

Scorecard - Whitby Hydro Electric Corporation

Performance Outcomes	Performance Categories	Measures	2013	2014	2015	2016	2017	Trend	Target		
									Industry	Distributor	
Customer Focus Services are provided in a manner that responds to identified customer preferences.	Service Quality	New Residential/Small Business Services Connected on Time	100.00%	96.10%	96.20%	95.10%	95.60%		90.00%		
		Scheduled Appointments Met On Time	99.50%	100.00%	99.60%	99.60%	99.46%		90.00%		
		Telephone Calls Answered On Time	68.00%	73.80%	81.50%	80.60%	87.93%		65.00%		
	Customer Satisfaction	First Contact Resolution			99.86%	99.82%	99.59	99.74			
		Billing Accuracy			99.89%	99.83%	99.81%	99.88%		98.00%	
		Customer Satisfaction Survey Results	A	A	A	A	A				
Operational Effectiveness Continuous improvement in productivity and cost performance is achieved; and distributors deliver on system reliability and quality objectives.	Safety	Level of Public Awareness			78.90%	78.90%	83.60%				
		Level of Compliance with Ontario Regulation 22/04 ¹	C	C	C	C	C			C	
		Serious Electrical Incident Index	Number of General Public Incidents	0	0	0	0	0			0
	Rate per 10, 100, 1000 km of line		0.000	0.000	0.000	0.000	0.000			0.000	
	System Reliability	Average Number of Hours that Power to a Customer is Interrupted ²	0.93	1.89	1.40	0.99	0.69			1.14	
		Average Number of Times that Power to a Customer is Interrupted ²	0.87	2.32	1.65	1.23	1.23			1.35	
	Asset Management	Distribution System Plan Implementation Progress		94.9%	100.98%	97.95	95.14				
	Cost Control	Efficiency Assessment	3	3	3	3	3				
		Total Cost per Customer ³	\$612	\$628	\$676	\$689	\$682				
Total Cost per Km of Line ³		\$23,643	\$24,275	\$26,052	\$26,552	\$26,241					
Public Policy Responsiveness Distributors deliver on obligations mandated by government (e.g., in legislation and in regulatory requirements imposed further to Ministerial directives to the Board).	Conservation & Demand Management	Net Cumulative Energy Savings ⁴			10.63%	29.22%	55.85%			58.44 GWh	
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time	100.00%	100.00%							
		New Micro-embedded Generation Facilities Connected On Time	100.00%	92.86%	100.00%	78.95%	91.89%		90.00%		
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.65	1.48	1.45	1.24	1.04				
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	0.72	0.69	0.67	0.66	0.63				
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	9.66%	9.66%	9.66%	9.66%	9.66%			
			Achieved	14.54%	13.89%	10.43%	9.94%	10.46%			

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 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

2017 Scorecard Management Discussion and Analysis

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 2017 Scorecard MD&A:

http://www.ontarioenergyboard.ca/OEB/Documents/scorecard/Scorecard_Performance_Measure_Descriptions.pdf

Scorecard MD&A - General Overview

Whitby Hydro continues to post high performance in virtually all of the key measurements including Customer Focus (Service Quality, Customer Satisfaction), Operational Effectiveness (Safety, Reliability, Asset Management and Cost Control), as well as Financial Performance (Financial Ratios). In 2017, performance either exceeded or met applicable industry-wide or Whitby Hydro specific targets in these areas. With respect to Public Policy Responsiveness, Conservation is an area with particularly challenging targets set for the end of the framework in 2020; however, Whitby Hydro has demonstrated steady progress by the end of 2017 achieving 55.6% of its target at the mid-point of the six year framework timeline (2015- 2020).

Service Quality

- **New Residential/Small Business Services Connected on Time**

In 2017, Whitby Hydro connected 95.6% of eligible low-voltage residential and small business customers to its system within the five-day timeline prescribed by the Ontario Energy Board (OEB). Whitby Hydro understands the importance of connecting its customers in a timely fashion once all service requirements are met. Whitby Hydro continues to maintain the reporting and data retention practices that were implemented in 2015. The 2017 connections completed on time, are well above the target of 90%.

- **Scheduled Appointments Met On Time**

Whitby Hydro continues to meet the requirement to schedule and attend appointments within the four hour window arranged with customers (or their representatives) during regular business hours.

- **Telephone Calls Answered On Time**

Qualified incoming calls to Whitby Hydro’s customer service phone line must be answered within thirty seconds at least 65% of the time. In 2017, Whitby Hydro achieved levels well above the target, exceeding call answer levels from previous years. In 2012, a new telephone system was installed which allowed for new information to be reported which incorporated the thirty second threshold. Whitby Hydro leveraged the new system’s reporting and the 2013- 2017 results clearly demonstrate progressive improvement and a renewed focus on ensuring that customer calls are answered in a timely fashion.

Customer Satisfaction

- **First Contact Resolution**

Specific customer satisfaction measurements have not been previously defined across the industry. The OEB asked Whitby Hydro and all electricity distributors to review and develop measurements in these areas and begin tracking performance starting July 1, 2014. The OEB plans to review information provided by electricity distributors over several years and implement a commonly defined measure for these areas in the future. As a result, each electricity distributor may have different measurements of performance until such time as the OEB provides more specific direction regarding a commonly defined measurement.

First Contact Resolution can be measured in a variety of ways and clarity of expectations is required in order to achieve meaningful comparable data across electricity distributors. Without a CRM (customer relationship management) program to track type and frequency of telephone calls by customers, Whitby Hydro is tracking escalated telephone calls that customer service representatives resolve without added support as a percentage of the total number of eligible telephone calls. In 2017, 99.74% of customer telephone calls were successfully managed without further escalation or support.

- **Billing Accuracy**

Until July 2014, a specific measurement of billing accuracy had not been defined across the industry. After consultation with some electricity distributors, the OEB prescribed a measurement of billing accuracy which was required to be reported by all electricity distributors effective October 1, 2014.

For the period from January 1 – December 31, 2017, Whitby Hydro achieved a billing accuracy of 99.88% which is similar to levels achieved since 2014. All four years compare favourably to the prescribed OEB target of 98%. As this is a relatively new and important measurement, Whitby Hydro will continue to monitor its billing accuracy closely.

- **Customer Satisfaction Survey Results**

The OEB indicated that electricity distributors will have discretion in determining how to conduct customer satisfaction surveys; however, surveys must adhere to the following principles: 1) surveys must canvas satisfaction regarding power quality and reliability, price, billing and payment, communications, and the customer service experience; and 2) surveys will follow good survey practices. The survey must be done at minimum once every two years. In 2013, prior to receiving any specific direction from the OEB, Whitby Hydro engaged UtilityPULSE (the electricity utility survey division of Simul Corporation) to conduct a customer satisfaction survey. Whitby Hydro's target is to be equal to or better than the Ontario benchmark. In 2017, Whitby Hydro's customers have generally indicated their satisfaction as equal to or higher than both National and Ontario results, with 95% of customers rating their experience with Whitby Hydro as fairly satisfied to very satisfied. Previous surveys in 2015 and 2013 were conducted with the same values and principles as those used for 2017 and had satisfaction levels of 90% and 95% respectively. In all survey years, Whitby Hydro has had strong results which were above the national and province-wide levels. This score illustrates Whitby Hydro's commitment to customer experience and satisfaction.

Electricity Customers who are fairly or very satisfied:

Year	Whitby Hydro	National	Ontario
2013	95%	91%	90%
2015	90%	88%	83%
2017	95%	87%	81%

The 2017 Report Card results have been summarized below:

Whitby Hydro Utility PULSE Report Card

	<u>Whitby Hydro</u>	<u>National</u>	<u>Ontario</u>
1. Customer Care	B+	B	C+
Price and Value	B	B	C
Customer Service	A	B+	B
2. Company Image	A	B+	B
Company Leadership	A	B+	B
Corporate Stewardship	A	B+	B
3. Management Operations	A	A	A
Operational Effectiveness	A	A	A
Power Quality and Reliability	A+	A	A
OVERALL	A	B+	B

Safety

➤ **Public Safety**

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

To gauge overall electrical safety awareness amongst the general public, Whitby Hydro commissioned a research firm to conduct its second Public Awareness of Electrical Safety Survey from December 13 to December 18, 2017. The survey was conducted using computer assisted techniques of telephone interviewing and random number selection. The survey consisted of a representative sample of 400 Whitby residents, 18 years or older, currently residing in Whitby Hydro’s service territory. Responses to the six core survey questions resulted in a 2017 Public Safety Awareness Index of 83.6%. This is an improvement over 2016 results (78.9%).

Helping customers and the public understand the importance of staying safe and using electricity wisely is a priority for Whitby Hydro. Whitby Hydro works to continuously enhance public awareness of electrical safety through four primary vehicles:

- Hazard Specific Campaigns – on November 28, 2017, Whitby Hydro hosted a Contractor Safety Day. Contractor Safety Day was created to educate contractors in the Whitby Hydro service area about electrical and jobsite safety. Whitby Hydro introduced this event to help increase the awareness of the hazards associated with underground and overhead power lines for contractors in our service area. Presentations covered topics such as the Certificate of Recognition (COR), a national safety program accreditation, critical safety considerations when working overhead and underground power lines, Whitby Hydro engineering and Health & Safety expectations for contractors working with Whitby Hydro and a walk through of Whitby Hydro contractor management system. Other campaigns include Dig Safe Month and Electrical Safety Authority’s (ESA) Powerline Safety Month.

- Student Education Programs - Whitby Hydro sponsors an informative and dynamic Kids Safety Village in Durham Region. As a commitment to the Safety village in 2017, Whitby Hydro helped refurbish the Electrical Safety Site at the Village and participated in the Village Holiday celebration. The site educates kids on the electrical hazards of playing on or near ground transformers, hydro lines & call before you dig. The Safety Village is committed to providing quality progressive safety programs, in a positive and interactive atmosphere. The Safety Village is a community project dedicated to building a safer future for children. More than 200,000 school aged students have toured and continue to tour this site throughout the school year to learn about safety.
- Customer Newsletter - twice annually, Whitby Hydro provides its customers with an information brochure called Power Panel. In 2017, brochure topics included public safety awareness for traffic in work zones, staying safe around electricity, call before you dig, overhead lines, downed powerlines and outdoor electrical equipment.
- Website communication – Whitby Hydro’s website provides video links and presentations to educate the public on dig safe month, ESA’s powerline safety awareness campaign, overhead power lines, underground cables and vehicle accidents involving power lines.

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

Over the previous five years, Whitby Hydro was found to be compliant with Ontario Regulation 22/04 (Electrical Distribution Safety). Ontario Regulation 22/04 establishes objective-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.

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

Whitby Hydro did not have any serious electrical incidents to report in 2017.

System Reliability

System reliability targets are calculated using Whitby Hydro’s historical data to derive a five year performance baseline (currently 2010-2014) consistent with the methodology outlined by the OEB. With system reliability measures, a lower score indicates better reliability performance.

The industry acknowledges that the measurement of customer impacts associated with an outage is compiled using different methodologies depending on the outage management tracking processes, technologies and systems available within the service area. Over the past eight years, Whitby Hydro has taken steps to improve the quality of data by refining how it quantifies customers impacted by an outage event. In 2015, Whitby Hydro implemented an outage management system which provides a number of benefits including improved analytics which help assign resources and isolate the extent of the outage. Starting in 2015, this system also allowed Whitby Hydro to incorporate more accurate customer information into reliability reporting.

Historically, Whitby Hydro has had strong reliability performance, following a strict schedule of asset maintenance and review to ensure appropriate investments are made to the distribution system. However, even with diligent effort, no distribution system is immune to the effects of severe weather and unexpected equipment failure etc. In 2016, the OEB defined and introduced an approach to reliability measurement which removes the impact of “major events”. According to the OEB, a major event is one which is beyond the control of the distributor and is characterized as unforeseeable, unpredictable, unpreventable and unavoidable.

Whitby Hydro reviewed five years of historical information and used the IEEE 1366 (Institute of Electrical and Electronics Engineers) as the preferred approach for determining a major event. The following were identified as major events during the 2011-2017 timeframe and have been excluded from reliability reporting:

- 2013: In December 2013, much of southern Ontario felt the effects of the severe ice storm. While this was a major event, Whitby Hydro's aggressive tree trimming program and the committed efforts of operations crews during the Christmas holiday season, ensured the outage suffered by Whitby Hydro customers (interruption occurrences and duration) was less than that experienced by neighboring electricity distributors.
- 2017 On December 28, it was determined that an adverse weather related jolt of a pole occurred due to the extreme cold which caused conductor movement. There was no other plant damage found. Because of the weather-related equipment issues, Whitby Hydro's system experienced a feeder lockout. Power was restored but intermittent outages continued while crews investigated until they were able to identify the main cause and isolate the equipment for repairs.

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

Whitby Hydro has reported strong reliability performance over the past five years. 2017's results reflect a measurement of less than an hour of interruption per customer which is favourable to the target of 1.14 hours. The target is based on the average of five years of historical performance and excludes outages related to a loss of supply or any major events as defined by the OEB and described above.

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

The number of times power to a customer is interrupted is largely affected by weather (e.g. frequency and extent of storms, lightning, high winds) and equipment failure. With the exception of some extreme cold winter temperature days, the weather in 2017 was generally favorable and Whitby Hydro showed very positive reliability performance. To help reduce the number of interruptions on its 44 kV system, Whitby Hydro has been installing lightning arrestors in four locations a year since 2012. To minimize outages related to equipment failure, asset assessment and replacement reviews are a regular feature of the utility's distribution planning process, identifying and addressing aging infrastructure such as underground cables, switchgear, transformers, poles and switches. As a result of these efforts, Whitby Hydro had a reduced level of outages due to defective equipment in 2017. The average number of times the power to a customer is interrupted shows improvement over recent years and is at levels lower than the target of 1.35.

Asset Management

- **Distribution System Plan Implementation Progress**

This is a relatively new measure which is currently under development. The OEB has permitted electricity distributors to use their discretion to develop and implement a measure that they feel most effectively reflects their performance in system plan implementation.

Whitby Hydro has not formally submitted a Distribution System Plan to the OEB. However, in the interim, Whitby Hydro has diligently managed those capital investment accounts over which Whitby Hydro has direct control, namely, System Renewal, System Service and General Plant. For those capital investments, Whitby Hydro reported an achievement of 95.14% which represents the percentage of 2017 actual capital expenditures versus budget. The variance to budget in 2017 relates to scope and timing changes for a smart grid technology pilot project as well as a delay in the delivery of product for the MIST meter plan. Capital spending for these initiatives will shift into 2018.

Cost Control

The total cost and efficiency estimates use complex calculations that were developed by the OEB's consultant Pacific Economics Group (PEG). The results of the calculations for 2017 were provided to electricity distributors on August 27, 2018 to be incorporated into the Scorecard.

- **Efficiency Assessment**

An econometric model developed by the consultant PEG has been used to predict total costs for the electricity distributor; the efficiency measure compares PEG's calculation of total actual costs with those PEG has predicted. Depending on the degree to which the average total costs for the period 2015 to 2017 are below or above the predicted costs, the electricity distributor is placed into one of five groupings and assigned a "stretch factor" for use in rate setting. Whitby Hydro's average total actual costs are 2.2% below the predicted costs which is a favourable outcome. The results place Whitby Hydro in the mid-range (or third grouping) for efficiency.

- **Total Cost per Customer**

PEG's calculation of Whitby Hydro's 2017 total cost per customer is \$682 representing a 1.0% decrease over previous year's \$689. These costs include significant third-party capital requirement costs related to the construction of Highway 407 which are beyond the control of Whitby Hydro. Although third-party construction costs are to a great extent funded by third-parties, the OEB model requires gross costs to be included in the total cost calculation. When adjustments are made to remove such costs, the 2017 total costs are reduced to \$642 representing a decrease of approximately 1.2% (2016 total costs excluding third party construction costs are \$650).

- **Total Cost per Km of Line**

PEG's calculation of Whitby Hydro's 2017 total cost per Km of line is \$26,241 representing a 1.2% decrease over the previous year's \$26,552. These costs include third-party capital requirement costs related to the construction of Highway 407 which are beyond the control of Whitby Hydro. Although third-party construction costs are to a great extent funded by third-parties, the OEB model requires gross costs to be included in the total cost calculation. When adjustments are made to remove such costs, the 2017 total costs are reduced to \$24,706 representing a decrease of approximately 1.3% (2016 total costs excluding third party construction costs are \$25,038).

Conservation & Demand Management (CDM)

The Conservation First Framework (CFF) covers 2015 through 2020 and includes higher energy savings targets, the removal of demand targets, and a more constrained budget in order to drive cost effectiveness. As 2015 was a transitional year, 2017 marked the second full year where CDM programs were delivered under the new CFF.

In 2015 and under the previous framework, the majority of energy savings were derived from non-residential CDM programs. This trend shifted for Whitby Hydro in 2016 and 2017 primarily due to significantly increased participation levels in residential programs. CDM results in 2017 reflected more typical average net-to-gross ratios for Retrofit program savings as compared to 2016 levels which were abnormally lower than provincial figures.

Whitby Hydro has some concerns regarding the achievability of the aggressive energy savings targets as the current customer mix remains heavily weighted

towards a growing residential sector with a commercial customer base that is relatively small in size and numbers. These concerns are aligned with the latest version of the Achievable Potential Study released by the IESO which indicates that Whitby Hydro will likely experience significant challenges in meeting its overall energy target of 58.44 GWh. While Whitby Hydro has fully allocated its budget towards achieving this target, success is dependent on large projects being completed late in the framework timeline which ends in 2020.

Moving forward, Whitby Hydro anticipates a reduction in residential program performance compared to 2017 due largely to market saturation, coupled with declining incentive levels. Additional target savings are expected to be achieved through the implementation of Combined Heat and Power (CHP) projects, which due to the size and complexity have long lead times for implementation. CHP projects have been actively pursued with several Capital Project Incentive Applications currently accepted. Whitby Hydro continues in its collaborative efforts with other LDCs to help reduce the cost to deliver conservation programs while refining marketing strategies to improve effectiveness and cost efficiency.

- **Net Cumulative Energy Savings (Percent of target achieved)**

Whitby Hydro's target for 2017 was 18.0% of its overall Conservation First Framework target. Whitby Hydro achieved 24.0% in 2017. Whitby Hydro's performance was largely due to increased participation in the residential programs as well as the strong Retrofit business program results. On a cumulative basis, Whitby Hydro has achieved 55.85% of its 2020 framework target as per the Final 2017 Annual Verified Results Report provided by the IESO.

Connection of Renewable Generation

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

Upon receipt of a completed application for a renewable energy generation facility that has a nameplate rated capacity of greater than 10 kW, Whitby Hydro is required to complete the Connection Impact Assessment (CIA) within the application timeline prescribed in Ontario Regulation 326/09. For projects up to 500 kW, the timeline is (a) 60 days or (b) 120 days if an upstream electricity distributor CIA is required. For projects greater than 500 kW and less than 10 MW, the timeline is (a) 90 days or (b) 120 days if it requires the involvement of other upstream electricity distributors. While there were no applications received in 2017, Whitby Hydro has historically met this requirement.

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

This measure was introduced in 2013. For a renewable energy generation facility that has a nameplate rated capacity of less than or equal to 10 kW, an offer to connect is to be issued no later than 90 days after the date the connection request is received. After the project is installed and has passed the electrical safety inspection, Whitby Hydro must have the following information to finalize the connection: (a) Connection Authorization letter issued by the Electrical Safety Association; (b) payment for the connection costs; and (c) a signed "Micro-Embedded Generation Facility Connection Agreement". On receipt of all of the required connection information, Whitby Hydro would install and connect the meter. During 2016, Whitby Hydro experienced unexpected delays in the scheduled delivery of meters required for micro-embedded generation to nearly twice the expected delivery timeframe. This resulted in limited meter inventory levels and extended the connection timeline beyond the targeted 5 business days. However, in 2017, Whitby Hydro was able to return to performance levels above the 90% target - a total of 37 new micro embedded generation facilities were installed of which 34 were connected within 5 business days of all conditions being met for installation.

Financial Ratios

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

The current ratio is one indicator of financial health and a ratio greater than one indicates that the company is in a good position to pay its short-term debts and financial obligations. The higher the number, the more “liquid” and the larger the margin of safety to cover the company’s short-term debts and financial obligations. Whitby Hydro maintains a strong liquidity ratio. The decline in 2016 and 2017 was due to a deferral of borrowing, while the shift in the 2014 measurement was related in part to the under recovery of energy-related pass through costs.

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

The OEB has established a deemed capital structure of 60% debt, 40% equity for electricity distributors when establishing rates. The deemed mix is equal to an equity ratio of 1.5 (60/40). A lower debt to equity ratio usually implies a more financially stable business. Whitby Hydro maintains a very strong debt to equity ratio and its levels are lower than those provided in the OEB’s deemed structure. As a result, Whitby Hydro is well positioned to take on new borrowing should there be an investment need in the future.

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

9.66% reflects the return on equity established during the last approved cost of service rate application.

Profitability: Regulatory Return on Equity – Achieved

By definition, the regulatory rate of return on equity (ROE) calculation is based on the revenue and cost structure in the approved 2011 Cost of Service application within an allowable range of +/- 3%. During 2016, the Ontario Energy Board released a new template which allowed the calculation of ROE to be more closely reflective of the intended definition and as a result, be more accurately comparable against the approved ROE. On this basis, Whitby Hydro’s ROE for the past three years of 10.43% (2015), 9.94% (2016), and 10.46% (2017) are all well within the allowed threshold.

However, for 2014 and 2013, Whitby Hydro disagrees with the presentment of ROE information on the scorecard matrix since those rates of return include items outside of the revenue and cost structures in the approved 2011 Cost of Service application. These elements are regulatory requirements and include the following: lower taxes due to under recoveries in pass-through costs; and the 2013 smart meter disposition which included revenue and costs from 2006-2012; however, inclusion of them in the ROE calculation distorts any comparability to approved ROE and allowable ranges.

While Whitby Hydro provided updated ROE calculations for 2013 (12.14%) and 2014 (11.32%) based on the new template, the Ontario Energy Board did not allow Whitby Hydro to include this revised data in the Scorecard matrix. The Ontario Energy Board did however review information provided by Whitby Hydro and confirmed the ROE was materially affected by items such as the lower taxes and that the restated 2013 and 2014 ROE numbers are appropriate and within the allowable range.

Note to Readers of 2017 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, any information provided 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.