

**IN THE MATTER** of the *Ontario Energy Board Act 1998*, Schedule B to the *Energy Competition Act*, 1998, S.O. 1998, c.15;

**AND IN THE MATTER OF** an Application by Guelph Hydro Electric Systems Inc. for an Order or Orders approving just and reasonable distribution rates and other service charges for the distribution of electricity, effective January 1, 2016.

**INTERROGATORIES**  
**FROM THE**  
**SCHOOL ENERGY COALITION**

**1-SEC-1**

Attached is a table comparing the most recent (2013) results of the 22 Ontario distributors that have more than 25,000, and less than 100,000, customers, including the Applicant. With respect to this comparison table:

- a. Please identify any distributors on the list that the Applicant feels are not appropriate comparators, and provide reasons for that conclusion.
- b. The OM&A per customer of the Applicant is the 4<sup>th</sup> highest, at about 114% of the average of the comparators. Please explain how the Applicant plans to improve its position on this metric relative to the comparators, and how those plans are consistent with the requested increase in OM&A per customer in this Application.
- c. The Distribution Revenue per customer of the Applicant is 11<sup>th</sup> highest, at 102% of the average of the comparators. Please provide any information available to the Applicant that explains its relatively high distribution revenue per customer relative to the comparators.
- d. Gross PP&E per customer (i.e. original cost of assets) is 7<sup>th</sup> lowest, at 86% of the average. Please provide any specifics of the asset mix of the Applicant that affect the validity and usefulness of this comparison.
- e. The “aging ratio” (i.e. ratio of net book value to original cost of assets) is the 2<sup>nd</sup> highest of the comparators, suggesting that the Applicant’s assets have a much lower average age relative to most of its peers. Please advise whether the Applicant believes the comparative data is sufficiently consistent to make this a reasonable conclusion. Please

provide any data available to the Applicant (other than information already included in the Distribution System Plan) that will assist the Board and the parties in understanding the relative age of the Applicant's assets, compared to other distributors.

- f. The three year average efficiency rating of the Applicant is the 10<sup>th</sup> worst of the comparator group, but has improved since 2010 and 2011. In light of the substantial increase in costs being proposed for the test year, what is the Applicant's current plan to improve its efficiency rating relative to comparator utilities? Please provide any documents planning or forecasting improvements in efficiency rating, or any of the components of the calculation, in the period 2016-2020.

### **1-SEC-2**

[Ex. 1/4] Please provide a breakdown of all costs incurred, or to be incurred, by the Applicant for customer engagement activities (including planning, implementation, regulatory compliance, and supervision) in each of 2014, 2015, and 2016 including but not limited to external costs such as consulting fees, and internal costs such as staff assigned to planning or implementation activities.

### **1-SEC-3**

[Ex. 1, App. 1-A] With respect to the Budget and Business Plan:

- a. Please advise the date of the budget and business plan document. Please advise the original date it was prepared and submitted to the Executive Management Team, any revisions from that date until the date it was submitted to the Board of Directors, the date it was approved by the Board of Directors, and any revisions subsequent to that date.
- b. P. 4. Please provide an update as to the timing of the long-term debt issuance. Please provide a copy of any letter, memorandum or other documentation that includes any estimate of the interest rate on that debt.
- c. P. 8. Please advise the "reasonable rate of return" that the shareholder expects.
- d. P. 11. Please confirm that the issuance of new debt at lower rates should reduce the revenue requirement for regulatory purposes, reduce the PILs, and increase the Rate of Return on Equity for the shareholder.
- e. P. 11. Please confirm that the weighted average distribution rate increase from 2015 to 2016 requested in the Application is 14.6% ( $\$4,084,908/28,027,320$ ), and that a 10% distribution rate increase would be \$1,282,176 less than requested. Please explain why the 2015 budget shows \$28,975 of net distribution revenue, but the Revenue Requirement Work Form shows revenue at current rates in 2016 of only \$28,027. Please disaggregate the impact of accounting adjustments, changes in billing determinants, and any other factors that cause 2016 revenue at current rates to be lower than 2015 net distribution revenue. Please provide a copy of the document presented to the Board of Directors that showed the 14.6% weighted average rate increase.
- f. P. 12. Please file the six year CDM plan referred to.

- g. P. 13. Please reconcile the OM&A per customer figures of \$282 in 2012 and \$310 in 2016, a 9.93% increase, with the OM&A per customer figures in \$258 in 2012 and \$305 in 2016 from Ex.4/2/1, Table 4-8, an 18.2% increase.

#### **1-SEC-4**

[Ex. 1, App. 1-B] With respect to the Customer Satisfaction Survey:

- a. P. 2. Please explain why this document is privileged. Please file the “written permission” referred to.
- b. P. 9. Please provide complete details, including all algorithms, on how the CEPr is calculated.
- c. P. 10. Please provide completed details, including all algorithms, on how the CEI is calculated.
- d. P.18. In light of the preference of a majority of the Applicant’s customers for a merger with other utilities, please provide details on the Applicant’s strategy to identify and complete transactions with potential merger partners.

#### **1-SEC-5**

[Ex. 1, App. 1-D] Please provide a detailed list of the main things the Applicant learned from the Online Customer Survey. Please divide the list into information that the Applicant knew prior to the survey, and had confirmed, and information that was new to the Applicant as a result of the survey. Please provide a summary of the Applicant’s intended future actions as a result of what was learned in the Online Customer Survey.

#### **1-SEC-6**

[Ex.1/1/1, p. 5] Please provide all documents evidencing the “extensive assessment” done to align the Application to the RRFE.

#### **1-SEC-7**

[Ex.1/1/1, p. 12] Please provide a detailed list of all collaborative activities carried out between the Applicant and neighbouring LDCs since 2012.

#### **1-SEC-8**

[Ex/1/2/2, p. 3] Please file the “benefit-risk analysis” prepared for each of the new full or part-time positions in 2015 and 2016.

#### **1-SEC-9**

[Ex. 1/2/2, p. 4] Please provide all documents used in the presentation of the 2016 budget to the Finance Audit Committee.

#### **1-SEC-10**

[Ex.1/2/4, p. 3] With respect to the Summary of Rate Base:

- a. Please confirm that the following figures are correct based on the working capital allowances included in the table and the regulatory after-tax income in Ex.1/5/2:

	2012	2013	2014
Rate Base	\$139,600	\$144,607	\$148,536
Deemed Equity	\$55,840	\$57,843	\$59,414
After Tax Profit	\$5,365	\$4,897	\$7,488
ROE	9.61%	8.47%	12.60%

- b. Please confirm that the following figures are correct based on recalculating the working capital at 7.5% rather than 15%, all other figures being the same:

	2012	2013	2014
Rate Base	\$127,243	\$130,893	\$133,751
Deemed Equity	\$50,897	\$52,357	\$53,500
After Tax Profit	\$5,365	\$4,897	\$7,488
ROE	10.54%	9.35%	14.00%

**1-SEC-11**

[Ex.1/2/5, p. 1] Please file the ‘well-developed succession plan’ referred to.

**1-SEC-12**

[Ex.1/2/6, p. 1] Please provide complete details of the basis of the forecast of 4.85% as the effective interest rate on the new debt. Please provide any benchmarking information the Applicant has on the current interest rates of A-rated electricity distributors.

**1-SEC-13**

[Ex.1/4] Please confirm that customer engagement has been a priority of the Applicant, and a mandate from its shareholder, since long before the RRFE. Please advise whether, in the view of the Applicant, the customer engagement activities of the Applicant prior to the RRFE were already compliant, or close to being compliant, with the requirements of the RRFE. Please confirm that, notwithstanding the existing customer engagement activities, the Applicant has a mandate from its shareholder and its Board of Directors to expand and intensify its customer engagement activities in the future.

**1-SEC-14**

[Ex.1/4/4, p. 13] Please advise what steps, if any, the Applicant has taken to licence, or otherwise make available, its website structure and functionality, and its mobile capabilities, to other electricity distributors in Ontario. If no such steps have been taken, please advise whether the Applicant has considered, or would be willing, to share its on-line advances with other LDCs, with or without payment of compensation.

**1-SEC-15**

[Ex.1/4/4, p. 62] At what point in any of its surveying, polling and other customer engagement did the Applicant advise its customers that it was proposing a 14.6% rate increase, and ask them if they support or oppose a rate increase of that magnitude?

**1-SEC-16**

[Ex.1/9/4, p. 3] With respect to the Scorecard at Table 1-59:

- a. Please file the “development plan” referred to under Key Strategic Objectives.
- b. Please provide an update on the status of the “Successful implementation of shared service for control room” and 24/7, additional LDC, stretch targets.
- c. Please provide the latest Quarterly tracking report for each metric.

**1-SEC-17**

[Ex.1/9/4, p. 9] Please file the most recent Shareholder Declaration, and each prior Shareholder Declaration dated on or after January 1, 2012.

**1-SEC-18**

[Ex.1, App. 1-R, 1-S, and 1-T] For each of these documents, please advise the authorship of the original document (e.g. corporate counsel, Board committee, etc.) and the original source or precedent from which the document was derived (e.g. EDA precedent, City policy, original work, multiple sources).

**2-SEC-19**

(Ex.2-1-1-p.2, Table 2-1) The Applicant is requesting inclusion in rate base of the Zigbee Chip initiative which the Board removed from rate base in 2012 and required the Applicant to record in a variance account for future cost recovery consideration. Specifically, in the EB-2011-0123 Decision, Page 9, the Board stated:

*“At the current time, it is clear that the Zigbee chip does not yet provide a benefit to ratepayers and it would therefore be inappropriate for the investment to be included in rate base.*

*The Board is of the view that it is preferable to consider the costs associated with the Zigbee chip, both the capital investment to date and the expected future costs required to fully put the chips into use in the context of the Board’s Smart Grid consultation on the development of a Smart Grid and/or CDM. The Board invites Guelph Hydro to avail itself of either of the existing or developing processes related to these areas such that the value proposition of the installed Zigbee chip technology can be more readily defined.*

*If, at a future point in time, Guelph Hydro determines that there is no potential for the Zigbee chip to provide any ratepayer benefit, Guelph has the option of requesting a prudence review to seek the recovery of its Zigbee chip investment on the basis that it acted prudently in making its investment in the Zigbee chip.*

a. Please provide a breakdown and description of all costs associated with the Zigbee chip initiative and confirm the amount to be included in the 2016 Opening Gross Fixed Assets balance.

b. Please discuss and define the current value proposition of the Zigbee chip.

**2-SEC-20**

(Ex. 2-1-1 p.8) In 2015 and 2016, the Applicant plans to extend the 2nd floor of 395 Southgate Drive primary place of business in order to better manage the increase in FTEs that are expected as part of its growth plan. The projected costs of the expansion are \$755,000 in 2015 and \$804,000 in 2016.

a. Please provide the current square footage of 395 Southgate Drive and the square footage of the proposed expansion.

b. Please discuss the Applicant's growth plan, the increase in FTEs expected and how the proposed expansion accommodates growth.

c. Please provide the square footage per FTE.

d. Please provide the cost benefit analysis to support the building expansion.

**2-SEC-21**

(Ex2-1-2 p. 8) The Application refers to an under-recovery of Capital Costs in the Applicant's 2012 Rebasing Application due to \$4.8 million in additional capital expenditures that were incurred for the Arlen TS due to higher overall projects costs and higher costs from Hydro One not adequately factored into the 2012 rate filing. At the 2012 CoS filing, a projected cost was estimated at \$14.8 million, but the final costs were \$19.6 million.

a. Please discuss the impact of the increased Arlen TS costs on the cost benefit analysis used in the 2012 filing to determine the favourable economics of the project.

b. Please provide the Applicant's assessment of prudence related to the increased costs for the Arlen TS investment.

**2- SEC-22**

(Ex. 2-2-2, p. 6, Table 2-22: Appendix 2-AA)

a. Please provide a listing of all projects that are considered discretionary.

b. Please provide a listing of the specific DSP projects in the Applicant's proposed 2016 capital budget that are driven by km or asset unit replacement such as pole replacement.

c. Please explain the negative values in the Table.

**2- SEC-23**

(Ex. 2, Appendix 2-A, p. 15 Table 0-1) Table 0-1 shows the Applicant's Capital Expenditure Plan. Please reproduce the table and variance analysis to include:

- a. The Board Approved capital budget amounts for 2012.
- b. The Applicant's internal proposed budget amounts for the years 2011, 2013 and 2014.
- c. The year to date actuals for 2015 and the forecast to year end.
- d. Please show system operations and system maintenance costs separately for each year.

**2- SEC-24**

(Ex. 2, Appendix 2-A, p. 15 Table 0-1)

- a. Please provide the total percentage of capital work that is contracted out by year.
- b. Please summarize the capital work activities that are contracted out.
- c. Please provide a cost comparison of in-house vs. contractor costs for the same work activities.

**2- SEC-25**

(Ex.2, Appendix 2-A, p. 36) The Applicant indicates it is moving from a new growth driven planning mode to an asset renewal mode. Please provide a summary of the key factors that are driving this change in planning mode.

**2- SEC-26**

(Ex.2, Appendix 2-A, p. 37) The Applicant indicates its System Renewal investments proposed in the DSP include proactive replacements to address targeted assets identified in the ACA and reactive investments allocated for replacements on failure. Please provide the split between proactive and reactive capital costs for the years 2011 to 2014 and the forecast for 2015, 2016 and 2017 to 2020.

**2- SEC-27**

(Ex. 2, Appendix 2-A, p.37) The Applicant states that based on the outcomes of its ACA with respect to system renewal requirements, it was determined that it has previously been underspending and to address this gap GHESI has been prudently ramping up its expenditures on system renewal.

- a. Please explain the basis for underspending on system renewal and provide the analysis and specific references to the ACA.
- b. In order to address the gap, please discuss the recommended level of spending by year and the timeframe required.

c. Please provide the specific assets that the Applicant currently runs to failure and discuss if this practice has changed in the last 5 years.

**2-SEC-28**

(Ex.2, Appendix 2-A, p. 38-39) The Applicant identifies sources of expected cost savings and efficiencies. Please provide the expected costs savings associated with each initiative over the forecast period and show any calculations.

**2- SEC-29**

(Ex.2, Appendix 2-A, p. 39) The Applicant indicates it is part of the Utilities Standard Forum (USF) group to standardize installation drawings for use in the projects in this DSP. Please provide further details on the assets the standards apply to and how standard installation drawings differ from the Applicant's current practice and leads to savings.

**2- SEC-30**

(Ex. 2, Appendix 2-A, p. 42, Table 5.2-4) Table 5.2-4 lists 21 different asset types in 2014. Does the Applicant have a typical asset replacement cost for each asset type? If yes, please provide.

**2- SEC-31**

(Ex. 2, Appendix 2-A, p.44) Please explain why concrete poles were previously not inspected.

**2- SEC-32**

(Ex. 2, Appendix 2-A, p.64) The evidence provides details of the Applicant's Customer Engagement Survey undertaken in 2014. Please summarize all of the changes made to the DSP as a result of specific input through Customer Engagement.

**2- SEC-33**

(Ex.2, Appendix 2-A, p. 69 Table5.2-12) Under Customer Focus, the Applicant identifies Customer Bill Impacts: Percentage Average Total Bill Impact and Average Dollar Impact as two additional metrics outside of the scorecard process.

a. Please discuss when these metrics were implemented by the Applicant.

b. Please provide the Applicant's bill impact targets at the distribution, delivery and total bill impact level for 2016 and beyond.

**2- SEC-34**

(Ex.2, Appendix 2-A, p. 69, Table5.2-12) Under Customer Focus, the Applicant identifies Power Quality and Electrical Disturbances as an additional metric outside of the scorecard process.

a. Please discuss how the Applicant collects data, and monitors and measures power quality and electrical disturbances for each customer type (residential, commercial and industrial).

b. Please discuss when this metric was implemented.

- c. Please explain how the metric is calculated and provide historical data for 2010-2014.
- d. Please provide the forecast Power Quality and Electrical Disturbances targets for 2016 and beyond.

**2- SEC-35**

(Ex. 2, Appendix 2-A, p.87)

- a. For each of the years 2010 to 2014, please provide the total customer hours of interruption and total customer interruptions.
- b. Please provide the same information as part (a) excluding loss of supply, Major Event Days and Scheduled Outages.
- c. Please provide Figures 5.2-6 and 5.2-7 with normalized SAIDI and SAIFI excluding Loss of Supply and also excluding Scheduled Outages.
- d. Please provide a table that shows the SAIDI and SAIFI impact of just Scheduled Outages for the years 2010 to 2014.

**2-SEC-36**

(Ex.2, Appendix 2-A, p. 91 Table 5.2-12)

- a. Please provide a table to show a further breakdown of defective equipment by providing the percentage attributable to each equipment failure cause code for each of the years 2010 to 2014.
- b. Please discuss if voltage sags and power quality issues are part of outage incidents that are included in the “unknown/Other” category.

**2-SEC-37**

(Ex.2, Appendix 2-A, p. 92 Table 5.2-14)

- a. Please provide a table that shows the percentage of overall outage incidents attributable to each cause code for each of the years 2010 to 2014.
- b. Please provide a table to show a further breakdown of defective equipment by providing the percentage attributable to each equipment failure cause code for each of the years 2010 to 2014.
- c. Please explain the reason for the high percentage of scheduled outages at 44%.

**2-SEC-38**

(Ex.2, Appendix 2-A, p. 93) Does the Applicant have a minimum DAI threshold that it considers necessary so that the data available for determining the health index is adequate? Please discuss.

**2-SEC-39**

(Ex.2, Appendix 2-A, p.95)

- a. Please provide the total cost per customer for 2010 and 2014 and forecast for 2015 and 2016.
- b. Please provide the total cost per km of line for 2010 and 2014 and forecast for 2015 and 2016.
- c. Please provide the Total Cost of MWh of Electricity Consumed for the years 2010 to 2014 and forecast for 2015 and 2016.

**2-SEC-40**

(Ex.2, Appendix 2-A, p. 101) The Applicant indicates that to reduce the impact of severe weather events it is installing additional and upgrading existing SCADA switches, and making improvements to construction standards in an effort to strengthen the system against significant weather events.

- a. Please provide the specific construction standards that are to be improved and how they will be improved.
- b. Please provide the analysis undertaken by the Applicant to support the proposal that making improvements to construction standards will strengthen the system against significant weather events.
- c. Please discuss the cost impact in 2016 and beyond due to improvements to construction standards.
- d. Has the Applicant had its existing construction standards reviewed by a 3<sup>rd</sup> party to determine if they are considered to be acceptable industry practice? Please provide details.

**2-SEC-41**

(Ex.2, Appendix 2-A, p.101) The Applicant indicates that underground cables reaching EOL are causing a significant number of outages and will become a cause of long outage events. Having recognized this, the Applicant has included plans in its DSP to proactively replace underground cables to minimize outages related to cable failures.

- a. Does the above statement refer to primary or secondary cable.
- b. Please provide the number of outages and customer hours of interruptions due to underground cable failures separately for primary and secondary cable for the years 2010 to 2014.
- c. Please confirm the End of Life (EOL) for primary and secondary underground cable.
- d. Please explain if EOL differs from Typical Useful Life (TUL).
- e. Please provide the percentage of total underground primary and secondary cable that is at or beyond EOL and show the calculation.

f. Please provide the health index ratings for this asset class.

g. Please provide the length of primary and secondary underground cable replaced between 2010 and 2014 and forecast for replacement for the years 2015 to 2020.

h. Please provide the cost to replace primary and secondary underground cable by year between 2010 and 2014 and forecast for replacement for each of the years 2015 to 2020.

i. Please list the specific capital projects proposed for the 2016 Test Year that include the replacement of primary underground cable and/or secondary underground cable.

**2-SEC-42**

(Ex.2, Appendix 2-A, p.101) The Applicant indicates that normalized SAIDI and SAIFI are within target values and reliability is not a major driver in this planning cycle. Please confirm the major drivers in this planning cycle and key outcomes.

**2-SEC-43**

(Ex.2, Appendix 2-A, p.103) Please quantify the efficiencies resulting from the implementation of operations technology/SCADA.

**2- SEC-44**

(Ex.2, Appendix 2-A, p. 119 Table 5.3-2) Please identify the assets where the frequency of the inspection cycle has changed in the last 5 years and provide an explanation of the change.

**2- SEC-45**

(Ex.2, Appendix 2-A, p. 123) The evidence provides a Process Description of how replacement costs are estimated that includes known counts and types of assets contained in each project area combined with generic estimates to replace each asset type. Please provide a specific example from the Applicant's 2016 System Renewal Capital Budget to illustrate how this process is used to estimate costs.

**2- SEC-46**

(Ref 1: Ex. 2, Appendix 2-A p. 130 Table 5.3-5)(Ref 2: Ex.2, Appendix 2-A, p.130 Table 5.3-3) Please reconcile the total number of each asset at Reference 1 with the asset quantities at Reference 2. For example, for wood poles the quantities are 9275 (Ref 1) compared to 10,105 (Ref 2).

**2- SEC-47**

(Ex.2, Appendix 2-A, p.133 Figure 5.3-3)

Please complete the attached Table to further quantify the Health Index Results for each asset category.

**2- SEC-48**

(Ex.2, Appendix 2-A, p. 134 Table 5.3-6) For each asset class in the Table, please provide the quantity of assets at or beyond end of life as a quantity and a percentage.

**2- SEC-49**

(Ex.2, Appendix 2-A, p. 151) The Applicant indicates it performs tree trimming on a three year rotation.

- a. Please advise how long tree trimming has been on a three year rotation.
- b. Please provide a summary of other vegetation management activities beyond tree trimming undertaken by the Applicant.
- c. Please provide a breakdown of the cost and unit quantities for each vegetation management activity (for example tree trimming km) that makes up the total vegetation management spending by year for the years 2010 to 2014 and forecast for 2015 and 2016, split between in-house and contracted services.

**2- SEC-50**

(Ex. 2, Appendix 2-A Page 159 Figure 5.4-2) Please reproduce the Figure to show the 2010-2015 Capital Expenditures by Category.

**2- SEC-51**

(Ex. 2, Appendix 2-A Page 163-166) SEC seeks to better understand the scope of the capital work to be undertaken in 2016. For each project heading listed under System Access, System Renewal and System Service, please identify the nature of the work (i.e overhead line renewal) and provide the total quantities of each key asset impacted by the work.

**2- SEC-52**

(Ex.2, Appendix 2-A, p. 163-166) Please complete the attached Table.

**2- SEC-53**

(Ex.2, Appendix 2-A, p. 190) The evidence discusses special attention that is given to projects that fall into specific asset replacement programs as follows:

- Concrete Distribution Poles
- Pole-Trans Rehabilitation
- Douglas Fir Distribution Poles
- Live Front Equipment Replacement
- Limited Access Areas Direct Buried Cable
- Poor Reliability Areas (Worst Performing Feeders)
- OH Pole Line Rebuilds
- Pad-Mounted Switchgear
- UG Cable Replacement - Unjacketed Cable
- Town House Rehabilitation - Live Front Equipment and Direct Buried Cable
- Rotten Pole Replacement Program
- UG Structures - Degrading Transformer Rooms and Manholes
- Overhead 3-Phase Transformers
- Overhead Double Cluster Switches

- Protective Device Replacement
- Transformer Upgrades

a. Please provide the historical expenditures and asset quantities for the above asset replacement programs.

b. Please discuss how the above asset replacement programs relate and are mapped to the Applicant's proposed 2016 Capital Expenditure Plan in Appendix 2-AA.

**2- SEC-54**

(Ex.2, Appendix 2-A) Please explain how the Applicant's DSP for the years 2016 to 2020 achieves continuous improvement in productivity and cost performance.

**2- SEC-55**

(Ex.2, Appendix 2-AA) Under System Renewal , for the Distribution System Replacement project (CREP), please provide the assets quantities renewed each year for the years 2011 to 2014 and forecast for 2015 and 2016.

**2- SEC-56**

(Ex.2, Appendix 2-AA) Under System Renewal , for the projects listed under Secondary Underground Cable please provide the asset quantities replaced by year for the years 2011 to 2014 and forecast for 2015 and 2016.

**2- SEC-57**

(Ex.2, Appendix 2-A, p.205) Please provide a breakdown of maintenance costs by year between Predictive Maintenance, Preventive Maintenance, Emergency Maintenance for the years 2011 to 2016.

**4-SEC-58**

[Ex.4/2/1, p. 5] Please confirm that the increase in OM&A per customer from 2012 Actual to 2016 forecast is 18.21%. Please confirm that, if the increase had been kept to inflation less productivity, it would be 5.72%, and that would result in total OM&A in the test year being lower by \$1,733,285. Please provide a detailed summary of all of the additional services and/or improved outcomes to be experienced by the Applicant's customers as a result of this incremental increase in cost, and break down, for each of those additional services or improved outcomes, the portion of that additional annual cost attributable to that change in service/outcome. By way of example, the Applicant has estimated the cost to go to a 24/7 control room to be some part of \$555,481 per year [Ex.4/3/1, p.14]. Please provide a full breakdown of the \$1,733,285, attaching each part of it to a change in service or outcome.

**4-SEC-59**

[Ex.4/3/1, p. 32] Please confirm the following total compensation per FTE calculations. Please advise what evidence the Applicant has to show that those amounts per FTE are comparable to other LDCs:

Comp/FTE	2012A	2016P	Inc.
Management	\$201,961	\$229,466	13.62%
Non-Management	\$155,484	\$185,747	19.46%
Total	\$171,017	\$200,450	17.21%

**4-SEC-60**

[Ex.4/3/1, p. 86] Please provide a table showing the number of employees at each age level from 18 to 70.

Submitted by the School Energy Coalition July 9, 2015.

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Jay Shepherd  
Counsel for School Energy Coalition

Company	# of Customers	OM&A/ Customer	DX. Rev/ Customer	Gross PPE/ Customer	Net PPE/ Customer	Aging Ratio	Efficiency Assessment					Cost per Customer	Cost per km of Line
							2010	2011	2012	2013	3 Year		
BLUEWATER POWER DISTRIBUTION CORPORATION	35,982	\$348.52	\$586.73	\$2,595.76	\$1,454.40	56.03%	-3.2%	1.7%	6.4%	5.9%	4.6%	646	29,017
BRANTFORD POWER INC.	38,543	\$229.54	\$410.02	\$2,432.12	\$1,546.89	63.60%	3.8%	-2.5%	4.7%	0.7%	0.9%	507	39,373
BURLINGTON HYDRO INC.	66,704	\$260.13	\$488.62	\$3,636.99	\$1,552.52	42.69%	-7.6%	-7.1%	-9.0%	-7.5%	-8.0%	587	25,773
CAMBRIDGE and NORTH DUMFRIES HYDRO INC.	52,212	\$274.72	\$529.45	\$3,925.69	\$1,999.24	50.93%	-10.1%	-7.8%	-3.3%	0.5%	-3.7%	624	28,714
CANADIAN NIAGARA POWER	28,584	\$310.04	\$677.89	\$4,599.85	\$2,862.47	62.23%	16.4%	15.6%	10.0%	13.8%	13.2%	726	20,275
ENTEGRUS	40,385	\$237.24	\$486.59	\$3,076.35	\$1,656.40	53.84%	-13.1%	-13.4%	-10.9%	-12.5%	-12.3%	531	22,407
ENWIN UTILITIES LTD.	86,018	\$263.76	\$597.17	\$2,690.54	\$2,387.23	88.73%	17.8%	16.8%	23.9%	10.3%	16.9%	652	48,500
ESSEX POWERLINES CORPORATION	28,400	\$212.94	\$413.98	\$2,329.64	\$1,514.47	65.01%	-17.0%	-17.1%	-12.6%	-17.2%	-15.7%	482	29,323
GREATER SUDBURY HYDRO INC.	47,074	\$258.34	\$577.89	\$3,987.62	\$1,577.16	39.55%	-2.4%	14.1%	16.7%	4.8%	11.9%	560	26,887
GUELPH HYDRO ELECTRIC SYSTEMS INC.	52,323	\$298.11	\$527.28	\$2,975.54	\$2,561.05	86.07%	12.4%	14.7%	-2.0%	0.8%	4.2%	608	28,952
KINGSTON HYDRO CORPORATION	27,098	\$258.89	\$499.49	\$2,285.16	\$1,411.87	61.78%	0.1%	2.2%	2.4%	3.7%	2.8%	517	38,667
KITCHENER-WILMOT	90,018	\$186.18	\$460.79	\$3,583.42	\$2,011.28	56.13%	-22.9%	-22.8%	-20.7%	-19.3%	-21.1%	466	22,062
MILTON HYDRO DISTRIBUTION INC.	34,073	\$247.59	\$460.40	\$3,477.35	\$1,783.50	51.29%	-4.1%	-3.0%	-37.6%	-4.5%	-15.7%	654	22,402
NEWMARKET-TAY	34,626	\$214.87	\$465.80	\$3,095.86	\$1,596.64	51.57%	-14.6%	-21.0%	-19.5%	-19.5%	-20.1%	543	22,272
NIAGARA PENINSULA ENERGY INC.	51,213	\$276.34	\$572.30	\$4,441.31	\$2,176.45	49.00%	5.4%	5.2%	10.2%	1.1%	5.4%	672	17,408
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	64,793	\$270.31	\$565.55	\$4,182.19	\$2,421.98	57.91%	7.6%	12.4%	10.6%	13.8%	12.0%	730	26,377
OSHAWA PUC NETWORKS INC.	53,969	\$207.71	\$363.15	\$2,981.88	\$1,436.07	48.16%	-21.7%	-18.0%	-14.5%	-17.4%	-16.7%	505	27,050
PETERBOROUGH DISTRIBUTION INCORPORATED	35,845	\$276.62	\$454.98	\$2,711.97	\$1,557.00	57.41%	14.0%	15.6%	13.2%	14.5%	14.4%	562	35,731
PUC DISTRIBUTION INC.	33,367	\$365.81	\$600.59	\$4,077.41	\$2,441.57	59.88%	-8.5%	-5.2%	13.4%	22.7%	10.2%	687	30,950
THUNDER BAY HYDRO	50,190	\$264.18	\$390.69	\$3,718.51	\$1,728.59	46.49%	9.6%	8.0%	-2.8%	8.2%	4.4%	585	25,631
WATERLOO NORTH HYDRO INC.	54,165	\$244.24	\$614.81	\$5,705.02	\$3,279.02	57.48%	-3.1%	6.4%	4.3%	10.6%	7.0%	728	25,066
WHITBY HYDRO ELECTRIC CORPORATION	41,200	\$266.29	\$580.23	\$3,591.16	\$1,671.05	46.53%	0.4%	-3.0%	-7.0%	-0.9%	-4.1%	642	24,806
<b>Averages of 22 Distributors</b>	<b>47,581</b>	<b>\$262.38</b>	<b>\$514.75</b>	<b>\$3,459.15</b>	<b>\$1,937.58</b>	<b>56.01%</b>	<b>-1.8%</b>	<b>-0.4%</b>	<b>-1.1%</b>	<b>0.6%</b>	<b>-0.4%</b>	<b>601</b>	<b>28,075</b>



**Interrogatory 2-SEC-**

Ex.2, Appendix 2-A, p. 163-166  
Ex. 2, Appenidx 2-A Appendix N

**Capital Investments Summary**

2011 2012 2013 2014 2015 2016

Appendix N

**SYSTEM ACCESS**

**Apartment, Commercial, Industrial Customer Connections (CACI)**

Apartment connections			174	230		
Total Length - # metres						
Cost						

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Commercial connections			72	67		
Total Length - # metres						
Cost						

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Industrial connectons			0	2		
Total Length - # metres						
Cost						

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<i>Total Cost</i>	600,858	546,155	544,823	1,035,517	628,053	646,894
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**Meter Installations**

Residential Meters - # meters						
Residential Meters - cost						

GS <50kW - # meters						
GS< 50kW - cost						

GS >50kW - # meters						
GS >50kW - cost						

<i>Total Cost</i>	1,342,946	567,148	422,899	389,899	1,010,000	415,000
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**Distribution System Modifications /  
Expansions for Customers (CMOD)**

# projects			2	4		
Total Length - # metres						
<i>Total Cost</i>	181,659	68,172	75,760	-10,230	761,407	784,249

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**Expansions for New Residential Subdivisions**

Total Length - # metres						
# lots						
<i>Total Cost</i>	796,412	1,409,933	1,642,688	861,802	1,401,224	1,443,261

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**New Residential Service Connections**

# service connections			307	309		
Total Length - # metres						
<i>Total Cost</i>	410,079	311,801	348,477	216,128	231,994	238,954

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**Expansions for New Residential Townhouse Subdivisions**

# townhouse units		235	127			
Total Length - # metres						
<i>Total Cost</i>	629,739	379,538	433,944	243,783	522,236	568,803

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**SYSTEM RENEWAL**

**Distribution System Transformer Replacement (CRTU)**

# of transformers						
<i>Total Cost</i>	144,433	91,051	151,523	322,307	306,013	315,193

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