

Scorecard - London Hydro Inc.

9/24/2017

Performance Outcomes	Performance Categories	Measures	2012	2013	2014	2015	2016	Trend	Target		
									Industry	Distributor	
<b>Customer Focus</b>  Services are provided in a manner that responds to identified customer preferences.	<b>Service Quality</b>	New Residential/Small Business Services Connected on Time	96.80%	99.90%	100.00%	97.60%	96.60%		90.00%		
		Scheduled Appointments Met On Time	99.65%	99.51%	99.80%	100.00%	99.90%		90.00%		
		Telephone Calls Answered On Time	67.17%	65.98%	64.80%	68.00%	67.00%		65.00%		
	<b>Customer Satisfaction</b>	First Contact Resolution				99.7%	99.2%	99.5%			
		Billing Accuracy				99.28%	98.34%	99.71%		98.00%	
		Customer Satisfaction Survey Results				A	A	A			
<b>Operational Effectiveness</b>  Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	<b>Safety</b>	Level of Public Awareness					84.00%	84.00%			
		Level of Compliance with Ontario Regulation 22/04 <sup>1</sup>	C	C	C	C	C			C	
		Serious Electrical Incident Index	Number of General Public Incidents	2	3	0	3	2			1
	Rate per 10, 100, 1000 km of line		0.709	1.056	0.000	1.029	0.698			0.391	
	<b>System Reliability</b>	Average Number of Hours that Power to a Customer is Interrupted <sup>2</sup>	0.89	0.82	0.98	0.93	0.97			1.04	
		Average Number of Times that Power to a Customer is Interrupted <sup>2</sup>	1.30	1.09	1.21	1.08	1.03			1.35	
	<b>Asset Management</b>	Distribution System Plan Implementation Progress				In Progress	In Progress	In Progress			
	<b>Cost Control</b>	Efficiency Assessment	2	2	2	2	2				
		Total Cost per Customer <sup>3</sup>	\$463	\$466	\$477	\$505	\$521				
Total Cost per Km of Line <sup>3</sup>		\$24,386	\$24,430	\$24,946	\$27,149	\$28,281					
<b>Public Policy Responsiveness</b> Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	<b>Conservation &amp; Demand Management</b>	Net Cumulative Energy Savings <sup>4</sup>					14.51%	32.45%		196.66 GWh	
	<b>Connection of Renewable Generation</b>	Renewable Generation Connection Impact Assessments Completed On Time	100.00%	100.00%	100.00%	90.91%	85.71%				
		New Micro-embedded Generation Facilities Connected On Time		100.00%	100.00%	90.74%	91.43%		90.00%		
<b>Financial Performance</b>  Financial viability is maintained; and savings from operational effectiveness are sustainable.	<b>Financial Ratios</b>	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.23	1.13	1.23	1.17	1.31				
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.66	0.61	0.64	0.66	0.74				
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	8.01%	8.98%	8.98%	8.98%	8.98%			
			Achieved	4.90%	11.22%	9.10%	7.52%	5.99%			

1. Compliance with Ontario Regulation 22/04 assessed: Compliant (C); Needs Improvement (NI); or Non-Compliant (NC).

2. The trend's arrow direction is based on the comparison of the current 5-year rolling average to the fixed 5-year (2010 to 2014) average distributor-specific target on the right. An upward arrow indicates decreasing reliability while downward indicates improving reliability.

3. A benchmarking analysis determines the total cost figures from the distributor's reported information.

4. The CDM measure is based on the new 2015-2020 Conservation First Framework.

**Legend:**

5-year trend

up down flat

Current year

target met target not met

# 2016 Scorecard Management Discussion and Analysis (“2016 Scorecard MD&A”)

The link below provides a document titled “Scorecard - Performance Measure Descriptions” that has the technical definition, plain language description and how the measure may be compared for each of the Scorecard’s measures in the 2016 Scorecard MD&A:

[http://www.ontarioenergyboard.ca/OEB/ Documents/scorecard/Scorecard Performance Measure Descriptions.pdf](http://www.ontarioenergyboard.ca/OEB/Documents/scorecard/Scorecard%20Performance%20Measure%20Descriptions.pdf)

## Scorecard MD&A - General Overview

At London Hydro, fostering innovation in our employees is a corporate priority. Employees in every area of the organization are encouraged to stretch their creative muscles and, by doing so, they have positioned London Hydro as a leader in safety, reliability, technology, cost management, community involvement and energy conservation programming.

The innovation and dedication of our employees led to another successful year in 2016, as London Hydro met or exceeded a majority of the OEB scorecard targets. London Hydro is extremely pleased with the continued improvement of reliability indicators while remaining one of the most cost effective utilities in the province of Ontario.

London Hydro surpassed most Ontario Energy Board (OEB) targets and is proud of the significant advances it has made in 2016 in customer focus, operational effectiveness, public policy responsiveness and financial performance.. The following particular achievements have helped us to reduce or mitigate customer rates, improve safety or enhance the customer experience:

### Customer Focus

- Leading the industry by utilizing Green Button technology to work with other utilities to provide services for an increased number of customers and being able to share the costs of those services for which we were recognized with an EDA Customer Service Excellence Award.
- Leading Ontario’s Green Button adoption campaign to empower customers to manage their energy costs proactively using industry leading applications (e.g., Bidgely - consumption disaggregation).
- Maintaining an “A” rating in our customer satisfaction surveys.

## Operational Effectiveness

- Remaining one of the lowest cost utilities in the province.
- Being awarded the EDA Conservation Leadership Award by providing over 50,000 lighting and 700 appliance retrofits and upgrades to more than 3,000 social housing dwellings. The program is saving tenants and the London & Middlesex Housing Corporation about \$450,000 per year.
- Continuing our trend of improvement in SAIFI and SAIDI reliability metrics.
- Leading the way as an early adopter of emerging technologies to deliver “mobile first” open standards-based Cloud solutions to our customers.

## Public Policy Responsiveness

- Entering into a partnership with a neighbouring utility to improve efficiencies in the delivery of CDM programs.
- Being a leader in the implementation of the OEB's Ontario Electricity Support Program (OESP) initiative by programming our system to allow for seamless integration with the centralized OEB portal; as a result of our success, we were asked by the OEB to share our technological practices for the benefit of other utilities and, ultimately, consumers.
- Increasing our funding for the Low-Income Energy Assistance Program (LEAP) to \$250,000 in 2016.
- Paying the City of London \$10M in dividends in 2016.

## Service Quality

### • **New Residential/Small Business Services Connected on Time**

In 2016, London Hydro connected 96.6% of its 1,901 eligible low-voltage residential and small business customers (those utilizing connections under 750 volts) to its system within the five-day timeline prescribed by the OEB. This score exceeds the OEB-mandated threshold of 90%. London Hydro is consistently able to achieve high levels of compliance in this area due to the existing workflow processes and computer systems that are used to monitor the status of each job. London Hydro also previously implemented an evening shift service truck, which has resulted in improved flexibility for connecting new customers.

- **Scheduled Appointments Met On Time**

London Hydro scheduled 1,011 appointments with its customers in 2016 to complete work requested by customers or by customers' representatives. The utility met 99.9% of these appointments on time, which significantly exceeds the industry target of 90%. The duties and obligations of this requirement are well communicated to and known by London Hydro's staff, which has contributed to London Hydro's success in this area.

- **Telephone Calls Answered On Time**

In 2016, 181,789 calls were made to London Hydro of which 176,162 were answered by our Customer Service Representatives (CSR), representing an average of 700 calls a day. We continue to meet the required percentage of calls answered in 30 seconds or less.

Since 2014, London Hydro has engaged a call over-flow company to assist in call-handling after the implementation of our new online, self-service tool, MyLondonHydro. The drivers to enhance our self-serve online portal included the increase in email correspondence and customer requests for additional online tools to manage interactions 24 hours a day, seven days a week. London Hydro anticipates that telephone call volumes will decline with more customer acceptance of this tool. In 2015 and 2016, this engagement with the call over-flow partner continued as further enhancements to our customer self-serve web continued.

London Hydro is committed to maintaining exceptional customer care and to continuing to find ways to improve the customer experience. London Hydro's approach is to balance customer preferences with regulatory requirements, when necessary. For example, as a best practice, London Hydro maintains the prescribed 65% metric for "Calls Answered on Time." While we could try to surpass that metric by hiring more CSRs, our customers have told us that it is more important to keep costs low; therefore, we focus on meeting this objective rather than surpassing it.

## Customer Satisfaction

- **First Contact Resolution**

London Hydro strives to serve customers in a friendly and professional manner and to answer their questions and resolve their issues within the first call. In 2016, London Hydro had great success on the First Contact Resolution measure, scoring over 99%. Our success can be attributed to a number of factors including our intensive training program for new hires as well as our dedicated resource for gap training and process management. We also use call monitoring tools to record and archive every call to allow us to evaluate our staff's call handling, and each month we review one randomly selected call with each CSR. Any anomalies or customer escalations are reviewed when warranted. All customer interactions are logged in our Customer Information System (CIS) System, including any escalations. We use the results of our annual Customer Satisfaction Survey to learn what is working and what areas require improvement.

- **Billing Accuracy**

In 2016, London Hydro distributed an average of 153,000 invoices per month and achieved an overall billing accuracy rate of 99.71%. To supplement our validating, estimating and editing process, our CIS system uses audits and controls to ensure the accuracy of bill calculations. Any billing irregularities are investigated, analyzed and evaluated for impacts. All changes are verified and tested by our Subject Matter Experts. This dedicated team also monitors and manages bill print exceptions. As an additional check, we audit the value of the bill, and by setting a “threshold” amount for each billing class of customers, we ensure no excessive/irregular invoice is distributed without validation.

- **Customer Satisfaction Survey Results**

For the past 18 years, London Hydro Inc. has engaged a third party to conduct a Customer Satisfaction Survey. The purpose of London Hydro’s involvement in these surveys is to determine a benchmark for measuring the level of satisfaction our customers experience with all areas of service and, equally important, to identify any areas for improvement. The survey asks a core set of questions that provides annual benchmarks, such as overall satisfaction with London Hydro, reliability of service, outages, billing issues and corporate image. Additionally, London Hydro provides a second set of questions regarding specific current issues to identify and respond to new needs or expectations of the customers. The information gathered from the survey is then carefully considered and included in the development or enhancement of both London Hydro’s Strategic Plan and Corporate Communications Plan.

In 2016, London Hydro’s Customer Satisfaction Survey results were equal to or better than provincial and national counterparts, and, on most measures, London Hydro demonstrated improvement over the previous year’s score. Customers’ overall satisfaction rating for London Hydro was 86%. On reliability, London Hydro scored 94%, while the Ontario benchmark was 89%.

Again, this survey is a valuable tool for gauging customers’ awareness of changes in the industry, their level of satisfaction with the services London Hydro provides, their insights into capital programs, and for identifying any areas of improvement to services. London Hydro’s goal is to provide service excellence in all we do, and we plan to continue surveying our customers to benchmark our service levels and help us continue to develop service enhancements.

## Safety

- **Public Safety**

- **Component A – Public Awareness of Electrical Safety**

In 2016, London Hydro undertook major safety awareness efforts, including:

- the School Electricity Safety Program, which is presented to over 10,000 students annually;
- the Power of Electricity, a curriculum-based program that involves training teachers to present the program to grades 5/6 each year;
- media coverage for electrical safety-related issues and incidents in the community;
- pole top rescue training;
- support and presentations at the Safety Village;
- numerous summer camps; and
- other community event presentations.

In 2017, London Hydro will conduct the second public awareness survey (developed by the Electrical Safety Authority (ESA)) among a representative sample of Londoners. The survey helps gauge the public's awareness of fundamental safety precautions related to electricity. The 2017 results will be measured against the benchmark results from the first survey that was conducted in 2015.

○ **Component B – Compliance with Ontario Regulation 22/04**

Over the past five years, London Hydro has been found to be compliant with Ontario Regulation 22/04 (Electrical Distribution Safety Regulation). This success was achieved by London Hydro's strong commitment to safety and adherence to company policies, procedures and Safe Work Practices. The Electrical Distribution Safety Regulation (Ontario Regulation 22/04) establishes objectives-based electrical safety requirements for the design, construction, and maintenance of electrical distribution systems owned by licensed distributors. Specifically, the regulation requires the approval of equipment, plans, specifications and inspection of construction before they are put into service.

The ESA performs Due Diligence Inspections (DDI) throughout the year to ensure utilities remain compliant with the objectives set out in Ontario Regulation 22/04. London Hydro has a process in place for responding to DDI's and for reporting back to the ESA on the action plans taken within the specified time period. In 2016, one DDI was performed on London Hydro equipment and infrastructure and we received one statement of non-compliance which was found to be an issue interpreting a work order document. The issue was resolved with ESA.

○ **Component C – Serious Electrical Incident Index**

London Hydro experienced two reportable incidents in 2016. None of the electrical incidents that occurred in 2016 resulted in injury, either to a worker or to a member of the public. In order to maintain the safety and reliability of the distribution grid, London Hydro conducts an investigation of all incidents of this nature. In 2016 the two incidents were caused by the failure of London Hydro owned equipment.

Through analysis and review of these incidents, London Hydro has implemented modifications to engineering designs and/or targeted replacement programs where appropriate to ensure continued safe and reliable distribution of electricity to our customers

## System Reliability

- **Average Number of Hours that Power to a Customer is Interrupted**

In 2016, London Hydro surpassed its performance target for the average number of hours that power to a customer was interrupted. London Hydro's System Average Interruption Duration Index (SAIDI), without Loss of Supply, was 0.97 hours, which is below the target of 1.04.

A large percentage of the hours that power to customers was interrupted are related to scheduled outages, which are necessary to complete infrastructure improvement projects and to maintain the system. This work ensures that the system will continue to be reliable in the future.

- **Average Number of Times that Power to a Customer is Interrupted**

In 2016, London Hydro also surpassed its performance target for the average number of times that power to a customer was interrupted. London Hydro's System Average Interruption Frequency Index (SAIFI), without Loss of Supply, was 1.03, which is lower than the 1.35 target.

London Hydro's reliability performance is a clear indicator of our commitment to reliably deliver electricity to our customers. In order to achieve this performance, London Hydro's engineers analyze system events and produce weekly reports, monthly reports, and an annual Quality of Supply report, which includes a feeder by feeder performance analysis. The reports identify system solutions to avoid future interruptions and initiate projects in areas that require improvement. By investing in infrastructure maintenance, we ensure that the system is able to minimize the impact of inclement weather events.

## Asset Management

- **Distribution System Plan (DSP) Implementation Progress**

London Hydro's DSP implementation is "in progress." London Hydro has metrics in place to ensure that ongoing and new initiatives related to the distribution system are effective. The main performance indicator is the reliability of the system. While the overall system reliability (expressed as SAIDI and SAIFI) is important, London Hydro has refined outage reporting and analysis to the point where specific outage causes (such as underground primary cable faults) can be tracked before and after implementing a solution (such as introducing silicone cable injection).

For London Hydro's DSP, the following reliability metrics are monitored and used to make annual adjustments to the projects and programs that are in place to make improvements to the distribution system.

Reliability Metric	Purpose & Form	Desired Outcome	Motivation	Related Projects / Programs
System Average Interruption Duration Index (SAIDI) – Equipment Design-Related Outages (outages related to controllable causes such as defective equipment)	SAIDI – EDRO (Equipment Design Related Outages) provides a measure of the reliability of the distribution system as affected by controllable causes. It is calculated using only outages related to controllable causes such as defective equipment.	Stable year-over-year; slight decrease over time in customer minutes of outage	<u>Consumer</u> : Consistent level of reliability for customers; <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages; <u>System Performance</u> : Evidence that assets are performing as expected	Most System Renewal Proj.- 16C1 Feeder Tie; 17C1 Supply to Core; 16B7, 17B7 Installation of Backup Supply; 16B8, 17B8 Installation of Fault Indicators; 16H1, 17H1 Recloser Installation; 16H5, 17H5 Line Status Sensors
System Average Interruption Frequency Index (SAIFI) – Equipment Design Related Outages	SAIFI – EDRO provides a measure of the reliability of the distribution system as affected by controllable causes. It is calculated using only outages related to controllable causes such as defective equipment.	Stable year-over-year; slight decrease over time in number of customers affected by an outage	<u>Consumer</u> : Consistent level of reliability for customers; <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages; <u>System Performance</u> : Evidence that assets are performing as expected	Most System Renewal Projects
Customer Acceptance of Existing Level of Reliability (via surveys)	This metric measures customer acceptance of reliability. Expressed as a percentage of respondents who agree “London Hydro provides consistent, reliable energy”	Consistent year-over-year of majority of responses find existing level of reliability acceptable (90%)	<u>Consumer</u> : Consistent level of reliability for customers	Overall spending on System Renewal and reliability focused projects are kept relatively consistent year-over-year
Number of Faults in Residential Underground Primary Conductor	This metric tracks the quantity of faults on residential underground primary conductor per year to determine if the level of investment in cable injection and rebuilds is effective.	Year-over-year decrease	<u>Consumer</u> : Consistent level of reliability for customers; <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages; <u>System Performance</u> : Evidence that assets are performing as expected	16B1, 17B1 Cable Silicone Injection; 16B2, 17B2 Subdivision Conversions / Rebuilds with Silicone Injection
Number of Outages Caused by Lightning	This metric tracks the quantity of outages caused by lightning each year to determine if lightning mitigation measures are effective.	Year-over-year decrease (relative to the number of lightning flashes)	<u>Consumer</u> : Consistent level of reliability for customers; <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages; <u>System Performance</u> : Evidence that assets are performing as expected	Pre-2016 projects (15G6) to install shield wire and arrestors on critical main feeders; now part of new construction standard for overhead main feeders
Number of Broken Poles (not due to motor vehicle accidents)	This metric tracks the quantity of outages caused by broken poles each year to determine if the pole testing and replacement program is effective.	Stable year-over-year quantity	<u>Consumer</u> : Consistent level of reliability for customers <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages and optimize the lifecycle cost of wood poles <u>System Performance</u> : Evidence that assets are performing as expected	16G1, 17G1 Replace Deteriorating Poles
Number of Pole Fires	This metric tracks the quantity of outages caused by pole fires each year to determine if the pole inspection and replacement program is effective.	Year-over-year decrease	<u>Consumer</u> : Consistent level of reliability for customers <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages and optimize the lifecycle cost of wood poles <u>System Performance</u> : Evidence that assets are performing as expected	16G2, 17G2 Replacement of Poles Susceptible to Pole Fires

Number of Outages due to Sectionalizing Enclosure (SE) Failures	This metric tracks the quantity of outages caused by SE failures each year to determine if the SE inspection and replacement program is effective.	Year-over-year decrease	<u>Consumer</u> : Consistent level of reliability for customers <u>Corporate</u> : Cost effectiveness – prevent costs associated with unplanned outages <u>System Performance</u> : Evidence that assets are performing as expected	16B3, 17B3 Replacement / Removals of SE's
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London Hydro also monitors the overall cost to our customers to ensure competitiveness with our peers and affordable increases year-over-year. The following cost-based metrics provide feedback to our customers and stakeholders regarding our overall cost efficiency.

Cost Metric	Purpose & Form	Desired Outcome	Motivation	Related Projects / Programs
Controllable Cost per Customer	This metric tracks the controllable costs per customer each year to ensure costs are competitive with peers. Values are sourced from OEB Yearbook.	Bottom quartile of all LDCs	<u>Consumer</u> : Customers should see rates competitive with similar sized LDCs <u>Corporate</u> : Feedback to management on cost effectiveness of LDC	Top down budget constraints, System Renewal Projects[1]; 16B8, 17B8 Installation of Fault Indicators & 16H5, 17H5 Line Status Sensors (reduce time required to locate problems)
PEG Efficiency Assessment	This metric measures the LDC's overall efficiency as determined by PEG. Values are sourced from OEB/PEG.	Remain within Group 2 (2 <sup>nd</sup> most efficient)	<u>Consumer</u> : Customers should see rates competitive with similar sized LDCs <u>Corporate</u> : Feedback to management on cost effectiveness of LDC	Top down budget constraints
Annual Distribution Revenue (Residential)	This metric tracks the average annual distribution revenue per residential customer. Values are sourced from OEB yearbook; stats by class tab.	Bottom quartile of all LDCs	<u>Consumer</u> : Customers should see rates competitive with similar sized LDCs <u>Corporate</u> : Feedback to management on cost effectiveness of LDC	Top down budget constraints

To ensure the work outlined in the DSP is carried out efficiently, London Hydro has developed some measurement tools to assist in the timely execution and completion of the overall planned projects:

Each crew leader is given access to a smart phone application referred to as EASY (Economic Assessment System), which provides current data on the progress of capital projects. Providing field crews with near-real time tracking of their work effort against the budgeted amount allows them to identify potential variances early in the project and take appropriate corrective action to address inefficiencies or adjust the mix of resources assigned to the project.

An Engineering Instruction (EI-21 Engineering & Operations Capital Program Project Cost Control Requirements) is used by staff to assess the variance to budget for all capital projects. Any project valued at \$25,000 or more that comes in over or under budget by 10% or more requires analysis to determine the source of the variance. These variance reports are reviewed by managers to determine if opportunities exist to improve the estimation process and/or project execution process.

Regular meetings with engineering and operations staff are scheduled to provide status reports (red/green/amber) on capital projects and review significant variances. Bi-weekly meetings focus on the project level, while monthly meetings focus on the program level. A year-end report is used to assess total variance to budget and actual completion of planned work to budget.

DSP Implementation Metric	Purpose & Form	Desired Outcome	Motivation	Related Projects / Programs
Utilization of the EASY application (number of crew leaders using application on a regular basis)	Crew leaders are encouraged to take ownership of projects and monitor their costs compared to budget. This metric will track the number of crew leaders using this application to ensure it is effective and user-friendly.	Higher utilization should result in lower variance to budget for capital projects	<u>Corporate</u> : Less variance to budget should assist with keeping costs within budget, resource allocation is optimized <u>Consumer</u> : Meeting budget targets should keep rates stable	All capital projects
Average % Variance to Budget for System Renewal and System Service Projects	This metric measures the variance percentage to budget to determine the accuracy of budgeting and effectiveness of project execution. Calculated as the percent difference in actual annual spending to budget on System Renewal and System Service projects.	Slight improvement each year with ultimate goal of 10% or less	<u>Corporate</u> : Less variance to budget should assist with keeping costs within budget <u>Consumer</u> : Meeting budget targets should keep rates stable	All System Renewal and System Service Projects
Percentage of Actual System Renewal and System Service Projects Completed per Half Year vs Planned	This measures the quantity of actual work vs planned work to determine the effectiveness of the planning and execution of capital projects. Calculated as the percent difference of actual vs planned System Renewal and System Service projects each quarter. Some subjectivity will be used as some projects will span set time periods.	Slight improvement each year with ultimate goal of 100%	<u>Corporate</u> : Less variance to budget should assist with keeping costs within budget <u>Consumer</u> : Meeting budget targets should keep rates stable	All System Renewal and System Service Projects

For customer-focused initiatives, London Hydro monitors the number of customers using each initiative and then adjusts either the promotion of the initiative (so more customers are aware of them) or the actual initiative (to make it more useful to customers).

Customer Participation Metric	Purpose & Form	Desired Outcome	Motivation	Related Projects / Programs
Number of Customers Subscribed to Paperless Billing	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : Easier customer access to billing information <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number of Customers Subscribed to Customer Portals (UCES / MyLondonHydro)	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : Easier customer access to billing information <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	Builders Portal, New Property Management Portal
Number of Customers Subscribed to Outage Notification	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : Better communication with customers on outage status	CE (Customer Engagement) Website Enhancements

Customer Participation Metric	Purpose & Form	Desired Outcome	Motivation	Related Projects / Programs
Number of Customers on Paperless Billing Enrolled in Aeroplan	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : Travel Rewards for converting to paperless billing; reduced costs to customers over time due to lower OM&A <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number of online move-in / move-out / transfer of service requests placed via LH website	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : Services available on-demand, anywhere <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number of Accounts Utilizing Delegate Functionality	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year	<u>Consumer</u> : More flexibility for customers to assign others to be responsible for hydro account, fewer missed or late payments <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number of Budget Billing Sign Ups via MyLondonHydro	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year, decline in quantity and value of late and delinquent accounts	<u>Consumer</u> : Option for customers to assist with budgeting hydro payments <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number Payment Notifications via MyLondonHydro	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year, decline in quantity and value of late and delinquent accounts	<u>Consumer</u> : Reduces the likelihood of late or missing payments and subsequent repercussions <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements
Number Payment Arrangements via MyLondonHydro	This measure will track usage of this website option to determine how many customers find this application useful. Software tracks the number of subscribers.	Gradual Increase in usage year-over-year, decline in quantity and value of late and delinquent accounts	<u>Consumer</u> : Simplifies payment process <u>Corporate</u> : Effectiveness of website development, proper allocation of resources in Customer Service area.	CE (Customer Engagement) Website Enhancements

In addition to these metrics, Google Analytics is used to monitor the number of website visits (total, unique, new, and returning), the percentage of mobile users, average bounce rate and the most popular page.

## Cost Control

- **Efficiency Assessment**

The total costs for Ontario local electricity distribution companies are evaluated by the Pacific Economics Group LLC (PEG) on behalf of the OEB to produce a single efficiency ranking. The electricity distributors are divided into five groups based on the magnitude of the difference between their respective individual actual and predicted costs. London Hydro's 2016 results placed us in Group 2, for the fifth year in a row. Group 2 distributors are defined as having actual costs that are 10% to 25% below predicted costs. Group 2 is

considered “better than average efficiency” – in other words, London Hydro’s costs are better than the average cost range for distributors in the province of Ontario. In reviewing the provincial electricity distributors 2016 results, 47% (32 distributors) (2015 - 51% (36 distributors)) of the Ontario distributors were ranked as “average efficiency”; 21% (14 distributors) (2015 - 20% (14 distributors)) were ranked as “more efficient”; 13% (9 distributors) (2015 - 15% (11 distributors)) were ranked as “least efficient.”

- **Total Cost per Customer**

Total cost per customer is calculated as the sum of London Hydro’s capital and operating costs divided by the total number of customers that London Hydro serves. The cost performance result for 2016 is \$521/customer (2015 – \$505/customer) which is a 3.2% increase over 2015.

Similar to most distributors in the province, London Hydro has experienced increases in the total costs required to deliver quality and reliable services to customers. London Hydro’s total cost per customer has increased, on average, by 1.2% (2015 1.3%) per annum over the period from 2012 through to 2016. Province-wide programs, such as smart meters required for Time-of-Use pricing, growth in wage and benefits costs for our employees, as well as investments in new information systems technology and the renewal and growth of the distribution system, have all contributed to increased operating and capital costs.

London Hydro will continue to replace distribution assets proactively along a carefully managed timeframe in a manner that balances system risks and customer rate impacts. As was demonstrated in our future 2017 Cost of Service (COS) rate application, London Hydro will continue to implement productivity and improvement initiatives to help offset some of the costs associated with future system improvement and enhancements. Customer engagement initiatives will continue in order to ensure customers have an opportunity to share their viewpoint on London Hydro’s capital spending plans. However, as discussed in our efficiency assessment, London Hydro is concerned that continuing public policy initiatives will result in continued cost escalations beyond London Hydro management’s control.

- **Total Cost per Km of Line**

This measure uses the same total cost that is used in the cost per customer calculation above. The total cost is divided by the kilometres of line that London Hydro operates to serve its customers. London Hydro's 2016 rate is \$28,281 per km of line, a 4.1% increase over 2015. London Hydro experienced a moderate level of growth in its total kilometres of lines complemented by a moderate annual customer growth rate. This continued modest growth rate provides London Hydro with the ability to fund capital renewal projects and buffers some of the increased operating costs realized through customer growth. As a result, cost per km of line has increased year over year with the increase in capital and operating costs. See the Cost per Customer section above for cost drivers commentary. London Hydro continues to seek innovative solutions to help ensure cost per km of line remains competitive and within acceptable limits to our customers.

## Conservation & Demand Management (CDM)

- **Net Cumulative Energy Savings**

As a means of improving the overall effectiveness of both organizations, London Hydro entered into a partnership arrangement with Tillsonburg Hydro for the delivery of CDM programs throughout the 2015-2020 CDM delivery framework, and submitted a Joint CDM Plan to IESO consisting of the following public-domain documents:

- London Hydro Report EM-14-03, Integrated Resource Planning: Forecasts of Energy Efficiency Program Outcomes as a Demand-Side Resource (Volume 1 – Articulation of the Vision); April 2015
- London Hydro Report EM-14-03B, Integrated Resource Planning: Forecasts of Energy Efficiency Program Outcomes as a Demand-Side Resource (Volume 2 – Budget & Resource Plan); April 2015
- London Hydro Report EM-14-03C, Integrated Resource Planning: Forecasts of Energy Efficiency Program Outcomes as a Demand-Side Resource (Volume 3 – Tillsonburg Hydro Element); April 2015

London Hydro's assigned net energy savings target for the current framework was 196.66 GWh.

According to the IESO publication Final Verified 2016 Annual LDC Program Results Report, throughout 2016 London Hydro achieved another 31,825 MWh of net energy savings (persisting to 2020), and has now achieved 32.45% of its 196 GWh target (and we are aware that there is under-reporting, e.g. London Hydro's Home Assistance projects for June 2016 are not included, but there will be a 2016 adjustment in the IESO's 2017 final verified results report). Consequently, London Hydro is on-track to meet its assigned CDM target (for both London Hydro and Tillsonburg Hydro).

Note: This is consistent with the Environmental Commissioner of Ontario's Annual Energy Conservation Progress Report (2016/2017) entitled: Every Joule Counts - Ontario's Energy Use and Conservation Year in Review, wherein it was reported (on page 12) that "... LDCs collectively are on pace to meet their 2020 target".

Embedded load displacement generation projects by their very nature are long-term (and can involve some level of unpredictability of in-service date due to the number of steps set forth in the Distribution System Code and number of organizations involved in the process) and have significant associated energy savings. At the time the Joint CDM Plan was formulated, London Hydro did not have information about the likely in-service date of the various generation projects underway, so it assumed a linear adoption (i.e. equal savings each year) whereas, realistically, these savings will be lumpy in nature. Consequently, comparing actual CDM results to the CDM Plan is not entirely meaningful.

## Connection of Renewable Generation

- **Renewable Generation Connection Impact Assessments Completed on Time**

In 2016, London Hydro completed 12 out of 14 Connection Impact Assessments within the prescribed time limit of 60 days. Due to a significantly higher than normal volume of applications received in the first quarter, it was not feasible to complete all of the assessments within the prescribed period. However, all projects were prioritized with the proponents' input to ensure their timelines were not negatively affected.

- **New Micro-embedded Generation Facilities Connected On Time**

In the same year, new micro-embedded generation facilities were connected on time in 32 out of 35 cases surpassing the OEB target of 90%. In the area of micro-embedded generation, we have also experienced a rise in applications and, thus, a higher volume of connections to be made within the prescribed five business days. In certain cases, an ESA inspection is received towards the end of a day resulting in one fewer work day to begin with. Nonetheless, we strive to meet the prescribed timelines and, occasionally, circumstances prevent us from meeting the target 100% of the time.

## Financial Ratios

- **Liquidity: Current Ratio (Current Assets/Current Liabilities)**

Current assets represent cash and other assets that are expected to become cash within the next year. Conversely, current liabilities are financial obligations that are anticipated to be paid within a year. A ratio that is greater than 1 may be an indicator that a company is able to meet its financial obligations coming due within the next year. A higher ratio of current assets to current liabilities provides a greater comfort zone since it indicates that current liabilities can be paid, while leaving excess funds for ongoing operations. A ratio of less than 1 could be a signal that a company may not be able to keep up with its upcoming payments, indicating insufficient cash flows from profits or the need for financing.

London Hydro's current ratio is affected by items such as accounts receivable and liabilities for electricity, which can fluctuate significantly, depending on such factors as changes in customer consumption and the price of electricity acquired on behalf of customers. Additionally, the timing and extent of capital investments in the London Hydro distribution system can have a significant impact on cash balances. Accordingly, a fluctuation in London Hydro's ratio is not an indicator of stability or financial performance but more a matter of timing and leveling with long-term debt.

The Company's ratio as of December 2016 was 1.31, which is up from 2015 (1.17) and the last five year average (1.26).

- **Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio**

London Hydro has a capital mix of 42% debt and 58% equity (debt to equity ratio of .74) for 2016. The OEB uses a deemed capital structure of 60% debt and 40% equity (debt to equity ratio of 1.5) when establishing rates.

A debt to equity ratio higher than 1.5 may indicate that the Company will have difficulty obtaining any required debt to finance capital investments and meet working capital requirements. A debt to equity ratio less than 1.5 may be a signal that the Shareholder is not achieving an optimum rate of return, as a portion of their investment is providing a lower yield.

London Hydro's capital mix equips it with unused debt capacity making funds readily available. This, in turn, keeps London Hydro in a strong financial position as displayed by the recent Standard & Poor's Rating Services rating of A/Stable.

- **Profitability: Regulatory Return on Equity – Deemed (included in rates)**

London Hydro's current distribution rates were approved by the OEB and include an expected (deemed) regulatory return on equity of 8.98%. The OEB allows a distributor to earn within +/- 3% of the expected return on equity. When a distributor performs outside of this range, the actual performance may trigger a regulatory review of the distributor's revenues and costs structure by the OEB.

- **Profitability: Regulatory Return on Equity – Achieved**

London Hydro's regulatory return on equity (ROE) achieved in 2016 was 5.99% (2015 – 7.52%), which is close to the lower end -3% deadband range allowed by the OEB, before the OEB would initiate a review. London Hydro submitted a COS rate application for new rates effective May 1, 2017.

London Hydro experienced higher distribution revenue in 2016 than was forecasted in our 2013 COS application. This result is primarily due to the impact of the IRM rate adjustments in 2014 through 2016 combined with an annual 1% growth in customer base. Other revenues are lower in 2016 than were forecasted in 2013 as a result of reduced disposals. OM&A costs are significantly higher than the COS forecast primarily in the area of Operation & Maintenance, Billing and General Administration. The overall higher distribution revenue is offset by a significant reduction in the 2016 ROE results stemming from the fact that London Hydro annually invests more in capital spending than is covered by the depreciation provided in our 2013 COS application. Our 2016 calculated depreciation was \$2.0M higher than projected in our 2013 COS application, this results in a lower measured net income.

London Hydro's 2016 formulaic rate base is \$38.2M greater than the 2013 COS application. \$10.5M of that amount is due to escalating customer consumption and electricity costs that London Hydro is required to cover in working capital. The remaining \$27.7M is the change in Average Net Fixed Assets.

With the filing of the 2017 COS, London Hydro anticipates that this declining ROE trend will stabilize. London Hydro therefore anticipates that future reported ROE balances will normalize, at least in 2017.

## Note to Readers of 2016 Scorecard MD&A

The information provided by distributors on their future performance (or what can be construed as forward-looking information) may be subject to a number of risks, uncertainties and other factors that may cause actual events, conditions or results to differ materially from historical results or those contemplated by the distributor regarding their future performance. Some of the factors that could cause such differences include legislative or regulatory developments, financial market conditions, general economic conditions and the weather. For these reasons, the information on future performance is intended to be management's best judgement on the reporting date of the performance scorecard, and could be markedly different in the future.