Empirical Research in Support of Incentive Rate-Setting: 2017 Benchmarking Update

Report to the Ontario Energy Board

August 2018



Pacific Economics Group Research, LLC

The views expressed in this report are those of Pacific Economics Group Research, and do not necessarily represent the views of, and should not be attributed to, the Ontario Energy Board, any individual Board Member, or Ontario Energy Board staff.

Empirical Research in Support of Incentive Rate-Setting: 2017 Benchmarking Update

Report to the Ontario Energy Board

August 2018

Dave Hovde, M.S. *Vice President*

Zachary Legge, M.A. *Economist II*

PACIFIC ECONOMICS GROUP RESEARCH, LLC

44 East Mifflin, Suite 601 Madison, Wisconsin USA 53703 608.257.1522 608.257.1540 Fax

TABLE OF CONTENTS

1.	Introduction	. 1
2.	Benchmarking Methodology	. 2
3.	Benchmarking Data	. 4
4.	Benchmarking Results and Updated Stretch Factors	. 8
5	Validation and Other Supporting Documents	q

1. Introduction

In 2013, as part of the IRM-4 proceeding EB-2010-0379, the Ontario Energy Board (OEB) issued a report titled "Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors" (Board Report) in which it set forth the framework for setting rate adjustment formulas for local distribution companies (LDCs or "distributors"). The Board Report provides the OEB's final determination on its policies and approaches to the distributor rate adjustment parameters and the benchmarking of electricity distributor total cost performance for the 2014 to 2018 rate-year period. The OEB has recently decided to extend this benchmarking for an additional year. This 2017 Benchmarking Update for distributors determines their 2018 stretch factor assignments in relation to the 2019 rate year.

According to the Board Report, rates will be indexed by a formula "which is used to adjust the distribution rates to reflect expected growth in the distributors' input prices (the inflation factor) less allowance for appropriate rates of productivity and efficiency gains (the X-factor)."² The productivity part of the X-Factor is the same for all LDCs. The efficiency gains part of the X-Factor is called the stretch factor and can vary by company. This stretch factor reflects the potential for incremental productivity gains by a given LDC under incentive regulation (i.e., incentive rate mechanism or IRM) which in turn depends on an individual distributor's level of cost efficiency.

These stretch factor assignments are based on the results of a statistical cost benchmarking study designed to make inferences on individual distributors' cost efficiency. An econometric model is used to predict the level of cost associated with each distributor's operating conditions. Distributors that had actual cost that was lower than that predicted by the model were assigned lower stretch factors than those that did not. The October 18, 2013 report by Pacific Economics Group (PEG) titled "Productivity and Benchmarking Research in Support of Incentive Rate Setting in Ontario" describes the model used to produce the benchmarking results. The work was subsequently updated to include 2013 data in July of 2014³ and has been updated

³ "Empirical work in Support of Incentive Rate Setting: 2013 Benchmarking Update".



¹ Issued on November 21, 2013 and corrected on December 4, 2013.

² Board Report, page 5.

each year since. This report presents updated benchmarking results and associated stretch factors that incorporate 2017 data.

Section 2 of this report discusses the methodology used for the 2017 update. Section 3 discusses the data used. Section 4 presents the benchmarking results and updated stretch factors. Section 5 discusses additional resources available to distributors to validate the results contained in this report.

2. Benchmarking Methodology

The model used to determine the cost efficiency of distributors is based on econometrics. Distributor cost in this model is estimated as a function of business conditions faced by each distributor. These business conditions include the number of customers served and the price of inputs such as labor and capital. The parameters of this model establish the relationship between each business condition and distributor cost. These parameters were estimated using Ontario LDC data from 2002-2012.

The model can make a prediction of each distributor's cost given its business conditions by multiplying the company's business condition variables by the model parameters and summing the results⁴. The distributor's actual cost is then compared to that predicted by the model. The percentage difference between actual and predicted cost is the measure of cost performance. Companies with larger negative differences between actual and predicted costs are considered to be better cost performers and therefore eligible for lower stretch factors. A

⁴ The table of parameters published in the PEG report was for the full sample. When making predictions of cost for each company, the econometric program estimated the model without including the subject of benchmarking in the sample. Therefore, there exist 65 different sets of parameters which are very similar to each other. For ease of presentation, the PEG report did not present the parameters specific to each distributor. These company-specific parameters are necessary for the 2013 calculations and are contained within the working papers associated with this report.



detailed description of the econometric model including estimation technique and other technical details are contained in sections 6 and A2.1 of the PEG report.

The econometric model used to obtain the updated stretch factors is identical to the model described in the PEG report. The OEB intentionally decided not to update the parameters of the econometric model to include future data. The goal was to establish a fixed benchmark that would allow companies a fair opportunity to demonstrate improved cost performance and earn a lower stretch factor. The parameters from the previous model were combined with each company's data – including 2013-2017 data - to produce 2017 predicted cost. The rationale for this decision is discussed in the Board Report and in a memorandum by PEG that also makes some corrections to the 2012 results.⁵ The PEG memorandum contains the corrected final results of the 2010-2012 benchmarking model used in this update.

To apply the 2017 values to the model parameters, the data must be transformed to be consistent with how the data were specified for the estimated econometric model. One example of a transformation is that many of the explanatory variables were expressed as logarithms prior to the model being estimated. The PEG report describes the details of the estimation process in section A2.1. The spreadsheet model and associated documentation discussed in section 5 contain the calculations leading to the cost benchmarking results.

The purpose of the benchmarking work is to evaluate the total cost incurred by each distributor. Table 1 shows the formulas used to calculate the measure of total cost used in PEG's benchmarking analysis. As described in the PEG benchmarking report, adjustments were undertaken with the purpose of standardizing cost in order to facilitate more accurate cost comparisons among distributors. These adjustments included the treatment of high voltage and low voltage costs.

The variables used to explain total cost are the same as in the previous PEG report. They include outputs such as customers, kWh deliveries, and capacity. Prices for capital and OM&A along with other business conditions such as customer growth and average length of lines are also included. A complete discussion of the explanatory variables can be found in section 6 of the PEG report and the documents discussed in section 5. The explanatory variables are used to

⁵ Available on the OEB website in the file "PEG_Memorandum_OEB on_corrections_20131220.pdf"



Pacific Economics Group Research, LLC

explain the level of cost incurred by each LDC. Cost that is not explained by the variables is deemed to be due to management performance.

3. Benchmarking Data

The source of the cost and output data used in the calculations is from the distributors as reported in the reporting and record-keeping requirements (RRR) filings. The study assumes that the data as reported by the distributors conforms to accounting policies and procedures described in the Accounting Procedures Handbook and other instructions contained within the RRR filing system. It is also assumed that the LDCs have taken ownership of the data provided to the OEB and significant revisions are not anticipated. On March 31, 2015, the OEB established new requirement for certification of the electricity distributors' RRRs. To underscore the importance that the OEB places on the accuracy and integrity of distributor reporting, particularly in the context of the new performance based regulatory framework, the OEB required that any RRR filing with the OEB be certified by an executive signing officer of the company (e.g., Chief Executive Officer, Chief Financial Officer). The new executive certification was required for both quarterly and annual RRR filings.

Data sources apart from the RRR are related to input prices. OEB-approved rates of return were obtained from OEB Staff. The source for other input price data was Statistics Canada. The input price indexes used were the same as those used in PEG's original study with one exception. Statistics Canada no longer calculates the Electric Utility Construction Price Index (EUCPI). The growth in the GDPIPI (FDD) was used to escalate the EUCPI values used the calculations.

The update was done in the same manner as the original work and the previous update with a few exceptions. The first is that the OEB has improved the quality of the guidance given

⁶ The Ontario Energy Board (OEB) released the Report of the Board on Scorecard (EB-2010-0379) on March 5, 2014 (the "Scorecard Report") states that: 'While the Board will create consistent Scorecard reports for distributors, ownership of the data and Scorecard resides with the distributor.'



to distributors related to capital additions data. As a result, improved data are available for 2013-2017. PEG has accordingly relied upon these newly-available capital additions data instead of inferring these data from changes in gross plant⁷. The second exception is related to the treatment of deferred smart meter OM&A expenses. In the original PEG report, an adjustment was made for the estimated amount of amortization that was included in the reported OM&A expenses as a result of clearing amounts from account 1556. In 2014, OEB staff had advised that due to improved reporting requirements, this adjustment is no longer necessary. A recent survey of LDC disposition of account 1556 amounts has confirmed this.

The calculations have also been adjusted for amalgamations that have taken place since the original study was done. The historical cost performance of the combined entity was calculated from the historical results of the predecessor distributors that were amalgamated or acquired. The most recent amalgamation is the creation of Alectra from Enersource, Horizon, PowerStream, and Hydro One Brampton Networks. Previous amalgamations included the acquisition of Haldimand, Woodstock, and Norfolk by Hydro One Networks, the formation of Energy +, and the Lakeland acquisition of Parry Sound.⁸

This report also addresses the impact of data revisions by LDCs. The OEB requires distributors to be accountable for the integrity of their reported data. As part of its procedures to improve data quality, the OEB invited distributors to submit corrections to previously provided data. However, a key determination is that already established and published benchmarking results for prior years would not be modified as a result of the new data. This includes any year

⁸ The method used to calculation the hypothetical historical cost performance of the combined entity is to sum the actual costs, sum the costs predicted by the model, and calculate the percentage difference. This method is essentially a cost-weighted average of the historical cost performances of the amalgamated distributors.



⁷ This improvement in data quality also extends to the collection of smart meter capital additions. The previous study estimated capital additions for distribution capital exclusive of meters for the period 2006-2012 in order to be able to isolate the accounting treatment of smart meters. The capital expenditures on smart meters were gathered for each company via a supplemental data request. These capital expenditures were then used as a proxy for capital additions and added to the total. A recent survey of the composition of the reported gross capital additions has revealed that some distributors have included amounts cleared from account 1555. The capital additions data for these companies has been adjusted to remove the cleared smart meter capital additions to avoid double counting.

that comprised the three-year average used to determine the current year's stretch factor. However, any revised data used by the model have been incorporated into the benchmarking databases. As a result, the updated calculations for this updated benchmarking study may show different results for 2016 and 2015 performance. The revised 2016 and 2015 results are presented only for the purposes of showing the impact of the data changes but were not used to calculate the new 2015-2017 average cost performance used to determine the 2018 stretch factors.

Several tables are included at the end of this report. Table 1 describes the calculation of total cost. Table 2 shows each distributor's growth in total cost from 2016 to 2017. Table 3 (A) presents the 2017 benchmarking results and a comparison to prior years' results. Table 3 (B) summarizes the impact of data revisions discussed above. Table 4 presents average cost performance and associated stretch factors. Table 5 presents the companies assigned to each cohort.

The goal of the benchmarking work is to evaluate levels of distributor cost. Table 2 presents the actual OM&A, Capital, and Total cost for each distributor for 2016 and 2017. As can be seen, industry total cost grew by only 0.33% on average from 2016-2017. Whereas OM&A cost grew on average by 1.80%, capital cost decreased on average by 0.35%. The decline in capital cost is due to lower approved rates of return in 2017 vs. 2016.

The econometric model estimates LDCs' costs as a function of distributor output, input price growth, and other business condition variables beyond management control. It will also produce a prediction of the level of cost consistent with these business conditions and thus "explain" some of the observed cost level. As described in the PEG benchmarking report, changes not accounted for by these factors are deemed to be due to management performance. The parameter estimates measure the cost impact of the different business conditions and are presented on Table 16 of the PEG benchmarking report.

The first of the cost drivers is output quantity. The model uses three measures for the quantity of distributor output. The first is the number of customers served and the second is kWh delivered. The third is a proxy for the capacity of the distribution system. The capacity variable is described in the PEG report and is equal to the largest peak load experienced as of the current year of data. For example, the 2012 value for the capacity variable is equal to largest reported



system summer or winter kW in all the years 2002-2012. Therefore, for 2013, this capacity variable only increased if the distributor's kW demand in that year exceeded kW demand in every year between 2002 and 2012. Of the three output variables, the model estimates that the number of customers has the largest impact on cost, followed by the system capacity variable. The kWh delivered was the least important of the output variables. For the average company, the number of customers was found to be a more important cost driver than the other two combined. For each 1% change in number of customers, cost was estimated to change by 0.44%.

The second group of cost drivers were the input prices for capital and OM&A. For the average company, the cost impact of changes in the capital price was found to be almost twice as important as that for OM&A. For every 1% change in capital price, the impact on total cost was about 0.63%. The corresponding impact for changes in the OM&A price was 0.37%. The relevant indexes were updated to include 2017 data. For the OM&A price, the growth in average weekly earnings and that for the GDP implicit price index for final domestic demand ("GDPIPI (FDD)") were calculated. The 2017 growth in the OM&A price index is calculated as 70% times average weekly earnings growth plus 30% times GDPIPI (FDD) growth. The 2016 values for the OM&A price index from the previous report were escalated by the growth that occurred in 2017.

The capital price calculation is based upon an asset price index, an economic depreciation rate, and a rate of return. The asset price index was the Electric Utility Construction Price Index as calculated by Statistics Canada. As this index is no longer available, the previous values are escalated by an alternate index. The index chosen was the GDPIPI (FDD) which is the same index used to represent all non-labour price inflation in the Board-approved inflation measure formula⁹. The depreciation rate is fixed at 4.59% consistent with the previous work. The rate of return is a weighted average of the rates for return on equity, long-term debt, and short-term debt as approved by the OEB. The capital price used to calculate total cost is also used as an explanatory variable. Therefore, any changes in the rate of return that affect the cost calculation will also affect the price calculation which will in turn "explain" the observed changes in cost.

The last group of cost drivers consists of other business condition variables. The first was the percentage of customers added over the last ten years. The second was the average km

⁹ The weight given to the non-labour index in the inflation formula includes capital cost.



Pacific Economics Group Research, LLC

of distribution line. In each case these variables were updated to include 2017 data. For each 1% change in line length, total cost was estimated to increase by 0.29%. The model also contains a time trend that accounts for changes in cost over time that are not accounted for by the other cost drivers. This variable estimates that cost should rise by 1.7% per year for reasons not identified by other variables in the model.

4. Benchmarking Results and Updated Stretch Factors

Table 3 (A) presents a summary of the current benchmarking results for each distributor from 2013-2017. The updated average cost performance is calculated from the 2015-2017 values and is used to assign updated stretch factors to distributors. The last column presents the difference between the updated average cost performance and the previous one. All but one distributor had average cost performance that changed by less than 5% ¹⁰.

As discussed above, the OEB requires distributors to be accountable for the integrity of their reported data and sets out reporting procedures to improve data quality. OEB Staff reviewed and approved distributors' data corrections requests to previously filed data when reasonable justification is provided. PEG evaluated the data provided in response to the data request to identify any warranted corrections. The revised data were incorporated into the benchmarking databases and the 2015 and 2016 results were recalculated to demonstrate the impact on the previously published 2014-2016 average cost performance. Table 3 (B) shows the impact of LDC data revisions on 2015 and 2016 cost performance for those companies that had approved changes. Two LDCs had data revisions that resulted in a consequential change in past cost performance. All other revisions would not have changed cohort placement.

Updated stretch factors are assigned based on a three-year average of actual less predicted cost over the 2015-2017 period. As discussed in the Board Report, distributors that averaged 25% or more below cost received the lowest stretch factor of 0%. Those that averaged between

¹⁰ Changes in average cost performance are due to not only the addition of 2017 results, but the removal of 2014 results. It is therefore possible to simultaneously have improved 2017 cost performance and deteriorating average performance.



10% and 25% below cost received a stretch factor of 0.15%. Those within 10% of predicted cost received a stretch factor of 0.30%. Those distributors that had cost in excess of 10% to 25% of that predicted received a stretch factor of 0.45%. Any distributors that had cost in excess of 25% were assigned the highest stretch factor of 0.60%.

Table 4 presents a summary of the current and previous years' cost performance results and corresponding stretch factors. The assigned stretch factor for most companies was not affected by the 2017 update. A total of 10 companies have been assigned different stretch factors. Of these, 7 now have lower stretch factors and 3 have higher stretch factors. Table 5 presents the updated stretch factor assignments in the format of Appendix D of the Board report.

5. Validation and Other Supporting Documents

As part of their reporting requirements, distributors are asked to validate the numbers contained in their scorecard. Many distributors had difficulty understanding and validating the results contained in earlier versions of this report. As part of its process improvement initiative, OEB Staff commissioned additional work to make these calculations more accessible and transparent. In collaboration with a committee of industry members, the working papers and documentation were upgraded with the purpose of making them a tool to assist LDCs in validating their benchmarking results. The result was an enhanced benchmarking Spreadsheet Model and a User's Guide which are available on the OEB's website 11. A webinar and training session were also held to assist the industry in using these new tools.

This Spreadsheet Model has been updated to include 2017 data and produces the updated benchmarking results contained in this report. The updated Spreadsheet Model builds on the previous version by adding additional worksheets related to the 2017 calculations. The format of the additional sheets is identical to those provided earlier and the User's Guide will be applicable

¹¹ The spreadsheet model and users guide are available in the <u>Measuring Performance of Electricity</u> <u>Distributors</u> section of the OEB's website



to the new worksheets. The guide is intended to serve as a tool for distributors to better understand these calculations and their cost performance.



Table 1

Calculation of 2017 Total Cost

Variable		Reference	Formula	Source
Total Cost			= OM&A + Capital Cost	Formula
OM&A			= A+B+C+D+E+F+G-I+J	Formula
2017	Operation	Α		RRR
2017	Maintenance	В		RRR
2017	Billing and Collection	С		RRR
2017	Community Relations	D		RRR
2017	Administrative and General Expenses	E		RRR
2017	Insurance Expense	F		RRR
2017	Advertising Expenses	G		RRR
Adjustments to	OM&A			
2017	HV Adjustment	1		RRR
2017	LV Adjustment	J		Hydro One Networks
Capital				
2016	Asset Price Index	K		PEG Report Working Papers
2016	Capital Price	L		PEG Report Working Papers
2016	Capital Quantity	M		PEG Report Working Papers
2016	Capital cost	N		PEG Report Working Papers
2017	Asset Price Index	0	=K x (GDPPI-FDD 2016 / GDPPI-FDD 2015)	Formula, Statistics Canada
2017	Capital Additions	Р		RRR
2017	HV Capital Additions	Q		RRR
2017	Quantity of Capital Additions	R	=(P-Q) / O	Formula
	Depreciation Rate	S	Fixed at 4.59% for All Years	PEG Report
2017	Capital Quantity	Т	$= M - S \times M + R$	Formula
2017	Rate of Return	U		OEB Staff
2017	Capital Price	V	=U x K + S x O	Formula
2017	Capital Cost	W	= V x T	Formula

Table 2

Total Cost by Distributor: 2016 vs. 2017

		OM&A Cost	(Capital Cost			Total Cost		
			Percent			Percent			Percent
	2016	2017	Change	2016	2017	Change	2016	2017	Change
Alectra Utilities Corporation	237,670,721	253,135,398	6.30%	659,356,986	666,886,626	1.14%	897,027,707	920,022,023	2.53%
Algoma Power Inc.	11,621,713	11,949,456	2.78%	24,888,602	24,804,672	-0.34%	36,510,315	36,754,128	0.67%
Atikokan Hydro Inc.	1,064,080	1,128,041	5.84%	1,596,851	1,640,282	2.68%	2,660,930	2,768,323	3.96%
Bluewater Power Distribution Corporation	13,631,005	13,327,256	-2.25%	25,958,989	25,350,482	-2.37%	39,589,995	38,677,738	-2.33%
Brantford Power Inc.	9,685,238	9,372,903	-3.28%	20,812,110	19,960,172	-4.18%	30,497,348	29,333,076	-3.89%
Burlington Hydro Inc.	17,539,020	17,672,918	0.76%	41,441,591	40,813,641	-1.53%	58,980,611	58,486,560	-0.84%
Canadian Niagara Power Inc.	9,308,936	8,980,025	-3.60%	22,930,334	22,465,934	-2.05%	32,239,271	31,445,959	-2.49%
Centre Wellington Hydro Ltd.	2,176,403	2,366,911	8.39%	4,603,095	4,732,071	2.76%	6,779,497	7,098,982	4.60%
Chapleau Public Utilities Corporation	735,273	714,794	-2.82%	922,404	891,168	-3.45%	1,657,677	1,605,962	-3.17%
Collus PowerStream Corp.	4,888,199	4,564,267	-6.86%	9,129,511	8,783,946	-3.86%	14,017,710	13,348,213	-4.89%
Cooperative Hydro Embrun Inc.	602,881	666,866	10.09%	1,112,507	1,153,022	3.58%	1,715,388	1,819,888	5.91%
E.L.K. Energy Inc.	2,512,511	2,601,207	3.47%	4,904,503	4,864,883	-0.81%	7,417,014	7,466,090	0.66%
Energy+ Inc.	16,658,608	17,339,704	4.01%	40,997,606	41,449,284	1.10%	57,656,213	58,788,988	1.95%
Entegrus Powerlines Inc.	9,372,230	9,247,189	-1.34%	23,149,177	22,846,328	-1.32%	32,521,407	32,093,517	-1.32%
EnWin Utilities Ltd.	24,226,656	26,481,205	8.90%	62,125,724	62,552,073	0.68%	86,352,379	89,033,279	3.06%
Erie Thames Powerlines Corporation	6,058,023	6,303,144	3.97%	12,609,896	12,670,489	0.48%	18,667,919	18,973,633	1.62%
Espanola Regional Hydro Distribution Corporation	1,459,269	1,452,179	-0.49%	2,198,345	2,174,399	-1.10%	3,657,613	3,626,578	-0.85%
Essex Powerlines Corporation	6,535,076	6,904,038	5.49%	15,823,867	16,020,809	1.24%	22,358,942	22,924,847	2.50%
Festival Hydro Inc.	5,538,914	5,423,944	-2.10%	13,434,051	12,917,513	-3.92%	18,972,964	18,341,456	-3.39%
Fort Frances Power Corporation	1,673,934	1,624,397	-3.00%	2,556,419	2,494,242	-2.46%	4,230,353	4,118,638	-2.68%
Greater Sudbury Hydro Inc.	14,059,731	13,736,803	-2.32%	30,679,910	29,854,613	-2.73%	44,739,641	43,591,416	-2.60%
GRIMSBY POWER INCORPORATED	3,318,208	2,934,569	-12.29%	6,827,296	6,352,193	-7.21%	10,145,504	9,286,762	-8.84%
Guelph Hydro Electric Systems Inc.	14,197,517	14,940,539	5.10%	33,975,748	34,475,764	1.46%	48,173,266	49,416,303	2.55%
Halton Hills Hydro Inc.	6,128,245	5,991,470	-2.26%	17,028,654	16,934,734	-0.55%	23,156,899	22,926,203	-1.00%
Hearst Power Distribution Company Limited	1,052,201	1,097,095	4.18%	1,396,100	1,427,597	2.23%	2,448,301	2,524,692	3.07%
Hydro 2000 Inc.	514,942	573,244	10.73%	658,309	708,562	7.36%	1,173,251	1,281,806	8.85%
Hydro Hawkesbury Inc.	956,643	1,067,938	11.01%	1,496,894	1,660,535	10.37%	2,453,537	2,728,474	10.62%
Hydro One Networks Inc.	544,519,280	531,008,997	-2.51%	1,291,093,963	1,285,910,694	-0.40%	1,835,613,243	1,816,919,691	-1.02%
Hydro Ottawa Limited	77,473,478	76,585,427	-1.15%	217,553,973	216,773,074	-0.46%	295,027,451	293,358,501	-0.57%
Innpower Corporation	5,712,209	5,967,674	4.38%	14,870,807	14,771,044	-0.50%	20,583,016	293,338,301	0.75%
Kenora Hydro Electric Corporation Ltd.	1,999,114	2,196,843	9.43%	3,217,783	3,367,800	4.56%	5,216,897	5,564,643	6.45%
Kingston Hydro Corporation	6,596,789		1.08%	14,636,762	14,829,612	1.31%	21,233,551	21,497,822	1.24%
Kitchener-Wilmot Hydro Inc.	15,268,932	6,668,210 16,163,456	5.69%	46,491,871	46,655,634	0.35%	61,760,803	62,819,090	1.70%
Lakefront Utilities Inc.	2,257,872	2,292,335	1.51%	4,810,613	4,715,734	-1.99%	7,068,485	7,008,069	-0.86%
Lakeland Power Distribution Ltd.	5,084,703					-1.99 <i>%</i> -4.50%			-4.69%
		4,833,159 35,729,769	-5.07% 2.33%	9,838,422 80,996,232	9,405,604 81,057,869	-4.50% 0.08%	14,923,125 115,902,306	14,238,763	-4.69% 0.76%
London Hydro Inc.	34,906,074		3.13%			0.08%		116,787,639	
Midland Power Utility Corporation	2,508,991	2,588,787		4,906,270	4,914,372		7,415,261	7,503,159	1.18%
Milton Hydro Distribution Inc.	9,598,087	8,862,186	-7.98%	26,626,170	25,294,071	-5.13%	36,224,257	34,156,257	-5.88%
Newmarket-Tay Power Distribution Ltd.	7,692,179	9,160,875	17.47%	21,283,460	22,181,512	4.13%	28,975,639	31,342,388	7.85%
Niagara Peninsula Energy Inc.	16,422,965	17,622,603	7.05%	40,039,453	40,672,397	1.57%	56,462,418	58,295,000	3.19%
Niagara-on-the-Lake Hydro Inc.	2,393,371	2,530,464	5.57%	6,619,352	6,541,743	-1.18%	9,012,723	9,072,207	0.66%
North Bay Hydro Distribution Limited	6,303,293	6,227,380	-1.21%	16,557,737	16,206,020	-2.15%	22,861,030	22,433,400	-1.89%
Northern Ontario Wires Inc.	2,473,362	2,621,077	5.80%	3,873,815	3,980,253	2.71%	6,347,176	6,601,330	3.93%
Oakville Hydro Electricity Distribution Inc.	17,048,727	17,537,919	2.83%	49,568,785	49,005,241	-1.14%	66,617,512	66,543,160	-0.11%
Orangeville Hydro Limited	3,309,331	3,299,288	-0.30%	6,904,089	6,836,145	-0.99%	10,213,419	10,135,433	-0.77%
Orillia Power Distribution Corporation	4,682,094	4,709,486	0.58%	8,923,635	8,939,871	0.18%	13,605,729	13,649,357	0.32%

Table 2

Total Cost by Distributor: 2016 vs. 2017

	OM&A Cost			C	apital Cost			Total Cost		
	<u> </u>		Percent			Percent			Percent	
	2016	2017	Change	2016	2017	Change	2016	2017	Change	
Oshawa PUC Networks Inc.	11,720,225	12,150,794	3.61%	31,002,985	30,654,401	-1.13%	42,723,209	42,805,196	0.19%	
Ottawa River Power Corporation	2,904,015	3,169,087	8.73%	5,349,293	5,570,543	4.05%	8,253,308	8,739,630	5.73%	
Peterborough Distribution Incorporated	8,836,492	8,616,790	-2.52%	22,099,641	21,303,186	-3.67%	30,936,133	29,919,976	-3.34%	
PUC Distribution Inc.	10,775,065	10,685,848	-0.83%	23,266,331	22,600,176	-2.90%	34,041,396	33,286,024	-2.24%	
Renfrew Hydro Inc.	1,393,601	1,406,742	0.94%	2,560,823	2,527,720	-1.30%	3,954,424	3,934,462	-0.51%	
Rideau St. Lawrence Distribution Inc.	2,086,630	2,228,632	6.58%	3,189,682	3,356,536	5.10%	5,276,312	5,585,168	5.69%	
Sioux Lookout Hydro Inc.	1,510,500	1,559,987	3.22%	2,377,225	2,409,693	1.36%	3,887,725	3,969,681	2.09%	
St. Thomas Energy Inc.	4,219,822	3,841,607	-9.39%	9,203,830	8,654,568	-6.15%	13,423,653	12,496,175	-7.16%	
Thunder Bay Hydro Electricity Distribution Inc.	15,166,729	15,384,698	1.43%	33,672,778	33,401,362	-0.81%	48,839,507	48,786,060	-0.11%	
Tillsonburg Hydro Inc.	2,676,347	2,631,316	-1.70%	4,765,338	4,708,418	-1.20%	7,441,686	7,339,735	-1.38%	
Toronto Hydro-Electric System Limited	232,383,928	234,078,557	0.73%	795,760,801	800,340,353	0.57%	1,028,144,729	1,034,418,911	0.61%	
Veridian Connections Inc.	26,930,114	26,716,784	-0.80%	70,940,433	69,567,507	-1.95%	97,870,547	96,284,291	-1.63%	
Wasaga Distribution Inc.	2,992,341	3,094,041	3.34%	5,738,095	5,774,022	0.62%	8,730,435	8,868,062	1.56%	
Waterloo North Hydro Inc.	12,139,696	12,895,779	6.04%	44,118,943	44,113,282	-0.01%	56,258,640	57,009,061	1.33%	
Welland Hydro-Electric System Corp.	6,568,599	6,597,232	0.43%	11,648,691	11,465,921	-1.58%	18,217,290	18,063,153	-0.85%	
Wellington North Power Inc.	1,732,025	1,707,931	-1.40%	3,133,691	3,061,505	-2.33%	4,865,716	4,769,435	-2.00%	
West Coast Huron Energy Inc.	1,782,044	1,630,646	-8.88%	3,247,606	3,053,274	-6.17%	5,029,650	4,683,920	-7.12%	
Westario Power Inc.	5,716,495	6,113,555	6.72%	13,386,631	13,604,887	1.62%	19,103,126	19,718,442	3.17%	
Whitby Hydro Electric Corporation	11,510,497	11,961,256	3.84%	29,074,553	28,969,907	-0.36%	40,585,050	40,931,163	0.85%	
Average			1.80%			-0.35%			0.33%	
Median			1.51%			-0.55%			0.32%	

Table 3 (A)

Summary of Cost Performance Results

	2013	2014	2015	2016	2017	2013-2015	2014-2016	2015-2017	Difference from 2014-2016
Alectra Utilities Corporation	-3.6%	-2.9%	0.2%	0.2%	4.5%	-2.1%	-0.8%	1.6%	2.5%
Algoma Power Inc.	71.2%	68.1%	70.6%	69.8%	68.9%	70.0%	69.5%	69.8%	0.3%
Atikokan Hydro Inc.	11.6%	-4.9%	9.7%	11.9%	12.6%	5.5%	5.6%	11.4%	5.8%
Bluewater Power Distribution Corporation	5.9%	0.3%	0.8%	2.1%	4.0%	2.3%	1.1%	2.3%	1.2%
Brantford Power Inc.	0.7%	-3.6%	-6.1%	-4.4%	-8.2%	-3.0%	-4.7%	-6.2%	-1.5%
Burlington Hydro Inc.	-7.5%	-9.4%	-10.3%	-11.1%	-11.9%	-9.0%	-10.3%	-11.1%	-0.9%
Canadian Niagara Power Inc.	13.8%	12.9%	13.0%	13.5%	11.2%	13.2%	13.1%	12.6%	-0.6%
Centre Wellington Hydro Ltd.	0.4%	-3.1%	-1.2%	0.4%	1.0%	-1.3%	-1.3%	0.1%	1.4%
Chapleau Public Utilities Corporation	20.5%	27.7%	23.9%	21.0%	17.0%	24.0%	24.2%	20.6%	-3.6%
Collus PowerStream Corp.	-12.3%	-14.2%	-14.2%	-13.2%	-18.4%	-13.6%	-13.9%	-15.3%	-1.4%
Cooperative Hydro Embrun Inc.	-18.9%	-29.7%	-33.2%	-38.2%	-41.1%	-27.3%	-33.7%	-37.5%	-3.8%
E.L.K. Energy Inc.	-33.2%	-44.9%	-34.7%	-39.4%	-44.5%	-37.6%	-39.7%	-39.5%	0.2%
Energy+ Inc.	1.4%	-2.2%	-5.3%	-9.9%	-11.1%	-2.1%	-5.8%	-8.8%	-3.0%
Entegrus Powerlines Inc.	-12.5%	-16.7%	-17.3%	-15.7%	-17.5%	-15.5%	-16.6%	-16.9%	-0.3%
EnWin Utilities Ltd.	10.3%	10.9%	9.9%	9.6%	5.3%	10.3%	10.1%	8.3%	-1.9%
Erie Thames Powerlines Corporation	7.9%	7.0%	7.0%	6.8%	7.8%	7.3%	6.9%	7.2%	0.3%
Espanola Regional Hydro Distribution Corporation	-19.3%	-25.4%	-20.4%	-20.9%	-23.1%	-21.7%	-22.2%	-21.4%	0.8%
Essex Powerlines Corporation	-17.2%	-12.7%	-13.5%	-14.3%	-14.1%	-14.5%	-13.5%	-14.0%	-0.5%
Festival Hydro Inc.	19.6%	16.6%	14.0%	13.4%	8.8%	16.8%	14.7%	12.1%	-2.6%
Fort Frances Power Corporation	6.4%	5.6%	5.1%	6.8%	2.4%	5.7%	5.8%	4.8%	-1.1%
Greater Sudbury Hydro Inc.	4.8%	14.9%	8.0%	9.6%	7.1%	9.3%	10.9%	8.2%	-2.6%
GRIMSBY POWER INCORPORATED	-16.9%	-17.3%	-17.0%	-13.0%	-24.9%	-17.0%	-15.7%	-18.3%	-2.6%
Guelph Hydro Electric Systems Inc.	0.8%	-4.8%	-3.8%	-5.1%	-3.5%	-2.6%	-4.6%	-4.1%	0.4%
Halton Hills Hydro Inc.	-35.7%	-31.3%	-28.2%	-27.5%	-28.4%	-31.7%	-29.0%	-28.0%	1.0%
Hearst Power Distribution Company Limited	-33.1%	-22.4%	-7.4%	-21.3%	-20.1%	-21.0%	-17.0%	-16.3%	0.7%
Hydro 2000 Inc.	-1.0%	-15.3%	-6.2%	-19.6%	-23.0%	-7.5%	-13.7%	-16.3%	-2.6%
Hydro Hawkesbury Inc.	-51.1%	-64.3%	-68.1%	-66.4%	-56.3%	-61.2%	-66.3%	-63.6%	2.7%
Hydro One Networks Inc.	26.5%	28.9%	19.7%	15.6%	17.0%	25.0%	21.4%	17.4%	-4.0%
Hydro Ottawa Limited	8.5%	12.7%	15.2%	15.7%	16.5%	12.1%	14.5%	15.8%	1.3%
Innpower Corporation	-2.8%	-2.8%	8.5%	9.1%	4.7%	1.0%	4.9%	7.4%	2.5%
Kenora Hydro Electric Corporation Ltd.	-11.2%	-11.0%	-3.9%	-12.5%	-9.2%	-8.7%	-9.1%	-8.5%	0.6%
Kingston Hydro Corporation	3.7%	-3.6%	-3.1%	-2.9%	-1.4%	-1.0%	-3.2%	-2.5%	0.7%
Kitchener-Wilmot Hydro Inc.	-19.3%	-19.0%	-22.3%	-20.4%	-19.9%	-20.2%	-20.6%	-20.9%	-0.3%
Lakefront Utilities Inc.	-7.4%	-16.0%	-22.1%	-18.8%	-23.5%	-15.2%	-19.0%	-21.5%	-2.5%
Lakeland Power Distribution Ltd.	-0.9%	-1.9%	-7.6%	-11.6%	-16.1%	-3.5%	-7.0%	-11.8%	-4.8%
London Hydro Inc.	-11.0%	-12.8%	-9.9%	-8.0%	-7.1%	-11.3%	-10.3%	-8.4%	1.9%
Midland Power Utility Corporation	18.6%	15.2%	13.8%	11.8%	11.4%	15.9%	13.6%	12.3%	-1.3%
Milton Hydro Distribution Inc.	-4.5%	-4.0%	2.7%	-0.6%	-14.4%	-1.9%	-0.6%	-4.1%	-3.5%

Table 3 (A)

Summary of Cost Performance Results

	2013	2014	2015	2016	2017	2013-2015	2014-2016	2015-2017	Difference from 2014-2016
Newmarket-Tay Power Distribution Ltd.	-19.5%	-18.6%	-19.3%	-16.7%	-12.2%	-19.1%	-18.2%	-16.1%	2.1%
Niagara Peninsula Energy Inc.	1.1%	7.7%	4.5%	3.5%	4.9%	4.5%	5.3%	4.3%	-1.0%
Niagara-on-the-Lake Hydro Inc.	-0.7%	-2.8%	-6.6%	-6.4%	-9.2%	-3.4%	-5.3%	-7.4%	-2.1%
North Bay Hydro Distribution Limited	5.4%	8.2%	7.0%	3.2%	5.5%	6.9%	6.2%	5.2%	-0.9%
Northern Ontario Wires Inc.	-21.5%	-32.6%	-42.2%	-38.5%	-36.0%	-32.1%	-37.8%	-38.9%	-1.1%
Oakville Hydro Electricity Distribution Inc.	13.8%	8.7%	6.9%	4.5%	2.6%	9.8%	6.7%	4.7%	-2.0%
Orangeville Hydro Limited	0.1%	-4.0%	-7.6%	-10.2%	-14.3%	-3.8%	-7.3%	-10.7%	-3.4%
Orillia Power Distribution Corporation	-4.7%	-5.3%	-8.0%	-2.5%	-3.8%	-6.0%	-5.3%	-4.8%	0.5%
Oshawa PUC Networks Inc.	-17.4%	-18.1%	-14.9%	-15.4%	-16.3%	-16.8%	-16.2%	-15.6%	0.6%
Ottawa River Power Corporation	4.3%	-6.9%	-9.3%	-9.8%	-10.4%	-4.0%	-8.7%	-9.8%	-1.2%
Peterborough Distribution Incorporated	14.5%	14.5%	11.0%	12.6%	8.2%	13.3%	12.7%	10.6%	-2.1%
PUC Distribution Inc.	22.7%	14.6%	16.2%	14.0%	11.2%	17.8%	14.9%	13.8%	-1.1%
Renfrew Hydro Inc.	15.7%	10.4%	10.6%	10.6%	7.7%	12.2%	10.5%	9.6%	-0.9%
Rideau St. Lawrence Distribution Inc.	-7.2%	-8.1%	-4.8%	-8.1%	-4.1%	-6.7%	-7.0%	-5.7%	1.3%
Sioux Lookout Hydro Inc.	2.9%	6.2%	-4.3%	-3.4%	-7.9%	1.6%	-0.5%	-5.2%	-4.7%
St. Thomas Energy Inc.	-0.3%	-6.3%	-10.3%	-7.7%	-14.8%	-5.6%	-8.1%	-10.9%	-2.8%
Thunder Bay Hydro Electricity Distribution Inc.	8.2%	7.4%	8.6%	12.2%	11.2%	8.1%	9.4%	10.7%	1.3%
Tillsonburg Hydro Inc.	19.5%	4.4%	-0.5%	1.6%	-1.2%	7.8%	1.8%	0.0%	-1.9%
Toronto Hydro-Electric System Limited	48.4%	49.9%	51.5%	52.3%	52.9%	49.9%	51.2%	52.3%	1.0%
Veridian Connections Inc.	-4.5%	-3.0%	-2.7%	-1.6%	-3.1%	-3.4%	-2.4%	-2.5%	0.0%
Wasaga Distribution Inc.	-41.6%	-41.6%	-45.6%	-44.9%	-45.7%	-42.9%	-44.0%	-45.4%	-1.4%
Waterloo North Hydro Inc.	10.6%	11.0%	8.2%	9.9%	9.5%	9.9%	9.7%	9.2%	-0.5%
Welland Hydro-Electric System Corp.	-15.2%	-17.3%	-18.7%	-17.4%	-19.6%	-17.0%	-17.8%	-18.5%	-0.8%
Wellington North Power Inc.	17.7%	14.2%	11.8%	16.2%	12.7%	14.6%	14.1%	13.6%	-0.5%
West Coast Huron Energy Inc.	41.4%	32.8%	33.5%	34.9%	26.8%	35.9%	33.7%	31.7%	-2.0%
Westario Power Inc.	2.2%	-4.2%	-6.0%	-2.7%	-1.5%	-2.6%	-4.3%	-3.4%	0.9%
Whitby Hydro Electric Corporation	-5.7%	-6.8%	-2.6%	-1.9%	-2.1%	-5.0%	-3.8%	-2.2%	1.6%
Average	0.05%	-2.47%	-2.57%	-2.91%	-4.41%	-1.66%	-2.65%	-3.30%	-0.64%
Median	0.42%	-3.60%	-3.75%	-2.68%	-3.53%	-2.60%	-3.78%	-4.08%	-0.77%
Max	71.22%	68.08%	70.60%	69.75%	68.93%	69.97%	69.48%	69.76%	5.83%
Min	-51.09%	-64.32%	-68.10%	-66.37%	-56.30%	-61.17%	-66.26%	-63.59%	-4.75%

Summary of the Impact of Revisions on Cost Performance Results

Table 3 (B)

	2015 Cost Performance			2016	Cost Perform	ance	2014-2016 Average Cost Performance		
LDCs who filed 2015 and/or 2016 revisions	As Previously Calculated	As Revised	Difference	As Previously Calculated	As Revised	Difference	As Previously Calculated	As Revised	Difference
Bluewater Power Distribution Corporation	0.79%	5.68%	4.89%	2.06%	6.23%	4.17%	1.06%	4.08%	3.02%
Brantford Power Inc.	-6.05%	-6.07%	-0.01%	-4.36%	-4.38%	-0.02%	-4.69%	-4.70%	-0.01%
Burlington Hydro Inc.	-10.27%	-10.27%	0.00%	-11.13%	-11.13%	0.00%	-10.25%	-10.25%	0.00%
E.L.K. Energy Inc.	-34.71%	-34.71%	0.00%	-39.45%	-40.19%	-0.75%	-39.70%	-39.95%	-0.25%
Espanola Regional Hydro Distribution Corporation	-20.36%	-20.36%	0.00%	-20.85%	-20.85%	0.00%	-22.21%	-22.21%	0.00%
Essex Powerlines Corporation	-13.48%	-13.46%	0.02%	-14.32%	-16.68%	-2.37%	-13.49%	-14.27%	-0.78%
Festival Hydro Inc.	13.98%	14.06%	0.08%	13.43%	13.50%	0.07%	14.68%	14.73%	0.05%
Fort Frances Power Corporation	5.11%	5.11%	0.00%	6.84%	6.09%	-0.75%	5.85%	5.60%	-0.25%
Greater Sudbury Hydro Inc.	8.01%	8.01%	0.00%	9.62%	9.62%	0.00%	10.85%	10.85%	0.00%
Grimsby Power Incorporated	-16.98%	-4.62%	12.36%	-12.96%	-1.86%	11.09%	-15.73%	-7.92%	7.82%
Hydro 2000 Inc.	-6.18%	-6.18%	0.00%	-19.57%	-19.57%	0.00%	-13.68%	-13.68%	0.00%
Midland Power Utility Corporation	13.85%	13.94%	0.09%	11.80%	11.88%	0.08%	13.60%	13.66%	0.06%
Milton Hydro Distribution Inc.	2.69%	-0.41%	-3.10%	-0.60%	-6.20%	-5.60%	-0.62%	-3.52%	-2.90%
Newmarket-Tay Power Distribution Ltd.	-19.30%	-19.30%	0.00%	-16.67%	-16.67%	0.00%	-18.18%	-18.18%	0.00%
North Bay Hydro Distribution Limited	6.98%	6.98%	0.00%	3.24%	7.54%	4.30%	6.16%	7.59%	1.43%
Peterborough Distribution Incorporated	11.04%	11.03%	-0.01%	12.60%	12.60%	0.00%	12.71%	12.70%	0.00%
Tillsonburg Hydro Inc.	-0.48%	-0.48%	0.00%	1.59%	1.56%	-0.03%	1.85%	1.84%	-0.01%
Veridian Connections Inc.	-2.68%	-2.70%	-0.01%	-1.59%	-1.60%	-0.01%	-2.41%	-2.42%	-0.01%
Waterloo North Hydro Inc.	8.20%	8.20%	0.00%	12.90%	9.85%	0.00%	10.71%	9.69%	-1.02%

Table 4

Summary of Stretch Factor Assignments

	2014-2016		2015-2	Change in	
	Benchmarking Performance	Stretch Factor	Benchmarking Performance	Stretch Factor	Stretch Factor
Alectra Utilities Corporation	-0.8%	0.30	1.6%	0.30	NO
Algoma Power Inc.	69.5%	0.60	69.8%	0.60	NO
Atikokan Hydro Inc.	5.6%	0.30	11.4%	0.45	YES
Bluewater Power Distribution Corporation	1.1%	0.30	2.3%	0.30	NO
Brantford Power Inc.	-4.7%	0.30	-6.2%	0.30	NO
Burlington Hydro Inc.	-10.3%	0.15	-11.1%	0.15	NO
Canadian Niagara Power Inc.	13.1%	0.45	12.6%	0.45	NO
Centre Wellington Hydro Ltd.	-1.3%	0.30	0.1%	0.30	NO
Chapleau Public Utilities Corporation	24.2%	0.45	20.6%	0.45	NO
Collus PowerStream Corp.	-13.9%	0.15	-15.3%	0.15	NO
Cooperative Hydro Embrun Inc.	-33.7%	0.00	-37.5%	0.00	NO
E.L.K. Energy Inc.	-39.7%	0.00	-39.5%	0.00	NO
Energy+ Inc.	-5.8%	0.30	-8.8%	0.30	NO
Entegrus Powerlines Inc.	-16.6%	0.15	-16.9%	0.15	NO
EnWin Utilities Ltd.	10.1%	0.45	8.3%	0.30	YES
Erie Thames Powerlines Corporation	6.9%	0.30	7.2%	0.30	NO
Espanola Regional Hydro Distribution Corporation	-22.2%	0.15	-21.4%	0.15	NO
Essex Powerlines Corporation	-13.5%	0.15	-14.0%	0.15	NO
Festival Hydro Inc.	14.7%	0.45	12.1%	0.45	NO
Fort Frances Power Corporation	5.8%	0.30	4.8%	0.30	NO
Greater Sudbury Hydro Inc.	10.9%	0.45	8.2%	0.30	YES
GRIMSBY POWER INCORPORATED	-15.7%	0.15	-18.3%	0.15	NO
Guelph Hydro Electric Systems Inc.	-4.6%	0.30	-4.1%	0.30	NO
Halton Hills Hydro Inc.	-29.0%	0.00	-28.0%	0.00	NO
Hearst Power Distribution Company Limited	-17.0%	0.15	-16.3%	0.15	NO
Hydro 2000 Inc.	-13.7%	0.15	-16.3%	0.15	NO
Hydro Hawkesbury Inc.	-66.3%	0.00	-63.6%	0.00	NO
Hydro One Networks Inc.	21.4%	0.45	17.4%	0.45	NO
Hydro Ottawa Limited	14.5%	0.45	15.8%	0.45	NO
Innpower Corporation	4.9%	0.30	7.4%	0.30	NO
Kenora Hydro Electric Corporation Ltd.	-9.1%	0.30	-8.5%	0.30	NO
Kingston Hydro Corporation	-3.2%	0.30	-2.5%	0.30	NO
Kitchener-Wilmot Hydro Inc.	-20.6%	0.15	-20.9%	0.15	NO
Lakefront Utilities Inc.	-19.0%	0.15	-21.5%	0.15	NO
Lakeland Power Distribution Ltd.	-7.0%	0.30	-11.8%	0.15	YES
London Hydro Inc.	-10.3%	0.15	-8.4%	0.30	YES
Midland Power Utility Corporation	13.6%	0.45	12.3%	0.45	NO
Milton Hydro Distribution Inc.	-0.6%	0.30	-4.1%	0.30	NO

Summary of Stretch Factor Assignments

Table 4

	2014-2016		2015-2	2015-2017			
	Benchmarking Performance	Stretch Factor	Benchmarking Performance	Stretch Factor	Change in Stretch Factor		
Newmarket-Tay Power Distribution Ltd.	-18.2%	0.15	-16.1%	0.15	NO		
Niagara Peninsula Energy Inc.	5.3%	0.30	4.3%	0.30	NO		
Niagara-on-the-Lake Hydro Inc.	-5.3%	0.30	-7.4%	0.30	NO		
North Bay Hydro Distribution Limited	6.2%	0.30	5.2%	0.30	NO		
Northern Ontario Wires Inc.	-37.8%	0.00	-38.9%	0.00	NO		
Oakville Hydro Electricity Distribution Inc.	6.7%	0.30	4.7%	0.30	NO		
Orangeville Hydro Limited	-7.3%	0.30	-10.7%	0.15	YES		
Orillia Power Distribution Corporation	-5.3%	0.30	-4.8%	0.30	NO		
Oshawa PUC Networks Inc.	-16.2%	0.15	-15.6%	0.15	NO		
Ottawa River Power Corporation	-8.7%	0.30	-9.8%	0.30	NO		
Peterborough Distribution Incorporated	12.7%	0.45	10.6%	0.45	NO		
PUC Distribution Inc.	14.9%	0.45	13.8%	0.45	NO		
Renfrew Hydro Inc.	10.5%	0.45	9.6%	0.30	YES		
Rideau St. Lawrence Distribution Inc.	-7.0%	0.30	-5.7%	0.30	NO		
Sioux Lookout Hydro Inc.	-0.5%	0.30	-5.2%	0.30	NO		
St. Thomas Energy Inc.	-8.1%	0.30	-10.9%	0.15	YES		
Thunder Bay Hydro Electricity Distribution Inc.	9.4%	0.30	10.7%	0.45	YES		
Tillsonburg Hydro Inc.	1.8%	0.30	0.0%	0.30	NO		
Toronto Hydro-Electric System Limited	51.2%	0.60	52.3%	0.60	NO		
Veridian Connections Inc.	-2.4%	0.30	-2.5%	0.30	NO		
Wasaga Distribution Inc.	-44.0%	0.00	-45.4%	0.00	NO		
Waterloo North Hydro Inc.	10.7%	0.45	9.2%	0.30	YES		
Welland Hydro-Electric System Corp.	-17.8%	0.15	-18.5%	0.15	NO		
Wellington North Power Inc.	14.1%	0.45	13.6%	0.45	NO		
West Coast Huron Energy Inc.	33.7%	0.60	31.7%	0.60	NO		
Westario Power Inc.	-4.3%	0.30	-3.4%	0.30	NO		
Whitby Hydro Electric Corporation	-3.8%	0.30	-2.2%	0.30	NO		

Table 5

Stretch Factor Assignments by Group

Group I	Group II	Gre	oup III	Group IV	Group V
Stretch Factor = 0%	Stretch Factor = 0.15%	Stretch Fa	actor = 0.30%	Stretch Factor = 0.45%	Stretch Factor = 0.60%
Cooperative Hydro Embrun Inc.	Burlington Hydro Inc.	Alectra Utilities Corporation	Milton Hydro Distribution Inc.	Atikokan Hydro Inc.	Algoma Power Inc.
E.L.K. Energy Inc.	Collus PowerStream Corp.	Bluewater Power Distribution Corporation	Niagara Peninsula Energy Inc.	Canadian Niagara Power Inc.	Toronto Hydro-Electric System Limited
Halton Hills Hydro Inc.	Entegrus Powerlines Inc.	Brantford Power Inc.	Niagara-On-The-Lake Hydro Inc.	Chapleau Public Utilities Corporation	West Coast Huron Energy Inc.
Hydro Hawkesbury Inc.	Espanola Regional Hydro Distribution Corporation	Centre Wellington Hydro Ltd.	North Bay Hydro Distribution Limited	Festival Hydro Inc.	
Northern Ontario Wires Inc.	Essex Powerlines Corporation	Energy+ Inc.	Oakville Hydro Electricity Distribution Inc.	Hydro One Networks Inc.	
Wasaga Distribution Inc.	Grimsby Power Incorporated	Enwin Utilities Ltd.	Orillia Power Distribution Corporation	Hydro Ottawa Limited	
	Hearst Power Distribution Company Limited	Erie Thames Powerlines Corporation	Ottawa River Power Corporation	Midland Power Utility Corporation	
	Hydro 2000 Inc.	Fort Frances Power Corporation	Renfrew Hydro Inc.	Peterborough Distribution Incorporated	
	Kitchener-Wilmot Hydro Inc.	Greater Sudbury Hydro Inc.	Rideau St. Lawrence Distribution Inc.	PUC Distribution Inc.	
	Lakefront Utilities Inc.	Guelph Hydro Electric Systems Inc.	Sioux Lookout Hydro Inc.	Thunder Bay Hydro Electricity Distribution Inc.	
	Lakeland Power Distribution Ltd.	InnPower	Tillsonburg Hydro Inc.		
	Newmarket-Tay Power Distribution Ltd.	Kenora Hydro Electric Corporation Ltd.	Veridian Connections Inc.	Wellington North Power Inc.	
	Orangeville Hydro Limited	Kingston Hydro Corporation	Waterloo North Hydro Inc.		
	Oshawa PUC Networks Inc.	London Hydro Inc.	Westario Power Inc.		
	St. Thomas Energy Inc.		Whitby Hydro Electric Corporation		
	Welland Hydro-Electric System Corp.				