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May 6, 2011

Ms. Kristen Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Suite 2700
Toronto, Ontario
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Re: London Hydro Inc. Application for an Exemption from Mandated Time-of-Use
Pricing Date
Board File Number EB-2011-0092

With respect to the above referenced application, please find attached our replies to the Board Staff interrogatories that were posted on the Boards website on April 29th.

In accordance with the Board's instructions, we are enclosing two paper copies. An electronic copy in Word format and searchable PDF format has been e-mailed to the Board Secretary and posted on the Boards RESS filing system.

Yours truly,

LONDON HYDRO INC

A handwritten signature in black ink, appearing to read "D. Williamson".

Dave Williamson
CFO & Vice President - Finance

cc: Mike Chase London Hydro, Director of Finance & Regulatory

encl: London Hydro Responses to OEB Board Staff Interrogatories

Q1a: Please confirm the status of London Hydro's smart meter deployment and TOU implementation as of April 1, 2011.

A: The number of smart meters installed within London Hydro's franchise service territory as of April 1st was 143,813 - please refer to London Hydro's monthly filing to the OEB for the period ending March 31st, 2011.

London Hydro successfully completed *MDM/R Qualification Testing* on April 12th, 2011.

Q1b: Please provide the details and basis of London Hydro's AMI Network Performance Timelines.

A: London Hydro's AMI Network Performance timeline is comprised of several sub-tasks including: 1) antenna and transceiver installation; 2) network tuning; 3) stale meter re-initialization; 4) RF licensure compliance verification; and 5) validation of performance and additional corrective measures (if applicable).

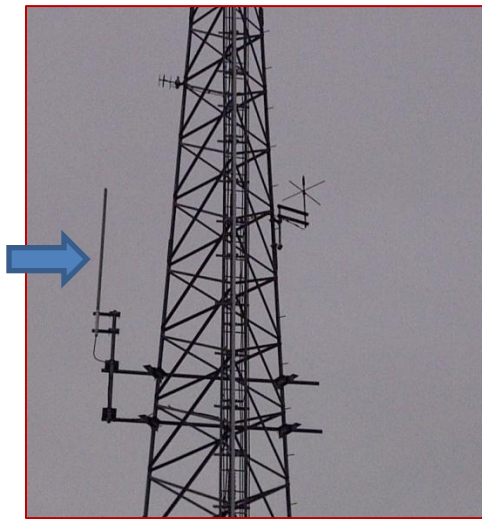


Figure 1, Original 900 MHz Omni-Directional Antenna Installation



Figure 2, Present Array of Three (3) 900 MHz Directional Antennas

- **Antenna and Transceiver Installation.** The antennas at four (4) sites are planned to be changed from a single omni-directional antenna (as depicted in Figure 1) to an array of three (3) directional antennas, each with a 120 degree radiation pattern (as depicted in Figure 2). Manufacture of the eight (8) additional radio transceivers has commenced, and these will be installed and commissioned at four sites
- **Network Tuning.** Once the antenna and transceivers are installed, then the process of optimizing the radio frequency (RF) system will start. There is a suite of specialized software that examines the quality of the radio path between each smart meter and the regional collectors.

- **Stale meter re-initialization.** Meters which still cannot be reliably reached may need to be physically addressed or replaced. The true number of meters will not be known until the network tuning is complete.
- **RF licensure compliance verification.** Industry Canada's Spectrum Management division may require London Hydro to repeat field measurements to verify our conditions of license. Alternatively Industry Canada may be satisfied with the results from the RF modeling software provided by the AMI vendor.
- **Validation of performance and additional corrective measures.** Our expectation is that throughout the wireless network optimization process, the communications success rate will steadily improve as the network congestion on the receive channels is alleviated. Further improvements may be required to bring the system up to required performance levels.

Q1c: Please provide the details of and rationale for London Hydro's seven month billing implementation schedule that begins on November 2011 and ends in May 2012, including:

- The billing cycle dates (and number of customers on each billing date);**
- When customers will begin to be billed on a TOU basis.**

A: London Hydro's MDM/R and Time of Use transition plan is based on meter routes, availability of quality data from our AMI and availability of midnight register read. This plan is illustrated in Figure 2 of our application and the supporting table of customer volume is included below for further reference and reflects the expected transition throughout the seven month cutover.

	Time of Use Cutover	
	Transition	Cumulative
Nov-11	100	100
Dec-11	8,000	8,100
Jan-12	11,900	20,000
Feb-12	30,000	50,000
Mar-12	40,000	90,000
Apr-12	40,000	130,000
May-12	13,813	143,813

Customers transitioned to Time of Use billing will begin to be billed on that basis in the month they are transitioned.

London Hydro's rationale for a seven month Time of Use transition beginning in November are:

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- To complete AMI network performance enhancements by Fall 2011
 - Establish at least one month of good data for meters being transitioned
 - Complete additional verification and testing of AMI data quality
 - Minimize volume of customers receiving their first Time of Use bill also crossing a period of rate change (November 1st)
 - Take advantage of the MDM/R Measurement Canada solution to ensure compliance with Measurement Canada and avoid customer confusion over lack of register reads on the bill
 - As London Hydro staff focus on helping customers take advantage of the time of use rates rather than billing and transition issues
 - Minimize risk of significant billing issues by transitioning customer groups in a more controlled fashion.

Q1d: Please explain in detail the barriers to a shorter TOU billing implementation schedule (e.g. beginning in November and ending in December 2011).

A: Please refer to our answer to Question 1c.

Q1e: Please describe in detail how costs are affected by the requested delay in London Hydro's TOU implementation.

A: London Hydro's contractual arrangement with the AMI vendor includes a guarantee on the performance of the RF system and as such the AMI vendor is providing all additional transceivers, installation contractors, and engineering design work at their own expense.

While the delay will mean that one of our contracted program managers will be assigned to the AMI project for a longer time period than originally envisioned, this expense will be offset by avoiding re-work costs (associated with the Measurement Canada compliance issue) and the additional CSR staff that would be required for an accelerated ramp-up (i.e. compressed transition). As such, overall, we don't believe that the incremental costs to London Hydro's Smart-metering / TOU project associated with the delay will be of a material nature. The only impact would seem to be the date at which the AMI investment changes from being a "work in progress" to a "production system".

Q1f: Are there any other factors (internal and/or external) that London Hydro has identified that may hinder its ability to comply with their requested mandatory TOU date?

A: Our current project plan which requests a revised TOU date of May 2012, includes appropriate contingency measures for known risk factors. However, after the RF congestion problem is addressed, we may still find that there are small pockets of meters where we still don't have reliable communications (even though the RF propagation study predicted that there would be sufficient signal strength for reliable communications). This could introduce another

project delay depending on the number of auxiliary RF devices that need to be installed and the approvals governing such installations.

London Hydro recently identified another technical issue related to its population of polyphase revenue meters - see comment #9 in our March 31st filing to the OEB. The matter has been escalated within the AMI vendor's organization for remediation, however it may impact transition of 6000 customers to TOU.

Q2a: With specific reference to the Measurement Canada solution development in place, please explain in detail why London Hydro believes this issue to warrant a delay in its implementation of TOU billing.

A: Given that the AMI performance stabilization will take us into Fall 2011, which coincides with the MDM/R delivery of the Measurement Canada solution, we feel it is prudent to initiate Time of Use billing in the same timeframe. This will avoid any compliance issue and customer confusion by supporting the inclusion of register reads on the customer bills and avoiding substantial rework efforts necessary to migrate a production solution to support a new MDM/R standard.

Q2b: Given that current status of meters enrolled in the MDM/R, LDC's integrated with the MDM/R, and customers on TOU billing, please explain in detail why London Hydro believes this issue to warrant a delay in its implementation of TOU billing.

A: London Hydro has very limited resources and it doesn't appear prudent to dedicate resources and money to completing the design, software coding and testing of the bill print processes, introduce it to a production environment, and then in a matter of a few weeks (when the MDM/R releases the revised interface specification) to turn around and repeat the entire process.

The circumstances of other LDC's are different. For an LDC that has been offering TOU billing to its customers for several months already, implementing the changes to comply with the Measurement Canada regulations would likely be seen as a "*forgivable*" additional expense. At the time they implemented TOU billing, the provincial MDM/R likely didn't have a timeframe or specification as to how they were going to achieve compliance.

Q3a: Please explain in detail how customer acceptance of TOU is an issue representing "*extraordinary and unanticipated circumstances*" related to the implementation of TOU billing.

A: When viewed in isolation, customer acceptance of TOU would not on its own appear to be an "extraordinary and unanticipated circumstance". As outlined in the application, the implementation plan timelines are affected by extraordinary

and unanticipated technical issues that affect the ability of London Hydro to carry out the plan in accordance with the Boards prescribed timelines.

The point that London Hydro makes is that, without a reliable AMI network sub-system, any premature attempts to implement TOU customer billing would likely result in billing errors, billing corrections and a significant increase in customer complaints. Such a transition environment would have a negative impact on the degree of customer acceptance of TOU billing.

London Hydro is the sole point of contact with the customer and as such is responsible for managing customer expectations, customer service and satisfaction. It would be irresponsible for London Hydro management to implement TOU billing without first resolving all of the technical issues that have been identified in this application.

Q3b: Please provide a description of all smart meter and TOU communications London Hydro has issued to its customers over the past two years. Please explain why these materials have not provided information to customers about the TOU implementation, and if so, why they were provided by London Hydro.

A: London Hydro provided information regarding the installation of Smart Meters prior to the installation of smart meters and at the time of installation. The letter and booklet left with the customer educated customers on how a smart meter works and informed customers that they would be advised in advance of implementing TOU electricity pricing on their billing. In addition, London Hydro, through local media has advised customers of the need to delay implementation of TOU electricity rates and continually advised customers of the need to use electricity wisely. This was achieved through media interviews and participation in live call-in news talk shows on local radio stations. London Hydro also runs radio advertisements providing tips to customers on electricity conservation, encouraging customers to use energy wisely.

Our communication plans include providing information on TOU pricing to customers two months prior to installation. Our experience to date and that of other LDCs indicates that providing information too far in advance causes confusion as customers think that once they have the information they are being billed on TOU pricing. Our plan for advance communications will be scheduled two months prior to implementing TOU billing

Q3c: Please explain in detail why London Hydro believes customer acceptance of TOU is a barrier to a shorter TOU billing implementation schedule.

A: London Hydro does not believe it is a barrier, but a compressed implementation time frame exposes the transition process to the issues as outlined in above answer to Q3a.

Q3d: Please explain how delaying implementation will improve customer acceptance of TOU billing. Include all measures London Hydro plans to take to improve customer acceptance of TOU billing and their associated costs.

A: Refer also to answer to Q3a. The primary measure London Hydro is taking to improve customer acceptance is to ensure that TOU billing transition is not plagued with technical issues or billing errors that would generate customer dissatisfaction.

Q3e: Does London Hydro intend to inform those customers whose bills would be reduced by TOU billing that London Hydro has chosen to delay the implementation of TOU billing. If yes, when and how? If not, why not?

A: Yes. All London Hydro customers have been informed of this delay through notification of this application in the London Free Press on April 20, 2011 and through the London Hydro website.

For the Board's clarification, London Hydro's request for delay in implementation was not by choice, it was as a result of extraordinary and unanticipated circumstances related to technical issues as described in our application. These issues are preventing us from being able to implement TOU billing as per the Board's prescribed timelines.

Q3f: Has London Hydro performed analysis of the costs and benefits to their customers of delaying the implementation of TOU billing. If so, please provide this analysis.

A: No, this type of analysis has not been performed. The decision to delay was not an optional decision made by management. As outlined in these responses, management is undertaking all appropriate measures to avoid unnecessary costs and re-work associated with the implementation of TOU billing.

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