence at 10 AM and take approximately 7 hours to complete; thereafter, we will proceed with system tests.

There is no impact expected on production; however, the RNI will not be accessible that day.

Please reply to confirm receipt of this email.

Thank you,

Greg

Greg Moryc | Project Manager - Ontario AMI/HAN Projects KTI Limited | 33 Isaacson Crescent | Aurora, ON L4G 3H5 Canada

C: 519-404-4604 | greg.moryc@ktild.on.ca | www.ktild.on.ca

ATTACHMENT D

KTI/Sensus

Email from Stephen Ivins

September 22, 2011

From: Ivins, Stephen [<mailto:Steve.Ivins@sensus.com>]
Sent: September-22-11 10:30 AM
To: Paul Heeg; Greg Moryc
Cc: Wilton, John; McGann, Michael; Bourrie, Marc; Teehan, Chris; Andrew Howarth
Subject: RE: Haldimand call on 9/20...

Good morning Paul.

So I have discussed the process to review and configure NEPA RNI. The will review your population, then being the process. As we spoke I would be comfortable with completion of this task, including the "foot work" that will be needed to address those A3's we cannot reliably reach with OTA by middle to end of Oct/11.

I will make sure that Greg keeps you apprised of the status and progress. My intentions are to see about getting the basics setup next week then review.

I hope this helps.

Thanks.

ski

Stephen Ivins Sr | Canadian Regional Manager
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