

November 6, 2015

Ms. Kirsten Walli
Ontario Energy Board
PO Box 2319
27th Floor, 2300 Yonge Street
Toronto, Ontario M4P 1E4

Re: 2016 Cost of Service Application, Evidence Update
Board File No.: EB-2015-0061

Dear Ms. Walli,

On October 30, 2015, Entegrus Powerlines Inc. ("EPI") filed a letter with the Board highlighting four updates required to its previously filed Cost of Service Application evidence.

Of the four previously identified items, EPI has completed the following three of the updates, as noted below. Additionally EPI has updated for the most recent RPP release, which is further described below:

1. Streetlight Billing Determinants:

EPI has updated its Load Forecast to reflect the appropriate number of streetlight connections identified by way of the ongoing LED conversion project in the towns of Strathroy and Mount Brydges. EPI also updated the Load Forecast CDM savings to reallocate the appropriate expected 2015 CDM savings related to the streetlight project. In total, these changes do not affect the total predicted billed kWh. These updates have been update carried throughout the remainder of the impacted Application components.

2. Cost of Capital Parameters:

On October 15, 2015, the Board issued the 2016 Cost of Capital parameters. These changes moved the Weighted Average Cost of Capital ("WACC") from the placeholder percentage (as originally filed) of 6.48% to 6.28%. This change has been captured in EPI's Revenue Requirement Work Form Model ("RRWF") and results in a reduction to EPI's Revenue Requirement of \$181k.

3. Working Capital Allowance:

Upon further review of EPI's lead/lag study, EPI's third party consultant revised the Working Capital Allowance ("WCA") Factor from 8.22% to 8.14%. EPI has included a copy of the updated study in Attachment A to this letter. This change has been captured in EPI's RRWF Model and results in a reduction to EPI's Revenue Requirement of \$4k.

4. Cost of Power:

On October 15, 2015, the OEB issued the RPP Price Report for prices effective November 1, 2015. EPI has updated the RPP and Non-RPP prices utilized in its cost of power calculation from the May 1 placeholder rate (as originally filed) of \$102.10 to the November 1 rate of

\$107.28. This update is included in the Load Forecast Model and has been carried throughout the impacted Application components. This change represents a \$53k increase to EPI's Revenue Requirement.

At this time, EPI has not received the final LRAMVA report as it remains in process with a third party analysis firm. EPI anticipates filing the final LRAMVA report during the week of November 9th, including the necessary model updates and bill impacts. EPI does not expect these changes to be significant.

To assist with review of these updates, EPI has included the updated Models in Live Excel format and also in PDF format attached to this letter as follows:

Attachment B: EPI Load Forecast Model
Attachment C: Revenue Requirement Work Form Model
Attachment D: Cost Allocation Model
Attachment E: EPI Bill Impact Model

If you have any questions, please do not hesitate to contact us.

Regards,

[Original Signed By]

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ATTACHMENT A

EPI Lead/Lag Study

Prepared by Navigant Consulting Inc.



Determination of Working Capital Requirements

Prepared for:
Entegrus Powerlines, Inc.



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Project No. 181777
October 20, 2015

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Executive Summary

Purpose of Study

Navigant Consulting, Ltd. (“Navigant”) has been retained by Entegrus Powerlines, Inc. (“EPI” or “the Company”) to perform a lead-lag study using the most recent data available and to derive the Company’s working capital requirements for a historical 2014 “test” year. The purpose of this report is to provide the results of the lead-lag study and to determine the working capital requirements of the Company’s distribution business.

Summary of Results

Based upon the results of our analysis, Navigant recommends a level of working capital equal to 8.14% of Operation and Maintenance, Administrative Expenses (“OM&A”) and Cost of Power. The estimated level of working capital is based upon an analysis of the accounting records for 2014.

Table 1: 2014 to 2019 Working Capital Requirement associated with Distribution Operations

	2014	2015	2016	2017	2018	2019
Working Capital as a Percent of OM&A incl. Cost of Power	8.14%	8.14%	8.00%	8.00%	7.96%	7.93%
Total - Including HST	\$ 8,831,627	\$ 9,421,738	\$ 9,721,631	\$ 10,175,385	\$ 10,614,860	\$ 11,080,292

Definition of Working Capital

Working capital is the amount of funds required to finance the day-to-day operations of any ongoing entity including a regulated utility. Regulated utilities typically include working capital in rate base for ratemaking purposes. A lead-lag study is the most accurate basis for determination of working capital and was used by Navigant for this purpose.

Lead-Lag Study

A lead-lag study is often used by utilities to quantify the level of working capital they require in order to finance their ongoing business activities. A lead-lag study analyzes the time between the date customers receive service and the date that customers’ payments are available to the Company (or “lag”) and the time between the Company’s receipt of goods and services from its vendors and its payment for these goods and services at a later date (or “lead”).¹ “Leads” and “Lags” are both measured in days and are generally dollar-weighted. The dollar-weighted net lag (i.e., lag minus lead) days is then divided by 365 (or 366 if the year is a leap year) and then multiplied by the annual test year cash expenses to determine the amount of working capital required for operations. The resulting amount of working capital is then included as part of the Company’s rate base for the purpose of deriving revenue requirements.

¹ A positive lag (or lead) indicates that payments are received (or paid for) after the provision of a good or service.



Organization of the Report

Section I of this report discusses the lags associated with the Company's collections of revenues. Included in Section II is a description of the sources of such revenues and how they were treated for the purposes of deriving an overall revenue lag.

Section II presents a description of the various expenses and their attendant lead times. Included in the discussion on expense leads are the lead times on Cost of Power, Retailer Remittances, OM&A costs, Interest on Long-Term Debt, Payments in Lieu of Taxes, Debt Retirement Charges, and the Harmonized Sales Tax ("HST"). The methods used to calculate the expense lead times associated with each of the items, as well as the results from the application of the methods, are described in this section.

Section III presents the 2014 cash working capital requirements of EPI, Inc.'s distribution business including the working capital requirement associated with the HST.

Section IV of this report discusses the methods and assumptions used in determining the lead-lag approach. Included in Section I is a description of two key concepts; the mid-point method and the statutory approach for services and materials provided and expensed.

1. Revenue Lags

A Revenue Lag is the time difference between when service is provided to a customer and when customer payments for such services are available to the Company.

EPI's distribution business currently receives funds from retail customers, the Ontario Clean Energy Benefit (OCEB) and miscellaneous sources of revenue such as the sale of scrap materials. EPI currently takes into account the OCEB when billing customers and is reimbursed for OCEB through the settlement processes with the Independent Electricity System Operator (IESO). The OCEB is expected to cease December 31, 2015. OCEB was removed from retail revenues in this study to reflect this known and measurable change. EPI currently charges both residential and non-residential customers for the Debt Retirement Charge (DRC) and remits the DRC collected from customers to the Ontario Electricity Financial Corporation (OEFC). Ontario O.Reg 156/15 exempts residential customers from paying DRC on electricity consumed after December 31, 2015. DRC was removed from residential customers' retail revenues in this study to reflect this known and measurable change.

Retail customer Revenue Lag consists of four sequential components: a) Service Lag; b) Billing Lag; c) Collections Lag; and d) Payment Processing Lag. The lag times of each of these four components, when added together, results in the Retail Revenue Lag for the purpose of calculating the working capital requirements of the Company.

EPI also collects other revenues from pole rentals, scrap sales, and other misc. sources. Interviews with EPI staff and supporting data provided payment frequency and service periods for other revenues.

A table summarizing the components of the total revenue lag of 55.70 days which EPI incurs are summarized in Table 2 below:

Table 2: Components of Total Revenue Lag

Total Revenue Lag	Lag Days	Weighting Factor	Weighted Lag Days
Retail Revenue	55.34	99.54%	55.08
Other Revenues	132.61	0.46%	0.61
Total		100.00%	55.70

The lag times for each of the above components, when added together, results in the Retail Revenue Lag for the purpose of calculating the working capital requirements for EPI's business. The components are intended to represent a continuous process from the end date of the customer's previous billing cycle to the date in which the payment is available to EPI. Figure 1 below illustrates the start and end point for each component of EPI's retail revenue lag.

Figure 1: Retail Revenue Lag

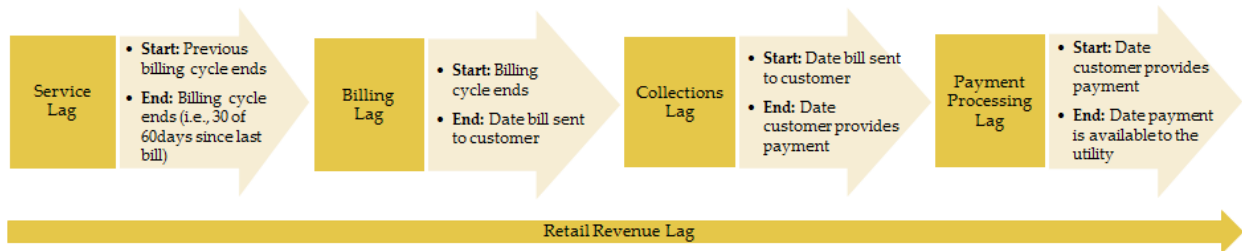


Table 3 summarizes the components of EPI' retail revenue lag.

Table 3: Components of Retail Revenue Lag

Component of Retail Revenue Lag	Lag Days
Service Lag	15.21
Billing Lag	17.42
Collections Lag	21.66
Payment Processing Lag	1.06
Total	55.34

The estimation of each component of the retail revenue lag is described below.

Service Lag

The Service Lag is the time from the Company's provision of electricity to a customer, to the time the customer's service period ends, which is typically defined as when the meter is read. Interviews with EPI staff indicated that all customers are on a monthly service schedule. Taking this information into account and using a mid-point methodology, the Service Lag was estimated to be 15.21 days.

Billing Lag

A Billing Lag is the time period between the end of a customer's service period and the time that the customer's bill is generated and provided to the customer. While customer consumption data was readily available subsequent to a meter read, interviews with EPI staff indicated that the key determinant of the Company's ability to provide a bill to its customer was the receipt of pricing data from the Ontario Independent Electricity System Operator ("IESO") which takes up to 10 business days. With this factored in, the Billing Lag is estimated to be 17.42 days.

Collections Lag

A Collections Lag measures the time period from when a customer's bill is provided, to the time period the customer provides a payment to the Company and when that payment is recorded in the Company's Billing System. This period of time is measured by analyzing the receivables aging data contained in receivables reports used by the Company for normal business purposes. Using such data provided by the Company for calendar year 2014, a dollar-weighted average collections lag of 21.66 days was determined for the Company's operations.

Payment Processing Lag

A Payment Processing Lag is the time period between the recording of a payment as having been received by the Company from a customer, and the payment being deposited into the Company's bank account. Based on interviews with EPI staff, it was discovered that different payment methods result in different dates in which the payment is received in the Company's bank account. Revenues by payment type were unavailable. As such, the number of accounts by payment type were used to calculate the weighted payment processing lag. The following payment processing methods were considered in this study:

- If the customer paid by pre-authorized payment, that payment is in the Company's bank account the same day, representing 62 percent of accounts;
- If the customer paid electronically, by internet or telephone banking, via a bank walk-in, by credit card, or in-person, that payment is in the Company's bank account the next business day, representing 32 percent of accounts; and,
- If the customer paid by external mail, that payment is in the Company's bank account five days after, representing five percent of accounts.

An overall Payment Processing Lag of 1.06 days is the result and was used in the determination of the Company's overall revenue lag time.

2. Expense Leads

An Expense Lead is the time period between when a good or service is provided to the Company and when the Company generally pays for that service. Expense Leads generally have both a Service Lead component (i.e., services are assumed to be provided to the Company evenly around the mid-point of the service period), and a Payment Lead component (i.e., the time period from the end of the service period to the time payment was made and the funds left the Company's possession). The following expenses were considered in this study:

- Cost of Power;
- Payroll, Withholdings, and Employee Benefits;
- Operations, Maintenance, and Administrative ("OM&A") Expenses;
- Payments in Lieu of Taxes;
- Debt Retirement Charge; and,
- Interest Expense.

The Company's benefits and costs in terms of the working capital requirement associated with the HST are discussed separately.

Cost of Power

The Company purchases its power supply requirements from three sources:

- IESO
- Hydro One
- Embedded generation

The Company primarily purchases its power supply on a monthly basis from the IESO and pays for such supplies on a schedule defined within the IESO's billing and settlement procedures. In addition, a large portion of the Company's service territory is embedded within Hydro One's system and payments are made monthly for withdrawal's from Hydro One's system. Finally, the Company makes payments to embedded generators for power generated within the customers' billing cycle. Using information on actual payments made by the Company in 2014, a dollar-weighted Expense Lead time of 33.40 days was quantified for the Company's cost of power procurements. A summary of the calculation for the cost of power expense lead time is shown in Table 4, below.

Table 4: Calculation of the Expense Leads associated with the Cost of Power

Category	Payment Amounts (\$M)	Weighted Lead Days	Weighting Factor	Weighted Expense Lead Days
Cost of Power Expense	\$92,380,128	32.71	92.91%	30.39
Cost of Power (Chatham-Kent) Charge	4,513,399	55.70	4.54%	2.53
Cost of Power (Middlesex Power) Charge	2,538,384	54.12	2.55%	1.38
Total	\$99,431,912		100.00%	34.30

Payroll, Withholdings, and Employee Benefits

The following items were considered under the umbrella of payroll, withholdings, and employee benefits:

- Regular Payroll;
- Board of Directors Payroll;
- Pensions;
- Group Life and Long Term Disability, Insurance Coverage;
- Accidental Death and Dismemberment Coverage; and,
- Group Health, Medical, Dental, and Vision Coverage.

When considered together and on a dollar-weighted basis, these items have an Expense Lead time of 24.37 days. A summary of the dollar-weighted expense lead time is provided in Table 5 below.

Table 5: Payroll, Withholdings, and Employee Benefits Expense Lead Times

Description	Payment Amount (\$M)	Total Lead Time	Weighting Factor	Weighted Lead Time (Days)
Payroll	\$3,826,671	20.16	50.11%	10.10
Payroll Withholding	1,435,736	30.11	18.80%	5.66
Board of Directors Payroll	21,256	26.58	.28%	.07
Board Withholding	1,869	33.80	.02%	.01
Pensions	1,444,162	44.03	18.91%	8.33
All Benefits	692,150	(7.39)	9.06%	(0.67)
Employees Health Tax	143,199	30.24	1.88%	0.57
WSIB	71,030	31.71	0.93%	0.29
Total	\$7,636,073		100.00%	24.37

Interviews with EPI staff indicated that all employees, excluding the Company's Board of Directors, are paid bi-weekly. Employees are paid on the Friday, two weeks following a Sunday pay period end. Withholdings such as the Canada Pension Plan, Employment Insurance, and Income Tax are remitted five days following the employee's pay date. EPI does not use a payroll administrator. In addition, executives, management and non-union staff are paid annual bonuses for performance in the prior year in January

and May and spot bonuses are paid to project team members upon successful completion of significant projects or initiatives. In 2014, spot bonuses were paid in July and October. Taking this information into account and using the Company's payroll and withholding data for 2014, a dollar-weighted Expense Lead time of 20.16 days was determined for payroll and 30.11 days for withholdings. This included a Service Lead time of 7.00 days (the mid-point of the bi-weekly pay cycle) and an 11.00 day Payment Lead time.

2.1.1 Board of Directors Payroll

EPI Board of Directors is paid monthly using a process similar to that of the Company's employees except that they are paid every second pay period. Similar to non-Board of Directors' pay, funds are transferred two weeks following pay period end and a payroll administrator is not used. Annual and spot bonuses are not paid to Board members. Taking this information into account and using the Company's payroll and withholding data for 2014, a dollar weighted Expense Lead time of 26.58 days was determined for payroll and 33.80 for withholdings.

2.1.2 Contributions to the Ontario Municipal Employee Retirement System ("OMERS")

EPI makes its contributions to the OMERS the month following the calendar month for which contributions need to be made. Using data on actual payment dates and payment amounts during 2014, a dollar-weighted Expense Lead time of 44.03 days was determined.

2.1.3 All Benefits

EPI pays premiums for all of its benefits under the same schedule. Payments are made the same month service is provided for Accidental Death and Dismemberment, Basic Life Insurance, Long-term Disability, Extended Health and Dental, and Global Medical Assistance Coverage. Based on interviews with EPI staff and data provided for payments made in 2014, a dollar-weighted expense lead for all benefits of negative 7.39 days was calculated. This included a Service Lead time of 15.50 days (the mid-point of the monthly service period) and an average of negative 22.58 day Payment Lead time.

OM&A Expenses

The following items were the categories under the umbrella of OM&A expenses in this study:

- Corporate Procurement Card;
- Leases;
- Pre-payments; and,
- Other Misc. OM&A;

These items were selected to be included within the umbrella of OM&A expenses because they represent activities typical to that undertaken by a regulated utility company. Further, the items when considered together represent a major share of the Company's non-power supply, payroll, and benefits related expenses.

When considered together and on a dollar-weighted basis, this basket of items has an Expense Lead time of (2.04) days for 2014. A summary of the calculation of the dollar-weighted expense lead time is provided in Table 6.

Table 6: Expense Lead Time associated with OM&A Expenses

Description	Payment Amount (\$M)	Total Lead Time	Weighting Factor	Weighted Lead Time (Days)
Procurement Cards	\$44,706	40.55	3.58%	1.45
Leases	31,983	(35.63)	2.55%	(0.91)
Prepayments	341,077	(143.16)	27.32%	(39.12)
Miscellaneous OM&A	830,588	54.90	66.54%	36.53
Total	\$1,248,263		100.00%	(2.04)

2.1.4 Corporate Procurement Card

During 2014, the Company's employees charge expenses to corporate procurement cards. Using data on actual payment dates and payment amounts during 2014, a dollar weighted expense lead time of 40.55 days was quantified. This lead time includes an assumed half-month or 15.21 days of service lead time.

2.1.5 Leases

During 2014, the Company held one lease for the Strathroy Administration Building. Leases are paid quarterly during the first month of the quarter. Using data on actual payment dates and payment amounts during 2014, a dollar weighted expense lead time of negative 35.63 days was quantified. This lead time includes an assumed half-quarter or 45.50 days of service lead time.

2.1.6 Pre-payments

During 2014, the Company made several pre-payments such as payments to the Ontario Energy Board and the Electricity Distributor's Association. Using data on actual payment dates for 85 percent of pre-payments and payment amounts for all pre-payments during 2014, a dollar weighted expense lead time of negative 143.16 days was quantified.

2.1.7 Other Misc. OM&A

During 2014, the Company had various other miscellaneous OM&A expenses, ranging from commercial cleaning, to consulting and attorney fees. Using data on actual payment dates for 66 percent of other miscellaneous OM&A expenses and payment amounts for all other miscellaneous OM&A expenses during 2014, a dollar weighted expense lead time of 54.90 days was quantified. This lead time includes an average service lead time of 24.06 days based on an investigation of actual service periods for 77 percent of other miscellaneous OM&A expenses.

Interest

The Company makes interest payments to the Municipality of Chatham-Kent for Notes Payable, an intercompany short term loan, and finally, interest payments on customer deposits. Taking this information into account, a dollar-weighted Expense Lag time of 11.71 days associated with interest expense was determined.

Debt Retirement Charge

The Company makes a debt reduction charge monthly to the Ontario Electricity Finance Corporation ("OEFC"). The payment for the current charge month is made during the middle of the following month. O.Reg 156/15 exempts residential customers from paying DRC on electricity consumed after December 31, 2015. This has been modeled as a known and measurable change and only DRC to non-residential customers is included in the model. Using the estimated non-residential payment amounts that were made in calendar year 2014 and actual payment dates from calendar year 2014, a dollar-weighted Expense Lead time of 19.67 days associated with the debt retirement charge was determined.

Payments in Lieu of Taxes ("PILS")

The Company made payments in lieu of taxes to the Provincial Government via the OEFC, (12) times in 2014 during the middle of the month. Two large estimated payments were made in January and February of 2014, with smaller monthly amounts made in the remaining months. A dollar weighted Expense Lead time of (94.38) days was determined. This Expense Lag time includes an average 182.50 days of Service Lead time, i.e., the mid-point of a year.

Harmonized Sales Tax (HST)

The Expense Lead times associated with the following items that attract HST were considered in the Navigant study:

- Customer Revenues including Cost of Power;
- Cost of Power; and,
- Aggregate OM&A.

A summary of the Expense Lead times associated with each of the above items is provided in Table 7, below. Note that the statutory approach described earlier in this report was used to determine the Expense Lead times associated with the Company's remittances and collections of HST, i.e., both remittances and collections are generally on the last day of the month following the date of the applicable billing period.

Table 7: Expense Lead Times associated with HST Payments (Receipts) - 2014

Description	Weighted HST Lead (Lag) Days	Working Capital Factor	Payment Amount (\$M)	Working Capital (\$M)
Customer Revenues including Cost of Power	(4.50)	-1.23%	\$ 135,242,466	\$ (216,573)
Cost of Power	43.68	11.97%	\$ 99,431,912	\$ 1,546,910
Aggregate OM&A Expenses	32.04	8.78%	\$ 1,487,441	\$ 16,974
Total			\$ 236,161,819	\$ 1,347,311

3. EPI, Inc.'s Working Capital Requirements Test

Having calculated the revenue lag, expense lead, and the net lag times, the next step in the process was to calculate the Company's working capital requirement. Using the results described under the discussion of revenue lags and expense leads, and applying them to the Company's expenses for 2014, the Company's working capital requirements are \$8,831,627. This amount represents 8.14% of the Company's OM&A expense including cost of power.

A summary of the Company's working capital requirements in 2014 is provided in Table 8 below. Included within the working capital amount shown in Table 7 is the HST benefit of \$1,347,311 for 2014.

Table 8: 2014 Working Capital Requirement associated with Distribution Operations

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Expenses (\$M)	Working Capital Requirement (\$M)
Cost of Power	55.70	34.30	21.39	5.86%	\$ 99,431,912	\$ 5,827,444
Aggregate OM&A Expenses	55.70	20.17	35.53	9.73%	\$ 9,123,515	\$ 888,086
Debt Retirement Charge	55.70	19.67	36.02	9.87%	\$ 4,446,884	\$ 438,876
PILS	55.70	(94.38)	150.07	41.12%	\$ 379,000	\$ 155,830
Interest Expense	55.70	11.71	43.99	12.05%	\$ 1,444,516	\$ 174,080
Total					\$ 114,825,826	\$ 7,484,316
HST						\$ 1,347,311
Total – including HST						\$ 8,831,627
Working Capital as a Percentage of OM&A including Cost of Power						8.14%

A summary of the Company's working capital requirements for 2015 to 2019 is provided in Table 9, below. The inputs are based on the Company's financial projections.

Table 9: 2014 to 2019 Working Capital Requirement associated with Distribution Operations

	2014	2015	2016	2017	2018	2019
Working Capital as a Percent of OM&A incl. Cost of Power	8.14%	8.14%	8.00%	8.00%	7.96%	7.93%
Total - Including HST	\$ 8,831,627	\$ 9,421,738	\$ 9,721,631	\$ 10,175,385	\$ 10,614,860	\$ 11,080,292

Appendix A. Approach Employed to Perform the Lead-Lag Study

Methodology Employed for Lead-Lag Study

Performing a lead-lag study requires two key undertakings:

- 1) Developing an understanding of how the regulated business works, i.e., in terms of products and services sold to customers or purchased from vendors and the collections, and payment policies and procedures that govern such transactions; and;
- 2) Modeling such operations using data from a relevant period of time and a representative data set. It is important to ascertain and factor into the study whether (or not) there are known changes to existing business policies and procedures going forward. Where such changes are known and material, they should be factored into the study.

To develop an understanding of the Company's operations, interviews were conducted with key contacts within the regulated utility. Some key questions that were addressed during the course of the interviews included:

- What is being sold (or bought)? If a service is being provided (purchased), over what time period was the service provided (or purchased)?;
- Who are the buyers (sellers)?;
- What are the terms for payment? Are the terms for payment driven by industry norms or by company policy? Is there flexibility in the terms for payment?;
- Are any changes expected to the terms for payment either driven by industry or internally by the Company? What is the basis for such changes (if any)?; and,
- How is payment made (e.g., cash, check, electronic funds transfer)?.

Except where otherwise noted, a calendar year 2014 data set was used in the analysis. Development of the data set entailed gathering raw data from the utility's General Accounting, Accounts Payable, Payroll, and Tax Systems. Once the raw data had been gathered from the multiple in-house systems, sampling and data validation was performed to the extent necessary and appropriate.

Key Concepts

Defined below, are two key concepts that are used throughout this lead-lag study:

Mid-Point Method

When a service is provided to (or by) the company over a period of time, the service is deemed to have been provided (or received) evenly over a period, unless specific information regarding the provision (or receipt) of that service is available indicating otherwise. If both the service end date and the service start date are known, the mid-point of a service period can be calculated using the formula:

$$\text{Mid-Point} = \frac{([\text{Service End Date} - \text{Service Start Date}] + 1)}{2}$$

When specific start and end dates are unknown, but it is known that a service is evenly distributed over the period, an alternative formula that is typically used is shown below. The formula uses the number of days in a year and the number of periods in a year:

$$\text{Mid-Point} = \frac{\frac{\text{Number of Days in a Year}}{\text{Number of Time Periods in a Year}}}{2}$$

Statutory Approach

In conjunction with the use of the mid-point method, it is important to note that not all areas of this study may utilize dates on which actual payments were made by the Company. In some instances, particularly the HST, the due date for payments are established by statute or by regulation with significant penalties in place for missing the due date. In these instances, the due date established by statute has been used in lieu of when payments were actually made.

ATTACHMENT B

EPI Load Forecast Model

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
2015 & 2016 kWh Purchases Forecast

Date	Historical Purchases	Large Lost kWh	Small Lost kWh	Corrected Historical kWh	Year	CK Heating Degrees	CK Cooling Degrees	Manufacturing (x 1,000)	Economic Adjustment Factor	Forecast kWh	Forecast % Error	Absolute Forecast % Error
2006-01	92,275,262	4,080,530	1,554,253	86,640,479	2006	514	-	48,705,740	0.42	89,216,823	2.974%	2.888%
2006-02	85,895,794	3,698,719	1,201,808	80,995,267	2006	578	-	48,533,977	(0.51)	84,073,449	3.800%	3.661%
2006-03	91,568,196	4,382,302	1,811,912	85,373,982	2006	512	-	51,567,190	0.06	88,743,770	3.947%	3.797%
2006-04	79,308,311	3,964,442	1,283,786	74,060,083	2006	298	-	49,484,981	(0.69)	77,945,996	5.247%	4.985%
2006-05	86,611,523	4,321,758	1,263,782	81,025,982	2006	146	29	50,769,986	(0.29)	83,257,082	2.754%	2.680%
2006-06	91,680,970	4,360,326	1,625,892	85,694,752	2006	36	40	51,542,946	0.37	87,939,718	2.620%	2.553%
2006-07	105,876,113	3,930,918	1,131,202	100,813,993	2006	6	126	45,043,016	1.13	101,718,967	0.898%	0.890%
2006-08	104,632,862	4,748,541	1,744,246	98,140,075	2006	10	67	50,664,482	1.54	99,017,333	0.894%	0.886%
2006-09	87,025,571	4,018,354	1,395,584	81,611,633	2006	89	8	48,620,316	0.61	83,409,333	2.203%	2.155%
2006-10	89,135,907	3,794,587	1,169,193	84,172,126	2006	294	2	48,023,316	0.23	83,405,159	-0.911%	0.920%
2006-11	91,093,979	3,731,626	1,118,962	86,243,392	2006	378	-	49,712,772	(0.02)	84,250,824	-2.310%	2.365%
2006-12	90,288,887	2,986,153	957,900	86,344,834	2006	492	-	48,603,292	0.05	86,214,597	-0.151%	0.151%
2007-01	94,700,936	3,572,942	1,116,756	90,011,238	2007	633	-	47,937,774	0.42	90,401,380	0.433%	0.433%
2007-02	91,441,925	3,562,267	888,613	86,991,045	2007	743	-	47,414,981	(0.51)	85,924,274	-1.226%	1.226%
2007-03	91,789,983	3,623,410	1,189,210	86,977,363	2007	485	-	51,609,130	0.06	87,614,683	0.733%	0.733%
2007-04	82,921,569	3,224,312	854,277	78,842,981	2007	352	-	49,374,218	(0.69)	78,299,796	-0.689%	0.689%
2007-05	85,875,464	3,090,739	686,928	82,097,798	2007	138	25	50,724,181	(0.29)	81,736,430	-0.440%	0.440%
2007-06	95,885,760	3,366,406	935,416	91,583,937	2007	30	66	48,667,556	0.37	89,318,916	-2.473%	2.473%
2007-07	95,780,411	3,496,125	640,251	91,644,035	2007	17	68	45,502,574	1.13	92,261,160	0.673%	0.673%
2007-08	106,146,791	4,247,266	1,013,037	100,886,488	2007	14	87	48,002,098	1.54	99,846,382	-1.031%	1.031%
2007-09	92,664,788	3,717,096	860,376	88,087,316	2007	64	40	46,749,201	0.61	86,109,318	-2.245%	2.245%
2007-10	89,956,146	3,438,961	866,901	85,650,284	2007	144	30	48,531,421	0.23	84,673,765	-1.140%	1.140%
2007-11	88,189,942	2,960,291	675,074	84,554,577	2007	446	-	48,279,982	(0.02)	83,963,402	-0.699%	0.699%
2007-12	88,023,622	2,804,858	569,647	84,649,117	2007	624	-	41,182,527	0.05	83,050,237	-1.889%	1.889%
2008-01	93,493,709	3,315,214	578,744	89,599,752	2008	637	-	42,681,474	0.42	86,197,066	-3.798%	3.798%
2008-02	89,086,654	3,234,025	798,075	85,054,553	2008	670	-	44,980,567	(0.51)	82,166,584	-3.395%	3.395%
2008-03	91,324,558	3,367,292	324,813	87,632,452	2008	607	-	44,399,361	0.06	84,383,598	-3.707%	3.707%
2008-04	82,206,529	3,326,521	272,733	78,607,276	2008	279	-	45,575,941	(0.69)	73,587,628	-6.386%	6.386%
2008-05	82,342,887	3,166,230	423,731	78,752,926	2008	212	4	46,853,489	(0.29)	76,531,028	-2.821%	2.821%
2008-06	94,261,624	3,589,957	324,925	90,346,742	2008	22	73	48,111,832	0.37	89,241,343	-1.224%	1.224%
2008-07	102,930,302	3,283,392	229,772	99,417,138	2008	9	97	46,431,669	1.13	96,937,180	-2.494%	2.494%
2008-08	95,324,173	3,144,913	519,978	91,659,282	2008	23	46	46,291,039	1.54	91,583,347	-0.083%	0.083%
2008-09	86,959,025	2,760,354	317,351	83,881,321	2008	65	25	46,613,408	0.61	82,999,381	-1.051%	1.051%
2008-10	81,389,670	2,369,885	468,384	78,551,400	2008	291	0	45,988,896	0.23	80,431,150	2.393%	2.393%
2008-11	82,439,299	2,358,680	367,796	79,712,822	2008	452	-	43,334,946	(0.02)	80,030,383	0.398%	0.398%
2008-12	84,813,533	2,136,379	299,356	82,377,798	2008	657	-	37,504,764	0.05	80,517,835	-2.258%	2.258%
2009-01	87,308,876	3,023,378	257,414	84,028,084	2009	872	-	33,349,265	0.42	83,729,171	-0.356%	0.356%

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2009-02	77,097,974	2,605,509	337,006	74,155,459	2009	610	-	35,341,102	(0.51)	73,676,689	-0.646%	0.646%
2009-03	79,993,358	2,599,571	251,363	77,142,423	2009	525	-	36,682,400	0.06	76,776,019	-0.475%	0.475%
2009-04	70,555,972	2,127,458	468,804	67,959,710	2009	307	2	36,521,367	(0.69)	67,502,694	-0.672%	0.672%
2009-05	67,517,058	2,083,264	440,550	64,993,245	2009	160	4	34,102,278	(0.29)	66,023,548	1.585%	1.585%
2009-06	72,770,575	1,692,830	292,499	70,785,246	2009	53	32	35,283,385	0.37	73,694,582	4.110%	4.110%
2009-07	76,889,947	654,890	281,046	75,954,011	2009	24	38	36,559,330	1.13	80,206,073	5.598%	5.598%
2009-08	87,060,730	677,717	267,655	86,115,358	2009	24	72	36,544,471	1.54	88,406,898	2.661%	2.661%
2009-09	77,242,678	682,957	256,989	76,302,732	2009	77	19	38,926,914	0.61	76,245,457	-0.075%	0.075%
2009-10	74,523,817	666,503	167,840	73,689,474	2009	291	-	38,337,783	0.23	74,475,560	1.067%	1.067%
2009-11	74,187,824	516,763	218,905	73,452,157	2009	353	-	38,015,352	(0.02)	73,757,071	0.415%	0.415%
2009-12	80,483,064	579,144	85,111	79,818,809	2009	634	-	37,905,631	0.05	79,718,783	-0.125%	0.125%
2010-01	84,309,599	620,679	-	83,688,920	2010	727	-	37,285,840	0.42	82,974,112	-0.854%	0.854%
2010-02	75,616,771	531,013	-	75,085,758	2010	637	-	38,195,753	(0.51)	75,553,735	0.623%	0.623%
2010-03	76,144,148	500,342	-	75,643,806	2010	453	-	41,328,149	0.06	77,963,867	3.067%	3.067%
2010-04	67,578,857	418,759	-	67,160,099	2010	246	-	40,413,693	(0.69)	68,112,756	1.418%	1.418%
2010-05	74,789,718	397,678	-	74,392,041	2010	117	20	41,055,161	(0.29)	71,952,595	-3.279%	3.279%
2010-06	84,514,689	383,438	-	84,131,251	2010	23	63	42,286,604	0.37	82,364,182	-2.100%	2.100%
2010-07	97,389,830	461,310	-	96,928,520	2010	7	136	38,393,943	1.13	96,343,760	-0.603%	0.603%
2010-08	98,212,442	273,585	-	97,938,858	2010	5	88	41,231,739	1.54	93,354,102	-4.681%	4.681%
2010-09	79,192,860	256,467	-	78,936,393	2010	88	35	41,624,078	0.61	80,359,449	1.803%	1.803%
2010-10	75,023,854	271,066	-	74,752,788	2010	224	-	41,735,406	0.23	74,870,180	0.157%	0.157%
2010-11	76,439,083	298,587	-	76,140,496	2010	414	-	40,600,131	(0.02)	76,123,810	-0.022%	0.022%
2010-12	81,766,622	377,747	-	81,388,875	2010	708	-	39,964,231	0.05	81,974,945	0.720%	0.720%
2011-01	83,706,926	384,377	-	83,322,549	2011	791	-	41,385,749	0.42	86,467,424	3.774%	3.774%
2011-02	75,367,135	349,597	-	75,017,537	2011	675	-	40,385,682	(0.51)	77,194,442	2.902%	2.902%
2011-03	80,344,898	340,424	-	80,004,474	2011	347	-	43,636,079	0.06	76,850,190	-3.943%	3.943%
2011-04	70,865,313	269,468	-	70,595,845	2011	341	-	40,502,825	(0.69)	69,420,452	-1.665%	1.665%
2011-05	72,286,372	252,421	-	72,033,951	2011	145	20	41,346,450	(0.29)	72,102,560	0.095%	0.095%
2011-06	79,668,878	239,946	-	79,428,932	2011	28	53	42,150,675	0.37	80,109,244	0.857%	0.857%
2011-07	98,736,540	254,827	-	98,481,713	2011	0	170	40,454,374	1.13	102,457,957	4.038%	4.038%
2011-08	93,571,080	256,562	-	93,314,518	2011	5	76	44,495,143	1.54	92,968,911	-0.370%	0.370%
2011-09	81,593,770	232,499	-	81,361,271	2011	78	33	44,495,209	0.61	81,100,090	-0.321%	0.321%
2011-10	76,273,618	224,362	-	76,049,255	2011	228	-	44,798,937	0.23	76,461,921	0.543%	0.543%
2011-11	77,445,743	224,929	-	77,220,814	2011	334	-	44,900,275	(0.02)	76,890,207	-0.428%	0.428%
2011-12	78,733,416	257,071	-	78,476,345	2011	508	-	44,435,561	0.05	80,499,545	2.578%	2.578%
2012-01	83,350,471	296,560	-	83,053,911	2012	613	-	44,700,072	0.42	84,623,234	1.890%	1.890%
2012-02	77,534,216	270,659	-	77,263,557	2012	530	-	42,889,850	(0.51)	75,451,148	-2.346%	2.346%

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2012-03	76,965,961	273,221	-	76,692,740	2012	321	-	46,011,356	0.06	77,348,441	0.855%	0.855%
2012-04	70,563,283	239,875	-	70,323,408	2012	329	-	45,391,465	(0.69)	71,953,233	2.318%	2.318%
2012-05	76,978,073	242,770	-	76,735,303	2012	85	19	47,528,183	(0.29)	74,347,318	-3.112%	3.112%
2012-06	87,498,949	228,550	-	87,270,400	2012	1	29	47,227,131	0.37	78,624,169	-9.907%	9.907%
2012-07	99,161,585	203,413	-	98,958,172	2012	-	116	42,833,426	1.13	94,702,062	-4.301%	4.301%
2012-08	91,562,639	236,207	-	91,326,432	2012	10	64	46,525,071	1.54	91,955,404	0.689%	0.689%
2012-09	79,318,222	221,821	-	79,096,400	2012	101	27	44,793,226	0.61	80,290,283	1.509%	1.509%
2012-10	76,122,125	224,739	-	75,897,386	2012	238	3	45,235,573	0.23	76,766,803	1.146%	1.146%
2012-11	77,701,976	291,203	-	77,410,773	2012	438	-	45,914,231	(0.02)	79,019,385	2.078%	2.078%
2012-12	76,850,465	282,595	-	76,567,870	2012	501	-	41,774,375	0.05	77,900,958	1.741%	1.741%
2013-01	83,735,388	285,594	-	83,449,794	2013	639	-	43,255,833	0.42	83,508,759	0.071%	0.071%
2013-02	76,915,646	315,743	-	76,599,903	2013	617	-	43,116,627	(0.51)	76,694,502	0.123%	0.123%
2013-03	78,384,467	283,012	-	78,101,455	2013	548	-	44,960,463	0.06	80,472,233	3.036%	3.036%
2013-04	72,681,683	197,773	-	72,483,911	2013	354	-	44,976,603	(0.69)	71,517,665	-1.333%	1.333%
2013-05	75,087,149	164,779	-	74,922,369	2013	123	35	46,651,790	(0.29)	76,477,792	2.076%	2.076%
2013-06	79,035,305	127,637	-	78,907,668	2013	42	59	45,335,122	0.37	82,452,600	4.493%	4.493%
2013-07	94,541,770	-	-	94,541,770	2013	11	106	44,400,265	1.13	93,745,720	-0.842%	0.842%
2013-08	89,781,915	-	-	89,781,915	2013	19	59	45,231,055	1.54	89,776,515	-0.006%	0.006%
2013-09	80,998,234	-	-	80,998,234	2013	89	31	45,667,260	0.61	80,585,358	-0.510%	0.510%
2013-10	79,087,294	-	-	79,087,294	2013	196	9	46,815,382	0.23	77,447,958	-2.073%	2.073%
2013-11	79,031,975	-	-	79,031,975	2013	453	-	46,503,422	(0.02)	79,097,117	0.082%	0.082%
2013-12	81,479,866	-	-	81,479,866	2013	649	-	44,126,783	0.05	81,817,664	0.415%	0.415%
2014-01	89,964,155	-	-	89,964,155	2014	826	-	43,836,746	0.42	86,975,598	-3.322%	3.322%
2014-02	79,548,214	-	-	79,548,214	2014	758	-	44,788,193	(0.51)	80,018,273	0.591%	0.591%
2014-03	85,916,309	-	-	85,916,309	2014	657	-	47,969,252	0.06	84,082,629	-2.134%	2.134%
2014-04	70,343,410	-	-	70,343,410	2014	342	-	47,134,140	(0.69)	72,158,883	2.581%	2.581%
2014-05	71,981,984	-	-	71,981,984	2014	141	14	49,398,644	(0.29)	74,733,965	3.823%	3.823%
2014-06	82,005,910	-	-	82,005,910	2014	19	74	48,856,376	0.37	86,139,183	5.040%	5.040%
2014-07	86,507,061	-	-	86,507,061	2014	16	49	44,707,267	1.13	84,380,055	-2.459%	2.459%
2014-08	87,881,428	-	-	87,881,428	2014	17	60	47,025,015	1.54	90,562,665	3.051%	3.051%
2014-09	80,675,294	-	-	80,675,294	2014	97	27	46,360,999	0.61	79,962,274	-0.884%	0.884%
2014-10	77,280,642	-	-	77,280,642	2014	232	-	47,176,114	0.23	76,293,182	-1.278%	1.278%
2014-11	79,307,673	-	-	79,307,673	2014	469	-	47,364,047	(0.02)	79,400,737	0.117%	0.117%
2014-12	79,700,907	-	-	79,700,907	2014	527	-	44,024,343	0.05	78,707,385	-1.247%	1.247%
2015-01				-	2015	678	-	46,204,336	0.42	85,071,392		
2015-02				-	2015	632	-	45,180,277	(0.51)	77,177,695		
2015-03				-	2015	475	-	47,788,634	0.06	79,737,788		

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2015-04				-	2015	313	0	47,471,476	(0.69)	71,231,064		
2015-05				-	2015	141	20	49,473,917	(0.29)	75,042,759		
2015-06				-	2015	29	52	48,624,109	0.37	81,980,972		
2015-07				-	2015	9	107	45,824,948	1.13	93,687,455		
2015-08				-	2015	14	70	48,200,640	1.54	92,223,141		
2015-09				-	2015	81	27	47,520,024	0.61	79,904,226		
2015-10				-	2015	238	5	48,355,517	0.23	77,491,800		
2015-11				-	2015	408	-	48,548,148	(0.02)	78,391,806		
2015-12				-	2015	597	-	45,124,952	0.05	80,224,394		
2016-01				-	2016	678	-	47,359,445	0.42	85,245,834		
2016-02				-	2016	632	-	46,309,784	(0.51)	77,334,368		
2016-03				-	2016	475	-	48,983,350	0.06	79,939,719		
2016-04				-	2016	313	0	48,658,263	(0.69)	71,427,492		
2016-05				-	2016	141	20	50,710,765	(0.29)	75,273,932		
2016-06				-	2016	29	52	49,839,711	0.37	82,197,400		
2016-07				-	2016	9	107	46,970,572	1.13	93,855,314		
2016-08				-	2016	14	70	49,405,656	1.54	92,432,221		
2016-09				-	2016	81	27	48,708,025	0.61	80,101,497		
2016-10				-	2016	238	5	49,564,405	0.23	77,703,567		
2016-11				-	2016	408	-	49,761,852	(0.02)	78,606,916		
2016-12				-	2016	597	-	46,253,076	0.05	80,380,107		

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Regression Analysis

<i>Regression Statistics</i>	
Multiple R	96.21%
R Square	92.56%
Adjusted R Square	92.19%
Standard Error	2145168.805
Observations	108

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	5	5.83832E+15	1.16766E+15	253.7433304	7.21755E-56
Residual	102	4.69378E+14	4.60175E+12	0	0
Total	107	6.30769E+15	0	0	0

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1,300,695,332	162,375,764	8	0	978,623,775	1,622,766,890	978,623,775	1,622,766,890
Time	(627,256)	80,627	(8)	0	(787,179)	(467,334)	(787,179)	(467,334)
Heating Degrees	19,738	1,186	17	0	17,385	22,090	17,385	22,090
Cooling Degrees	161,357	10,064	16	0	141,395	181,319	141,395	181,319
Manufacturing (x 1,000)	1	0	13	0	1	1	1	1
Economic Adjustment Factor	6,778,225	481,058	14	0	5,824,049	7,732,402	5,824,049	7,732,402

<i>Variable</i>	<i>T-Stat</i>
Intercept	8.0
Time	-7.8
Heating Degrees	16.6
Cooling Degrees	16.0
Manufacturing (x 1,000)	13.4
Economic Adjustment Factor	14.1

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
2016 Load Forecast Accuracy & Loss Factor

Forecast Accuracy				
Year	Actual Purchases	Modeled Purchases	Difference	Difference %
2006	1,095,393,373	1,049,193,051	46,200,322	0.0422
2007	1,103,377,336	1,043,199,743	60,177,593	0.0545
2008	1,066,571,963	1,004,606,523	61,965,440	0.0581
2009	925,631,873	914,212,545	11,419,328	0.0123
2010	970,978,474	961,947,493	9,030,981	0.0093
2011	968,593,688	972,522,943	(3,929,256)	(0.0041)
2012	973,607,964	962,982,436	10,625,528	0.0109
2013	970,760,692	973,593,882	(2,833,190)	(0.0029)
2014	971,112,987	973,414,830	(2,301,843)	(0.0024)
2015	-	972,164,493		
2016	-	974,498,367		

Determination of Loss Factor				
Year	Actual Purchases	Total Billed	Losses	Loss Factor
2006	1,095,393,373	1,078,222,399	17,170,974	1.0157
2007	1,103,377,336	1,055,654,062	47,723,274	1.0433
2008	1,066,571,963	1,021,199,819	45,372,144	1.0425
2009	925,631,873	886,643,741	38,988,132	1.0421
2010	970,978,474	932,206,593	38,771,881	1.0399
2011	968,593,688	938,179,332	30,414,356	1.0314
2012	973,607,964	936,088,111	37,519,853	1.0385
2013	970,760,692	928,696,615	42,064,077	1.0433
2014	971,112,987	933,911,819	37,201,168	1.0383
2015	-	934,838,752		1.0399
2016	-	937,083,018		1.0399

Notes:

1) Average Loss Factor utilized for 2015 and 2016 Total Billed calculation is the average of 2007 to 2014 actual loss factors.

Entegrus Powerlines Inc.

EB-2015-0061, Cost of Service Application

Forecast Number of Customer/Connections

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load (Conn)	Sentinel Lighting (Conn)	Street Lighting (Conn)	Embedded Distributor	Total
Restated Average Annual Customers/Connections										
2006	35,142	4,009	507	1	2	-	393	12,468	-	52,522
2007	35,190	4,001	513	3	1	-	394	12,468	1	52,571
2008	35,334	3,976	523	3	1	-	393	12,553	1	52,784
2009	35,438	3,919	517	3	1	122	390	12,784	1	53,175
2010	35,472	3,916	496	2	1	244	388	12,931	1	53,451
2011	35,628	3,907	490	1	1	245	388	12,931	1	53,592
2012	35,816	3,859	498	1	1	245	388	12,931	1	53,740
2013	35,944	3,862	499	1	1	248	441	12,931	1	53,928
2014	36,074	3,870	497	1	1	251	487	12,926	1	54,108
Average	35,560	3,924	504	2	1	151	407	12,769	1	53,319
Customer Growth Rate										
2006	-	-	-	-	-	-	-	-	-	
2007	1.0014	0.9980	1.0118	3.0000	0.5000	-	1.0025	1.0000	-	
2008	1.0041	0.9938	1.0195	1.0000	1.0000	-	0.9975	1.0068	1.0000	
2009	1.0029	0.9857	0.9885	1.0000	1.0000	-	0.9924	1.0184	1.0000	
2010	1.0010	0.9992	0.9594	0.6667	1.0000	2.0000	0.9949	1.0115	1.0000	
2011	1.0044	0.9977	0.9879	0.5000	1.0000	1.0041	1.0000	1.0000	1.0000	
2012	1.0053	0.9877	1.0163	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
2013	1.0036	1.0008	1.0020	1.0000	1.0000	1.0122	1.1366	1.0000	1.0000	
2014	1.0036	1.0021	0.9960	1.0000	1.0000	1.0121	1.1043	0.9996	1.0000	
Geomean	1.0036	0.9975	0.9921	0.8027	1.0000	1.1552	1.0454	1.0022	1.0000	
Forecasted Customers/Connections										
2015	36,203	3,860	493	1	1	290	509	12,955	1	54,313
2016	36,333	3,850	489	1	1	335	532	12,984	1	54,526

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Forecast Consumption by Rate Class (kWh)

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
Restated Consumption (kWh)										
2006	302,355,083	129,600,878	507,947,705	92,372,408	36,694,467	-	454,662	8,797,196	-	1,078,222,399
2007	299,638,406	126,763,870	498,423,262	89,275,102	27,015,842	-	445,369	8,797,782	5,294,429	1,055,654,062
2008	296,054,771	125,816,796	464,092,558	98,751,177	22,647,906	-	436,740	8,199,730	5,200,141	1,021,199,819
2009	291,091,689	114,518,667	395,794,984	53,009,042	17,181,839	1,158,647	440,153	8,235,437	5,213,283	886,643,741
2010	301,267,823	116,294,933	435,880,111	35,030,946	29,034,336	1,191,306	433,931	8,221,743	4,851,464	932,206,593
2011	299,495,986	116,705,566	444,705,629	28,996,883	34,298,990	1,249,000	353,837	8,221,874	4,151,567	938,179,332
2012	296,656,279	109,007,040	453,565,445	28,118,306	34,317,082	1,213,037	405,259	8,250,167	4,555,496	936,088,111
2013	281,071,800	105,791,729	456,115,509	39,427,413	32,247,068	1,228,666	410,160	7,792,246	4,612,024	928,696,615
2014	289,455,443	108,543,510	457,346,103	33,167,215	31,573,402	1,249,444	408,652	7,533,249	4,634,801	933,911,819
Average Consumption per Customer (kWh)										
2006	8,604	32,327	1,001,869	92,372,408	18,347,234	-	1,157	706	-	
2007	8,515	31,683	971,585	29,758,367	27,015,842	-	1,130	706	5,294,429	
2008	8,379	31,644	887,366	32,917,059	22,647,906	-	1,111	653	5,200,141	
2009	8,214	29,221	765,561	17,669,681	17,181,839	9,497	1,129	644	5,213,283	
2010	8,493	29,697	878,791	17,515,473	29,034,336	4,882	1,118	636	4,851,464	
2011	8,406	29,871	907,563	28,996,883	34,298,990	5,098	912	636	4,151,567	
2012	8,283	28,247	910,774	28,118,306	34,317,082	4,951	1,044	638	4,555,496	
2013	7,820	27,393	914,059	39,427,413	32,247,068	4,954	930	603	4,612,024	
2014	8,024	28,047	920,213	33,167,215	31,573,402	4,978	839	583	4,634,801	
Average Growth per Customer										
2006	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
2007	98.97%	98.01%	96.98%	32.22%	147.25%	0.00%	97.67%	100.00%	0.00%	
2008	98.40%	99.88%	91.33%	110.61%	83.83%	0.00%	98.32%	92.49%	98.22%	
2009	98.03%	92.34%	86.27%	53.68%	75.87%	0.00%	101.62%	98.62%	100.25%	
2010	103.40%	101.63%	114.79%	99.13%	168.98%	51.41%	99.03%	98.76%	93.06%	
2011	98.98%	100.59%	103.27%	165.55%	118.13%	104.42%	81.57%	100.00%	85.57%	
2012	98.54%	94.56%	100.35%	96.97%	100.05%	97.12%	114.47%	100.31%	109.73%	
2013	94.41%	96.98%	100.36%	140.22%	93.97%	100.06%	89.08%	94.51%	101.24%	
2014	102.61%	102.39%	100.67%	84.12%	97.91%	100.48%	90.22%	96.68%	100.49%	
Geomean	99.54%	99.18%	103.75%	104.58%	97.28%	87.88%	94.24%	98.03%	97.67%	
Forecasted Average Consumption per Customer (kWh)										
2015	7,987	27,818	954,684	34,686,292	30,713,726	4,375	791	572	4,526,975	
2016	7,950	27,591	990,446	36,274,944	29,877,457	3,845	745	561	4,421,657	

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Forecast Consumption by Rate Class (kWh)

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
Calculated Consumption Non-Weather Adjusted (kWh)										
2015	289,153,361	107,377,480	470,659,212	34,686,292	30,713,726	1,268,750	402,619	7,410,260	4,526,975	946,198,675
2016	288,847,350	106,225,350	484,328,094	36,274,944	29,877,457	1,288,075	396,340	7,284,024	4,421,657	958,943,291
Calculation of Weather Sensitive Load										
% of Load	67.0%	67.0%	33.9%							
2015	193,590,988	71,890,267	159,562,628	-	-	-	-	-	-	425,043,883
2016	193,386,110	71,118,905	164,196,645	-	-	-	-	-	-	428,701,661
Allocation of Weather Adjustment										
Percent	45.5%	16.9%	37.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2015	(5,174,004)	(1,921,373)	(4,264,546)	-	-	-	-	-	-	(11,359,923)
Percent	45.1%	16.6%	38.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2016	(9,861,107)	(3,626,482)	(8,372,684)	-	-	-	-	-	-	(21,860,273)
TOTAL NORMALIZED LOAD FORECAST										
2015	283,979,357	105,456,107	466,394,666	34,686,292	30,713,726	1,268,750	402,619	7,410,260	4,526,975	934,838,752
2016	278,986,243	102,598,868	475,955,410	36,274,944	29,877,457	1,288,075	396,340	7,284,024	4,421,657	937,083,018
CDM ADJUSTMENT										
2015	(932,216)	(912,092)	(2,332,226)	(13,760,034)	-	-	-	(420,765)	-	(18,357,333)
2016	(1,450,490)	(2,503,906)	(3,631,551)	(25,601,118)	-	-	-	(831,477)	-	(34,018,543)
WMP ADJUSTMENT										
2015			6,613,942							6,613,942
2016			6,861,699							6,861,699
TOTAL ADJUSTED WEATHER NORMALIZED LOAD FORECAST										
2015	283,047,141	104,544,015	470,676,382	20,926,258	30,713,726	1,268,750	402,619	6,989,495	4,526,975	923,095,361
2016	277,535,753	100,094,962	479,185,558	10,673,826	29,877,457	1,288,075	396,340	6,452,547	4,421,657	909,926,174

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Forecast Demand by Rate Class (kW)

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
Restated Demand (kW)										
2006	-	-	1,526,414	228,620	72,885	-	1,897	24,792	-	1,854,608
2007	-	-	1,319,003	206,603	57,865	-	1,234	31,812	10,733	1,627,250
2008	-	-	1,276,603	210,734	51,576	-	1,222	24,235	10,432	1,574,802
2009	-	-	1,131,642	158,060	38,952	-	1,217	24,546	10,438	1,364,855
2010	-	-	1,183,053	102,526	56,098	-	1,224	24,338	10,285	1,377,524
2011	-	-	1,189,083	68,609	63,856	-	980	24,338	11,258	1,358,124
2012	-	-	1,188,171	66,670	67,537	-	1,138	24,338	10,054	1,357,908
2013	-	-	1,223,255	87,871	67,914	-	1,130	23,008	9,926	1,413,104
2014	-	-	1,181,005	81,852	65,619	-	1,144	22,342	16,051	1,368,013
Average	-	-	1,246,470	134,616	60,256	-	1,243	24,861	9,909	1,477,354
Percentage of kW to kWh										
2006			0.300%	0.250%	0.200%		0.420%	0.280%	0.000%	
2007			0.260%	0.230%	0.210%		0.280%	0.360%	0.200%	
2008			0.280%	0.210%	0.230%		0.280%	0.300%	0.200%	
2009			0.290%	0.300%	0.230%		0.280%	0.300%	0.200%	
2010			0.270%	0.290%	0.190%		0.280%	0.300%	0.210%	
2011			0.270%	0.240%	0.190%		0.280%	0.300%	0.270%	
2012			0.260%	0.240%	0.200%		0.280%	0.300%	0.220%	
2013			0.270%	0.220%	0.210%		0.280%	0.300%	0.220%	
2014			0.260%	0.250%	0.210%		0.280%	0.300%	0.350%	
Average			0.266%	0.248%	0.200%		0.280%	0.300%	0.254%	
Total Demand Forecast (kW)										
2015	-	-	1,234,406	51,897	61,427	-	1,127	20,968	11,499	1,381,324
2016	-	-	1,256,381	26,471	59,755	-	1,110	19,358	11,231	1,374,306

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Calculation of CDM Adjustment for the Load Forecast

Allocation of Tasked Savings by Year							
Description	2015	2016	2017	2018	2019	2020	TOTAL
Planned Program Savings by Year							
2015 Programs	28,775,427	28,775,427	28,775,427	28,775,427	28,396,160	28,396,160	
2016 Programs		6,218,596	6,218,596	6,218,596	6,218,596	5,611,768	
2017 Programs		-	6,049,723	6,049,723	6,049,723	6,049,723	
2018 Programs		-	-	12,078,195	12,078,195	12,078,195	
2019 Programs		-	-	-	5,165,783	5,165,783	
2020 Programs		-	-	-	-	4,777,519	
Total Planned Programs	28,775,427	34,994,023	41,043,746	53,121,941	57,908,457	62,079,147	
Annual % of Planned	45.63%	9.86%	9.59%	19.15%	8.19%	7.58%	100.00%
Allocated Tasked Savings	25,916,720	5,600,807	5,448,710	10,878,282	4,652,586	4,302,895	56,800,000

Allocation of 2015 & 2016 Tasked Savings by Rate Class										
Description	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
Allocation of 2015 Tasked Savings										
New Framework Programs	145,989	508,864	421,417							1,076,270
Old Framework Programs	439,807	1,480,197	1,225,831	23,731,898				821,425		27,699,158
2015 Planned Savings	585,796	1,989,061	1,647,248	23,731,898	-	-	-	821,425	-	28,775,428
% Allocator	13.9%	47.1%	39.0%							
2015 Tasked Savings	189,164	642,305	531,927	23,731,898	-	-	-	821,425	-	25,916,720
Allocation of 2016 Tasked Savings										
New Framework Programs	1,008,064	2,850,161	2,360,371							6,218,596
2016 Planned Savings	1,008,064	2,850,161	2,360,371	-	-	-	-	-	-	6,218,596
% Allocator	16.21%	45.83%	37.96%							
2016 Tasked Savings	907,918	2,567,012	2,125,879	-	-	-	-	-	-	5,600,809

Calculation of Load Forecast Adjustment by Rate Class										
Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
2015 Load Forecast Adjustment										
2014 Programs (50%)	837,634	590,939	2,066,262	1,894,085		-	-	10,052	-	5,398,972
2015 Programs (50%)	94,582	321,153	265,964	11,865,949	-	-	-	410,713	-	12,958,361
Total	932,216	912,092	2,332,226	13,760,034	-	-	-	420,765	-	18,357,333
2016 Load Forecast Adjustment										
2014 Programs (50%)	807,367	578,095	2,036,684	1,869,220				10,052		5,301,419
2015 Programs (100%)	189,164	642,305	531,927	23,731,898	-	-	-	821,425	-	25,916,719
2016 Programs (50%)	453,959	1,283,506	1,062,940	-	-	-	-	-	-	2,800,405
Total	1,450,490	2,503,906	3,631,551	25,601,118	-	-	-	831,477	-	34,018,543

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Calculation of Wholesale Market Participant

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use (CK)	Large Use (SMP)	Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distributor	Total
Historical kWh										
2011			-							-
2012			1,862,328							1,862,328
2013			4,199,611							4,199,611
2014			6,375,131							6,375,131
Geometric Mean										
			103.75%							
Forecasted kWh										
2015			6,613,942							6,613,942
2016			6,861,699							6,861,699

Year	Residential	General Service < 50 kW	General Service > 50 kW	Large Use		Unmetered Scattered Load	Sentinel Lighting	Street Lighting	Embedded Distribution	Total
Historical kW										
2011			-							-
2012			4,198							4,198
2013			9,630							9,630
2014			17,662							17,662
Percentage kW/kWh										
2011										
2012			0.23%							
2013			0.23%							
2014			0.28%							
Average			0.24%							
Total kW Forecast										
2015			16,132							16,132
2016			16,737							16,737

Entegrus Powerlines Inc.
EB-2015-0061, Cost of Service Application
Historical and Weather Normalized Load Forecast

Description	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Forecasted	2016 Forecasted
Reconciliation of Purchases											
Actual kWh Purchases	1,095,393,373	1,103,377,336	1,066,571,963	925,631,873	970,978,474	968,593,688	973,607,964	970,760,692	971,112,987		
Predicted Purchases	1,049,193,051	1,043,199,743	1,004,606,523	914,212,545	961,947,493	972,522,943	962,982,436	973,593,882	973,414,830	972,164,493	974,498,367
CDM Adjustment (Not in Model)										(18,357,333)	(34,018,543)
Adjusted Predicted Purchases	1,049,193,051	1,043,199,743	1,004,606,523	914,212,545	961,947,493	972,522,943	962,982,436	973,593,882	973,414,830	953,807,160	940,479,824
Percent Difference from Actual	4.218%	5.454%	5.810%	1.234%	0.930%	-0.406%	1.091%	-0.292%	-0.237%		
Billed kWh	1,078,222,399	1,055,654,062	1,021,199,819	886,643,741	932,206,593	938,179,332	936,088,111	928,696,615	933,911,819	923,095,361	909,926,174
Billed kWh by Rate Class											
Residential											
Customers	35,142	35,190	35,334	35,438	35,472	35,628	35,816	35,944	36,074	36,203	36,333
kWh	302,355,083	299,638,406	296,054,771	291,091,689	301,267,823	299,495,986	296,656,279	281,071,800	289,455,443	283,047,141	277,535,753
kW	-	-	-	-	-	-	-	-	-	-	-
General Service < 50 kW											
Customers	4,009	4,001	3,976	3,919	3,916	3,907	3,859	3,862	3,870	3,860	3,850
kWh	129,600,878	126,763,870	125,816,796	114,518,667	116,294,933	116,705,566	109,007,040	105,791,729	108,543,510	104,544,015	100,094,962
kW	-	-	-	-	-	-	-	-	-	-	-
General Service > 50 kW											
Customers	507	513	523	517	496	490	498	499	497	495	491
kWh	507,947,705	498,423,262	464,092,558	395,794,984	435,880,111	444,705,629	453,565,445	456,115,509	457,346,103	470,676,382	479,185,558
kW	1,526,414	1,319,003	1,276,603	1,131,642	1,183,053	1,189,083	1,188,171	1,223,255	1,181,005	1,250,538	1,273,118
Large Use											
Customers	3	4	4	4	3	2	2	2	2	2	2
kWh	129,066,875	116,290,944	121,399,083	70,190,881	64,065,282	63,295,873	62,435,388	71,674,481	64,740,617	51,639,984	40,551,283
kW	301,505	264,468	262,310	197,012	158,624	132,465	134,207	155,785	147,471	113,324	86,226
USL											
Connections	-	-	-	122	244	245	245	248	251	290	335
kWh	-	-	-	1,158,647	1,191,306	1,249,000	1,213,037	1,228,666	1,249,444	1,268,750	1,288,075
kW	-	-	-	-	-	-	-	-	-	-	-
Sentinel Lighting											
Connections	393	394	393	390	388	388	388	441	487	509	532
kWh	454,662	445,369	436,740	440,153	433,931	353,837	405,259	410,160	408,652	402,619	396,340
kW	1,897	1,234	1,222	1,217	1,224	980	1,138	1,130	1,144	1,127	1,110
Street Lighting											
Connections	12,468	12,468	12,553	12,784	12,931	12,931	12,931	12,931	12,926	12,955	12,984
kWh	8,797,196	8,797,782	8,199,730	8,235,437	8,221,743	8,221,874	8,250,167	7,792,246	7,533,249	6,989,495	6,452,547
kW	24,792	31,812	24,235	24,546	24,338	24,338	24,338	23,008	22,342	20,968	19,358
Embedded Distributor											
Customers	-	1	1	1	1	1	1	1	1	1	1
kWh	-	5,294,429	5,200,141	5,213,283	4,851,464	4,151,567	4,555,496	4,612,024	4,634,801	4,526,975	4,421,657
kW	-	10,733	10,432	10,438	10,285	11,258	10,054	9,926	16,051	11,499	11,231
TOTAL											
Customers	52,522	52,571	52,784	53,175	53,451	53,592	53,740	53,928	54,108	54,315	54,528
kWh	1,078,222,399	1,055,654,062	1,021,199,819	886,643,741	932,206,593	938,179,332	936,088,111	928,696,615	933,911,819	923,095,361	909,926,174
kW	1,854,608	1,627,250	1,574,802	1,364,855	1,377,524	1,358,124	1,357,908	1,413,104	1,368,013	1,397,456	1,391,043

ATTACHMENT C

Revenue Requirement

Work Form Model



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers



Version 6.00

Utility Name	Entegrus Powerlines Inc.
Service Territory	
Assigned EB Number	EB-2015-0061
Name and Title	Andrya Eagen, Senior Regulatory Specialist
Phone Number	519-352-6300 Ext 243
Email Address	regulatory@entegrus.com

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While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

[1. Info](#)

[2. Table of Contents](#)

[3. Data Input Sheet](#)

[4. Rate Base](#)

[5. Utility Income](#)

[6. Taxes PILs](#)

[7. Cost of Capital](#)

[8. Rev Def Suff](#)

[9. Rev Req](#)

[10. Tracking Sheet](#)

Notes:

- (1) Pale green cells represent inputs
- (2) Pale green boxes at the bottom of each page are for additional notes
- (3) Pale yellow cells represent drop-down lists
- (4) ***Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.***
- (5) ***Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel***



Revenue Requirement Workform (RRWF) for 2016 Filers

Data Input ⁽¹⁾

	Initial Application	(2)	Adjustments	Interrogatory Responses	(6)	Adjustments	Per Board Decision
1 Rate Base							
Gross Fixed Assets (average)	\$143,730,124			\$ 143,730,124			\$143,730,124
Accumulated Depreciation (average)	(\$67,091,078)	(5)		(\$67,091,078)			(\$67,091,078)
Allowance for Working Capital:							
Controllable Expenses	\$9,762,015			\$ 9,762,015			\$9,762,015
Cost of Power	\$110,889,168		\$8,500,540 (A)	\$ 119,389,708			\$119,389,708
Working Capital Rate (%)	8.22%	(9)		8.14%	(9)		8.14% (9)
2 Utility Income							
Operating Revenues:							
Distribution Revenue at Current Rates	\$18,033,987		(\$3,783)	\$18,030,204			
Distribution Revenue at Proposed Rates	\$18,189,984		(\$135,648)	\$18,054,336			
Other Revenue:							
Specific Service Charges	\$327,731		\$0	\$327,731			
Late Payment Charges	\$250,000		\$0	\$250,000			
Other Distribution Revenue	\$436,738		\$0	\$436,738			
Other Income and Deductions	\$174,052		\$0	\$174,052			
Total Revenue Offsets	\$1,188,521	(7)	\$0	\$1,188,521			
Operating Expenses:							
OM+A Expenses	\$9,495,813			\$ 9,495,813			\$9,495,813
Depreciation/Amortization	\$3,849,791			\$ 3,849,791			\$3,849,791
Property taxes	\$243,162			\$ 243,162			\$243,162
Other expenses	\$23,040			23040			\$23,040
3 Taxes/PILs							
Taxable Income:							
Adjustments required to arrive at taxable income	(\$2,583,928)	(3)		(\$2,583,928)			
Utility Income Taxes and Rates:							
Income taxes (not grossed up)	\$117,534			\$113,242			
Income taxes (grossed up)	\$159,910			\$154,070			
Federal tax (%)	15.00%			15.00%			
Provincial tax (%)	11.50%			11.50%			
Income Tax Credits	(\$51,000)			(\$51,000)			
4 Capitalization/Cost of Capital							
Capital Structure:							
Long-term debt Capitalization Ratio (%)	56.0%			56.0%			
Short-term debt Capitalization Ratio (%)	4.0%	(8)		4.0%	(8)		(8)
Common Equity Capitalization Ratio (%)	40.0%			40.0%			
Preferred Shares Capitalization Ratio (%)							
	100.0%			100.0%			
Cost of Capital							
Long-term debt Cost Rate (%)	4.77%			4.54%			
Short-term debt Cost Rate (%)	2.16%			1.65%			
Common Equity Cost Rate (%)	9.30%			9.19%			
Preferred Shares Cost Rate (%)							

Notes:

- General** Data inputs are required on Sheets 3. Data from Sheet 3 will automatically complete calculations on sheets 4 through 9 (Rate Base through Revenue Requirement). Sheets 4 through 9 do not require any inputs except for notes that the Applicant may wish to enter to support the results. Pale green cells are available on sheets 4 through 9 to enter both footnotes beside key cells and the related text for the notes at the bottom of each sheet.
- (1) All inputs are in dollars (\$) except where inputs are individually identified as percentages (%)
- (2) Data in column E is for Application as originally filed. For updated revenue requirement as a result of interrogatory responses, technical or settlement conferences, etc., use column M and Adjustments in column I
- (3) Net of addbacks and deductions to arrive at taxable income.
- (4) Average of Gross Fixed Assets at beginning and end of the Test Year
- (5) Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount.
- (6) Select option from drop-down list by clicking on cell M10. This column allows for the application update reflecting the end of discovery or Argument-in-Chief. Also, the outcome of any Settlement Process can be reflected.
- (7) Input total revenue offsets for deriving the base revenue requirement from the service revenue requirement
- (8) 4.0% unless an Applicant has proposed or been approved for another amount.
- (9) The default Working Capital Allowance factor is 7.5% (of Cost of Power plus controllable expenses), per the letter issued by the Board on June 3, 2015. Alternatively, WCA factor based on lead-lag study or approved WCA factor for another distributor, with supporting rationale.
- (A) Update for November 1, 2015 RPP release.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Rate Base and Working Capital

Line No.	Particulars		Initial Application	Adjustments	Interrogatory Responses	Adjustments	Per Board Decision
1	Gross Fixed Assets (average)	(3)	\$143,730,124	\$ -	\$143,730,124	\$ -	\$143,730,124
2	Accumulated Depreciation (average)	(3)	(\$67,091,078)	\$ -	(\$67,091,078)	\$ -	(\$67,091,078)
3	Net Fixed Assets (average)	(3)	\$76,639,046	\$ -	\$76,639,046	\$ -	\$76,639,046
4	Allowance for Working Capital	(1)	\$9,917,527	\$595,423	\$10,512,950	\$ -	\$10,512,950
5	Total Rate Base		\$86,556,573	\$595,423	\$87,151,996	\$ -	\$87,151,996

(1) Allowance for Working Capital - Derivation

6	Controllable Expenses		\$9,762,015	\$ -	\$9,762,015	\$ -	\$9,762,015
7	Cost of Power		\$110,889,168	\$8,500,540	\$119,389,708	\$ -	\$119,389,708
8	Working Capital Base		\$120,651,183	\$8,500,540	\$129,151,723	\$ -	\$129,151,723
9	Working Capital Rate %	(2)	8.22%	-0.08%	8.14%	0.00%	8.14%
10	Working Capital Allowance		\$9,917,527	\$595,423	\$10,512,950	\$ -	\$10,512,950

Notes

- (2) Some Applicants may have a unique rate as a result of a lead-lag study. The default rate for 2016 cost of service applications is 7.5%, per the letter issued by the Board on June 3, 2015. Alternatively, a utility could conduct and file its own lead-lag study.
- (3) Average of opening and closing balances for the year.



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Utility Income

Line No.	Particulars	Initial Application	Adjustments	Interrogatory Responses	Adjustments	Per Board Decision
	Operating Revenues:					
1	Distribution Revenue (at Proposed Rates)	\$18,189,984	(\$135,648)	\$18,054,336	\$ -	\$18,054,336
2	Other Revenue (1)	\$1,188,521	\$ -	\$1,188,521	\$ -	\$1,188,521
3	Total Operating Revenues	\$19,378,505	(\$135,648)	\$19,242,857	\$ -	\$19,242,857
	Operating Expenses:					
4	OM+A Expenses	\$9,495,813	\$ -	\$9,495,813	\$ -	\$9,495,813
5	Depreciation/Amortization	\$3,849,791	\$ -	\$3,849,791	\$ -	\$3,849,791
6	Property taxes	\$243,162	\$ -	\$243,162	\$ -	\$243,162
7	Capital taxes	\$ -	\$ -	\$ -	\$ -	\$ -
8	Other expense	\$23,040	\$ -	\$23,040	\$ -	\$23,040
9	Subtotal (lines 4 to 8)	\$13,611,806	\$ -	\$13,611,806	\$ -	\$13,611,806
10	Deemed Interest Expense	\$2,386,884	(\$113,611)	\$2,273,273	\$130,031	\$2,403,303
11	Total Expenses (lines 9 to 10)	\$15,998,690	(\$113,611)	\$15,885,079	\$130,031	\$16,015,110
12	Utility income before income taxes	\$3,379,815	(\$22,037)	\$3,357,778	(\$130,031)	\$3,227,747
13	Income taxes (grossed-up)	\$159,910	(\$5,840)	\$154,070	\$ -	\$154,070
14	Utility net income	\$3,219,905	(\$16,197)	\$3,203,707	(\$130,031)	\$3,073,677

Notes

Other Revenues / Revenue Offsets

(1)	Specific Service Charges	\$327,731	\$ -	\$327,731		\$327,731
	Late Payment Charges	\$250,000	\$ -	\$250,000		\$250,000
	Other Distribution Revenue	\$436,738	\$ -	\$436,738		\$436,738
	Other Income and Deductions	\$174,052	\$ -	\$174,052		\$174,052
	Total Revenue Offsets	\$1,188,521	\$ -	\$1,188,521	\$ -	\$1,188,521



Revenue Requirement Workform (RRWF) for 2016 Filers

Taxes/PILs

Line No.	Particulars	Application	Interrogatory Responses	Per Board Decision
<u>Determination of Taxable Income</u>				
1	Utility net income before taxes	\$3,219,905	\$3,203,707	\$3,242,054
2	Adjustments required to arrive at taxable utility income	(\$2,583,928)	(\$2,583,928)	(\$2,583,928)
3	Taxable income	<u>\$635,977</u>	<u>\$619,780</u>	<u>\$658,127</u>
<u>Calculation of Utility income Taxes</u>				
4	Income taxes	<u>\$117,534</u>	<u>\$113,242</u>	<u>\$113,242</u>
6	Total taxes	<u>\$117,534</u>	<u>\$113,242</u>	<u>\$113,242</u>
7	Gross-up of Income Taxes	<u>\$42,376</u>	<u>\$40,829</u>	<u>\$40,829</u>
8	Grossed-up Income Taxes	<u>\$159,910</u>	<u>\$154,070</u>	<u>\$154,070</u>
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	<u>\$159,910</u>	<u>\$154,070</u>	<u>\$154,070</u>
10	Other tax Credits	(\$51,000)	(\$51,000)	(\$51,000)
<u>Tax Rates</u>				
11	Federal tax (%)	15.00%	15.00%	15.00%
12	Provincial tax (%)	11.50%	11.50%	11.50%
13	Total tax rate (%)	<u>26.50%</u>	<u>26.50%</u>	<u>26.50%</u>

Notes



Revenue Requirement Workform (RRWF) for 2016 Filers

Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate		Return	
		Initial Application					
		(%)	(\$)	(%)		(\$)	
	Debt						
1	Long-term Debt	56.00%		\$48,471,681	4.77%		\$2,312,099
2	Short-term Debt	4.00%		\$3,462,263	2.16%		\$74,785
3	Total Debt	60.00%		\$51,933,944	4.60%		\$2,386,884
	Equity						
4	Common Equity	40.00%		\$34,622,629	9.30%		\$3,219,905
5	Preferred Shares	0.00%		\$ -	0.00%		\$ -
6	Total Equity	40.00%		\$34,622,629	9.30%		\$3,219,905
7	Total	100.00%		\$86,556,573	6.48%		\$5,606,789
		Interrogatory Responses					
		(%)	(\$)	(%)		(\$)	
	Debt						
1	Long-term Debt	56.00%		\$48,805,118	4.54%		\$2,215,752
2	Short-term Debt	4.00%		\$3,486,080	1.65%		\$57,520
3	Total Debt	60.00%		\$52,291,198	4.35%		\$2,273,273
	Equity						
4	Common Equity	40.00%		\$34,860,799	9.19%		\$3,203,707
5	Preferred Shares	0.00%		\$ -	0.00%		\$ -
6	Total Equity	40.00%		\$34,860,799	9.19%		\$3,203,707
7	Total	100.00%		\$87,151,996	6.28%		\$5,476,980
		Per Board Decision					
		(%)	(\$)	(%)		(\$)	
	Debt						
8	Long-term Debt	56.00%		\$48,805,118	4.77%		\$2,328,004
9	Short-term Debt	4.00%		\$3,486,080	2.16%		\$75,299
10	Total Debt	60.00%		\$52,291,198	4.60%		\$2,403,303
	Equity						
11	Common Equity	40.00%		\$34,860,799	9.30%		\$3,242,054
12	Preferred Shares	0.00%		\$ -	0.00%		\$ -
13	Total Equity	40.00%		\$34,860,799	9.30%		\$3,242,054
14	Total	100.00%		\$87,151,996	6.48%		\$5,645,358

Notes

(1)

Data in column E is for Application as originally filed. For updated revenue requirement as a result of interrogatory responses, technical or settlement conferences, etc., use column M and Adjustments in column I



Revenue Requirement Workform (RRWF) for 2016 Filers

Revenue Deficiency/Sufficiency

Line No.	Particulars	Initial Application		Interrogatory Responses		Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$155,997		\$24,131		\$206,335
2	Distribution Revenue	\$18,033,987	\$18,033,987	\$18,030,204	\$18,030,204	\$18,030,204	\$17,848,001
3	Other Operating Revenue	\$1,188,521	\$1,188,521	\$1,188,521	\$1,188,521	\$1,188,521	\$1,188,521
	Offsets - net						
4	Total Revenue	\$19,222,508	\$19,378,505	\$19,218,726	\$19,242,857	\$19,218,726	\$19,242,857
5	Operating Expenses	\$13,611,806	\$13,611,806	\$13,611,806	\$13,611,806	\$13,611,806	\$13,611,806
6	Deemed Interest Expense	\$2,386,884	\$2,386,884	\$2,273,273	\$2,273,273	\$2,403,303	\$2,403,303
8	Total Cost and Expenses	\$15,998,690	\$15,998,690	\$15,885,079	\$15,885,079	\$16,015,110	\$16,015,110
9	Utility Income Before Income Taxes	\$3,223,818	\$3,379,815	\$3,333,647	\$3,357,778	\$3,203,616	\$3,227,747
10	Tax Adjustments to Accounting Income per 2013 PILs model	(\$2,583,928)	(\$2,583,928)	(\$2,583,928)	(\$2,583,928)	(\$2,583,928)	(\$2,583,928)
11	Taxable Income	\$639,890	\$795,887	\$749,719	\$773,850	\$619,688	\$643,819
12	Income Tax Rate	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
13	Income Tax on Taxable Income	\$169,571	\$210,910	\$198,676	\$205,070	\$164,217	\$170,612
14	Income Tax Credits	(\$51,000)	(\$51,000)	(\$51,000)	(\$51,000)	(\$51,000)	(\$51,000)
15	Utility Net Income	\$3,105,247	\$3,219,905	\$3,185,971	\$3,203,707	\$3,090,398	\$3,073,677
16	Utility Rate Base	\$86,556,573	\$86,556,573	\$87,151,996	\$87,151,996	\$87,151,996	\$87,151,996
17	Deemed Equity Portion of Rate Base	\$34,622,629	\$34,622,629	\$34,860,799	\$34,860,799	\$34,860,799	\$34,860,799
18	Income/(Equity Portion of Rate Base)	8.97%	9.30%	9.14%	9.19%	8.86%	8.82%
19	Target Return - Equity on Rate Base	9.30%	9.30%	9.19%	9.19%	9.30%	9.30%
20	Deficiency/Sufficiency in Return on Equity	-0.33%	0.00%	-0.05%	0.00%	-0.44%	-0.48%
21	Indicated Rate of Return	6.35%	6.48%	6.26%	6.28%	6.30%	6.28%
22	Requested Rate of Return on Rate Base	6.48%	6.48%	6.28%	6.28%	6.48%	6.48%
23	Deficiency/Sufficiency in Rate of Return	-0.13%	0.00%	-0.02%	0.00%	-0.17%	-0.19%
24	Target Return on Equity	\$3,219,905	\$3,219,905	\$3,203,707	\$3,203,707	\$3,242,054	\$3,242,054
25	Revenue Deficiency/(Sufficiency)	\$114,658	\$ -	\$17,736	\$ -	\$151,656	(\$168,378)
26	Gross Revenue Deficiency/(Sufficiency)	\$155,997 (1)		\$24,131 (1)		\$206,335 (1)	

Notes:

(1) Revenue Deficiency/Sufficiency divided by (1 - Tax Rate)



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Revenue Requirement

Line No.	Particulars	Application	Interrogatory Responses	Per Board Decision
1	OM&A Expenses	\$9,495,813	\$9,495,813	\$9,495,813
2	Amortization/Depreciation	\$3,849,791	\$3,849,791	\$3,849,791
3	Property Taxes	\$243,162	\$243,162	\$243,162
5	Income Taxes (Grossed up)	\$159,910	\$154,070	\$154,070
6	Other Expenses	\$23,040	\$23,040	\$23,040
7	Return			
	Deemed Interest Expense	\$2,386,884	\$2,273,273	\$2,403,303
	Return on Deemed Equity	\$3,219,905	\$3,203,707	\$3,242,054
8	Service Revenue Requirement (before Revenues)	<u>\$19,378,505</u>	<u>\$19,242,857</u>	<u>\$19,411,234</u>
9	Revenue Offsets	\$1,188,521	\$1,188,521	\$ -
10	Base Revenue Requirement (excluding Tranformer Owership Allowance credit adjustment)	<u>\$18,189,984</u>	<u>\$18,054,336</u>	<u>\$19,411,234</u>
11	Distribution revenue	\$18,189,984	\$18,054,336	\$18,054,336
12	Other revenue	\$1,188,521	\$1,188,521	\$1,188,521
13	Total revenue	<u>\$19,378,505</u>	<u>\$19,242,857</u>	<u>\$19,242,857</u>
14	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	<u>\$ - (1)</u>	<u>\$ - (1)</u>	<u>(\$168,378) (1)</u>

Notes

(1) Line 11 - Line 8



Ontario Energy Board

Revenue Requirement Workform (RRWF) for 2016 Filers

Tracking Form

The last row shown is the most current estimate of the cost of service data reflecting the original application and any updates provided by the applicant distributor (for updated evidence, responses to interrogatories, undertakings, etc.)

Please ensure a Reference (Column B) and/or Item Description (Column C) is entered. Please note that unused rows will automatically be hidden and the PRINT AREA set when the PRINT BUTTON on Sheet 1 is activated.

⁽¹⁾ Short reference to evidence material (interrogatory response, undertaking, exhibit number, Board Decision, Code, Guideline, Report of the Board, etc.)

⁽²⁾ Short description of change, issue, etc.

60 Tracking Rows have been provided below. If you require more, please contact Industry Relations @ IndustryRelations@ontarioenergyboard.ca.

Summary of Proposed Changes

		Cost of Capital		Rate Base and Capital Expenditures			Operating Expenses			Revenue Requirement			
Reference ⁽¹⁾	Item / Description ⁽²⁾	Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance (\$)	Amortization / Depreciation	Taxes/PILs	OM&A	Service Revenue Requirement	Other Revenues	Base Revenue Requirement	Grossed up Revenue Deficiency / Sufficiency
1	Original Application	\$ 5,606,789	6.48%	\$ 86,556,573	\$ 120,651,183	\$ 9,917,527	\$ 3,849,791	\$ 159,910	\$ 9,495,813	\$ 19,378,505	\$ 1,188,521	\$ 18,189,984	\$ 155,997
	Update Nov6/15, Part 1	Update Cost of Capital Parameters	\$ 5,439,561	6.28%	\$ 86,556,573	\$ 120,651,183	\$ 9,917,527	\$ 3,849,791	\$ 146,179	\$ 9,495,813	\$ 19,197,546	\$ 1,188,521	\$ 18,009,025

ATTACHMENT D

Cost Allocation Model

Sheet I6.1 Revenue Worksheet -

Miscellaneous Revenue (RRWF 5. cell F48)	1,188,521
--	-----------

[illegible]



2016 Cost Allocation Model

EB-2015-0061

Sheet I6.2 Customer Data Worksheet -

			1	2	3	6	7	8	9	10
	ID	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor
Billing Data										
Bad Debt 3 Year Historical Average	BDHA	\$145,378	\$118,690	\$19,946	\$6,742	\$0	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$261,775	\$158,188	\$37,488	\$65,587		\$511			
Number of Bills	CNB	504,539	448,587	49,894.00	5,950.00	24.00	72.00			12
Number of Devices	CDEV						12,984	532	335	
Number of Connections (Unmetered)	CCON	3,743					2,876	532	335	
Total Number of Customers	CCA	40,682	36,333	3,850	490	2	6	-	-	1
Bulk Customer Base	CCB	-	-	-	-	-	-	-	-	-
Primary Customer Base	CCP	41,478	36,333	3,850	490	2	802	-	-	1
Line Transformer Customer Base	CCLT	41,387	36,333	3,850	401	-	802	-	-	1
Secondary Customer Base	CCS	40,652	36,333	3,850	462	-	6	-	-	1
Weighted - Services	CWCS	45,059	36,333	5,594	1,265	-	1,219	505	142	-
Weighted Meter -Capital	CWMC	11,866,352	7,423,326	2,631,798	1,759,970	51,258	-	-	-	-
Weighted Meter Reading	CWMR	5,316	4,747	504	65	-	-	-	-	-
Weighted Bills	CWNB	525,472	448,587	49,894	26,775	132	72	-	-	12

Bad Debt Data

Historic Year:	2012	129,320	95,304	27,862	6,154					
Historic Year:	2013	129,867	119,601	8,077	2,189					
Historic Year:	2014	176,948	141,167	23,898	11,883					
Three-year average		145,378	118,690	19,946	6,742	-	-	-	-	-

Street Lighting Adjustment Factors

NCP Test Results	4 NCP
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	Primary Asset Data		Line Transformer Asset Data	
Class	Customers/ Devices	4 NCP	Customers/ Devices	4 NCP
Residential	36,333	288,947	36,333	288,947
Street Light	12,984	6,379	12,984	6,379

Street Lighting Adjustment Factors	
Primary	16.1871
Line Transformer	16.1871

2016 Cost Allocation Model

EB-2015-0061

Sheet O1 Revenue to Cost Summary Worksheet -

Instructions:
Please see the first tab in this workbook for detailed instructions

Class Revenue, Cost Analysis, and Return on Rate Base

Rate Base Assets		Total	1	2	3	6	7	8	9	10
			Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor
crev mi	Distribution Revenue at Existing Rates	\$18,030,204	\$10,650,679	\$2,530,011	\$4,401,498	\$106,949	\$245,286	\$48,477	\$45,830	\$1,474
	Miscellaneous Revenue (mi)	\$1,188,521	\$778,745	\$138,959	\$228,982	\$17,904	\$17,743	\$3,846	\$2,325	\$16
	Miscellaneous Revenue Input equals Output									
	Total Revenue at Existing Rates	\$19,218,726	\$11,429,424	\$2,668,970	\$4,630,480	\$124,853	\$263,030	\$52,322	\$48,155	\$1,490
	Factor required to recover deficiency (1 + D)	1.0013								
	Distribution Revenue at Status Quo Rates	\$18,054,333	\$10,664,932	\$2,533,397	\$4,407,388	\$107,092	\$245,615	\$48,542	\$45,891	\$1,476
	Miscellaneous Revenue (mi)	\$1,188,521	\$778,745	\$138,959	\$228,982	\$17,904	\$17,743	\$3,846	\$2,325	\$16
	Total Revenue at Status Quo Rates	\$19,242,854	\$11,443,677	\$2,672,356	\$4,636,371	\$124,997	\$263,358	\$52,387	\$48,216	\$1,492
	Expenses									
di cu ad dep INPUT INT	Distribution Costs (di)	\$2,291,914	\$1,174,345	\$254,694	\$727,953	\$88,841	\$31,327	\$9,625	\$5,082	\$48
	Customer Related Costs (cu)	\$3,239,804	\$2,616,549	\$391,529	\$213,929	\$3,128	\$11,301	\$2,034	\$1,281	\$54
	General and Administration (ad)	\$4,230,297	\$2,846,548	\$495,592	\$763,047	\$75,415	\$34,581	\$9,698	\$5,325	\$90
	Depreciation and Amortization (dep)	\$4,163,542	\$2,272,023	\$565,306	\$1,148,387	\$108,100	\$46,207	\$14,788	\$8,423	\$307
	PILs (INPUT)	\$166,887	\$88,874	\$20,218	\$49,243	\$5,187	\$2,222	\$723	\$410	\$9
	Interest	\$2,462,383	\$1,311,314	\$298,316	\$726,571	\$76,531	\$32,792	\$10,672	\$6,056	\$131
	Total Expenses	\$16,554,827	\$10,309,654	\$2,025,655	\$3,629,130	\$357,202	\$158,430	\$47,541	\$26,576	\$638
	Direct Allocation									
	NI		(\$782,191)	(\$457,758)	(\$107,240)	(\$215,943)	(\$1,251)	\$0	\$0	\$0
Allocated Net Income (NI)		\$3,470,219	\$1,848,026	\$420,414	\$1,023,952	\$107,855	\$46,213	\$15,039	\$8,534	\$184
Revenue Requirement (includes NI)		\$19,242,854	\$11,699,922	\$2,338,830	\$4,437,139	\$463,806	\$204,643	\$62,581	\$35,110	\$823
Revenue Requirement Input equals Output										
Rate Base Calculation										
Net Assets										
dp gp accum dep co	Distribution Plant - Gross	\$126,256,135	\$67,200,302	\$15,543,006	\$37,599,104	\$3,625,076	\$1,514,911	\$483,476	\$282,809	\$7,451
	General Plant - Gross	\$25,871,105	\$13,711,263	\$3,114,249	\$7,657,577	\$841,068	\$361,239	\$117,559	\$66,709	\$1,440
	Accumulated Depreciation	(\$70,091,672)	(\$36,970,179)	(\$8,641,727)	(\$21,142,243)	(\$2,058,737)	(\$847,935)	(\$266,420)	(\$159,640)	(\$4,791)
	Capital Contribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Net Plant	\$82,035,568	\$43,941,386	\$10,015,528	\$24,114,438	\$2,407,407	\$1,028,215	\$334,616	\$189,878	\$4,100
Directly Allocated Net Fixed Assets										
COP		(\$5,396,523)	(\$3,158,184)	(\$739,871)	(\$1,489,839)	(\$8,628)	\$0	\$0	\$0	\$0
	Cost of Power (COP)	\$119,389,708	\$36,661,365	\$13,222,145	\$62,490,593	\$5,356,662	\$852,356	\$52,355	\$170,150	\$584,083
	OM&A Expenses	\$9,762,015	\$6,637,443	\$1,141,815	\$1,704,929	\$167,383	\$77,208	\$21,358	\$11,688	\$192
	Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal	\$129,151,723	\$43,298,807	\$14,363,959	\$64,195,522	\$5,524,046	\$929,564	\$73,713	\$181,837	\$584,275
	Working Capital	\$10,512,950	\$3,524,523	\$1,169,226	\$5,225,515	\$449,657	\$75,667	\$6,000	\$14,802	\$47,560
Total Rate Base	\$87,151,995	\$44,307,724	\$10,444,884	\$27,850,114	\$2,848,436	\$1,103,882	\$340,616	\$204,680	\$51,660	
Rate Base Input equals Output										
Equity Component of Rate Base										
		\$34,860,798	\$17,723,090	\$4,177,953	\$11,140,046	\$1,139,375	\$441,553	\$136,246	\$81,872	\$20,664
Net Income on Allocated Assets		\$3,470,219	\$1,591,782	\$753,941	\$1,223,183	(\$230,955)	\$104,928	\$4,846	\$21,640	\$854
Net Income on Direct Allocation Assets		(\$266,511)	(\$155,969)	(\$36,539)	(\$73,577)	(\$426)	\$0	\$0	\$0	\$0
Net Income		\$3,203,707	\$1,435,812	\$717,402	\$1,149,606	(\$231,381)	\$104,928	\$4,846	\$21,640	\$854
RATIOS ANALYSIS										
REVENUE TO EXPENSES STATUS QUO%										
		100.00%	97.81%	114.26%	104.49%	26.95%	128.69%	83.71%	137.33%	181.43%
EXISTING REVENUE MINUS ALLOCATED COSTS										
		(\$24,129)	(\$270,498)	\$330,141	\$193,341	(\$338,953)	\$58,386	(\$10,258)	\$13,045	\$668
Deficiency Input equals Output										
STATUS QUO REVENUE MINUS ALLOCATED COSTS		(\$0)	(\$256,245)	\$333,526	\$199,232	(\$338,810)	\$58,714	(\$10,194)	\$13,106	\$670
RETURN ON EQUITY COMPONENT OF RATE BASE		9.19%	8.10%	17.17%	10.32%	-20.31%	23.76%	3.56%	26.43%	4.13%



Ontario Energy Board

2016 Cost Allocation Model

EB-2015-0061

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet -

Output sheet showing minimum and maximum level for
Monthly Fixed Charge

Summary

Customer Unit Cost per month - Avoided Cost

Customer Unit Cost per month - Directly Related

Customer Unit Cost per month - Minimum System
with PLCC Adjustment

Existing Approved Fixed Charge

1	2	3	6	7	8	9	10
Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Sentinel	Unmetered Scattered Load	Embedded Distributor
\$6.53	\$12.90	\$54.75	\$342.64	\$0.30	\$0.30	\$0.31	\$3.88
\$10.58	\$19.43	\$86.16	\$488.16	\$0.57	\$0.57	\$0.57	\$7.37
\$19.54	\$29.87	\$101.60	\$383.08	\$3.60	\$9.67	\$5.24	\$39.64
\$18.04	\$31.88	\$108.26	\$2,615.41	\$1.43	\$7.48	\$10.75	\$122.86

ATTACHMENT E

Bill Impact Model

Entegrus Powerlines Inc.
2016 Cost of Service Application, EB-2015-0061
Bill Impact Summary

Line No.	Rate Class	Type	Typical kWh	Typical kW	2015 Final Rates by Rate Zone	2016 Proposed Rates Combined	\$ Increase (Decrease)	% Increase (Decrease)
1	CK							
2	Residential	RPP	800	-	\$137.72	\$137.56	-\$0.16	-0.12%
3	General Service < 50 kW	RPP	2,000	-	\$342.08	\$322.26	-\$19.82	-5.79%
4	General Service > 50 - 4,999 kW	Non-RPP	162,500	500	\$23,971.55	\$25,030.76	\$1,059.21	4.42%
5	General Service > 50 - 4,999 kW (From Intermediate)	Non-RPP	1,825,000	2,500	\$252,413.68	\$247,785.13	-\$4,628.55	-1.83%
6	Large Use (From Intermediate w/Self Gen)	Non-RPP	2,763,935	7,200	\$406,026.52	\$395,194.35	-\$10,832.17	-2.67%
7	Unmetered Scattered Load	RPP	150	-	\$31.98	\$29.02	-\$2.96	-9.25%
8	Sentinel Lighting	RPP	150	1	\$32.23	\$30.91	-\$1.31	-4.08%
9	Street Lighting	Non-RPP	150	1	\$27.03	\$25.92	-\$1.11	-4.11%
10	Embedded Distribution (From General Service > 50 kW)	Non-RPP	368,500	14	\$49,881.06	\$49,831.65	-\$49.41	-0.10%
11	SMP							
12	Residential	RPP	800	-	\$140.96	\$137.56	-\$3.40	-2.42%
13	General Service < 50 kW	RPP	2,000	-	\$316.43	\$322.26	\$5.83	1.84%
14	General Service > 50 - 4,999 kW	Non-RPP	162,500	500	\$23,322.91	\$25,030.76	\$1,707.85	7.32%
15	Large Use	Non-RPP	2,631,117	5,500	\$360,296.17	\$358,714.76	-\$1,581.40	-0.44%
16	Unmetered Scattered Load	RPP	150	-	\$31.35	\$29.02	-\$2.33	-7.44%
17	Sentinel Lighting	RPP	150	1	\$70.09	\$30.91	-\$39.18	-55.90%
18	Street Lighting	Non-RPP	150	1	\$23.28	\$25.92	\$2.63	11.31%
19	Dutton							
20	Residential	RPP	800	-	\$142.11	\$137.88	-\$4.22	-2.97%
21	General Service < 50 kW	RPP	2,000	-	\$328.59	\$323.07	-\$5.52	-1.68%
22	General Service > 50 - 4,999 kW (From General Service < 50 kW)	RPP	440,000	96	\$63,341.66	\$54,431.67	-\$8,909.99	-14.07%
23	Sentinel Lighting	RPP	150	1	\$30.29	\$30.91	\$0.62	2.04%
24	Street Lighting	Non-RPP	150	1	\$30.26	\$28.77	-\$1.48	-4.90%
25	Newbury							
26	Residential	RPP	800	-	\$145.03	\$139.43	-\$5.60	-3.86%
27	General Service < 50 kW	RPP	2,000	-	\$347.89	\$326.94	-\$20.95	-6.02%
28	General Service > 50 - 4,999 kW	Non-RPP	162,500	500	\$25,258.36	\$24,778.14	-\$480.22	-1.90%
29	Street Lighting	Non-RPP	150	1	\$31.14	\$27.77	-\$3.37	-10.83%