



London Hydro
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July 5, 2018

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

**Re: Section 71.4 Green Button Application
EB-2018-0118**

Dear Ms. Walli:

Please find attached London Hydro's responses to OEB questions as requested on June 14, 2018.

If you have any further questions, please do not hesitate to contact me.

Yours Truly,

A handwritten signature in black ink that reads "M Benum".

Martin Benum
Director of Regulatory Affairs
London Hydro
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1. Please provide the calculations of London Hydro's materiality threshold based on current parameters.

London Hydro Response:

London Hydro most recently calculated its materiality threshold in its 2017 COS filing (EB-2016-0091). Chapter 2 of the OEB Minimum Filing Requirements issued by the Board on July 14, 2016 sets out the methodology for calculating the materiality threshold based on the magnitude of a distributor's revenue requirement. London Hydro's revenue requirement (for 2017 and the foreseeable future) is greater than \$10 million and less than \$200 million; accordingly under the Board's methodology London Hydro's materiality threshold is 0.5% of its distribution revenue requirement. London Hydro's materiality threshold for the 2017 Test Year is \$357,000 as calculated in the table below. London Hydro respectfully submits that any change in the calculation based on London Hydro's 2018 revenue requirement will be immaterial.

2017 OEB Approved	
Distribution revenue requirement	\$ 71,346,413
Materiality Threshold Factor	0.5%
Materiality Threshold	<u>\$ 356,732</u>

2. Are the estimated GB services' annual costs material in any year of its incubation period forecast?

London Hydro Response:

London Hydro does not anticipate that the annual costs to provide GB services to 3rd parties will be material in any year during the incubation period (in the context of this application "3rd parties" refers to customers other than London Hydro's distribution customers). London Hydro notes that the nature of the GB services offering is such that most of the costs to provide it to 3rd parties are only incurred in conjunction with an associated revenue stream; in other words, if London Hydro does not secure additional 3rd party customers most of the forecast costs will never be incurred. Accordingly London Hydro submits that in assessing the cost risks associated with the application it is appropriate to focus on the forecast income/loss during the incubation period which London Hydro does not forecast as being material in any year. London Hydro has proposed that the annual RRR reporting 2.1.5.6 will provide transparency with respect to the financial impact of Green Button services.

London Hydro notes that with respect to its own distribution customers Green Button services and the related costs to provide those services have already been approved and included in rates as part of London Hydro's 2017 Cost of Service application.

3. Tables 3, 4 and 5 provide pro-forma income statements for various business scenarios. For each year in each scenario, please provide the expected regulatory net income for London Hydro prior to ring fencing any GB platform related revenues. Please also identify whether in any year, London Hydro's regulatory net income, prior to ring-fencing any GB platform-related revenues, falls outside the 300 basis point deadband above or below the target return on equity reflected in London Hydro's approved rates.

London Hydro Response:

The following table is London Hydro's expected regulatory net income prior to ring fencing any GB platform related revenue (\$ '000).

Proforma Financial Information:						
Expected Case	2016	2017	2018	2019	2020	2021
Income Statement						
Total Comprehensive Income for the year	12,173	14,052	9,954	7,525	6,476	6,493

The following table is London Hydro's expected regulatory net income post ring fencing any GB platform related revenue (\$ '000).

Proforma Financial Information:						
Income Statement	2016	2017	2018	2019	2020	2021
Total Comprehensive Income for the year	12,173	14,052	9,710	7,681	6,535	6,566

As stated in the response to question 2 above, London Hydro is not anticipating any material income or loss resulting from this activity during the incubation period. Accordingly London Hydro does not anticipate that the results of this activity will materially affect the reporting of regulatory income or cause London Hydro to approach 300 basis points of either over or under-earnings during the incubation period.

As shown below none of the scenarios would have any significant impact to our Return on Deemed Equity (\$ '000):

Proforma Financial Information:						
Expected Case	2016	2017	2018	2019	2020	2021
Income / (Loss) from Green Button Platform and External Apps	\$ -	\$ -	\$ (244)	\$ 213	\$ 81	\$ 100
Deemed Equity	\$ 132,367	\$ 129,935	\$ 142,019	\$ 151,976	\$ 158,132	\$ 166,259
Return on Deemed Equity impact of Green Button Work	0.0%	0.0%	-0.2%	0.1%	0.1%	0.1%

Proforma Financial Information:						
Best Case	2016	2017	2018	2019	2020	2021
Income / (Loss) from Green Button Platform and External Apps	\$ -	\$ -	\$ (244)	\$ 578	\$ 327	\$ 347
Deemed Equity	\$ 132,367	\$ 129,935	\$ 142,019	\$ 151,976	\$ 158,132	\$ 166,259
Return on Deemed Equity	0.0%	0.0%	-0.2%	0.4%	0.2%	0.2%

Proforma Financial Information:							
Worst Case	2016	2017	2018	2019	2020	2021	
Income / (Loss) from Green Button Platform and External Apps	\$ -	\$ -	\$ (244)	\$ 15	\$ (45)	\$ (19)	
Deemed Equity	\$ 132,367	\$ 129,935	\$ 142,019	\$ 151,976	\$ 158,132	\$ 166,259	
Return on Deemed Equity	0.0%	0.0%	-0.2%	0.0%	0.0%	0.0%	

4. On what basis did London Hydro determine not to run GB services through an affiliate? Please explain what analysis was undertaken, including any analysis of the comparative cost of using an affiliate.

London Hydro Response:

GB services were originally developed and implemented by London Hydro as a distribution related service to be provided to its distribution customers; it is on that basis that the existing service offering was included in rates as part of London Hydro's 2017 Cost of Service application and approved by the Board. Accordingly GB services exist, in London Hydro's opinion, as an element of its distribution activity.

The expansion of GB services as contemplated by this application, certainly throughout the incubation and possibly beyond, is intended to compliment the current service London Hydro is providing to its distribution customers, rather than provide the basis for a separate undertaking. Through this application London Hydro expects to be able to enhance the services offered to its own distribution customers and, to the extent London Hydro is able to offer the service to 3rd parties, expand the opportunities to offset the costs of distribution service to its distribution customers. In London Hydro's view the primary driver of extending GB services in terms of the scope of the services and the spectrum of customers that can access those services is the enhancement of the product and the product impact on London Hydro's distribution customers.

London Hydro has not undertaken any specific analysis comparing the cost of providing Green Button services through an affiliate against the costs to provide the services within the distribution company. As noted by London Hydro the proposed activity is not expected to be financially material in nature, particularly throughout the incubation period; accordingly, in London Hydro's view, creating an affiliate shell structure to support a single source marginal activity would be inefficient, particularly in light of the current state of the market for such services. It is London Hydro's view that keeping this service in the utility benefits not just London Hydro's distribution customers but all of Ontario's distribution customers.

It may be the case that, following the incubation period, the nature and scope of the Green Button services that London Hydro is able to provide to 3rd parties is such that a case for providing Green Button services through an affiliate may be supported. In its current state, however, London Hydro believes that the better option is to continue exploring the potential of the Green Button services offering in the context of the distribution business as a natural extension of the services London Hydro provides to its distribution customers.

5. The application outlines a proposal to utilize London Hydro's GB platforms and applications for commercial purposes. The application also states that the costs of developing these assets were partly recovered from London Hydro customers through rates [Exhibit: 1, Tab: 1, Schedule: 5, Page: 1]. Please confirm if there is a plan to reimburse London Hydro customers for the use of these assets when used for commercial purposes during the incubation period. If so, please describe how any reimbursement will be calculated.

London Hydro Response:

London Hydro notes that in its 2017 COS application it brought forward a forecast of 2017 revenue from the provision of GB services to 3rd party customers (Festival Hydro and Whitby Hydro) and, for the purposes of the 2017 rebasing credited 100% of the forecast net revenue from those customers against its cost of service. Accordingly the status quo treatment of Green Button services revenue is as a source of other revenue that has been forecast and included as a revenue offset in rates.

Currently London Hydro's distribution customers receive the full benefit of the revenue London Hydro generated from 3rd parties up to its 2017 rebasing (a benefit London Hydro's customer will enjoy whether or not Festival Hydro and Whitby Hydro continue to obtain service from London Hydro for the full period prior to the next rebasing). During the incubation period London Hydro's proposal is to treat any incremental costs and revenues from GB services, including variations related to the expansion of the scope of that service through this application, as variations in net other revenue. That revenue London Hydro's shareholder is, in the normal course, at risk for. London Hydro will bear the costs and, to the extent it can successfully grow the market for Green Button services during the incubation period, recover some net benefits from the expansion of its Green Button services to include more 3rd parties.

Upon rebasing and the conclusion of the incubation period London Hydro expects to come forward with a proposal that would appropriately allocate the revenues from the Green Button services based on a full analysis of the costs to provide the service (both to London Hydro's own distribution customers and to 3rd parties) against the market for those services including the price that London Hydro is able to charge for the services. London Hydro cannot predict what form that proposal will take at this time, as it depends largely on the results of its activity in trying to grow the customer base for Green Button services during the incubation period.

6. Please confirm whether there are any circumstances in which London Hydro intends to file a rebasing application before the expiry of its current rate plan.

London Hydro Response:

London Hydro is not currently aware of any circumstances that would cause it to file a rebasing application before the expiry of its current rate plan.

7. Please quantify how much London Hydro has spent to date in the development of GB for its own customers. Please indicate how this amount compares with London Hydro's expected costs of expanding GB.

London Hydro Response:

London Hydro would suggest it is not able to reasonably determine the quantum of costs for the development of its green button platform as London Hydro's Green Button development costs have been embedded in IT projects and enhancements expenditures since GB became a core back-end component for applications starting in 2013. Development of the GB platform and applications were originally intended for London Hydro customers only. Through utility collaboration London Hydro's platform is being used by Festival Hydro/Whitby Hydro. London Hydro is offering this cost effective solution to other Ontario utilities to help them avoid development costs.

London Hydro expects the costs for expanding Green Button to be primarily driven by customer/utility requirements including integration with utilities back-end systems, and incremental infrastructure/support costs. These costs are anticipated to be recovered from the contracting parties.

As iterated in our application it is London Hydro's shareholder who will bear the risk as a result of Green Button services activity during the incubation period. As noted above under question 5, upon rebasing and the conclusion of the incubation period London Hydro expects to come forward with a proposal that would appropriately allocate the revenues from the Green Button services based on a full analysis of the costs to provide the service against the market for those services including the price that London Hydro is able to charge for the services. London Hydro cannot predict what form that proposal will take at this time, as it depends largely on the results of its activity in trying to grow the customer base for Green Button Services during the incubation period.

8. Has London Hydro conducted an assessment of the legal risks associated with providing the GB services (e.g. potential exposure to litigation from GB clients inside and outside Ontario)?

London Hydro Response:

London Hydro has disclosed and discussed the nature of our services offerings with our general insurance provider, MEARIE, and they have provided reasonable assurance of liability coverage for activity of this nature. Further London Hydro engages and relies on legal counsel for development and ratification of all contracts for Green Button services offered. Based on the nature of our service offering London Hydro does not believe it is materially exposed to any potential litigation. As mentioned under question 7, it is important to recognize that any 3rd party taking Green Button related services from London Hydro remains responsible for generating and maintaining the data that Green Button services are applied to. It is not the case that

London Hydro is undertaking any physical metering and data collection activities within the scope of Green Button services, such that London Hydro believes its exposure to risk remains relatively low. Lastly, London Hydro would note that as the costs and revenues for extended Green Button services are to be ring fenced during the incubation period, distribution customers would be protected against the consequences of any litigation related to the provision of Green Button services; any losses would be ring fenced as a cost borne by London Hydro's shareholder.

9. Please identify the governance practices and oversight measures London Hydro will apply to business activities beyond Ontario's borders with specific regard to a) the potentially heightened legal risks that may accompany conduct in deregulated, competitive markets where London Hydro has no experience to date, and b) the fact that London Hydro customers are exposed to those risks when the line of business is held within the distribution company.

London Hydro Response:

London Hydro would note that the majority of its Board of Directors are independent members from its Shareholder. London Hydro Board of Directors would hold ultimate control for oversight of activities related to deployment of Green Button services beyond Ontario's border. Our response to question 8 above in and of itself satisfies the concerns of London Hydro Board of Directors. As noted above, the proposal to ring fence the costs and revenues associated with the provision of Green Button services to 3rd parties means that any litigation losses incurred as a result of the provision of Green Button services would be accounted for outside of the rates that London Hydro's distribution customers pay.

10. Page 6 of the application notes that London Hydro wishes to begin providing expanded GB services to its own distribution customers, services related to other utilities such as natural gas and water, and identifies these GB services as those enumerated in schedule 5. Please discuss in more detail what offering of service or information will be made to London Hydro customers regarding water and other utility services, and to what extent such an offer is contingent on the activities or participation of the utilities which provide these services.

London Hydro Response:

The Green Button standard supports water, gas and electricity data. London Hydro currently does water billing and provides customer care for the City of London. Therefore, London Hydro has incorporated water data in the Green Button platform.

In order to extend green button natural gas services to London Hydro customers, London Hydro is collaborating with Union Gas on a pilot to extend the value of Green Button to City of London's residential and commercial customers. The goal is to provide an economic benefit to the province of Ontario by providing customers with near real time data and consolidated ("whole" home) view of gas usage providing tools to reduce their bill.