London Hydro
111 Horton Street
P.O. Box 2700
London, ON
N6A 4H6

April 7, 2016

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

**Re: Application for an Optional Cellular Meter Read charge**

Dear Ms. Walli:

London Hydro Inc. herein submits this stand-alone electricity rate application for an Optional Cellular Meter Read charge.

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

Respectfully yours,

Martin Benum, CPA, CMA, BBM
Director of Regulatory Affairs
Telephone (519) 681-5800 ext. 5750
Fax (519) 661-2596
benumm@londonhydro.com

# Application

**ONTARIO ENERGY BOARD**

**IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, C. 15 (Sched. B), as amended;**

**AND IN THE MATTER OF an application by London Hydro Inc. for an Order or Orders pursuant to the Ontario Energy Boards Act, 1998, approving or fixing just and reasonable distribution rates and other charges for the distribution of electricity as of May 1, 2016.**

## APPLICATION

### Introduction

1. The Applicant is London Hydro Inc. ("London Hydro"). London Hydro is a licensed electricity distributor pursuant to license (ED-2002-0557) issued by the Ontario Energy Board (the "Board"), and charges Board-authorized rates (per EB-2015-0087). The Applicant distributes electricity to approximately 150,000 customers within the City of London.

2. **Relief Sought**

Specifically, London Hydro hereby applies for an Order or Orders approving a proposed optional Cellular Meter Read charge of $30.00 applicable to General Service Greater than 50 kW customers electing option 2 when being converted to Interval Meters.

3. **Proposed Effective Date of Rate Order**

London Hydro respectfully requests that the Board make its Rate Order effective May 1st, 2016.

In the event that there is insufficient time for the Board to issue a final Decision and Order in this application for the implementation of the proposed rates and charges as of May 1st, 2016, London Hydro requests that the Board issue an Order for the existing Specific Service Charge "Special Meter reads" $30.00 be made interim commencing May 1, 2016 and applicable for the purpose billing and collecting an interim Cellular Meter Read charge.

4. **Form of Hearing Requested**

London Hydro requests that this application be disposed of by way of a written hearing.

5. **Amendments**

This Application is supported by written evidence that may be amended from time to time, prior to the Board's final decision on the Application.

6. **Notice of Publication**

This application is being made to allow London Hydro to be in compliance with the August 21, 2014 OEB amendment to Section 5.1.3 a) & b) of the Distribution System Code (DSC). London Hydro is applying for a prospective optional charge to be offered to new General Service Greater than 50 kW customers that are to set up on a MIST[1] meter and existing General Service Greater than 50 kW customers that are to be converted from an existing demand meter to a MIST meter. As this application affects only those General Service Greater than 50 kW customers being converted to Interval Meters as an optional charge, London Hydro would suggest publication of the application on London Hydro's website www.londonhydro.com with an announcement posted to our Community Latest News also on our website.

7. **Primary Contact**

London Hydro requests that a copy of all documents filed with the Board in this proceeding be served on London Hydro as follows:

[1] "MIST meter" means an interval meter from which data is obtained and validated within a designated settlement timeframe. MIST refers to "Metering Inside the Settlement Timeframe."

Mr. Martin Benum
Director of Regulatory Affairs
London Hydro Inc.

Address: 111 Horton Street
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London, Ontario
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Fax Number: (519) 661-2596
E-mail Address: benumm@londonhydro.com

DATED at London, Ontario, this 6th day of April, 2016.

*(Original signed by)*

Martin Benum, CPA, CMA, BBM
Director of Regulatory Affairs
London Hydro Inc.

# Certification of Evidence

As President & Chief Executive Officer and Chief Financial Officer of London Hydro Inc., we certify that the evidence filed in London Hydro's Application for an optional Cellular Meter Read Charge is accurate, consistent and complete to the best of our knowledge or belief.

Vinay Sharma
President & Chief Executive Officer

David Arnold
Chief Financial Officer

# Managers Summary

## *Introduction*

On August 21, 2014, the OEB amended Section 5.1.3 a) of the Distribution System Code (DSC) to require electricity distributors to install a MIST[1] meter on any new General Service greater than 50 kW (GS>50) (installation effective on or after August 21, 2014 (EB-2013-0311)). The OEB also amended Section 5.1.3 b) of the DSC to require electricity distributors to install a MIST meter on any existing installation that has a monthly average peak demand during a calendar year of over 50 kW by August 21, 2020.

London Hydro has identified 1,080 existing customers that will need to be converted and has devised a conversion plan schedule to integrate the OEB's requirements under section 5.1.3 b) to meet the August 21, 2020 deadline.

On December 18, 2014, the OEB approved an amendment (EB-2014-0292) to London Hydro Inc.'s Electricity Distribution Licence (ED-2002-0557), specifically Schedule 3 of the licence, to reflect an exemption from the requirement of section 5.1.3.a) of the Distribution System Code. This exemption was set to expire on December 31, 2015.

Subsequently, on December 22, 2015, the OEB approved a further amendment (EB-2015-0289) to London Hydro Inc.'s Electricity Distribution Licence (ED-2002-0557), specifically Schedule 3 of the licence, to reflect an exemption from the requirement of section 5.1.3.a) of the Distribution System Code. This exemption is currently set to expire on December 31, 2016.

In both licence extension applications, London Hydro reported it was actively working towards the implementation of these new requirements but did not have a full solution. London Hydro advised the OEB that it was concurrently looking at two options for this metering group:

[1] "MIST meter" means an interval meter from which data is obtained and validated within a designated settlement timeframe. MIST refers to "Metering Inside the Settlement Timeframe."

A. Public carrier cellular communication. London Hydro has established a private APN with a public carrier; however, some sites may not be good candidates e.g., meters located in basement vaults and/or cellular coverage blanket by carrier network may not reach all areas sufficiently.

B. Existing Smart Meter enhanced interval meters. The vendor is supporting London Hydro to evaluate current infrastructure capacity and what optimization and/or level of investment is necessary to accommodate new meters in the future.

London Hydro has determined that the optimal solution for this conversion plan is to introduce a menu of options to the affected customers. These options would be as follows:

1. TCP/IP Internet Communication:

   The customer would provide an internet line connection at the meter base demarcation. London Hydro would install an interval meter along with a router and request the customer configure network settings to allow meter traffic to the public domain. Upon connection, the router would transmit interval meter data through the internet to London Hydro via IPSEC protocol to ensure secure data exchange.

2. Public Carrier Cellular Internet Communication

   London Hydro would install either (i) an external cellular modem connected to a meter, or (ii) a cellular modem under the meter cover for connectivity for customer service. Upon connection, the interval meter data would be transmitted to London Hydro using a private APN cellular network. London Hydro would interrogate the meter regularly traversing the internet and carrier's network securely with IPSEC protocol.

3. Dedicated Phone Line

   The customer would install a dedicated POTS (Plain Old Telephone System) phone line at the meter base. London Hydro would interrogate the meter regularly via telephone.

Historically, London Hydro has provided interval meters only to GS>50 kW customers with average annual demand in excess of 200 kW. In accordance with our existing Conditions of Service, the customer has been required to install dedicated POTS phone lines for communication with our MV90 meter interrogation system. The phone line cost has been, and continues to be, the responsibility of the customer. London Hydro has customarily applied a monthly OEB-approved $5.50 Meter interrogation charge to recover incremental costs of interrogation not required by those remaining customers on demand meters within this rate class.

Over time, issues with the existing structure have mounted. One issue involves customers who inadvertently cancelled/disconnected their dedicated phone service without notifying London Hydro. London Hydro must then implement weekly manual on-site meter reads when communications drop and charge the customer the OEB-approved Special Meter Read Charge of $30.00 per on-site visit. Another problem occurs when customers convert phone systems to Voice-Over-Internet (VOIP), again without notifying London Hydro. This communication medium does not facilitate London Hydro requirements; hence, London Hydro must then implement weekly manual on-site meter reads when communications drop and charge the customer the OEB-approved Special Meter Read Charge of $30.00 per on-site visit. Customers have come to resist reconnection of dedicated phone lines; therefore, London Hydro is required to perform regular manual weekly on-site meter reads.

In moving to Interval MIST metering for GS>50, new construction builds now require communications, where they did not in the past. This change represents a benefit as it minimizes the need to send a meter reader and/or technician to a construction, effectively eliminating the workers' exposure to a health and safety risk, unless deemed necessary. However, telephone lines are not often available in the early stages of the construction, and there can be a circular dependency with the telephone service installation contingent on energizing the electrical service. Where phone services are not available until the infrastructure is in place, cellular communication service will be invaluable and allow connection of services promptly and conveniently for both parties.

In investigating the challenge of installing interval meters for all GS>50 kW customers, London Hydro has determined that the existing structure is not a reasonable option. Hence, the menu of options, described above, is considered to be the most suitable approach as it empowers customers to select a communication connection that may meet their needs.

Using the current philosophy of 'user pays for communication,' London Hydro has determined that the TCP/IP Internet communication selection would be our most preferred or default position for this customer class. This option is premised on the customer having existing internet connectivity service at their location. The customer would be responsible for running an internet connection to the meter base demarcation. London Hydro would swap out the existing demand meter and install an interval meter and a router for connection. London Hydro assumes this to be the lowest cost solution for the customer and the preferred way for London Hydro to receive the data.

However, customers may have concerns about cyber security or privacy. Also, smaller companies that currently do not have interval service may not have local IT staff with the knowledge required to provide the network connectivity and security required for internet connected TCP/IP metering.

London Hydro has investigated cellular solutions offered by public carriers, specifically private APN's, which claim better management of service and isolated traffic from public cellular domain and , therefore, a higher level of security and/or performance as compared to non-APN cellular service. This solution requires London Hydro to assume the collective monthly data costs on each installation i.e., the public-carrier charges London Hydro directly rather than the affected customer. This solution requires either (i) a cellular modem under the meter cover, or (ii) an external cellular modem coupled with a standard meter for connectivity. The burden cost for the TCP/IP Internet communication to meter, the monthly data connection charge, additional software costs for London Hydro's interrogation and the maintenance costs are the responsibility of London Hydro, not the customer. For this solution, London Hydro is proposing to implement a monthly Cellular Meter Read charge of $30.00 per month mirroring the existing OEB approved rate for Special Meter Reads.

This solution should be acceptable to customers who prefer not to use the TCP/IP Internet communication solution due to perceived privacy concerns associated with making network changes as the traffic would now be securely communicated by an independent network, the public carrier. Also this option may be attractive to customers as it is a lower cost alternative to the dedicated phone line option. However, situations may occur in which cellular communication is not a viable solution due to site specific conditions.

The third option London Hydro would propose to customers would be the current status quo solution of using a dedicated phone line. This solution would involve the installation of a standard interval meter coupled with an analog telephone modem. The customer would continue to be responsible for the cost of a POTS dedicated phone line and would continue to incur the monthly OEB approved $5.50 Meter interrogation charge.

Currently London Hydro has no reasonable estimate of the potential uptake of the various options to be proffered to the 1080 demand metered customers.

In conjunction with the required conversion of existing demand metered customers, London Hydro intends to offer the same options to our existing interval metered customers (approximately 600 in service) upon the next meter seal expiry or at customer's request. This proposal will allow the customer to select a lower cost option, resulting in savings to those customers who elect either the TCP\IP or Cellular option.

London Hydro is aware that the OEB has established a deferral account for recovery of the incremental costs incurred in completing the implementation of the amended August 21, 2014 DSC Section 3 changes. London Hydro recognizes that the OEB would prefer that all incremental costs be deferred for future disposition. However, London Hydro believes that the affected customers require full knowledge of what the potential costs of each option will be to make an informed decision today. London Hydro needs to be able to put this information in our solicitation packages to be sent to each affected customer.

London Hydro will be looking to the OEB for direction on the ultimate disposition of the August 21, 2014 DSC Section 3 changes deferral account in a subsequent Cost Of Service Application post the required conversion completion date of August 21, 2021. London Hydro is scheduled to file a May 1, 2017 Cost of Service application. As the required conversion completion date of August 21, 2021 date is potentially beyond our next future May 1, 2021 Cost of Service filing date, future disposition of this account would likely occur in our May 1, 2025 Cost of Service application, in accordance with current OEB deferral account disposition practice. London Hydro herein proposes that London Hydro place the recoveries of the proposed monthly "Cellular Meter Reading Charge" as offset revenue in the deferral account, should the OEB so order.

## Conclusion

London Hydro hereby makes application to the OEB for the creation of a new Specific Service Charge (being a monthly "Cellular Meter Reading Charge") in the amount of $30.00 to be applied to customers adopting Option 2: Public Carrier Cellular Internet Communication.

London Hydro further intends to make amendments to its Conditions of Service to support our proposed menu option process.