

Scorecard - Essex Powerlines Corporation

9/29/2016

Performance Outcomes	Performance Categories	Measures	2011	2012	2013	2014	2015	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	98.30%	93.20%	92.70%	93.00%	92.30%		90.00%	
		Scheduled Appointments Met On Time	95.50%	95.70%	94.30%	94.70%	94.80%		90.00%	
		Telephone Calls Answered On Time	67.00%	68.50%	66.40%	78.00%	79.20%		65.00%	
	Customer Satisfaction	First Contact Resolution				99.6%	99.28			
		Billing Accuracy				99.84%	98.05%		98.00%	
		Customer Satisfaction Survey Results				81%	81%			
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					83.00%			
		Level of Compliance with Ontario Regulation 22/04 ¹	C	C	NI	C	C			C
		Serious Electrical Incident Index	Number of General Public Incidents	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	1.01	0.89	2.24	1.16	1.34			1.77
		Average Number of Times that Power to a Customer is Interrupted ²	0.52	0.61	1.12	0.66	0.83			0.91
	Asset Management	Distribution System Plan Implementation Progress				100.8%	107.00			
	Cost Control	Efficiency Assessment		2	2	2	2			
		Total Cost per Customer ³	\$475	\$491	\$482	\$524	\$538			
		Total Cost per Km of Line ³	\$28,669	\$30,851	\$29,323	\$32,562	\$34,680			
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					12.15%		31.43 GWh	
	Connection of Renewable Generation	Renewable Generation Connection Impact Assessments Completed On Time		100.00%	100.00%	100.00%	100.00%			
		New Micro-embedded Generation Facilities Connected On Time			100.00%	100.00%	100.00%		90.00%	
Financial Performance Financial viability is maintained; and savings from operational effectiveness are sustainable.	Financial Ratios	Liquidity: Current Ratio (Current Assets/Current Liabilities)	1.07	1.00	1.01	0.91	0.87			
		Leverage: Total Debt (includes short-term and long-term debt) to Equity Ratio	1.24	1.33	0.96	0.97	0.96			
		Profitability: Regulatory Return on Equity	Deemed (included in rates)	9.85%	9.85%	9.85%	9.85%	9.85%		
			Achieved	10.83%	8.15%	11.20%	9.73%	11.70%		

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. This measure is under review and subject to change in the future.

Legend:

5-year trend
 up down flat

Current year
 target met target not met



2015 Scorecard Management Discussion and Analysis (“2015 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 2015 Scorecard MD&A:

<http://www.ontarioenergyboard.ca/OEB/ Documents/scorecard/Scorecard Performance Measure Descriptions.pdf>

Scorecard MD&A - General Overview

- In 2015, Essex Powerlines Corporation has continued to exceed all performance targets set for the industry. Essex has seen improvement in some areas from 2014 including Scheduled Appointments Met on Time, Telephone Calls Answered On Time, consistent trending for all of the safety standards and slight decreases in the areas of system reliability and cost control. Essex has achieved 100% targets for the connection of renewable generation. The financial ratios show a slight decrease in the current ratio and the debt to equity ratio but improvement in the return on equity. New smart grid detection programs and equipment are continued to be implemented in 2014 and 2015 that is resulting in more accurate reporting and increased efficient detection of loss of power in areas within our system.

A large project that affects our distribution system is the Herb Gray Parkway which is a large scale Ontario Ministry of Transportation project to provide an efficient roadway system to a new international Bridge crossing from Canada to the United States through Windsor. This project was completed in late 2015. This parkway has required considerable resources from Essex to remove and reconstruct infrastructure to connect new loads that include tunnel lighting and pumping stations.

Essex upgraded its billing system in late 2015 to further address customer needs for information and provide tools for our staff to respond to customer inquiries more efficiently and effectively.

In 2016, Essex expects to continue to improve its scorecard performance compared to prior years through the implementation of new system monitoring tools, staff training and education and overall system improvements and upgrades.

Service Quality

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

All of the service quality measures are above the industry required standard. In 2015, Essex connected 92.3% of eligible low voltage residential and small business customers within the five day timeline prescribed by the Ontario Energy Board (OEB). This was a slight decline from the 2014 performance of 93% but still above the industry standard of 90%. There has been increased demand in new house connections as the economy in the area begins to improve. There was a decline in the residential/commercial services connected on time in 2012 compared to 2011 due to a refinement of the reporting process. The performance for 2012, 2013, 2014 and 2015 has been more consistent and continues to be above the industry average of 90%.

- **Scheduled Appointments Met On Time**

Essex scheduled 1,315 customer related appointments in 2015 and was able to meet the requested schedule 94.8% of the time. This was an improvement over 2014. Scheduled appointments met on time has a slight declining trend in 2013 and 2014 but the five year average is approximately 95% which is still consistently over the industry average of 90%.

- **Telephone Calls Answered On Time**

Essex received 33,449 calls into its customer service call center or an average of approximately 150 calls per day. An agent answered these calls in 30 seconds or less 79% of the time. Performance of telephone calls answered on time has improved by 1% in 2015 but the number of calls coming into the centre has increased by almost 40% due to new consumer programs such as the Ontario Electricity Savings Program (OESP), increased economic activity in the area such as new home builds and house sales in general. Therefore overall telephone accessibility has improved over 2014.

Customer Satisfaction

- **First Contact Resolution**

Specific customer satisfaction measurements have not been previously defined for the industry prior to 2014. The Ontario Energy Board (OEB) has instructed all electricity distributors to develop measurements in these areas and the OEB plans to review information provided by electricity distributors over the next few years and implement a commonly defined measure for these areas in the future. As a result, there may be inconsistencies of performance between distributors until the OEB provides specific direction regarding a commonly defined measure. First contact resolution can be measured in a variety of ways and further regulatory guidance is necessary in order to achieve meaningful comparisons across electricity distributors.

For Essex, First Contact Resolution was measured based on calls received and how many required escalation to a supervisor resulting in 99.28% of calls being resolved without escalation to a supervisor. This is slightly down from the 2014 performance of

99.6%. This is consistent performance to date for this new measure.

- **Billing Accuracy**

This was a new measure implemented by the Ontario Energy Board in 2014 after consultation with some electricity distributors in the province. For the period from October 1, 2014 to December 31, 2014 Essex Powerlines issued more than 94,500 bills and achieved a billing accuracy of 99.8%. For 2015, Essex issued 354,187 bills and achieved a billing accuracy of 98.05%. This is above the OEB standard of 98% but down from 2014. Essex Powerlines will continue to monitor its billing accuracy and results to find areas of improvement and to ensure adherence to the standard established by the OEB.

- **Customer Satisfaction Survey Results**

The Ontario Energy Board (OEB) introduced the Customer Satisfaction Survey Results measure beginning in 2013. At a minimum, electricity distributors are required to measure and report a customer satisfaction result at least every other year.

Essex Powerlines completed a customer satisfaction survey in 2014 using a third party to conduct the survey that resulted in an overall rating of 81% of customers satisfied with our services. The survey included at a minimum questions relating to 1) power quality and reliability 2) price 3) billing and payment 4) communications and 5) the customer service experience. The survey results have demonstrated that Essex Powerlines have the following opportunities to improve the overall customer experience: 1) increased customer knowledge of how bills are calculated, 2) increased familiarity of available online billing tools, 3) identification of new means of communicating with our customer base to keep customers proactively informed.

In addition to the survey, Essex Powerlines also held a public customer engagement meeting in November 2014. The customer engagement meeting included general information about Essex Powerlines, bill components, energy management tools available for customers, planned capital expenditures, operations, maintenance and administration costs projected for 2016. The meeting included interactive questions with the customers that attended. With the satisfaction survey standard established and feedback from the public meeting, Essex will focus on improving our satisfaction rating with our customers.

Essex will be conducting another survey in 2016 and 2017 prior to the submission of its upcoming cost of service.

Safety

- **Public Safety**

- The Ontario Energy Board (OEB) introduced the Safety measure in 2015. The measure looks at safety from a customers' point of view as safety of the distribution system is a high priority. The Safety measure is generated by the Electrical Safety Authority (ESA) and includes three components: Public Awareness of Electrical Safety, Compliance with Ontario Regulation 22/04, and the Serious Electrical Incident Index.

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

This component of the public safety measure was implemented for 2015. Essex engaged a third party to conduct this survey on its behalf. The survey indicated that 83% of the public are aware of the risks involved with the electricity distribution system. Additional customer education will be conducted in 2016 to increase this percentage.

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

Over the past five year period, Essex Powerlines was found to be compliant 4 out of 5 years with Ontario Regulation 22/04 (Electrical Distribution Safety). This was achieved by our commitment to safety and adherence to company procedures. Ontario Regulation 22/04 – Electrical Distribution Safety established objectives based on 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**

There were no serious electrical contacts within Essex Powerlines distribution system during the five year period shown on the scorecard.

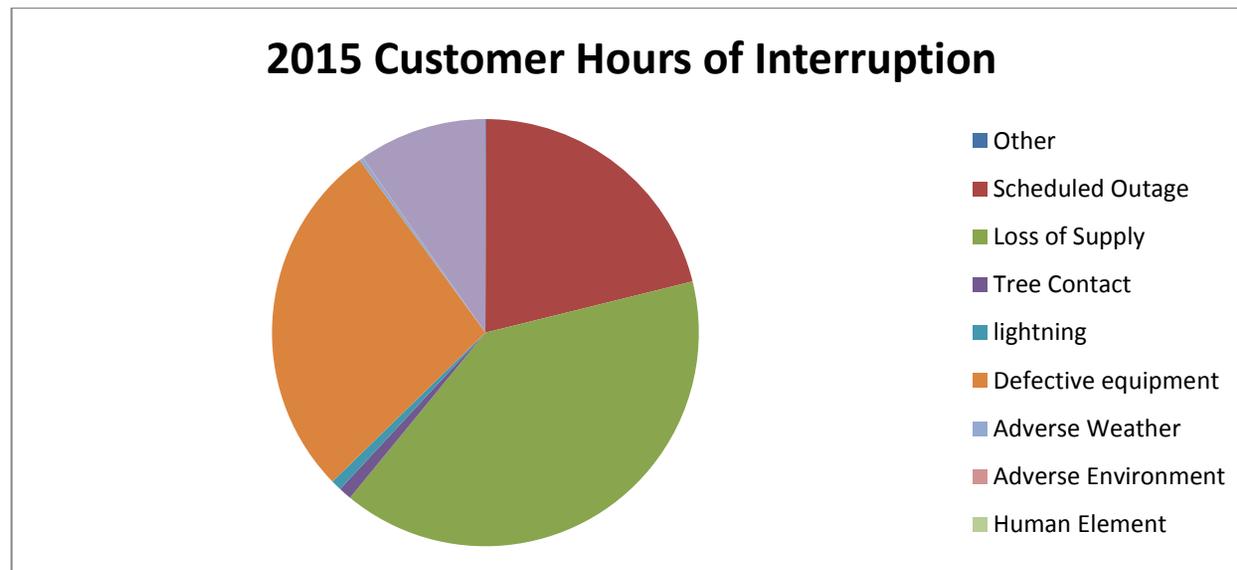
System Reliability

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

Essex Powerlines variance from year to year in average number of hours that power to a customer was interrupted is based on a

number of differing items that occurred during the year. The Asset Management programs, weather, foreign interference, and vegetation will determine these indices. Planned outages to repair, replace, or manage the vegetation related to equipment vary by year and does not exactly follow the same trend as the performance but is similar and accounts for approximately 25% of the indices. Vegetation causing interruptions (10% of the indices) are mainly due to unpreventable incidents where dead (ash) or poor health trees fall over completely or are not within the vicinity of vegetation management. With the vegetation management programs in place, preventable vegetation outages are in a significant downward trend. Weather and lightning and foreign interference represent approximately 30% of the indices. Equipment failures account for approximately 30% of the indices.

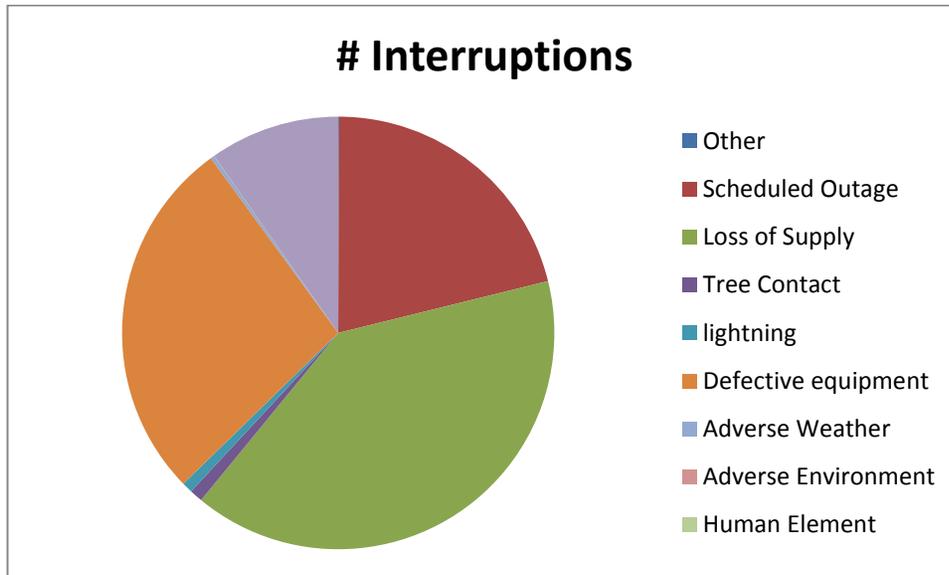
Essex Powerlines uses leading edge Asset Investment Strategy tools and processes to improve the indices using: Risk Reduction, Risk Assessments, Optimize Spend based on Strategic Objectives, Keep Reliability Centered Maintenance Statistics within Acceptable Severity/Importance Indices, carry out Cyclical Planned Inspections/Preventative Maintenance & correct findings, Global Information System with full connectivity and asset information, Statistical Data, analysis, and Forecasting Tools, Healthmap – this program provides the health index of assets, alerts of out of range distribution system data, Smartmap – this program provides full integration of voltage, loading, monitoring of line temperature, air temperature, losses, fault current, outages, outage detection upon a system upset. Essex’s average for 2015 was 1.34 hours compared to 1.16 hours in 2014. The 5 year average is 1.77 hours. Essex is overall improving its performance in this area.



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

Essex Powerlines experienced a slight increase in the number of times that power to a customer was interrupted to .83 in 2015

compared to .66 in 2014. This increase is minor and still below the 5 year average of .91. Overall, there is a significant decrease in the trends with planned outage increasing significantly to approximately 61% of the outages. 25% of the frequency are unpreventable vegetation, lighting, adverse weather, adverse environment, human element and foreign interference. Equipment is approximately 14% with a consistent downward trend.



Asset Management

- Distribution System Plan Implementation Progress**

Distribution system plan implementation progress was a new performance measure added by the OEB starting in 2013. The Distribution System Plan (DSP) outlines the forecasted capital expenditures, over the next five (5) years, required to maintain and expand the system to serve its current and future customers. The Distribution System Plan Implementation Progress measure is intended to assess Essex's effectiveness at planning and implementing the DSP. Essex has not yet filed a formal DSP with the OEB due to a delay in filing a full Cost of Service rate application which is now planned to be submitted in April 2017 for OEB review for rates effective January 1, 2018.

However, Essex Powerlines is continuing to measure the progress of its draft DSP implementation as a ratio of actual total capital expenditures made in a calendar year over the total amount of planned capital expenditures for that calendar year per the DSP. The 2015 measure indicates that Essex slightly exceeded its planned project spending (107%) and is on target to complete its five year plan.

Cost Control

- **Efficiency Assessment**

The total costs for Ontario Electricity Distributors are evaluated by the Pacific Economics Group LLC (PEG) on behalf of the OEB to produce a single efficiency ranking. PEG has made adjustments to the actual costs to make them more comparable between distributors. The electrical distributors are divided into five groups based on the magnitude of the difference between their respective individual actual and predicted costs. In 2015, for the fourth year in a row, Essex Powerlines was placed in Group 2, which is the second most efficient grouping of Ontario electrical distributors out of a total of 5 groups with 1 being the most efficient and 5 being the least efficient.

- **Total Cost per Customer**

Total cost per customer is calculated as the sum of Essex Powerlines capital and operating costs and dividing this figure by the total number of customers that Essex Powerlines serves. The cost performance for 2014 is \$538 per customer which is a 2.7% increase over 2014.

Essex Powerlines Total cost per customer has increased an average of 2.7% over the five year period of 2011 to 2015. Essex Powerlines has experienced increases in its total costs required to deliver quality, reliable and regulator compliant services to its customers. Essex Powerlines has experienced growth in wage and benefit costs for our employees, as well as investments in new information, financial and operating systems technology and renewal growth of the distribution system. All of these have contributed to increased operating and capital costs. Essex Powerlines has seen additional capital spending on distribution systems to connect the new Herb Gray Parkway which will eventually connect to a new bridge crossing to the United States. This parkway project has affected Essex Powerlines operating and capital costs over the last few years and was completed in 2015.

Essex Powerlines will continue to replace distribution assets proactively but pacing the expenditures over several years to avoid any significant increase in costs in any one year. Productivity and improvement initiatives will continue to help offset the costs from inflation and future system improvements and enhancements.

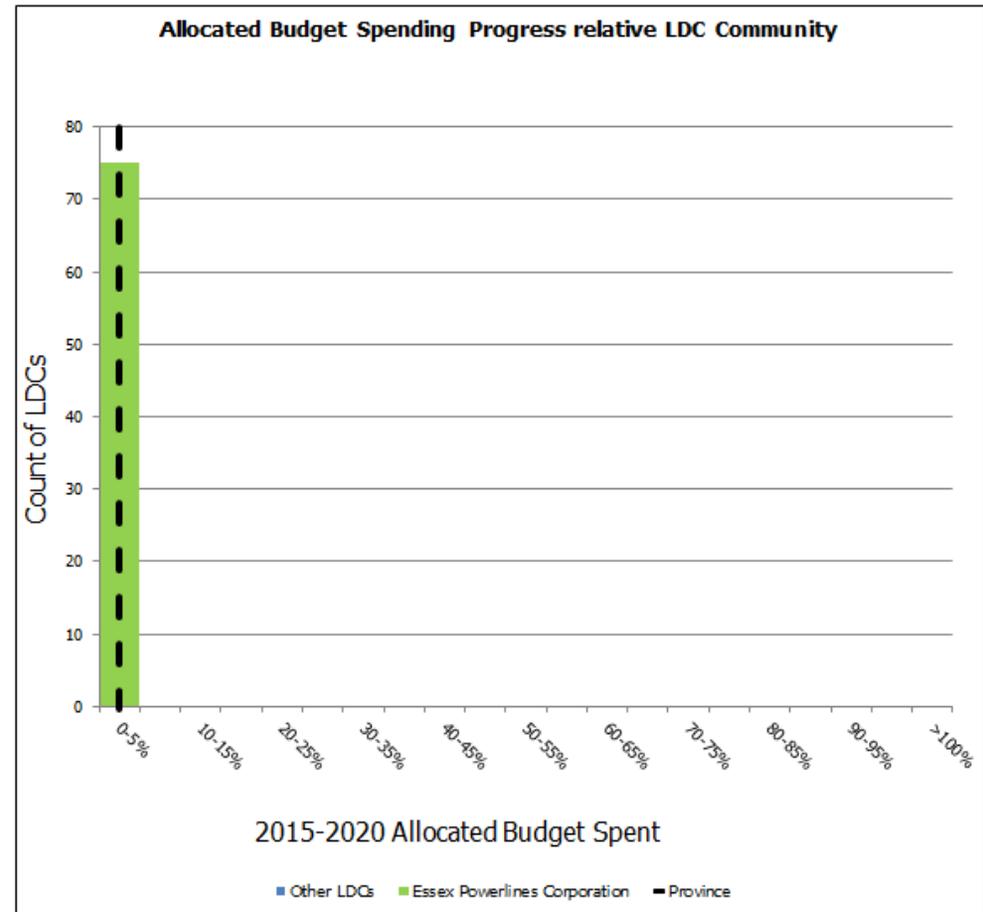
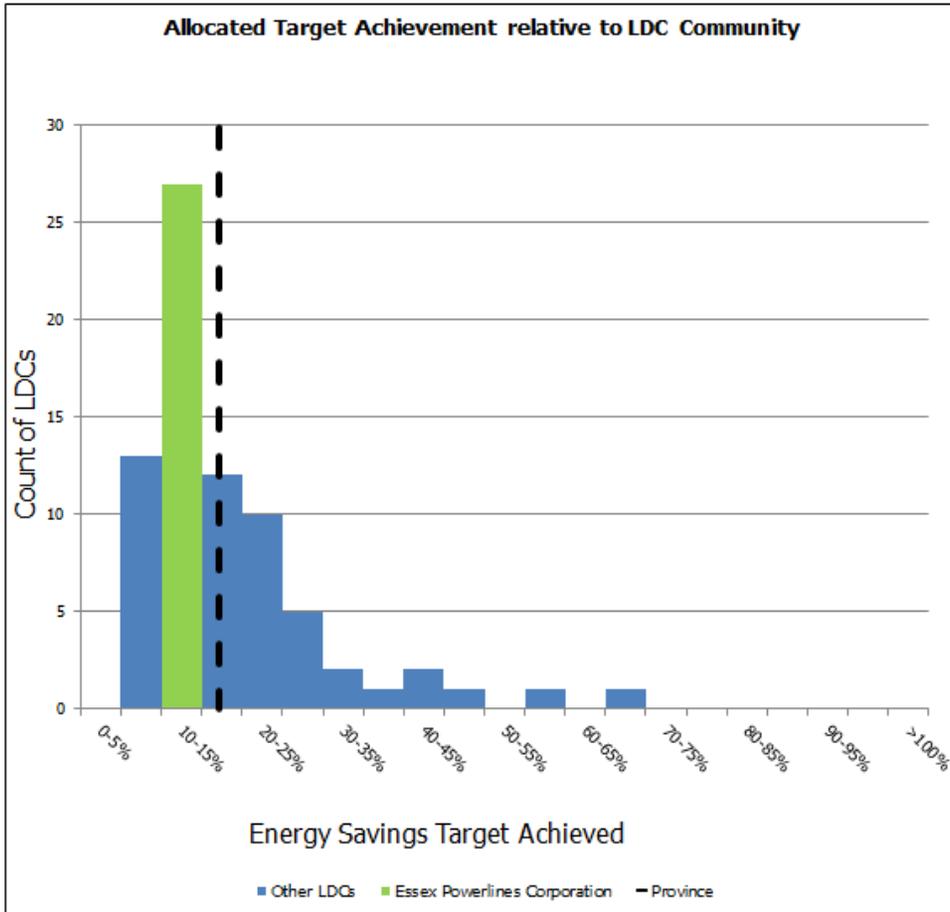
- **Total Cost per Km of Line**

This measure uses the same total cost that is used in the Cost per customer calculation above. The Total cost is divided by the kilometers of line that Essex Powerlines operates to serve its customers. Essex Powerlines rate is \$34,680 per Km of line, a 6.5% increase over 2014 compared to an 11% increase in 2014 over 2013. Essex Powerlines has experienced a reduction of 3% or approximately 15 km's of line since 2010. This reduction is due to the Herb Gray Parkway substation conversion that eliminated overhead lines. In addition there has been a low growth rate in the area since 2010 which has limited our ability to fund capital renewal and increased operating costs through customer growth. With these two factors, the cost per km has increased year over year.

Conservation & Demand Management

- **Net Cumulative Energy Savings**

Essex Powerlines is tracking to meet our savings target under the 2015-2020 Conservation First Framework. During the first year of the new framework, EPL achieved 12% of its 6 year target while only spending 2% of its allocated budget. EPL is meeting its goal of delivering significant energy savings through its conservation programs, in a manner that is cost effective to ratepayers. This first year performance under the Conservation First Framework positions EPL suitably for achieving even greater energy savings in future program years, as significant conservation projects were identified in 2015 for implementation in 2016.



Connection of Renewable Generation

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

- Electricity distributors are required to conduct Connection Impact Assessments (CIA's) within 60 days of receiving authorization from the Electrical Safety Authority. In 2015, Essex Powerlines had four requests for CIA's that were completed within the prescribed time limit. In 2013 there were also two requests that were completed on time. There were no CIA's requested in 2011 and therefore the field is blank.

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

In 2015, Essex Powerlines connected 10 new micro-embedded generation facilities 100% within the prescribed time frame of 5 business days. The standard is 90% of new micro-embedded generators have to be completed within the five day time frame. Essex Powerlines makes additional effort to meet the connection of these facilities ahead of the standard. There were no micro-embedded generation facilities requested to be connected in 2011 or 2012 and therefore these fields are blank.

Financial Ratios

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

As an indicator of financial health, a current ratio that is greater than 1 is considered good as it indicates that the company can pay its short term debts and financial obligations. Companies with a ratio of greater than 1 are referred to as being “liquid”. 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.

Essex Powerlines ratio for 2015 was .87 compared to .91 for 2014. The slight decline is not an indication of financial performance but rather the result of using short term funds to pay for capital expenditures and thereby keeping interest costs down. The plan is to borrow additional long term funds that will increase the current cash available. See the additional explanation under the debt to equity ratio below.

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

The OEB uses a deemed capital structure of 60% debt and 40% equity for electricity distributors when establishing rates. This deemed capital mix is equal to a debt to equity ratio of 1.5 (60/40). A debt to equity ratio of more than 1.5 indicates that a distributor is more highly leveraged than the deemed capital structure. A high debt to equity ratio may indicate that an electricity distributor may have difficulty generating sufficient cash flows to make its debt payments. A debt to equity ratio of less than 1.5 indicates that the distributor is less levered than the deemed capital structure. A low debt-to-equity ratio may indicate that an electricity distributor is not taking advantage of the increased profits that financial leverage may bring.

As indicated above, additional loan facilities will be put in place during 2016 and 2017. Funding for the new transformer station in Leamington in 2017/2018 will also require additional long term debt to be put in place. These borrowings will increase the debt to equity ratio to be more in line with the approved deemed ratio.

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

Essex Powerlines current distribution rates were approved by the OEB and include an expected (deemed) regulatory return on equity of 9.85% approved by the OEB at our last Cost of Service rate application in 2010. The OEB allows a distributor to earn within +/- 3% of the expected rate of 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**

Essex Powerlines regulatory return on equity performance for 2015 was 11.70 compared to 9.73 from 2014 bringing the last five year average to 10.32 which is well within the +/- 3% range established by the OEB.

Note to Readers of 2015 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.