

Exhibit 3:

Operating Revenue

Table of Contents

Table of Contents.....	2
List of Attachments	3
3.1 Overview	4
3.2 Load Forecast	5
3.2.1 Overview	5
3.2.2 Load and Customer/Connection Forecasts.....	5
3.2.3 Billed Demand Load Forecast	6
3.2.4 CDM Related Adjustments.....	7
3.2.5 LRAMVA Baseline Calculation	8
3.2.6 Wholesale Market Participants.....	8
3.2.7 Summary of 2017 and 2018 Load Forecast.....	9
3.3 Accuracy of Load Forecast and Variance Analysis	10
3.3.1 Overview	10
3.3.2 Distribution Revenue Variance Analysis	10
3.3.3 2017/2018 Distribution Revenue at Existing Rates	17
3.3.4 Test Year Distribution Revenue at Proposed Rates	18
3.4 Other Revenue	19
3.4.1 Overview	19
3.4.2 Other Revenue Variance Analysis	20
3.4.3 Specific Service Charges.....	38
3.4.4 Affiliate Transactions	39
3.4.5 Generation Revenues.....	40

1 **List of Attachments**

2 3-A. EPLC Load Forecast

3 3-B. Load Forecast CDM Adjustment Work Form

4 3-C. EPLC CDM Plan 2015-2020

5 3-D Customer, Connections, Load Forecast and Revenues Data and Analysis

6 3-E. Other Operating Revenue

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3.1 Overview

Exhibit 3 is intended to provide details of Essex Powerlines Corporation's ("EPLC") operating revenues for 2010 (Board Approved), 2010 through 2016 (Actual), 2017 (Bridge Year) and 2018 (Test Year). Further, this Exhibit provides a detailed analysis of variances by rate classification for the components of operating revenue.

EPLC is proposing a total Service Revenue Requirement of \$13,162,895 for the 2018 Test Year which includes a Base Revenue Requirement of \$12,471,074 plus Other Revenue of \$691,821. Further details are included in Section 3.4.

3.2 Load Forecast

3.2.1 Overview

EPLC retained Elenchus Research Associates Inc. (“Elenchus”) to complete a detailed load forecast for 2017 (Bridge Year) and 2018 (Test Year). The load forecast model and associated write-up provided by Elenchus can be found as Attachment 3-A.

3.2.2 Load and Customer/Connection Forecasts

Elenchus utilized a regression analysis to normalize and forecast EPLC’s weather sensitive load using monthly heating degree days and cooling degree days as measured at Environment Canada’s Windsor Riverside weather station.

Further details about Elenchus’ methodology can be found in Attachment 3-A of this Exhibit.

Figure 2 below summarize the forecasted (2017 Bridge Year, 2018 Test Year) consumption, normalized for weather, against 2010 Board-Approved and historical actual billed consumption for 2010-2016.

Figure 2 – Summary of Load and Customer/Connection Forecasts

Rate Class	Billed kWh	kWh Change	% Change	Customer / Connection Count	Change	% Change
2010 Board Approved	541,118,333					
2010	561,345,855	20,227,522	3.74%	30,981		
2011	544,653,615	(16,692,240)	-2.97%	31,122	141	0.46%
2012	527,521,454	(17,132,161)	-3.15%	31,249	127	0.41%
2013	526,053,625	(1,467,829)	-0.28%	31,521	272	0.87%
2014	523,146,226	(2,907,399)	-0.55%	31,743	222	0.70%
2015	528,742,855	5,596,629	1.07%	31,985	242	0.76%
2016	547,976,676	19,233,821	3.64%	32,346	361	1.13%
2017 Forecast	528,989,785	(18,986,891)	-3.46%	32,550	204	0.63%
2018 Forecast	529,961,552	971,767	0.18%	32,736	186	0.57%

Figure 3 below summarizes the forecasted (2017 Bridge Year, 2018 Test Year) consumption against 2010 Board-Approved and historical actual billed consumption for 2010-2016 by rate class.

1 **Figure 3 – Historical Billed Consumption & Forecast by Rate Class**

Rate Class	Residential	GS<50	GS>50	Intermediate	Street Light	Sentinel Light	USL	ED	Total
2010 Board Approved	271,379,498	72,012,960	186,712,098	3,087,555	5,929,910	390,941	1,605,371	-	541,118,333
2010	265,216,568	68,742,430	216,691,454	2,963,603	5,780,507	393,141	1,558,152	-	561,345,855
2011	258,339,185	66,985,205	208,671,393	2,747,562	5,969,304	382,814	1,558,152	-	544,653,615
2012	256,003,979	67,056,278	193,368,936	2,944,410	6,205,705	383,994	1,558,152	-	527,521,454
2013	250,406,105	65,663,990	199,814,450	2,004,795	6,271,491	342,834	1,549,960	-	526,053,625
2014	245,551,952	65,242,011	203,591,284	568,157	6,286,758	350,518	1,555,546	-	523,146,226
2015	244,757,239	65,329,579	210,477,740	51,946	6,227,063	341,136	1,558,152	-	528,742,855
2016	255,390,421	66,808,993	219,618,448	-	4,268,688	335,758	1,554,368	-	547,976,676
2017 Forecast	247,700,344	65,087,892	211,511,541	-	2,799,882	335,758	1,554,368	-	528,989,785
2018 Forecast	246,544,006	65,487,649	183,374,335	-	2,799,882	335,758	1,554,368	29,865,554	529,961,552

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 3 Figure 4 below summarizes the forecasted (2017 Bridge Year, 2018 Test Year)
 4 customer/connection counts against 2010 Board-Approved and historical customer/connection
 5 counts for 2010-2016 by rate class.

6 **Figure 4 – Customers/Connections Forecast**

Rate Class	Residential	GS<50	GS>50	Intermediate	Street Light	Sentinel Light	USL	ED	Total
2010 Board Approved	25,902	1,852	222	2	2,643	168	151	-	30,940
2010	26,075	1,895	220	1	2,475	174	141	-	30,981
2011	26,182	1,921	228	1	2,474	175	141	-	31,122
2012	26,337	1,906	215	1	2,474	175	141	-	31,249
2013	26,466	1,904	214	1	2,621	175	140	-	31,521
2014	26,590	1,910	217	1	2,713	172	140	-	31,743
2015	26,815	1,936	217	1	2,701	174	141	-	31,985
2016	27,137	1,953	223	-	2,720	173	140	-	32,346
2017 Forecast	27,310	1,965	222	-	2,740	173	140	-	32,550
2018 Forecast	27,484	1,977	219	-	2,740	173	140	3	32,736

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 8 **3.2.3 Billed Demand Load Forecast**

9 Figure 5 below summarizes the forecasted (2017 Bridge Year, 2018 Test Year) Billed demand
 10 against 2010 Board-Approved and historical actual billed demand for 2010-2016 by rate class.

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Figure 5 – Historical Billed Demand & Forecast by Rate Class

Rate Class	GS>50	Intermediate	Street Light	Sentinel Light	ED	Total
2010 Board Approved	467,092	19,537	18,024	1,076	-	505,729
2010	423,400	17,115	17,543	883	-	458,941
2011	519,529	17,226	16,576	2,100	-	555,431
2012	514,811	10,850	18,742	2,100	-	546,503
2013	480,276	15,019	19,025	2,100	-	516,420
2014	473,538	5,529	15,872	2,068	-	497,007
2015	561,575	4,376	18,023	2,088	-	586,062
2016	563,949	-	13,490	2,080	-	579,519
2017 Forecast	541,026	-	8,848	2,080	-	551,954
2018 Forecast	464,212	-	8,848	2,080	80,869	556,009

3.2.4 CDM Related Adjustments

Elenchus further adjusted for forecasted Conservation & Demand Management (“CDM”) savings. To isolate the impact of CDM, persisting CDM related savings that are measured and verified by the IESO are added back to rate class consumption to simulate class specific consumption assuming there had been no CDM activity. Included as Attachments 3-B and 3-C are EPLC’s Load Forecast CDM Adjusted Work Form as well as EPLC’s 2015-2020 CDM Plan.

Figures 6 and 7 below outline EPLC’s proposed adjustment for CDM for both consumption (kWh) and demand (kW).

Figure 6 – Test Year CDM Adjustment - kWh

kWh	2018 Weather Normal Forecast	CDM Adjustment	2018 CDM Adjusted Forecast
Residential	246,544,006	1,169,888	245,374,118
GS<50	65,487,649	2,780,199	62,707,450
GS>50	183,374,335	7,094,029	176,280,306
Embedded Distributor	29,865,554	-	29,865,554
Street Light	2,799,882	-	2,799,882
Sentinel Light	335,758	-	335,758
USL	1,554,368	-	1,554,368
Total	529,961,552	11,044,116	518,917,436

Figure 7 – Test Year CDM Adjustment - kW

kW	2018 Weather Normal Forecast	CDM Adjustment	2018 CDM Adjusted Forecast
GS>50	464,212	17,959	446,253
Embedded Distributor	80,869	-	80,869
Street Light	8,848	-	8,848
Sentinel Light	2,080	-	2,080
Total	556,010	17,959	538,051

3.2.5 LRAMVA Baseline Calculation

Elenchus further adjusted for forecasted Lost Revenue Adjustment Mechanism Variance Account (“LRAMVA”) adjustments. Included as Attachments 3-B and 3-C are EPLC’s Load Forecast CDM Adjusted Work Form as well as EPLC’s 2015-2020 CDM Plan.

Figure 8 – EPLC LRAMVA Baseline

Description	Residential	GS<50	GS>50	Embedded Distributor	Street Light	Sentinel Light	USL	Total
2016 Program Persistence	584,944	1,390,100	3,547,015	-	-	-	-	5,522,058
2017 Program Persistence	584,944	1,390,100	3,547,015	-	-	-	-	5,522,058
2018 Program Persistence	584,944	1,390,100	3,547,015	-	-	-	-	5,522,058
Total LRAMVA Baseline	1,754,832	4,170,299	10,641,044	-	-	-	-	16,566,174

3.2.6 Wholesale Market Participants

EPLC currently has three (3) Wholesale Market Participant (“WMP”) loads operating within EPLC’s service territory. These WMP customers purchase power directly from the IESO however use EPLC’s distribution system to delivery electricity to their place of business. EPLC charges these customers transmission and distribution charges however charges such as commodity, Wholesale Market Service and Global Adjustment are billed by the IESO directly to the customer. For the purpose of this Load Forecast, EPLC has included these WMP customers in the GS>50 rate class which is where they qualified prior to registering as a WMP with the IESO. The forecast does not specifically break out these loads from the GS>50 rate class.

Figure 9 below shows the historical aggregated WMP load from August 2012 to December 2016.

Figure 9 – Historical WMP Consumption & Demand

WMP in GS>50	WMP Aggregated Consumption	WMP Aggregated Demand
2012	4,864,322	8,690
2013	11,548,939	20,616
2014	11,509,409	20,054
2015	11,537,201	20,062
2016	11,323,656	19,965
Total	50,783,527	89,387

3.2.7 Summary of 2017 and 2018 Load Forecast

Figure 10 below summarizes EPLC's proposed consumption, demand and customer/connection Forecast for the 2017 Bridge Year and 2018 Test Year, which were used for the purpose of rate design.

Figure 10 – Summary of Load Forecast Used in Rate Design

Rate Class	2017			2018		
	Cust/Conn	kWh	kW	Cust/Conn	kWh	kW
Residential	27,310	247,700,344	-	27,484	245,374,118	-
GS<50	1,965	65,087,892	-	1,977	62,707,450	-
GS>50	222	211,511,541	541,026	222	176,280,306	446,253
Embedded Distributor	-	-	-	3	29,865,554	80,869
Street Light	2,740	2,799,882	8,848	2,740	2,799,882	8,848
Sentinel Light	173	335,758	2,080	173	335,758	2,080
USL	140	1,554,368	-	140	1,554,368	-
Total	32,550	528,989,785	551,954	32,739	518,917,436	538,051

3.3 Accuracy of Load Forecast and Variance Analysis

3.3.1 Overview

This section is intended to provide an overview of EPLC's analysis of its historical load forecast from 2010 BAP to 2016 Actual as well as forecasted values for the 2017 Bridge Year and 2018 Test Year.

EPLC has completed its analysis based on Distribution Revenue, Billing Determinants (customer/connection counts, billed kWh and billed kW) as well as Distribution Revenue calculated based on existing and proposed rates. EPLC also included Appendix 2-IB as Attachment 3-D of this Exhibit.

3.3.2 Distribution Revenue Variance Analysis

The following outlines EPLC's historical variance analysis for the 2010 BAP through 2016 actual years for Distribution Revenue and Billing Determinants. EPLC has provided brief commentary for all variances that exceed its materiality threshold as calculated in Exhibit 1 of this Application. For the purpose of this analysis, the materiality threshold of \$65,000 has been used.

2010 BAP Vs. 2010 Actual

Figure 11 – Distribution Revenue – 2010 BAP Vs. 2010 Actual

Rate Class	2010 BAP	2010 Actual	Variance
Residential	\$ 7,972,558	\$ 7,561,421	\$ (411,137)
General Service < 50 kW	\$ 970,265	\$ 858,010	\$ (112,255)
General Service >= 50 kW	\$ 2,135,934	\$ 2,051,654	\$ (84,281)
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 148,803	\$ 125,104	\$ (23,699)
Sentinel Lighting Connections	\$ 10,938	\$ 10,820	\$ (118)
Unmetered Scattered Load Connections	\$ 61,206	\$ 61,055	\$ (151)
Total	\$ 11,299,703	\$ 10,668,063	\$ (631,640)

The primary drivers for the variance between 2010 BAP and 2010 Actual are primarily related to a decrease in consumption from the Residential and General Service < 50 kW customer classes

1 and demand outlined in Figure 12 below driven by the 2008 recession as well as CDM related
 2 savings outlined in section 3.2.4 of this Exhibit.

3 **Figure 12 – Billing Determinants – 2010BAP Vs. 2010 Actual**

Rate Class	Customers/Connections			kWh		kW		Variance
	2010 BAP	2010 Actual	Variance	2010 BAP	2010 Actual	2010 BAP	2010 Actual	
Residential	25,902	26,075	173	271,379,498	265,216,568	-	-	(6,162,930)
General Service < 50 kW	1,852	1,895	43	72,012,960	68,742,430	-	-	(3,270,530)
General Service >= 50 kW	222	220	(2)	186,712,098	216,691,454	467,092	423,400	(43,692)
General Service > 3000 to 4999 kW	2	1	(1)	3,087,555	2,963,603	19,537	17,115	(2,422)
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,643	2,475	(168)	5,929,910	5,780,507	18,024	17,543	(481)
Sentinel Lighting Connections	168	174	6	390,941	393,141	1,076	883	(193)
Unmetered Scattered Load Connections	151	141	(10)	1,605,371	1,558,152	-	-	(47,219)
Total	30,940	30,981	41	541,118,333	561,345,855	505,729	458,941	(9,527,467)

5 **2010 Actual Vs. 2011 Actual**

6 **Figure 13 – Distribution Revenue – 2010 Actual Vs. 2011 Actual**

Rate Class	2010 Actual	2011 Actual	Variance
Residential	\$ 7,561,421	\$ 7,721,301	\$ 159,880
General Service < 50 kW	\$ 858,010	\$ 1,100,408	\$ 242,398
General Service >= 50 kW	\$ 2,051,654	\$ 1,921,392	\$ (130,262)
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 125,104	\$ 166,260	\$ 41,156
Sentinel Lighting Connections	\$ 10,820	\$ 13,212	\$ 2,392
Unmetered Scattered Load Connections	\$ 61,055	\$ 60,726	\$ (329)
Total	\$ 10,668,063	\$ 10,983,299	\$ 315,236

8 EPLC experienced an increase in distribution revenue of \$315,236 in 2011 when compared to
 9 2010 Actual as summarized in Figure 13 above.

10 In 2011, EPLC's total kWh and kW continued to decrease slightly, compared to 2010 Actual.
 11 This is a result of the economic recession as well as significant CDM efforts by EPLC as outlined
 12 in section 3.2.4 of this Exhibit.

13 EPLC attributes the variances in Figure 13 and 14 as a result of:

- 14 • An overall increase in number of residential, GS<50 and GS>50 customers;
- 15 • Full year of Cost of Service rates in effect for all EPLC customers;
- 16 • Annual mechanistic IRM inflation of rates as in effect as of May 1st, 2011 as per EB-2010-
 17 0082;

1 **Figure 14 – Billing Determinants – 2010 Actual Vs. 2011 Actual**

Rate Class	Customers/Connections			kWh		kW		Variance
	2010 Actual	2011 Actual	Variance	2010 Actual	2011 Actual	2010 Actual	2011 Actual	
Residential	26,075	26,182	107	265,216,568	258,339,185	-	-	(6,877,383)
General Service < 50 kW	1,895	1,921	26	68,742,430	66,985,205	-	-	(1,757,225)
General Service >= 50 kW	220	228	8	216,691,454	208,671,393	423,400	519,529	96,129
General Service > 3000 to 4999 kW	1	1	-	2,963,603	2,747,562	17,115	17,226	111
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,475	2,474	(1)	5,780,507	5,969,304	17,543	16,576	(967)
Sentinel Lighting Connections	174	175	1	393,141	382,814	883	2,100	1,217
Unmetered Scattered Load Connections	141	141	-	1,558,152	1,558,152	-	-	-
Total	30,981	31,122	141	561,345,855	544,653,615	458,941	555,431	(8,538,118)

3 **2011 Actual Vs. 2012 Actual**

4 **Figure 15 – Distribution Revenue – 2011 Actual Vs. 2012 Actual**

Rate Class	2011 Actual	2012 Actual	Variance
Residential	\$ 7,721,301	\$ 7,804,704	\$ 83,403
General Service < 50 kW	\$ 1,100,408	\$ 1,437,971	\$ 337,563
General Service >= 50 kW	\$ 1,921,392	\$ 1,588,021	\$ (333,371)
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 166,260	\$ 203,924	\$ 37,664
Sentinel Lighting Connections	\$ 13,212	\$ 14,310	\$ 1,098
Unmetered Scattered Load Connections	\$ 60,726	\$ 60,158	\$ (568)
Total	\$ 10,983,299	\$ 11,109,090	\$ 125,791

6 EPLC experienced an increase in distribution revenue of \$125,791 in 2012 when compared to
 7 2011 Actual as summarized in Figure 15 above.

8 In 2012, EPLC's total kWh and kW continued to decrease slightly, compared to 2011 Actual.
 9 This is a result of the economic recession as well as significant CDM efforts by EPLC as outlined
 10 in section 3.2.4 of this Exhibit.

11 EPLC attributes the variances in Figure 15 and 16 as a result of:

- 12 • An overall increase in number of residential customers;
- 13 • An overall decrease in the number of GS<50 and GS>50 customers;
- 14 • Annual mechanistic IRM inflation of rates as in effect as of May 1st, 2012 as per EB-2011-
 15 0166;

1 **Figure 16 – Billing Determinants – 2011 Actual Vs. 2012 Actual**

Rate Class	Customers/Connections			kWh		kW		Variance
	2011 Actual	2012 Actual	Variance	2011 Actual	2012 Actual	2011 Actual	2012 Actual	
Residential	26,182	26,337	155	258,339,185	256,003,979	-	-	(2,335,206)
General Service < 50 kW	1,921	1,906	(15)	66,985,205	67,056,278	-	-	71,073
General Service >= 50 kW	228	215	(13)	208,671,393	193,368,936	519,529	514,811	(4,718)
General Service > 3000 to 4999 kW	1	1	-	2,747,562	2,944,410	17,226	10,850	(6,376)
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,474	2,474	-	5,969,304	6,205,705	16,576	18,742	2,166
Sentinel Lighting Connections	175	175	-	382,814	383,994	2,100	2,100	-
Unmetered Scattered Load Connections	141	141	-	1,558,152	1,558,152	-	-	-
Total	31,122	31,249	127	544,653,615	527,521,454	555,431	546,503	(2,273,061)

3 **2012 Actual Vs. 2013 Actual**

4 **Figure 17 – Distribution Revenue – 2012 Actual Vs. 2013 Actual**

Rate Class	2012 Actual	2013 Actual	Variance
Residential	\$ 7,804,704	\$ 7,876,390	\$ 71,685
General Service < 50 kW	\$ 1,437,971	\$ 1,591,911	\$ 153,939
General Service >= 50 kW	\$ 1,588,021	\$ 1,415,445	\$ (172,576)
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 203,924	\$ 242,863	\$ 38,939
Sentinel Lighting Connections	\$ 14,310	\$ 15,810	\$ 1,499
Unmetered Scattered Load Connections	\$ 60,158	\$ 59,767	\$ (391)
Total	\$ 11,109,090	\$ 11,202,185	\$ 93,095

6 EPLC experienced an increase in distribution revenue of \$93,095 in 2013 when compared to
 7 2012 Actual as summarized in Figure 17 above.

8 In 2013, EPLC's total kWh and kW continued to decrease slightly, compared to 2012 Actual.
 9 This is a result, in small part, to the economic recession as well as significant CDM efforts by
 10 EPLC as outlined in section 3.2.4 of this Exhibit.

11 EPLC attributes the variances in Figure 17 and 18 as a result of:

- 12 • An overall increase in number of residential customers;
- 13 • An overall decrease in the number of GS<50 and GS>50 customers;
- 14 • Annual mechanistic IRM inflation of rates as in effect as of May 1st, 2013 as per EB-2012-
 15 0123;

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Figure 18 – Billing Determinants – 2012 Actual Vs. 2013 Actual

Rate Class	Customers/Connections			kWh		kW		Variance
	2012 Actual	2013 Actual	Variance	2012 Actual	2013 Actual	2012 Actual	2013 Actual	
Residential	26,337	26,466	129	256,003,979	250,406,105	-	-	(5,597,874)
General Service < 50 kW	1,906	1,904	(2)	67,056,278	65,663,990	-	-	(1,392,288)
General Service >= 50 kW	215	214	(1)	193,368,936	199,814,450	514,811	480,276	(34,535)
General Service > 3000 to 4999 kW	1	1	-	2,944,410	2,004,795	10,850	15,019	4,169
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,474	2,621	147	6,205,705	6,271,491	18,742	19,025	283
Sentinel Lighting Connections	175	175	-	383,994	342,834	2,100	2,100	-
Unmetered Scattered Load Connections	141	140	(1)	1,558,152	1,549,960	-	-	(8,192)
Total	31,249	31,521	272	527,521,454	526,053,625	546,503	516,420	(7,028,437)

2013 Actual Vs. 2014 Actual

Figure 19 – Distribution Revenue – 2013 Actual Vs. 2014 Actual

Rate Class	2013 Actual	2014 Actual	Variance
Residential	\$ 7,876,390	\$ 7,711,531	\$ (164,859)
General Service < 50 kW	\$ 1,591,911	\$ 1,537,373	\$ (54,538)
General Service >= 50 kW	\$ 1,415,445	\$ 1,499,281	\$ 83,835
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 242,863	\$ 266,073	\$ 23,210
Sentinel Lighting Connections	\$ 15,810	\$ 17,431	\$ 1,621
Unmetered Scattered Load Connections	\$ 59,767	\$ 59,384	\$ (383)
Total	\$ 11,202,185	\$ 11,091,071	\$ (111,114)

EPLC experienced a decrease in distribution revenue of \$111,114 in 2014 when compared to 2013 Actual as summarized in Figure 19 above.

In 2014, EPLC's total kWh and kW continued to decrease slightly, compared to 2013 Actual. This is a result, in small part, to the economic recession (for which the area has relatively rebounded) as well as significant CDM efforts by EPLC as outlined in section 3.2.4 of this Exhibit.

EPLC attributes the variances in Figure 19 and 20 as a result of:

- An overall increase in number of residential, GS<50 and GS>50 customers;
- Tax change rate rider which credited customers in effect until April 30th, 2015;
- LRAMVA rate rider which charged customers in effect until April 30th, 2015;
- Other DVA/GA rate riders which credited customers in effect until April 30th, 2015;
- Annual mechanistic IRM inflation of rates as in effect as of May 1st, 2014 as per EB-2013-0128;

Figure 20 – Billing Determinants – 2013 Actual Vs. 2014 Actual

Rate Class	Customers/Connections			kWh		kW		Variance
	2013 Actual	2014 Actual	Variance	2013 Actual	2014 Actual	2013 Actual	2014 Actual	
Residential	26,466	26,590	124	250,406,105	245,551,953	-	-	(4,854,152)
General Service < 50 kW	1,904	1,910	6	65,663,990	65,242,011	-	-	(421,979)
General Service >= 50 kW	214	217	3	199,814,450	203,591,284	480,276	473,538	(6,738)
General Service > 3000 to 4999 kW	1	1	-	2,004,795	568,157	15,019	5,529	(9,490)
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,621	2,713	92	6,271,491	6,286,758	19,025	15,872	(3,153)
Sentinel Lighting Connections	175	172	(3)	342,834	350,518	2,100	2,068	(32)
Unmetered Scattered Load Connections	140	140	-	1,549,960	1,555,546	-	-	5,586
Total	31,521	31,743	222	526,053,625	523,146,227	516,420	497,007	(5,289,958)

2014 Actual Vs. 2015 Actual

Figure 21 – Distribution Revenue – 2014 Actual Vs. 2015 Actual

Rate Class	2014 Actual	2015 Actual	Variance
Residential	\$ 7,711,531	\$ 9,894,481	\$ 2,182,950
General Service < 50 kW	\$ 1,537,373	\$ 1,919,833	\$ 382,460
General Service >= 50 kW	\$ 1,499,281	\$ 1,598,368	\$ 99,087
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 266,073	\$ 272,332	\$ 6,259
Sentinel Lighting Connections	\$ 17,431	\$ 17,371	\$ (59)
Unmetered Scattered Load Connections	\$ 59,384	\$ 60,378	\$ 994
Total	\$ 11,091,071	\$ 13,762,763	\$ 2,671,692

EPLC experienced an increase in distribution revenue of \$2,671,692 in 2015 when compared to 2014 Actual as summarized in Figure 21 above.

In 2015, EPLC's total kWh and kW continued to decrease slightly, compared to 2014 Actual. This is a result of significant CDM efforts by EPLC as outlined in section 3.2.4 of this Exhibit.

EPLC attributes the variances in Figure 21 and 22 as a result of:

- An overall increase in number of residential, GS<50 and GS>50 customers;
- Approval of disposition of the Smart Metering Initiative costs which greatly affected residential and GS<50 variances;

1 **Figure 22 – Billing Determinants – 2014 Actual Vs. 2015 Actual**

Rate Class	Customers/Connections			kWh		kW		Variance
	2014 Actual	2015 Actual	Variance	2014 Actual	2015 Actual	2014 Actual	2015 Actual	
Residential	26,590	26,815	225	245,551,953	244,757,239	-	-	(794,714)
General Service < 50 kW	1,910	1,936	26	65,242,011	65,329,579	-	-	87,568
General Service >= 50 kW	217	217	-	203,591,284	210,477,740	473,538	561,575	88,037
General Service > 3000 to 4999 kW	1	1	-	568,157	51,946	5,529	4,376	(1,153)
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,713	2,701	(12)	6,286,758	6,227,063	15,872	18,023	2,151
Sentinel Lighting Connections	172	174	2	350,518	341,136	2,068	2,088	20
Unmetered Scattered Load Connections	140	141	1	1,555,546	1,558,152	-	-	2,606
Total	31,743	31,985	242	523,146,227	528,742,855	497,007	586,062	(615,485)

3 **2015 Actual Vs. 2016 Actual**

4 **Figure 23 – Distribution Revenue – 2015 Actual Vs. 2016 Actual**

Rate Class	2015 Actual	2016 Actual	Variance
Residential	\$ 9,894,481	\$ 8,394,579	\$ (1,499,903)
General Service < 50 kW	\$ 1,919,833	\$ 1,795,691	\$ (124,142)
General Service >= 50 kW	\$ 1,598,368	\$ 1,603,629	\$ 5,262
Embedded Distributor	\$ -	\$ -	\$ -
Street Lighting Connections	\$ 272,332	\$ 232,782	\$ (39,550)
Sentinel Lighting Connections	\$ 17,371	\$ 17,204	\$ (167)
Unmetered Scattered Load Connections	\$ 60,378	\$ 59,476	\$ (902)
Total	\$ 13,762,763	\$ 12,103,362	\$ (1,659,402)

6 EPLC experienced a decrease in distribution revenue of \$1,659,402 in 2016 when compared to
 7 2015 Actual as summarized in Figure 23 above.

8 In 2016, EPLC's total kWh and kW increased as a result of increases in demand and an overall
 9 hotter year which drove an increase in distribution revenue; especially in the summer.

10 EPLC attributes the variances in Figure 23 and 24 as a result of:

- 11 • An overall increase in number of residential, GS<50 and GS>50 customers;
- 12 • The primary variance is a correction from the one-time approval of disposition of Smart
 13 Metering Initiative costs in 2015 which greatly affected residential and GS<50 variances;
- 14 • Annual mechanistic IRM inflation of rates as in effect as of May 1st, 2016 as per EB-2015-
 15 0005;

16 **Figure 24 – Billing Determinants – 2015 Actual Vs. 2016 Actual**

Rate Class	Customers/Connections			kWh		kW		Variance
	2015 Actual	2016 Actual	Variance	2015 Actual	2016 Actual	2015 Actual	2016 Actual	
Residential	26,815	27,137	322	244,757,239	255,390,422	-	-	10,633,183
General Service < 50 kW	1,936	1,953	17	65,329,579	66,808,993	-	-	1,479,414
General Service >= 50 kW	217	223	6	210,477,740	219,618,449	561,575	563,949	2,374
General Service > 3000 to 4999 kW	1	-	(1)	51,946	-	4,376	-	(4,376)
Embedded Distributor	-	-	-	-	-	-	-	-
Street Lighting Connections	2,701	2,720	19	6,227,063	4,268,688	18,023	13,490	(4,533)
Sentinel Lighting Connections	174	173	(1)	341,136	335,758	2,088	2,080	(8)
Unmetered Scattered Load Connections	141	140	(1)	1,558,152	1,554,368	-	-	(3,784)
Total	31,985	32,346	361	528,742,855	547,976,678	586,062	579,519	12,102,270

3.3.3 2017/2018 Distribution Revenue at Existing Rates

Figure 25 – Distribution Revenue – 2017 Bridge Vs. 2018 Test

Rate Class	2017 Bridge	2018 Test	Variance
Residential	\$ 8,588,056	\$ 8,612,319	\$ 24,263
General Service < 50 kW	\$ 1,609,420	\$ 1,585,914	\$ (23,507)
General Service >= 50 kW	\$ 1,551,690	\$ 1,528,407	\$ (23,283)
Embedded Distributor	\$ 197,973	\$ 187,106	\$ (10,867)
Street Lighting Connections	\$ 187,615	\$ 187,611	\$ (4)
Sentinel Lighting Connections	\$ 27,447	\$ 27,447	\$ -
Unmetered Scattered Load Connections	\$ 62,175	\$ 62,175	\$ -
Total	\$ 12,224,376	\$ 12,190,979	\$ (33,397)

EPLC calculated Distribution Revenue for the 2017 Bridge Year and 2018 Test Year, as summarized above in Figure 25, based on existing Board approved rates and the Billing Determinants summarized in Figure 26 below. EPLC is anticipating a very small decrease in Distribution Revenue based on projected decreases in kWh and kW. These projections are summarized in EPLC's load forecast which is included as Attachment 3-A of this Exhibit.

Figure 26 – Billing Determinants – 2017 Bridge Vs. 2018 Test

Rate Class	Customers/Connections			kWh		kW		Variance
	2017 Bridge	2018 Test	Variance	2017 Bridge	2018 Test	2017 Bridge	2018 Test	
Residential	27,310	27,484	174	247,700,344	245,374,118	-	-	(2,326,226)
General Service < 50 kW	1,965	1,977	12	65,087,892	62,707,450	-	-	(2,380,442)
General Service >= 50 kW	219	219	-	179,829,958	176,280,306	455,239	446,253	(8,986)
General Service > 3000 to 4999 kW	-	-	-	-	-	-	-	-
Embedded Distributor	3	3	-	31,681,583	29,865,554	85,786	80,869	(4,917)
Street Lighting Connections	2,740	2,740	-	2,799,882	2,799,882	8,848	8,848	-
Sentinel Lighting Connections	173	173	-	335,758	335,758	2,080	2,080	-
Unmetered Scattered Load Connections	140	140	-	1,554,368	1,554,368	-	-	-
Total	32,550	32,736	186	528,989,785	518,917,436	551,954	538,051	(4,720,571)

3.3.4 Test Year Distribution Revenue at Proposed Rates

EPLC calculated Distribution Revenue for the 2018 Test Year, as summarized below in Figure 27, based on the proposed rates summarized in this Application and the Billing Determinants previously summarized in Figure 26 above.

Figure 27 – Distribution Revenue – 2017 Bridge @ Existing Rates Vs. 2018 Test @ Proposed Rates

Rate Class	2017 Bridge @ Existing Rates	2018 Test @ Proposed Rates	Variance
Residential	\$ 8,588,056	\$ 8,883,696	\$ 295,640
General Service < 50 kW	\$ 1,609,420	\$ 1,623,942	\$ 14,522
General Service >= 50 kW	\$ 1,551,690	\$ 1,563,530	\$ 11,840
Embedded Distributor	\$ 197,973	\$ 118,094	\$ (79,879)
Street Lighting Connections	\$ 187,615	\$ 192,059	\$ 4,444
Sentinel Lighting Connections	\$ 27,447	\$ 26,662	\$ (785)
Unmetered Scattered Load Connections	\$ 62,175	\$ 58,609	\$ (3,566)
Total	\$ 12,224,376	\$ 12,466,592	\$ 242,216

3.4 Other Revenue

3.4.1 Overview

Other Revenue refers to revenue that is distribution in nature however is not received through distribution rates. Other Revenues consists of four primary categories:

- Specific Service Charges;
- Late Payment Charges;
- Other Operating Revenues;
- Other Income or Deductions

EPLC made some minor, immaterial changes across the categories to better align with the APH as summarized below in Figure 28.

Figure 28 – Other Revenue Adjustment

Description	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual
Specific Service Charges	\$ (191,738)	\$ (172,297)	\$ (183,389)	\$ (189,503)	\$ (162,399)	\$ (177,244)	\$ (177,950)
Adjustment	\$ 28,960	\$ 27,413	\$ 27,379	\$ 26,348	\$ 16,061	\$ 22,559	\$ 24,654
Adjusted Specific Service Charges	\$ (162,778)	\$ (144,884)	\$ (156,010)	\$ (163,155)	\$ (146,338)	\$ (154,685)	\$ (153,296)
Late Payment Charges	\$ (170,398)	\$ (248,885)	\$ (232,732)	\$ (255,410)	\$ (248,723)	\$ (246,472)	\$ (239,495)
Adjustment	\$ (22,710)	\$ (20,580)	\$ (20,100)	\$ (19,015)	\$ (10,890)	\$ (15,155)	\$ (27,240)
Adjusted Late Payment Charges	\$ (193,108)	\$ (269,465)	\$ (252,832)	\$ (274,425)	\$ (259,613)	\$ (261,627)	\$ (266,735)
Other Operating Revenue	\$ (232,674)	\$ (230,182)	\$ (228,063)	\$ (228,608)	\$ (247,219)	\$ (230,529)	\$ (243,002)
Adjustment	\$ (6,250)	\$ (6,833)	\$ (7,279)	\$ (7,333)	\$ (5,171)	\$ (7,404)	\$ 2,586
Adjusted Other Operating Revenue	\$ (238,925)	\$ (237,015)	\$ (235,342)	\$ (235,941)	\$ (252,390)	\$ (237,933)	\$ (240,416)

EPLC's Other Revenue is calculated below as Figure 29 for the 2010 BAP, historical years 2010 through 2016 and the 2017 Bridge and 2018 Test Years.

Figure 29 – Other Revenue Summary

Description	2010 BAP	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Bridge Year	2018 Test Year
Specific Service Charges	\$ (167,415)	\$ (162,778)	\$ (144,884)	\$ (156,010)	\$ (163,155)	\$ (146,338)	\$ (154,685)	\$ (153,296)	\$ (166,480)	\$ (166,480)
Late Payment Charges	\$ (148,511)	\$ (193,108)	\$ (269,465)	\$ (252,832)	\$ (274,425)	\$ (259,613)	\$ (261,627)	\$ (266,735)	\$ (260,400)	\$ (260,400)
Other Operating Revenues	\$ (228,355)	\$ (238,925)	\$ (237,015)	\$ (235,342)	\$ (235,941)	\$ (252,390)	\$ (237,933)	\$ (240,416)	\$ (225,155)	\$ (225,155)
Other Income or Deductions	\$ (225,176)	\$ (559,961)	\$ (814,058)	\$ (934,108)	\$ (569,531)	\$ (487,875)	\$ (127,215)	\$ 657,281	\$ (354,035)	\$ (176,486)
Total	\$ (769,457)	\$ (1,154,772)	\$ (1,465,422)	\$ (1,578,292)	\$ (1,243,052)	\$ (1,146,216)	\$ (781,460)	\$ (3,166)	\$ (1,006,070)	\$ (828,521)

For the purpose of calculating Revenue Requirement, EPLC excluded revenues and expenses relating from its solar PV assets. Figure 30 below outlines EPLC's proposed Adjusted Other Revenue for the purpose of calculating Revenue Requirement.

Figure 30 – Adjusted Other Revenue Summary

Description	2010 BAP	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Bridge Year	2018 Test Year
Total Other Revenue	\$ (769,457)	\$ (1,154,772)	\$ (1,465,422)	\$ (1,578,292)	\$ (1,243,052)	\$ (1,146,216)	\$ (781,460)	\$ (3,166)	\$ (1,006,070)	\$ (828,521)
Exclude:										
Non-Regulated Solar Revenue	\$ -	\$ -	\$ (398,812)	\$ (590,368)	\$ (586,822)	\$ (401,920)	\$ (390,198)	\$ (394,876)	\$ (369,700)	\$ (366,700)
Non-Regulated Solar Expense	\$ -	\$ -	\$ 35,901	\$ 49,173	\$ 49,131	\$ 34,807	\$ 204,896	\$ 252,183	\$ 212,000	\$ 230,000
DVA Interest (Account 4405)	\$ -	\$ (22,245)	\$ (67,938)	\$ (103,056)	\$ (215,535)	\$ (299,988)	\$ (63,816)	\$ (121,510)	\$ -	\$ -
Total Adjusted Other Revenue	\$ (769,457)	\$ (1,154,772)	\$ (1,102,511)	\$ (1,037,097)	\$ (705,361)	\$ (779,103)	\$ (596,158)	\$ 139,526	\$ (848,370)	\$ (691,821)

EPLC has included Board Appendix 2-H as Attachment 3-E of this Exhibit.

3.4.2 Other Revenue Variance Analysis

The variance analysis in this Section has been completed consistent with EPLC's materiality threshold calculated in Exhibit 1 of this Application. For the purpose of this analysis, EPLC's materiality threshold is \$65,000.

Figure 31 below shows the variances by Other Revenue category for the 2010 BAP, historical years 2010 through 2016 and the 2017 Bridge and 2018 Test Years.

Figure 31 – Other Revenue Variance Summary

Description	2010 BAP	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Bridge Year	2018 Test Year
Specific Service Charges	\$ (167,415)	\$ (162,778)	\$ (144,884)	\$ (156,010)	\$ (163,155)	\$ (146,338)	\$ (154,685)	\$ (153,296)	\$ (166,480)	\$ (166,480)
Late Payment Charges	\$ (148,511)	\$ (193,108)	\$ (269,465)	\$ (252,832)	\$ (274,425)	\$ (259,613)	\$ (261,627)	\$ (266,735)	\$ (260,400)	\$ (260,400)
Other Operating Revenues	\$ (228,355)	\$ (238,925)	\$ (237,015)	\$ (235,342)	\$ (235,941)	\$ (252,390)	\$ (237,933)	\$ (240,416)	\$ (225,155)	\$ (225,155)
Other Income or Deductions	\$ (225,176)	\$ (559,961)	\$ (814,058)	\$ (934,108)	\$ (569,531)	\$ (487,875)	\$ (127,215)	\$ 657,281	\$ (354,035)	\$ (176,486)
Total	\$ (769,457)	\$ (1,163,413)	\$ (1,501,323)	\$ (1,578,292)	\$ (1,243,052)	\$ (1,146,216)	\$ (781,460)	\$ (3,166)	\$ (1,006,070)	\$ (828,521)
Description	2010 BAP vs. 2010 Actual	2010 Act Vs. 2011 Act	2011 Act Vs. 2012 Act	2012 Act Vs. 2013 Act	2013 Act Vs. 2014 Act	2014 Act Vs. 2015 Act	2015 Act Vs. 2016 Act	2016 Act Vs. 2017 Bridge	2017 Bridge Vs. 2018 Test	
Specific Service Charges	\$ 4,637	\$ 17,894	\$ (11,126)	\$ (7,145)	\$ 16,817	\$ (8,347)	\$ 1,389	\$ (13,184)	\$ -	
Late Payment Charges	\$ (44,597)	\$ (76,357)	\$ 16,633	\$ (21,593)	\$ 14,812	\$ (2,014)	\$ (5,108)	\$ 6,335	\$ -	
Other Operating Revenues	\$ (10,570)	\$ 1,909	\$ 1,673	\$ (599)	\$ (16,449)	\$ 14,457	\$ (2,483)	\$ 15,261	\$ -	
Other Income or Deductions	\$ (334,785)	\$ (254,097)	\$ (120,051)	\$ 364,577	\$ 81,656	\$ 360,661	\$ 784,495	\$ (1,011,316)	\$ 177,549	
Total	\$ (385,315)	\$ (310,651)	\$ (112,870)	\$ 335,240	\$ 96,836	\$ 364,757	\$ 778,293	\$ (1,002,904)	\$ 177,549	

2010 BAP Vs. 2010 Actual

EPLC experienced an overall increase of \$393,956 in Other Revenue between the 2010 BAP and 2010 Actual. Figure 32 below details the variances by USoA account.

Figure 32 – 2010 BAP Vs. 2010 Actual Variance Analysis

USoA #	Description	2010 BAP	2010 Actual	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (167,415)	\$ (162,778)	\$ 4,637
4225	Late Payment Charges	\$ (148,511)	\$ (193,108)	\$ (44,597)
4080	SSS Revenue	\$ (91,250)	\$ (78,655)	\$ 12,595
4082	Retail Services Revenues	\$ (33,424)	\$ (45,485)	\$ (12,061)
4084	Service Tax Requests	\$ (1,357)	\$ (12,374)	\$ (11,017)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (102,324)	\$ (102,337)	\$ (13)
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ (74)	\$ (74)
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ -	\$ -
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (10,000)	\$ (23,879)	\$ (13,879)
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (1,787,240)	\$ (2,196,295)	\$ (409,055)
4375	Generation Facility Revenues - Sub-Account	\$ -	\$ -	\$ -
4380	Expenses from Non-Utility Operations	\$ 1,628,857	\$ 1,711,586	\$ 82,729
4380	Generation Facility Expenses - Sub-Account	\$ -	\$ 8,641	\$ 8,641
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (21,300)	\$ (8,611)	\$ 12,689
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ -	\$ 36,067	\$ 36,067
4405	Interest and Dividend Income	\$ (35,493)	\$ (87,470)	\$ (51,977)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (769,457)	\$ (1,154,772)	\$ (385,315)

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced an increase in account 4375 as a result of non-budgeted items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances as EPLC is not affected either positively or negatively by the administration of CDM programs.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced an increase in account 4380 as a result of non-budgeted items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances.

2010 Actual Vs. 2011 Actual

EPLC experienced an overall increase of \$337,910 in Other Revenue between the 2010 Actual and 2011 Actual. Figure 33 below details the variances by USoA account.

Figure 33 – 2010 Actual Vs. 2011 Actual Variance Analysis

USoA #	Description	2010 Actual	2011 Actual	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (162,778)	\$ (144,884)	\$ 17,894
4225	Late Payment Charges	\$ (193,108)	\$ (269,465)	\$ (76,357)
4080	SSS Revenue	\$ (78,655)	\$ (76,745)	\$ 1,910
4082	Retail Services Revenues	\$ (45,485)	\$ (38,946)	\$ 6,539
4084	Service Tax Requests	\$ (12,374)	\$ (14,114)	\$ (1,740)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (102,337)	\$ (105,058)	\$ (2,721)
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ (74)	\$ (2,152)	\$ (2,079)
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ -	\$ -
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (23,879)	\$ (120,531)	\$ (96,653)
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (2,196,295)	\$ (1,807,744)	\$ 388,552
4375	Generation Facility Revenues - Sub-Account	\$ -	\$ (398,812)	\$ (398,812)
4380	Expenses from Non-Utility Operations	\$ 1,711,586	\$ 1,640,066	\$ (71,520)
4380	Generation Facility Expenses - Sub-Account	\$ 8,641	\$ 35,901	\$ 27,259
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (8,611)	\$ (26,161)	\$ (17,550)
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 36,067	\$ 41	\$ (36,026)
4405	Interest and Dividend Income	\$ (87,470)	\$ (136,817)	\$ (49,347)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,154,772)	\$ (1,465,422)	\$ (310,651)

Account 4355 – Gain on Disposition of Utility and Other Property

EPLC realized an increase of \$96,653 in account 4355 from 2010 Actual to 2011 Actual.

Changes in 2011 relate to:

- Sale of bucket truck – \$81k;
- Sale of property at Mill St. Parking Lot to Municipality of Leamington- \$39k;

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced a decrease in account 4375 as a result of items related to Conservation & Demand Management as well as an increase in street lighting and traffic lighting services. CDM revenues and expenses are largely and mostly timing related variances.

EPLC also began tracking solar photovoltaic revenues in 2011. All revenues and expenses relating to solar projects owned by EPLC are not considered in this Application and will not be described further.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced an increase in account 4380 as a result of items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances.

EPLC also began tracking solar photovoltaic expenses in 2011. All revenues and expenses relating to solar projects owned by EPLC are not considered in this Application and will not be described further.

1 2011 Actual Vs. 2012 Actual

2 EPLC experienced an overall increase of \$76,970 in Other Revenue between the 2011 Actual
3 and 2012 Actual. Figure 34 below details the variances by USoA account.

4 **Figure 34 – 2011 Actual Vs. 2012 Actual Variance Analysis**

USoA #	Description	2011 Actual	2012 Actual	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (144,884)	\$ (156,010)	\$ (11,126)
4225	Late Payment Charges	\$ (269,465)	\$ (252,832)	\$ 16,633
4080	SSS Revenue	\$ (76,745)	\$ (82,855)	\$ (6,110)
4082	Retail Services Revenues	\$ (38,946)	\$ (35,298)	\$ 3,648
4084	Service Tax Requests	\$ (14,114)	\$ (15,068)	\$ (954)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (105,058)	\$ (102,121)	\$ 2,937
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ (2,152)	\$ -	\$ 2,152
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ -	\$ -
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (120,531)	\$ (37,915)	\$ 82,616
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (1,807,744)	\$ (1,961,905)	\$ (154,161)
4375	Generation Facility Revenues - Sub-Account	\$ (398,812)	\$ (590,368)	\$ (191,556)
4380	Expenses from Non-Utility Operations	\$ 1,640,066	\$ 1,802,020	\$ 161,955
4380	Generation Facility Expenses - Sub-Account	\$ 35,901	\$ 49,173	\$ 13,272
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (26,161)	\$ (31,371)	\$ (5,210)
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 41	\$ 11	\$ (30)
4405	Interest and Dividend Income	\$ (136,817)	\$ (163,754)	\$ (26,937)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,465,422)	\$ (1,578,292)	\$ (112,870)

Account 4355 – Gain on Disposition of Utility and Other Property

EPLC realized a decrease of \$82,616 in account 4355 from 2011 Actual to 2012 Actual. Changes in 2012 relate to decreased year over year activity relating from property sales described in 2011 above.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced a decrease in account 4375 as a result of items related to Conservation & Demand Management as well as an increase in street lighting and traffic lighting services. EPLC also experienced a small increase in municipal water billing revenue.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced an increase in account 4380 as a result of items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances. EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

1 2012 Actual Vs. 2013 Actual

2 EPLC experienced an overall decrease of \$335,240 in Other Revenue between the 2012 Actual
 3 and 2013 Actual. Figure 35 below details the variances by USoA account.

4 **Figure 35 – 2012 Actual Vs. 2013 Actual Variance Analysis**

USoA #	Description	2012 Actual	2013 Actual	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (156,010)	\$ (163,155)	\$ (7,145)
4225	Late Payment Charges	\$ (252,832)	\$ (274,425)	\$ (21,593)
4080	SSS Revenue	\$ (82,855)	\$ (83,263)	\$ (408)
4082	Retail Services Revenues	\$ (35,298)	\$ (27,420)	\$ 7,878
4084	Service Tax Requests	\$ (15,068)	\$ (15,224)	\$ (156)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (102,121)	\$ (110,034)	\$ (7,913)
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ 465,810	\$ 465,810
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (37,915)	\$ (79,457)	\$ (41,542)
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (1,961,905)	\$ (2,218,439)	\$ (256,534)
4375	Generation Facility Revenues - Sub-Account	\$ (590,368)	\$ (586,822)	\$ 3,546
4380	Expenses from Non-Utility Operations	\$ 1,802,020	\$ 2,132,501	\$ 330,481
4380	Generation Facility Expenses - Sub-Account	\$ 49,173	\$ 49,131	\$ (42)
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (31,371)	\$ (48,106)	\$ (16,734)
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 11	\$ (468)	\$ (479)
4405	Interest and Dividend Income	\$ (163,754)	\$ (283,682)	\$ (119,928)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,578,292)	\$ (1,243,052)	\$ 335,240

Account 4305 – Regulatory Debits

Effective January 1st, 2013, EPLC transitioned from reporting in CGAAP to reporting in MIFRS for the purpose of annual RRR reporting, as directed by the Board in “*Accounts Procedures Handbook Frequently Asked Questions July 2012*”. The amount \$465,810 represents the offsetting entry to Account 1576.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced an increase in account 4375 as a result of items related to Conservation & Demand Management.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced an increase in account 4380 as a result of items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances. EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

Account 4405 – Interest and Dividend Income

Interest income increased materially in 2013 as a result of EPLC carrying relatively large regulatory balances. This revenue decreases accordingly in 2015 once EPLC received the necessary approval for disposition of these regulatory balances.

1 2013 Actual Vs. 2014 Actual

2 EPLC experienced an overall decrease of \$96,836 in Other Revenue between the 2013 Actual
 3 and 2014 Actual. Figure 36 below details the variances by USoA account.

4 **Figure 36 – 2013 Actual Vs. 2014 Actual Variance Analysis**

USoA #	Description	2013 Actual	2014 Actual	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (163,155)	\$ (146,338)	\$ 16,817
4225	Late Payment Charges	\$ (274,425)	\$ (259,613)	\$ 14,812
4080	SSS Revenue	\$ (83,263)	\$ (84,366)	\$ (1,103)
4082	Retail Services Revenues	\$ (27,420)	\$ (27,350)	\$ 70
4084	Service Tax Requests	\$ (15,224)	\$ (10,688)	\$ 4,536
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (110,034)	\$ (129,986)	\$ (19,952)
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ 465,810	\$ 160,213	\$ (305,597)
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (79,457)	\$ (30,602)	\$ 48,855
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (2,218,439)	\$ (1,906,609)	\$ 311,830
4375	Generation Facility Revenues - Sub-Account	\$ (586,822)	\$ (401,920)	\$ 184,902
4380	Expenses from Non-Utility Operations	\$ 2,132,501	\$ 2,013,171	\$ (119,330)
4380	Generation Facility Expenses - Sub-Account	\$ 49,131	\$ 34,807	\$ (14,324)
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (48,106)	\$ (22,396)	\$ 25,710
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ (468)	\$ 642	\$ 1,110
4405	Interest and Dividend Income	\$ (283,682)	\$ (335,181)	\$ (51,499)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,243,052)	\$ (1,146,216)	\$ 96,836

Account 4305 – Regulatory Debits

Effective January 1st, 2013, EPLC transitioned from reporting in CGAAP to reporting in MIFRS for the purpose of annual RRR reporting, as directed by the Board in “*Accounts Procedures Handbook Frequently Asked Questions July 2012*”. The amount \$160,213 represents the offsetting entry to Account 1576.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced a decrease in account 4375 as a result of items related to Conservation & Demand Management.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced a small decrease in account 4380 as a result of non-budgeted items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances. EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

2014 Actual Vs. 2015 Actual

EPLC experienced an overall decrease of \$364,757 in Other Revenue between the 2014 Actual and 2015 Actual. Figure 37 below details the variances by USoA account.

Figure 37 – 2014 Actual Vs. 2015 Actual Variance Analysis

USoA #	Description	2014 Actual	2015 Actual	Variance
Reporting Basis		CGAAP	MIFRS	
4235	Specific Service Charges	\$ (146,338)	\$ (154,685)	\$ (8,347)
4225	Late Payment Charges	\$ (259,613)	\$ (261,627)	\$ (2,014)
4080	SSS Revenue	\$ (84,366)	\$ (84,690)	\$ (324)
4082	Retail Services Revenues	\$ (27,350)	\$ (23,454)	\$ 3,896
4084	Service Tax Requests	\$ (10,688)	\$ (15,118)	\$ (4,430)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (129,986)	\$ (114,671)	\$ 15,315
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ 160,213	\$ -	\$ (160,213)
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (30,602)	\$ (17,612)	\$ 12,990
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ 104,845	\$ 104,845
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (1,906,609)	\$ (2,316,678)	\$ (410,069)
4375	Generation Facility Revenues - Sub-Account	\$ (401,920)	\$ (390,198)	\$ 11,722
4380	Expenses from Non-Utility Operations	\$ 2,013,171	\$ 2,415,303	\$ 402,132
4380	Generation Facility Expenses - Sub-Account	\$ 34,807	\$ 204,896	\$ 170,090
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (22,396)	\$ (11,371)	\$ 11,025
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 642	\$ (17,576)	\$ (18,218)
4405	Interest and Dividend Income	\$ (335,181)	\$ (98,824)	\$ 236,357
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,146,216)	\$ (781,460)	\$ 364,757

Account 4305 – Regulatory Debits

Effective January 1st, 2013, EPLC transitioned from reporting in CGAAP to reporting in MIFRS for the purpose of annual RRR reporting, as directed by the Board in “*Accounts Procedures Handbook Frequently Asked Questions July 2012*”. EPLC did not record an entry in 4305 in 2015.

Account 4360 – Loss on Disposition of Utility and Other Property

EPLC retired its remaining distribution substations in 2015 as part of its Single Voltage Utility initiative described further in Exhibit 2 of this Application.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced an increase in account 4375 as a result of items related to Conservation & Demand Management.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced a small decrease in account 4380 as a result of items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances. EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

Account 4405 – Interest and Dividend Income

Interest income increased materially in 2013 as a result of EPLC carrying relatively large regulatory balances. This revenue decreases accordingly in 2015 once EPLC received the necessary approval for disposition of these regulatory balances.

1 2015 Actual Vs. 2016 Actual

2 EPLC experienced an overall decrease of \$778,293 in Other Revenue between the 2015 Actual
 3 and 2016 Actual. Figure 38 below details the variances by USoA account.

4 **Figure 38 – 2015 Actual Vs. 2016 Actual Variance Analysis**

USoA #	Description	2015 Actual	2016 Actual	Variance
Reporting Basis		MIFRS	MIFRS	
4235	Specific Service Charges	\$ (154,685)	\$ (153,296)	\$ 1,389
4225	Late Payment Charges	\$ (261,627)	\$ (266,735)	\$ (5,108)
4080	SSS Revenue	\$ (84,690)	\$ (86,653)	\$ (1,963)
4082	Retail Services Revenues	\$ (23,454)	\$ (21,106)	\$ 2,348
4084	Service Tax Requests	\$ (15,118)	\$ (15,464)	\$ (346)
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (114,671)	\$ (117,193)	\$ (2,522)
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ 781,900	\$ 781,900
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (17,612)	\$ (122,721)	\$ (105,109)
4360	Loss on Disposition of Utility and Other Property	\$ 104,845	\$ 85,458	\$ (19,387)
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (2,316,678)	\$ (2,862,081)	\$ (545,403)
4375	Generation Facility Revenues - Sub-Account	\$ (390,198)	\$ (394,876)	\$ (4,677)
4380	Expenses from Non-Utility Operations	\$ 2,415,303	\$ 3,063,638	\$ 648,335
4380	Generation Facility Expenses - Sub-Account	\$ 204,896	\$ 252,183	\$ 47,287
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (11,371)	\$ (12,176)	\$ (805)
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ (17,576)	\$ 7,335	\$ 24,911
4405	Interest and Dividend Income	\$ (98,824)	\$ (141,380)	\$ (42,556)
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (781,460)	\$ (3,166)	\$ 778,293

Account 4305 – Regulatory Debits

Effective January 1st, 2013, EPLC transitioned from reporting in CGAAP to reporting in MIFRS for the purpose of annual RRR reporting, as directed by the Board in “*Accounts Procedures Handbook Frequently Asked Questions July 2012*”. The amount \$781,900 represents the offsetting entry to Account 1576.

Account 4355 – Gain on Disposition of Utility and Other Property

EPLC sold property previously housing substations, now retired, back to the local municipalities. EPLC sold both pieces of property for approximately \$105,000.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced an increase in account 4375 as a result of items related to Conservation & Demand Management.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced a small decrease in account 4380 as a result of items related to Conservation & Demand Management. CDM revenues and expenses are largely and mostly timing related variances. EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

1 **2016 Actual Vs. 2017 Bridge**

2 EPLC is forecasting an overall increase of \$734,302 in Other Revenue between the 2016 Actual
3 and 2017 Bridge Year. Figure 39 below details the variances by USoA account.

4 **Figure 39 – 2016 Actual Vs. 2017 Bridge Variance Analysis**

USoA #	Description	2016 Actual	2017 Bridge	Variance
Reporting Basis		MIFRS	MIFRS	
4235	Specific Service Charges	\$ (153,296)	\$ (166,480)	\$ (13,184)
4225	Late Payment Charges	\$ (266,735)	\$ (260,400)	\$ 6,335
4080	SSS Revenue	\$ (86,653)	\$ (80,000)	\$ 6,653
4082	Retail Services Revenues	\$ (21,106)	\$ (28,000)	\$ (6,894)
4084	Service Tax Requests	\$ (15,464)	\$ (7,640)	\$ 7,824
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (117,193)	\$ (109,515)	\$ 7,678
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ 781,900	\$ -	\$ (781,900)
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ (122,721)	\$ -	\$ 122,721
4360	Loss on Disposition of Utility and Other Property	\$ 85,458	\$ -	\$ (85,458)
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (2,862,081)	\$ (1,865,253)	\$ 996,828
4375	Generation Facility Revenues - Sub-Account	\$ (394,876)	\$ (369,700)	\$ 25,176
4380	Expenses from Non-Utility Operations	\$ 3,063,638	\$ 1,784,228	\$ (1,279,410)
4380	Generation Facility Expenses - Sub-Account	\$ 252,183	\$ 212,000	\$ (40,183)
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (12,176)	\$ (14,000)	\$ (1,824)
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 7,335	\$ -	\$ (7,335)
4405	Interest and Dividend Income	\$ (141,380)	\$ (101,310)	\$ 40,070
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (3,166)	\$ (1,006,070)	\$ (1,002,904)

Account 4305 – Regulatory Debits

Effective January 1st, 2013, EPLC transitioned from reporting in CGAAP to reporting in MIFRS for the purpose of annual RRR reporting, as directed by the Board in “*Accounts Procedures Handbook Frequently Asked Questions July 2012*”. The variance is a result of no entry being required for 2016 and beyond for the MFIRS transition.

Account 4355 – Gain on Disposition of Utility and Other Property

The variance in account 4355 is a result of a one-time gain on disposition of property described in 2016 above.

Account 4360 – Loss on Disposition of Utility and Other Property

The positive variance in account 4360 is a result of the completion of retirement of distribution substations as part of EPLC’s Single Voltage Utility initiative.

Account 4375 – Revenue from Non-Utility Operations

EPLC experienced a large decrease in account 4375 as a result of items related to Conservation & Demand Management as well as the loss of a water billing municipal customer which dramatically affected revenues. Many of the efficiencies that EPLC was able to offer as a result of servicing both water and electricity customers are no longer cost effective and/or feasible as a result.

CDM revenues and expenses are largely and mostly timing related variances.

Account 4380 – Expenses from Non-Utility Operations

EPLC experienced a large decrease in account 4380 as a result of items related to Conservation & Demand Management as well as the loss of a water billing municipal customer which dramatically affected revenues. Many of the efficiencies that EPLC was able to offer as a result of servicing both water and electricity customers are no longer cost effective and/or feasible as a result.

EPLC also experienced rising (mainly inflationary) cost of services such as billing and traffic/street lighting.

1 2017 Bridge Vs. 2018 Test

2 EPLC is forecasting an overall increase of \$199,597 in Other Revenue between the 2017 Bridge
3 and 2018 Test Years. Figure 40 below details the variances by USoA account.

4 **Figure 40 – 2017 Bridge Vs. 2018 Test Variance Analysis**

USoA #	Description	2017 Bridge	2018 Test	Variance
Reporting Basis		CGAAP	CGAAP	
4235	Specific Service Charges	\$ (166,480)	\$ (166,480)	\$ -
4225	Late Payment Charges	\$ (260,400)	\$ (260,400)	\$ -
4080	SSS Revenue	\$ (80,000)	\$ (80,000)	\$ -
4082	Retail Services Revenues	\$ (28,000)	\$ (28,000)	\$ -
4084	Service Tax Requests	\$ (7,640)	\$ (7,640)	\$ -
4090	Electric Services Incidental to Energy Sales	\$ -	\$ -	\$ -
4205	Interdepartmental Rents	\$ -	\$ -	\$ -
4210	Rent from Electric Property	\$ (109,515)	\$ (109,515)	\$ -
4215	Other Utility Operating Income	\$ -	\$ -	\$ -
4220	Other Electric Revenues	\$ -	\$ -	\$ -
4240	Provision for Rate Refunds	\$ -	\$ -	\$ -
4245	Government Assistance Directly Credited to Income	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ -	\$ -
4310	Regulatory Credits	\$ -	\$ -	\$ -
4315	Revenues from Electric Plant Leased to Others	\$ -	\$ -	\$ -
4320	Expenses of Electric Plant Leased to Others	\$ -	\$ -	\$ -
4325	Revenues from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4330	Costs and Expenses from Merchandise, Jobbing, Etc.	\$ -	\$ -	\$ -
4335	Profits and losses from Financial Instrument Hedges	\$ -	\$ -	\$ -
4340	Profits and losses from Financial Instrument Investments	\$ -	\$ -	\$ -
4345	Gains from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4350	Losses from Disposition of Future Use Utility Plant	\$ -	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -
4365	Gains from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4370	Losses from Disposition of Allowances for Emission	\$ -	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ (1,865,253)	\$ (1,875,456)	\$ (10,203)
4375	Generation Facility Revenues - Sub-Account	\$ (369,700)	\$ (366,700)	\$ 3,000
4380	Expenses from Non-Utility Operations	\$ 1,784,228	\$ 1,865,670	\$ 81,442
4380	Generation Facility Expenses - Sub-Account	\$ 212,000	\$ 230,000	\$ 18,000
4385	Expenses of Non-Utility Operations	\$ -	\$ -	\$ -
4390	Miscellaneous Non-Operating Income	\$ (14,000)	\$ -	\$ 14,000
4395	Rate-Payer Benefit Including Interest	\$ -	\$ -	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ -	\$ -	\$ -
4405	Interest and Dividend Income	\$ (101,310)	\$ (30,000)	\$ 71,310
4415	Equity in Earnings of Subsidiary Companies	\$ -	\$ -	\$ -
Total		\$ (1,006,070)	\$ (828,521)	\$ 177,549

1 **Account 4380 – Expenses from Non-Utility Operations**

2 EPLC has been notified by one of its municipal water and sewer billing customers that they plan
3 to no longer use EPLC as a service provider in 2018 or early 2019. As a result, EPLC adjusted
4 expenses in account 4380 to account for this future loss of revenue. The remaining revenue
5 offset between accounts 4375 and 4380 relate to miscellaneous traffic and streetlight work.

6 **Account 4405 – Interest and Dividend Income**

7 Interest income decreased materially in 2018 as a result of EPLC clearing out DVA related
8 interest as part of this Application.

9 **3.4.3 Specific Service Charges**

10 EPLC proposes the following Specific Services Charges (“SSCs”) as described in Figure 41 below.
11 Additional information related to SSCs can be found in Exhibit 8. It should be noted that EPLC is
12 not proposing any rate increases related to SSCs for the purpose of this Application.

1 **Figure 41 – EPLC Proposed SSCs**

Description	Unit	Rate
Customer Administration		
Arrears Certificate	\$	15.00
Statement of Account	\$	15.00
Duplicate Invoices for Previous Billing	\$	15.00
Request for Other Billing Information	\$	15.00
Easement Letter	\$	15.00
Income Tax Letter	\$	15.00
Account History	\$	15.00
Returned Cheque (plus bank charges)	\$	15.00
Legal Letter Charge	\$	15.00
Account Set Up Charge/Change of Occupancy Charge (plus credit agency charge if applicable)	\$	30.00
Special Meter Reads	\$	30.00
Meter Dispute Charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non Payment of Account		
Late Payment - per Month	%	1.50
Late Payment - per Annum	%	19.56
Collection of Account Charge - No Disconnection	\$	30.00
Collection of Account Charge - No Disconnection - After Regular Hours	\$	165.00
Disconnect/Reconnect Charge - At Meter - During Regular Hours	\$	65.00
Disconnect/Reconnect Charge - At Meter - After Regular Hours	\$	185.00
Disconnect/Reconnect Charge - At Pole - During Regular Hours	\$	185.00
Disconnect/Reconnect Charge - At Pole - After Regular Hours	\$	415.00
Install/Remove Load Control Device - During Regular Hours	\$	65.00
Install/Remove Load Control Device - After Regular Hours	\$	185.00
Other Charges		
Service Call - Customer Owned Equipment	\$	30.00
Service Call - After Regular Hours	\$	165.00
Temporary Service Install & Remove - Overhead - No Transformer	\$	500.00
Temporary Service Install & Remove - Overhead - With Transformer	\$	300.00
Temporary Service Install & Remove - Underground - No Transformer	\$	1,000.00
Specific Charge for Access to the Power Poles - per Pole/Year	\$	22.35

2 **3.4.4 Affiliate Transactions**

3 EPLC currently provides water and wastewater billing, collecting and general customer service
 4 on behalf of three of its four Municipal Shareholders. The amounts received from these
 5 services are recorded in Account 4375. EPLC expects to continue services to only two out of
 6 four of its shareholders effective January 1st, 2018.

7

8

3.4.5 Generation Revenues

EPLC currently owns one 500 kW DC rooftop solar photovoltaic Feed In Tariff (“FIT”) project as well as three 10 kW DC ground mounted microFIT projects. Revenues and expenses related to these projects are not considered in this Application and are tracked in Accounts 4375 (Sub-account Generation Facility Revenues) and 4380 (Sub-account Generation Facility Expenses) respectively in accordance with EB-2009-0411 (Distributor Owned Generation).

Attachment 3-A

EPLC Load Forecast



Weather Normalized Distribution System Load Forecast: 2018 Cost of Service

**Report prepared by
Andrew Frank
Elenchus Research Associates Inc.**

**Prepared for:
Essex Powerlines**

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Table of Contents

1	Introduction	1
1.1	Summarized Results.....	2
2	Class Specific kWh Regression	4
2.1	Residential	4
2.2	GS < 50.....	6
2.3	GS > 50.....	8
3	Weather Normalization and Economic Forecast	11
4	Class Specific Normalized Forecasts.....	13
4.1	Residential	13
4.2	GS < 50.....	14
4.3	GS > 50.....	15
4.4	Embedded Distributor	17
5	Street Light, Sentinel and USL Forecast	19
6	CDM Adjustment to Load Forecast	22

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1 INTRODUCTION

This report outlines the results and methodology used to derive the weather normal load forecast prepared for use in the Cost of Service application for 2018 rates for Essex Powerlines (“Essex”).

The regression equations used to normalize and forecast Essex’ weather sensitive load use monthly heating degree days and cooling degree days as measured at Environment Canada’s Windsor Riverside weather station to take into account temperature sensitivity. This location is central to the communities in Essex’s service territory, and has strong historical weather data. Essex experiences peak loads in both the summer and winter seasons. Environment Canada defines heating degree days and cooling degree days as the difference between the average daily temperature and 18°C for each day (below for heating, above for cooling).

To isolate the impact of CDM, persisting CDM as measured by the IESO is added back to rate class consumption to simulate the rate class consumption had there been no CDM program delivery. This is labelled as “Actual No CDM” throughout the model. The effect is to remove the impact of CDM from any explanatory variables which may capture a trend, and focus on the external factors. A weather normalized forecast is produced first based on no CDM delivery, and then CDM savings of historic programs are subtracted off to reflect the actual normal forecast.

While statistical regression is appropriate for estimating a relationship between explanatory variables and energy use, in the case of CDM, an independent measurement is available providing a greater level of accuracy than could be obtained through regression.

Overall economic activity also impacts energy consumption. There is no known agency that publishes monthly economic accounts on a regional basis for Ontario. However, regional employment levels are available. Given that income from employment and labour sources accounts for the largest portion of GDP on an income basis, and a study by Statistics Canada that has indicated that “turning points in the growth of output and employment appear to have been virtually the same over the past three decades”¹, employment has been chosen as the economic variable to incorporate into the analysis. Specifically, the monthly full-time employment level for Winsor, Ontario, as reported in Statistics Canada’s Monthly Labour Force Survey (CANSIM series Table 282-0135) was tested and used for the Residential, GS < 50, and GS > 50 rate classes.

¹ Philip Cross, “Cyclical changes in output and employment,” *Canadian Economic Observer*, May 2009.

In order to isolate demand determinants at the class specific level, equations to weather normalize and forecast kWh consumption for the Residential, GS<50, and GS>50 classes, have been estimated.

In addition to the weather and economic variables, a time trend variable, number of days and number of working days in each month, number of customers, and month of year variables, have been examined for all rate classes. More details on the individual class specifications are provided in the next section.

Finally, for classes with demand charges, an annual kW to kWh ratio is calculated using actual observations for each historical year and applied to the normalized kWh to derive a weather normal kW observation. For forecast values, the average kW to kWh ratio for 2009-2016 is applied for all demand billed classes.

1.1 SUMMARIZED RESULTS

The following table summarizes the historic and forecast kWh for 2012-2018:

Normal Forecast

kWh	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2016 Normalized	2017 Forecast	2018 Forecast
Residential	256,003,979	250,406,105	245,551,953	244,757,239	255,390,422	249,168,165	247,700,344	246,544,006
GS < 50	67,056,278	65,663,990	65,242,011	65,329,579	66,808,993	64,675,919	65,087,892	65,487,649
GS > 50	160,883,812	164,887,609	166,100,613	171,874,066	187,031,606	175,310,400	179,829,958	183,374,335
Embedded Distributor	35,429,534	36,931,636	38,058,828	38,655,620	32,586,843	32,586,843	31,681,583	29,865,554
Street Light	6,205,705	6,271,491	6,286,758	6,227,063	4,268,688	4,268,688	2,799,882	2,799,882
Sentinel Light	383,994	342,834	350,518	341,136	335,758	335,758	335,758	335,758
USL	1,558,152	1,549,960	1,555,546	1,558,152	1,554,368	1,554,368	1,554,368	1,554,368
Total	527,521,454	526,053,625	523,146,226	528,742,855	547,976,676	527,900,141	528,989,785	529,961,552

Table 1 kWh forecast by class

The following table summarizes 2015-2020 CDM Adjusted Load Forecast kWh. Details for this calculation can be found in Schedule 6 of this report.

CDM Adjusted

kWh	2018 Weather Normal Forecast	CDM Adjustment	2018 CDM Adjusted Forecast
Residential	246,544,006	1,169,888	245,374,118
GS < 50	65,487,649	2,780,199	62,707,450
GS > 50	183,374,335	7,094,029	176,280,306
Embedded Distributor	29,865,554	0	29,865,554
Street Light	2,799,882	0	2,799,882
Sentinel Light	335,758	0	335,758
USL	1,554,368	0	1,554,368
Total	529,961,552	11,044,116	518,917,436

Table 2 CDM Adjusted kWh forecast

The following table summarizes the historic and forecast kW for 2012-2018. The calculations can be found as follows:

Normal Forecast

kW	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2016 Normalized	2017 Forecast	2018 Forecast
GS > 50	416,357	399,217	394,614	459,153	476,121	443,798	455,239	464,212
Embedded Distributor	109,304	96,078	84,453	106,798	87,828	88,238	85,786	80,869
Street Light	18,742	19,025	15,872	18,023	13,490	13,490	8,848	8,848
Sentinel Light	2,100	2,100	2,068	2,088	2,080	2,080	2,080	2,080
Total	546,503	516,420	497,007	586,062	579,519	547,606	551,954	556,009

Table 3 kW Forecast

The following table summarizes 2015-2020 CDM Adjusted Load Forecast kW. Details for this calculation can be found at the end of in Schedule 6 of this report.

CDM Adjusted

kW	2018 Weather Normal Forecast	CDM Adjustment	2018 CDM Adjusted Forecast
GS > 50	464,212	17,959	446,253
Embedded Distributor	80,869	0	80,869
Street Light	8,848	0	8,848
Sentinel Light	2,080	0	2,080
Total	556,009	17,959	538,051

Table 4 CDM Adjusted kW Forecast

The following table summarizes the historic and forecast customer/connections for 2012-2018:

Customer Connections

kW	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Forecast
Residential	26,337	26,466	26,590	26,815	27,137	27,310	27,484
GS < 50	1,906	1,904	1,910	1,936	1,953	1,965	1,977
GS > 50	208	208	211	212	220	219	219
Embedded Distributor	7	6	6	6	3	3	3
Street Light	2,474	2,621	2,713	2,701	2,720	2,740	2,740
Sentinel Light	175	175	172	174	173	173	173
USL	141	140	140	141	140	140	140
Total	31,249	31,521	31,742	31,984	32,345	32,550	32,736

Table 5 Customer / Connection Forecast for 2009-2020

2 CLASS SPECIFIC KWH REGRESSION

2.1 RESIDENTIAL

For the Residential Class kWh consumption the equation was estimated using 96 observations from 2009:01-2016:12.

Heating and Cooling Degree days were used, as measured at the Windsor Riverside weather station as described in the introduction. A Trend variable was used, indicating 1 in January 2009, and incrementing once each month, reaching 96 in the last month of the regression, December 2015. A count of the number of calendar days in the month was used. Finally, binary indicator variables for the Shoulder season months of March, April, May, September, October, and November, was used.

A count of customer connections was examined, and found to not show a statistically significant relationship to energy usage.

The following table outlines the resulting regression model:

Model 3: OLS, using observations 2009:01-2016:12 (T = 96)

Dependent variable: Gross_Res

	coefficient	std. error	t-ratio	p-value
const	(17,086,567)	4,123,062	-4.14414487	7.76E-05
HDD	6,467	500	12.94752018	3.54E-22
CDD	68,142	2,097	32.50110621	3.70E-51
Month_Days	828,171	95,188	8.700354107	1.57E-13
Shoulder	(1,891,036)	203,768	-9.280333545	9.87E-15
Trend	(20,583)	5,091	-4.043316991	1.12E-04
Windsor_FTE	65,415	22,171	2.950532571	0.004053762

Mean dependent var	21,389,786	S.D. dependent var	4559082.471
Sum squared resid	4.37176E+13	S.E. of regression	7.01E+05
R-squared	0.977860002	Adjusted R-squared	9.76E-01
F(6, 89)	655.1456358	P-value(F)	2.32E-71
Log-likelihood	-1424.750412	Akaike criterion	2863.500823
Schwarz criterion	2881.451261	Hannan-Quinn	2.87E+03
rho	-0.1490113	Durbin-Watson	2.284293989
Theil's U	0.18604		

Table 6 Residential Regression Model

Using the above model coefficients, we derive the following:

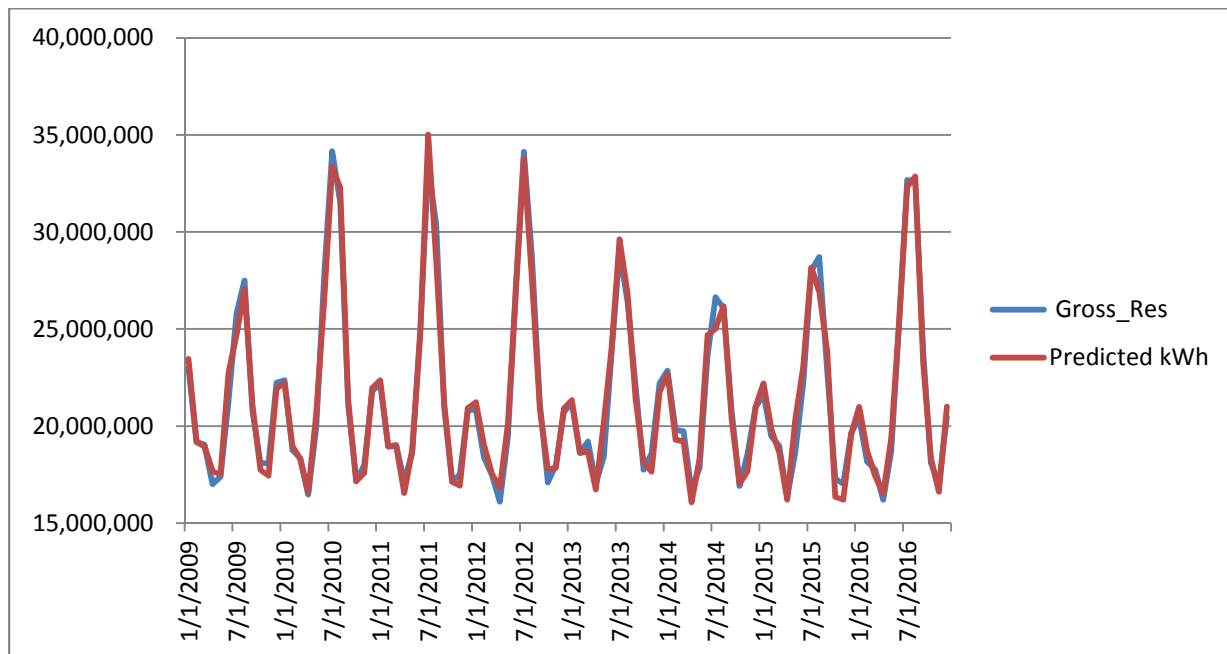


Figure 1 Residential Predicted vs Actual observations

Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 0.4%. Annual errors are calculated as the model is used to derive annual forecasts. However, in proceedings Elenchus has been involved in, intervenors and Board Staff have requested MAPE calculated on a monthly basis and this has been provided as well. The MAPE calculated monthly over the period is 2.4%.

Year	Res kWh		Absolute Error (%)
	Actual+CDM	Predicted	
2009	249,248,745	249,427,852	0.1%
2010	267,217,596	266,877,375	0.1%
2011	260,939,812	259,961,861	0.4%
2012	259,249,764	260,447,551	0.5%
2013	254,292,198	254,989,919	0.3%
2014	250,468,248	247,521,029	1.2%
2015	250,772,427	251,377,970	0.2%
2016	261,230,619	262,815,850	0.6%
Mean Absolute Percentage Error (Annual)			0.4%
Mean Absolute Percentage Error (Monthly)			2.4%

Table 7 Residential model error

2.2 GS < 50

For the GS < 50 class, the regression equation was estimated using 96 observations from 2009:01-2016:12.

Heating degree days and cooling degree days were used, as measured at the Windsor Riverside weather station as described in the introduction. Windsor employment “Windsor_FTE” has been included as an indicator of economic activity. A count of the number of calendar days ‘MonthDays’ in the month has been included.

Binary variables representing the Shoulder season months of March, April, May, September, October, and November, as well as indicators for the months of March and December have also been included.

The customer count and a trend variable were tested but found to not have a statistically significant relationship to energy usage.

The following table outlines the resulting regression model:

Model 5: OLS, using observations 2009:01-2016:12 (T = 96)

Dependent variable: Gross_GSI50

	coefficient	std. error	t-ratio	p-value
Const	(1,088,732)	645,754	-1.685985699	9.53E-02
HDD	1,031	94	10.92181431	4.71E-18
CDD	7,674	401	19.14757281	3.93E-33
Windsor_FTE	11,407	2,057	5.545950918	3.03E-07
Month_Days	149,535	19,402	7.707080931	1.83E-11
Shoulder	(268,303)	42,581	-6.301026423	1.14E-08
March	178,697	54,524	3.277385468	1.50E-03
December	(197,901)	58,891	-3.360431276	1.15E-03

Mean dependent var	5,744,507	S.D. dependent var	530340.3969
Sum squared resid	1.37747E+12	S.E. of regression	1.25E+05
R-squared	0.948447653	Adjusted R-squared	0.944346898
F(7, 88)	231.2861104	P-value(F)	8.17E-54
Log-likelihood	-1258.790252	Akaike criterion	2.53E+03
Schwarz criterion	2554.095289	Hannan-Quinn	2.54E+03
rho	0.453793157	Durbin-Watson	1.081812078
Theil's U	0.25417		

Table 8 GS < 50 Regression Model

Using the above model coefficients we derive the following:

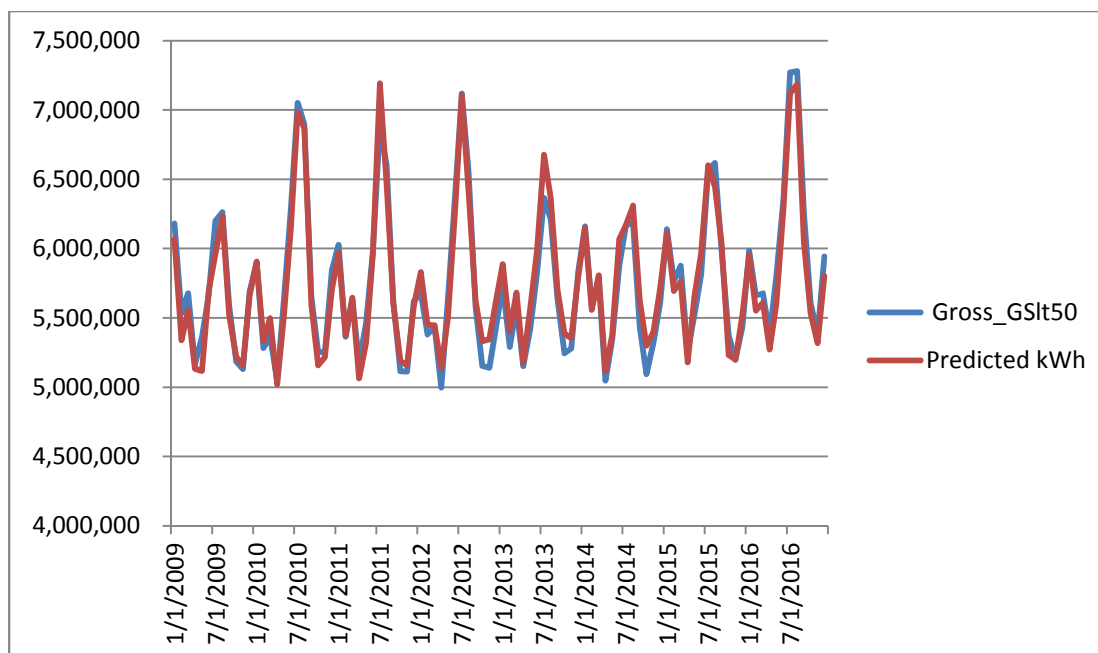


Figure 2 GS < 50 Predicted vs Actual observations

Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.1%. Annual errors are calculated as the model is used to derive annual forecasts. However, in recent proceedings Elenchus has been involved in, intervenors and Board Staff have requested MAPE calculated on a monthly basis and this has been provided as well. The MAPE calculated monthly over the period is 1.7%.

Year	GS<50 kWh		Absolute Error (%)
	Actual+CDM	Predicted	
2009	67,635,266	66,657,604	1.4%
2010	69,463,566	68,933,522	0.8%
2011	68,580,386	68,523,489	0.1%
2012	68,501,517	69,093,092	0.9%
2013	67,565,571	68,990,290	2.1%
2014	67,585,756	68,598,369	1.5%
2015	69,539,872	69,407,865	0.2%
2016	72,600,737	71,268,440	1.8%

Mean Absolute Percentage Error (Annual) 1.1%

Mean Absolute Percentage Error (Monthly) 1.7%

Table 9 GS < 50 model error

2.3 GS > 50

For the GS > 50 class, the regression equation was estimated using 96 observations from 2009:01-2016:12.

Heating degree days and cooling degree days were used, as measured at the Windsor Riverside weather station as described in the introduction. Windsor full time Employment "Windsor_FTE has been included as an indicator of economic activity. A trend variable indicating 1 in January 2009, incrementing by 1 each month, and reaching 96 in December 2016 has been included.

Binary variables representing the Spring and Fall season months were tested, however, separate binary indicators for February, August, September, October, and November were found to be much more statistically significant.

The customer count was tested, but found to not have a statistically significant relationship to energy usage.

The following table outlines the resulting regression model:

Model 1: OLS, using observations 2009:01-2016:12 (T = 96)

Dependent variable: Gross_GSgt50

	coefficient	std. error	t-ratio	p-value
const	(11,694,574)	3,877,080	3.016335242	3.37E-03
GSgt50_Customers	50,679	10,133	5.001285381	3.03E-06
HDD	2,681	529	5.073220952	2.27E-06
CDD	14,782	1,992	7.419284304	8.23E-11
Windsor_FTE	83,819	23,664	3.542095955	6.47E-04
Trend	12,860	5,317	2.418708449	1.77E-02
February	(797,687)	286,470	2.784539234	6.61E-03
August	1,257,541	297,286	4.230073151	5.87E-05
September	1,979,533	291,251	6.796646396	1.39E-09
October	1,466,842	305,152	4.806922215	6.54E-06
November	671,694	282,458	2.378033542	1.96E-02
Mean dependent var	14471630.8	S.D. dependent var	1.61E+06	
Sum squared resid	4.1056E+13	S.E. of regression	694990.1813	
R-squared	0.833314467	Adjusted R-squared	0.813704404	
F(10, 85)	42.49422745	P-value(F)	7.15E-29	
Log-likelihood	-1421.735334	Akaike criterion	2.87E+03	
Schwarz criterion	2893.678498	Hannan-Quinn	2876.872734	
Rho	0.254232178	Durbin-Watson	1.485514671	
Theil's U	0.57872			

Table 10 GS > 50 Regression Model

Using the above model coefficients we derive the following:

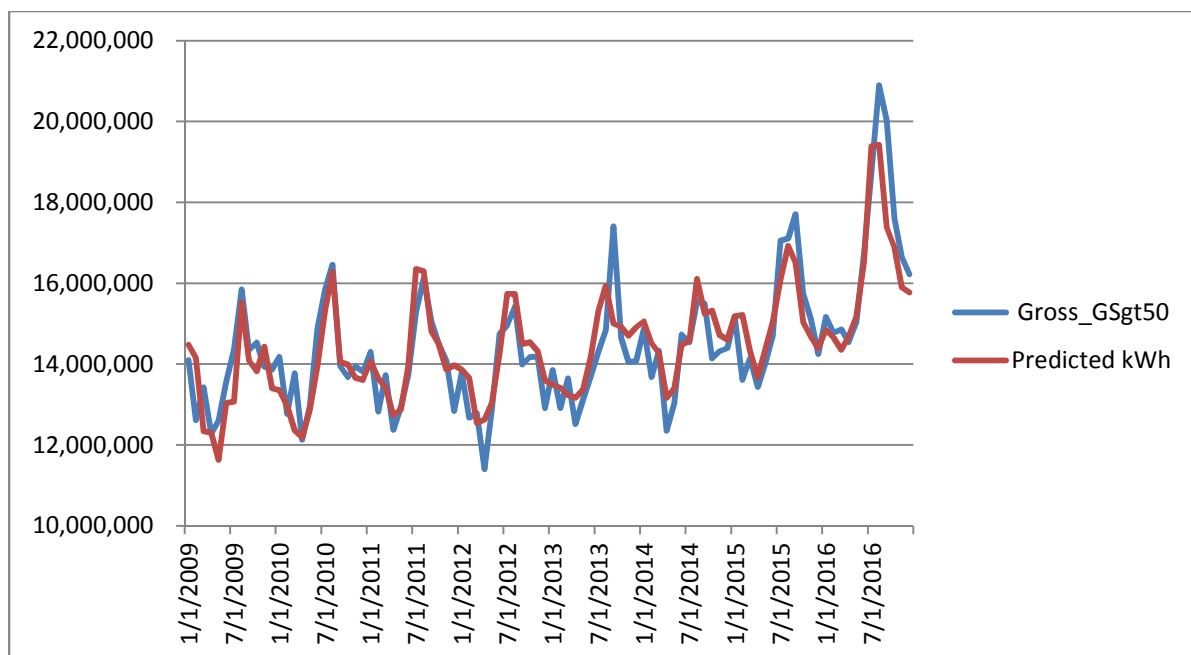


Figure 3 GS > 50 Predicted vs Actual observations

Annual estimates using actual weather are compared to actual values in the table below. Mean absolute percentage error (MAPE) for annual estimates for the period is 1.8%. Annual errors are calculated as the model is used to derive annual forecasts. However, in recent proceedings Elenchus has been involved in, intervenors and Board Staff have requested MAPE calculated on a monthly basis and this has been provided as well. The MAPE calculated monthly over the period is 3.7%.

Year	GS>50 kWh		Absolute Error (%)
	Actual+CDM	Predicted	
2009	165,450,249	162,280,731	1.9%
2010	168,399,144	164,618,456	2.2%
2011	167,789,871	170,519,616	1.6%
2012	163,904,123	168,388,914	2.7%
2013	169,072,483	171,630,122	1.5%
2014	171,423,509	175,450,624	2.3%
2015	182,018,509	181,410,532	0.3%
2016	201,218,669	194,977,562	3.1%

Mean Absolute Percentage Error (Annual) 1.8%

Mean Absolute Percentage Error (Monthly) 3.7%

Table 11 GS > 50 model error

3 WEATHER NORMALIZATION AND ECONOMIC FORECAST

It is not possible to accurately forecast weather for months or years in advance. Therefore, one can only base future weather expectations on what has happened in the past. Individual years may experience unusual spells of weather (unusually cold winter, unusually warm summer, etc.). However, over time, these unusual spells “average” out. While there may be trends over several years (e.g., warmer winters for example), using several years of data rather than one particular year filters out the extremes of any particular year. While there are several different approaches to determining an appropriate weather normal, Essex has adopted the most recent 10 year monthly degree day average as the definition of weather normal, which to our knowledge, is consistent with many LDCs load forecast filings for cost-of-service rebasing applications.

The table below displays the most recent 10 year average of heating degree days and cooling degree days as reported by Environment Canada for Windsor Riverside, which is used as the weather station for Essex.

10 Year Average

		HDD	CDD
Windsor Riverside	January	661.19	0
Windsor Riverside	February	598.17	0
Windsor Riverside	March	451.34	0.88
Windsor Riverside	April	259.55	2.45
Windsor Riverside	May	88.88	43.8
Windsor Riverside	June	9.77	117.39
Windsor Riverside	July	0.58	179.71
Windsor Riverside	August	1.71	158.1
Windsor Riverside	September	32.68	67.34
Windsor Riverside	October	176.42	10.18
Windsor Riverside	November	364.23	0.05
Windsor Riverside	December	552.31	0

Table 12 10 Year Average HDD and CDD

As part of the minimum filing requirements the OEB has requested monthly degree days calculated using a trend based on 20 years. This is shown in the table below.

20 Year Trend

		HDD	CDD
Windsor Riverside	January	675.09	0.00
Windsor Riverside	February	644.95	0.00
Windsor Riverside	March	454.91	0.13
Windsor Riverside	April	263.92	1.76
Windsor Riverside	May	82.02	52.21

Windsor Riverside	June	3.64	113.38
Windsor Riverside	July	0.76	186.39
Windsor Riverside	August	1.34	169.95
Windsor Riverside	September	31.63	70.65
Windsor Riverside	October	170.95	8.69
Windsor Riverside	November	359.64	0.10
Windsor Riverside	December	534.71	0.00

Table 13 20 Year Trend HDD and CDD

4 CLASS SPECIFIC NORMALIZED FORECASTS

4.1 RESIDENTIAL

Incorporating the forecast economic variables, 10-yr weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Year	Res kWh						
	Actual A	Cumulative Persisting CDM B	Actual no CDM C = A + B	Normalized no CDM D	Cumulative Persisting CDM E = B	Normalized F = D - E	
2009	248,399,886	848,858	249,248,745	261,706,941	848,858	260,858,083	
2010	265,216,568	2,001,028	267,217,596	259,318,714	2,001,028	257,317,686	
2011	258,409,726	2,530,086	260,939,812	256,348,291	2,530,086	253,818,205	
2012	256,003,979	3,245,785	259,249,764	258,425,322	3,245,785	255,179,537	
2013	250,406,105	3,886,093	254,292,198	255,706,080	3,886,093	251,819,986	
2014	245,551,953	4,916,295	250,468,248	253,278,603	4,916,295	248,362,308	
2015	244,757,239	6,015,187	250,772,427	252,990,205	6,015,187	246,975,018	
2016	255,390,422	5,840,197	261,230,619	255,008,362	5,840,197	249,168,165	
2017				252,951,789	5,251,445	247,700,344	
2018				251,127,941	4,583,936	246,544,006	

Table 14 Actual vs Normalized Residential kWh

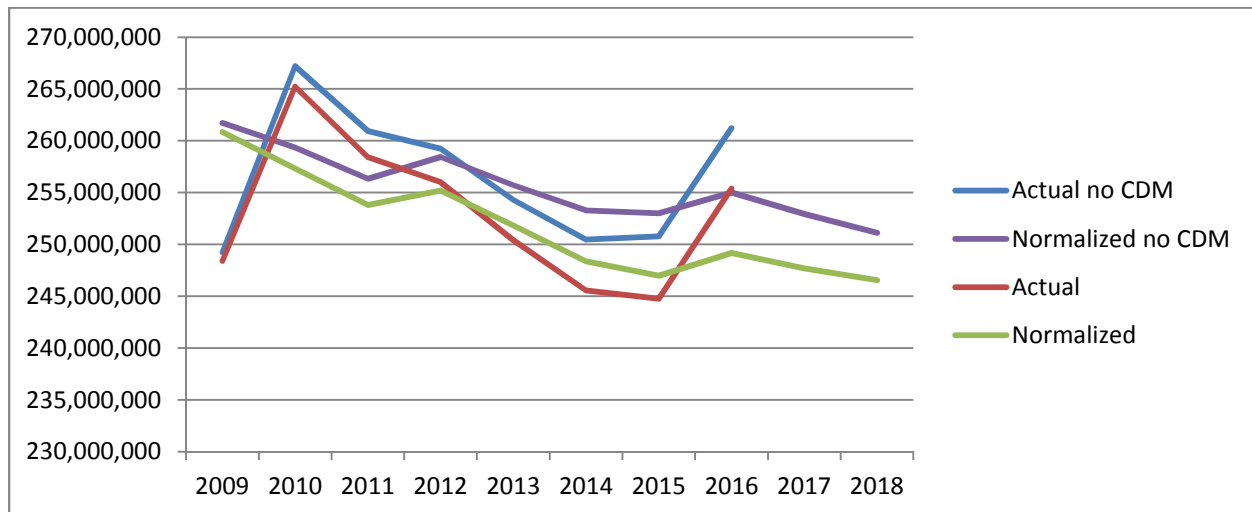


Figure 4 Actual vs Normalized Residential kWh

While Residential customer counts are not a component of the regression model, they are forecasted for the purpose of rate setting. The Geometric mean of the annual growth from 2009 to 2016 was used to forecast the growth rate from 2017 to 2018.

Year	Residential Customers	Percentage of Prior Year
2009	25,957	
2010	26,075	100.46%
2011	26,201	100.48%
2012	26,337	100.52%
2013	26,466	100.49%
2014	26,590	100.47%
2015	26,815	100.85%
2016	27,137	101.20%
2017	27,310	100.64%
2018	27,484	100.64%

Table 15 Forecasted Residential Customer Count

4.2 GS < 50

Incorporating the forecast economic variables, 10-yr weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Year	GS<50 kWh						
	Actual	Cumulative	Persisting CDM	Actual no CDM	Normalized no CDM	Cumulative	Persisting CDM
	A		B	C = A + B	D	E = B	F = D - E
2009	67,411,402		223,864	67,635,266	68,012,729	223,864	67,788,865
2010	68,742,430		721,136	69,463,566	68,113,113	721,136	67,391,976
2011	67,558,143		1,022,244	68,580,386	68,111,972	1,022,244	67,089,728
2012	67,056,278		1,445,240	68,501,517	68,996,132	1,445,240	67,550,892
2013	65,663,990		1,901,582	67,565,571	69,033,675	1,901,582	67,132,094
2014	65,242,011		2,343,745	67,585,756	69,127,215	2,343,745	66,783,470
2015	65,329,579		4,210,293	69,539,872	69,593,770	4,210,293	65,383,477
2016	66,808,993		5,791,744	72,600,737	70,467,663	5,791,744	64,675,919
2017					70,620,764	5,532,872	65,087,892
2018					70,819,565	5,331,916	65,487,649

Table 16 Actual vs Normalized GS < 50 kWh

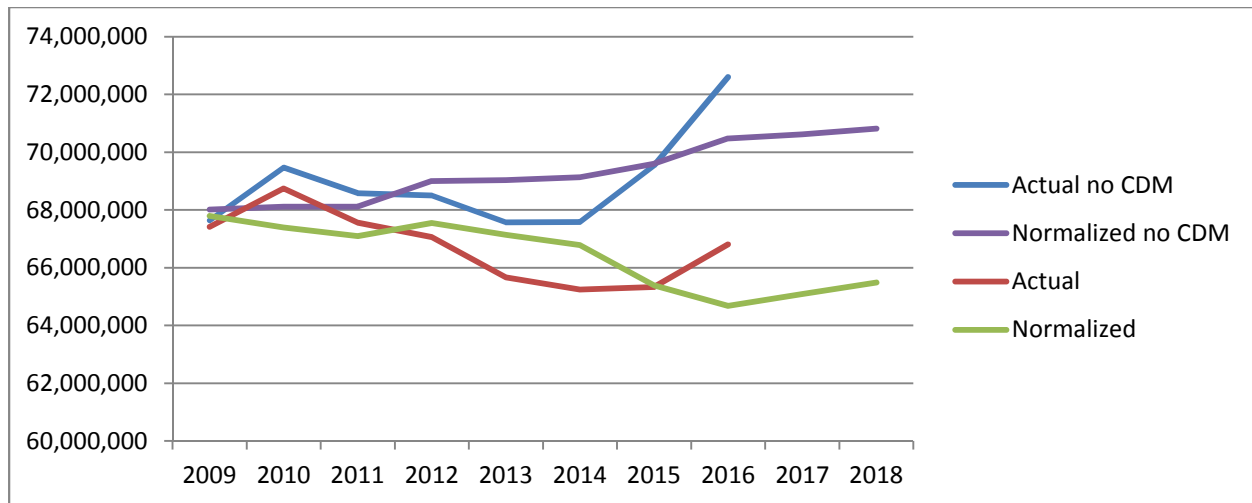


Figure 5 Actual vs Normalized GS < 50 kWh

While GS < 50 customer counts are not a component of the regression model, they are forecasted for the purpose of rate setting. The Geometric mean of the annual growth from 2009 to 2016 was used to forecast the growth rate from 2017 to 2018.

The following table includes the customer Actual / Forecast customer count on this basis:

Year	GS < 50 Customers	Percentage of Prior Year
2009	1,870	
2010	1,895	101.37%
2011	2,056	108.47%
2012	1,906	92.72%
2013	1,904	99.90%
2014	1,910	100.29%
2015	1,936	101.36%
2016	1,953	100.89%
2017	1,965	100.62%
2018	1,977	100.62%

Table 17 Forecasted GS < 50 Customer Count*

4.3 GS > 50

Incorporating the forecast economic variables, 10-yr weather normal heating and cooling degree days, and calendar variables, the following weather corrected consumption and forecast values are calculated:

Year	GS>50 kWh					
	Actual	Cumulative Persisting CDM	Actual no CDM	Normalized no CDM	Cumulative Persisting CDM	Normalized
	A	B	C = A + B	D	E = B	F = D - E
2009	164,879,032	571,217	165,450,249	160,709,213	571,217	160,137,995
2010	167,052,603	1,346,541	168,399,144	158,990,975	1,346,541	157,644,434
2011	165,850,872	1,938,999	167,789,871	165,598,376	1,938,999	163,659,377
2012	160,883,812	3,020,311	163,904,123	164,384,757	3,020,311	161,364,446
2013	164,887,609	4,184,874	169,072,483	167,509,941	4,184,874	163,325,067
2014	166,100,613	5,322,896	171,423,509	172,076,347	5,322,896	166,753,451
2015	171,874,066	10,144,443	182,018,509	177,660,533	10,144,443	167,516,090
2016	187,031,606	14,187,064	201,218,669	189,497,464	14,187,064	175,310,400
2017				193,414,587	13,584,630	179,829,958
2018				196,568,931	13,194,596	183,374,335

Table 18 Actual vs Normalized GS > 50 kWh

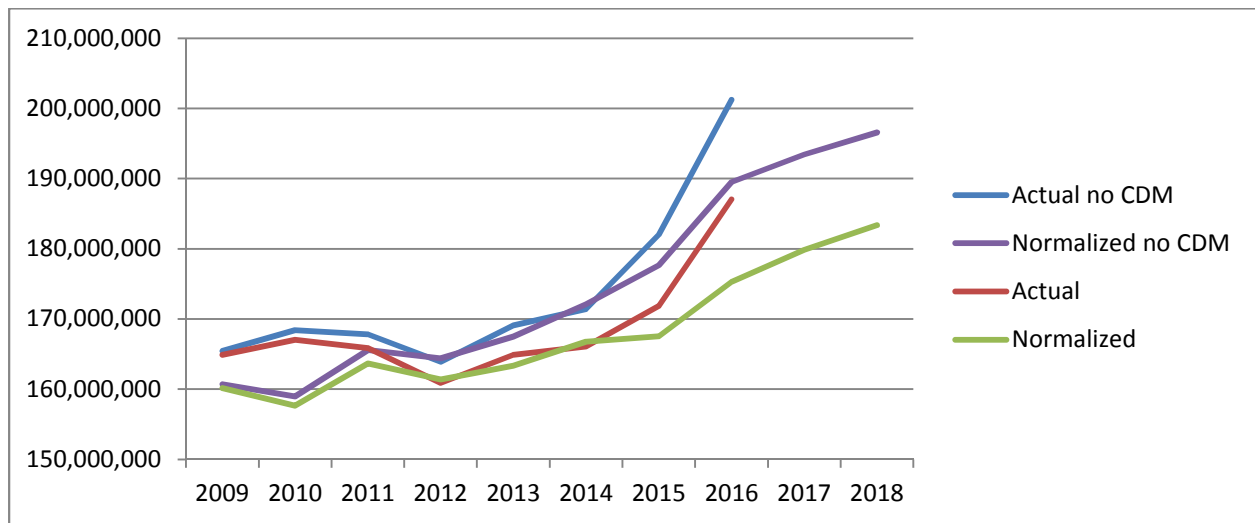


Figure 6 Actual vs Normalized GS > 50 kWh

Customer counts are forecasted and used for both the GS > 50 regression model, and for the purpose of rate setting. The Geometric mean of the annual growth from 2009 to 2016 was used to forecast the growth rate from 2017 to 2018.

The following table includes the customer Actual / Forecast customer count on this basis:

Year	GS > 50 Customers	Percentage of Prior Year
2009	221	
2010	214	96.80%
2011	222	103.65%
2012	208	93.74%
2013	208	99.92%
2014	211	101.60%
2015	212	100.24%
2016	220	103.62%
2017	219	99.88%
2018	219	99.88%

Table 19 Forecasted GS > 50 Customer Count

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The average ratio from 2009-2016 is used to forecast kW for all future years.

GS>50			
Year	kWh Actual A	Ratio C = B / A	kW Actual B
2009	164,879,032	0.002637102	434,803
2010	167,052,603	0.002534534	423,400
2011	165,850,872	0.002478392	411,044
2012	160,883,812	0.002587935	416,357
2013	164,887,609	0.002421144	399,217
2014	166,100,613	0.002375754	394,614
2015	171,874,066	0.002671453	459,153
2016	187,031,606	0.00254567	476,121

kWh Normalized			
	D	E	F = D * E
2016	175,310,400	0.002531498	443,798
2017	179,829,958	0.002531498	455,239
2018	183,374,335	0.002531498	464,212

Table 20 Forecasted GS > 50 kW

4.4 EMBEDDED DISTRIBUTOR

The Embedded Distributor did not exhibit statistically significant heating, cooling, nor sensitivity to economic variables. It is common that regression would not be appropriate for larger volume rate classes, and occasionally embedded distributors depending on the attached loads. In this case, attempts at regression failed to produce an acceptable

model. The Embedded Distributor class has exhibited a decreasing trend from 2009 to 2016, and was therefore forecasted by continuing the 8 year trend to 2017 and 2018.

Embedded Distributor

Year	Actual	Normalized
2009	44,707,890	44,707,890
2010	49,638,852	49,638,852
2011	42,820,521	42,820,521
2012	35,429,534	35,429,534
2013	36,931,636	36,931,636
2014	38,058,828	38,058,828
2015	38,655,620	38,655,620
2016	32,586,843	32,586,843
2017		31,681,583
2018		29,865,554

Table 21 Actual and Forecast Embedded Distributor kWh

The embedded distributor class has 3 connection points, and is projected to continue to be served at 3 connection points into 2018.

In order to normalize and forecast class kW for those classes that bill based on kW (demand) billing determinants, the relationship between billed kW and kWh is used. The average ratio from 2009-2016 is used to forecast kW for all future years.

Embedded Distributor

Year	kWh Actual	Ratio	kW Actual
	A	C = B / A	B
2009	44,707,890	0.002567453	114,785
2010	49,638,852	0.002795307	138,756
2011	42,820,521	0.002935759	125,711
2012	35,429,534	0.003085119	109,304
2013	36,931,636	0.002601512	96,078
2014	38,058,828	0.002219	84,453
2015	38,655,620	0.002762802	106,798
2016	32,586,843	0.002695211	87,828

kWh Normalized

	D	E	F = D * E
2016	32,586,843	0.00270777	88,238
2017	31,681,583	0.00270777	85,786
2018	29,865,554	0.00270777	80,869

Table 22 Forecasted GS > 50 kW

5 STREET LIGHT, SENTINEL AND USL FORECAST

The Street Lighting, Sentinel, and Unmetered Scattered Load Classes are non-weather sensitive classes. Connection counts are forecasted on the geometric mean growth rate from 2009 to 2016. Energy is forecasted on the basis of average energy per device or connection and connection growth.

In the case of Street Lighting, a significant LED conversion project was underway in 2016. As a result, the average demand from November and December 2016 and the average connection count from the same period were used in combination with the 2009-2016 demand to energy ratio to arrive at annual energy per street light.

The tables below summarize the historic connection counts and annual energy consumption for all classes and the anticipated consumption in the forecast period.

Street Light Year	Lamps / Devices
2009	7,634
2010	6,787
2011	2,896
2012	2,474
2013	2,621
2014	2,713
2015	2,701
2016	2,720
2017	2,740
2018	2,740

Table 23 Forecasted Street Light lamps (devices)

Sentinel Year	Connections
2009	174
2010	174
2011	174
2012	175
2013	175
2014	172
2015	174
2016	173
2017	173
2018	173

Table 24 Forecasted Sentinel connections

USL

Year	Connections
2009	140
2010	141
2011	141
2012	141
2013	140
2014	140
2015	141
2016	140
2017	140
2018	140

Table 25 Forecasted USL connections

Year	Street Light	
	Actual	Normalized
2009	5,814,688	5,814,688
2010	5,780,507	5,780,507
2011	5,969,304	5,969,304
2012	6,205,705	6,205,705
2013	6,271,491	6,271,491
2014	6,286,758	6,286,758
2015	6,227,063	6,227,063
2016	4,268,688	4,268,688
2017		2,983,574
2018		2,983,574

Table 26 Forecasted Street Light kWh

Year	Sentinel	
	Actual	Normalized
2009	398,171	398,171
2010	393,141	393,141
2011	382,814	382,814
2012	383,994	383,994
2013	342,834	342,834
2014	350,518	350,518
2015	341,136	341,136
2016	335,758	335,758
2017		335,758
2018		335,758

Table 27 Forecasted Sentinel kWh

Year	USL	
	Actual	Normalized
2009	1,553,160	1,553,160
2010	1,558,152	1,558,152
2011	1,558,152	1,558,152
2012	1,558,152	1,558,152
2013	1,549,960	1,549,960
2014	1,555,546	1,555,546
2015	1,558,152	1,558,152
2016	1,554,368	1,554,368
2017		1,554,368
2018		1,554,368

Table 28 Forecasted USL kWh

Street Light			
Year	kWh Actual	Ratio	kW Actual
	A	C = B / A	B
2009	5,814,688	0.003028579	17,610
2010	5,780,507	0.003034907	17,543
2011	5,969,304	0.003028805	18,080
2012	6,205,705	0.003020134	18,742
2013	6,271,491	0.003033639	19,025
2014	6,286,758	0.002524723	15,872
2015	6,227,063	0.002894251	18,023
2016	4,268,688	0.003160226	13,490

kWh Normalized			
	D = F / E	E	F
2016	4,548,744	0.002965658	13,490
2017	2,983,574	0.002965658	8,848
2018	2,983,574	0.002965658	8,848

Table 29 Forecasted Street Light kW

Sentinel			
Year	kWh Actual	Ratio	kW Actual
	A	C = B / A	B
2009	398,171	0.005238961	2,086
2010	393,141	0.005313609	2,089
2011	382,814	0.0054439	2,084
2012	383,994	0.005468836	2,100
2013	342,834	0.006125411	2,100
2014	350,518	0.005899844	2,068
2015	341,136	0.006120733	2,088
2016	335,758	0.006194936	2,080

kWh Normalized			
	D	E	F = D * E
2016	335,758	0.005725779	1,922
2017	335,758	0.005725779	1,922
2018	335,758	0.005725779	1,922

Table 30 Forecasted Sentinel kW

6 CDM ADJUSTMENT TO LOAD FORECAST

The current Chapter 2 OEB Minimum Filing requirements, consistent with the Board's CDM Guideline EB-2012-0003, expects the distributor to integrate an adjustment into its load forecast that takes into account the six-year (2015-2020) targets for kWh and kW reductions.

The filing requirements note that the distributors license condition targets and the LRAMVA balances are based on the IESO targets, which are annualized. It is recognized that the CDM programs in a year are not in effect for the full year, although persistence of previous year's programs will be. Therefore, the actual impact on the load forecast for the first year of the program should not be the full annualized amount. For this reason, the amount that will be used for the LRAMVA will be related to, but not necessarily equal to, the CDM adjustment for the load forecast.

The following is the proposed allocation of the CDM kWh load forecast adjustment and final proposed load forecast, based on a half-year of savings from 2016, a full year of savings from 2017 and 2018, and a half year of savings from 2018. The persisting savings observed in 2016 informed the apportionment of the commercial and industrial target.

For 2018 LRAMVA Elenchus reasons that the effects of 2016-2018 IESO CDM programs should be included in the LRAMVA calculation. In particular, full years of 2016-2018 are included.

	2015 Verified CDM	Share	CDM Adjustment	LRAMVA Target
Residential	1,356,938	10.6%	1,169,888	1,754,832
GS < 50	3,224,717	25.2%	2,780,199	4,170,299
GS > 50	8,228,273	64.2%	7,094,029	10,641,044
Total	12,809,928	100.0%	11,044,116	16,566,174

Table 31 Proposed CDM and LRAMVA kWh Adjustment

In order to calculate the kW Elenchus proposes using a proportional ratio utilizing the base load forecast kW and kWh.

	Weather Normalized 2018 Forecast (kWh)	CDM Adjustment (kWh)	% Savings	Weather Normalized 2018 Forecast (kW)	CDM Adjustment (kW)
GS > 50	183,374,335	7,094,029	3.9%	464,212	17,959
Total	183,374,335	7,094,029	0	464,212	17,959

Table 32 Proposed kW CDM adjustment

	Weather Normalized 2018 Forecast (kWh)	LRAMVA Target (kWh)	% Savings	Weather Normalized 2018 Forecast (kW)	LRAMVA Target (kW)
GS > 50	183,374,335	10,641,044	5.8%	464,212	26,938
Total	183,374,335	10,641,044	0	464,212	26,938

Table 33 LRAMVA kW threshold by class

Attachment 3-B

Load Forecast CDM Adjustment Work Form

Appendix 2-I Load Forecast CDM Adjustment Work Form (2018)

Appendix 2-I was initially developed to help determine what would be the amount of CDM savings needed in each year to cumulatively achieve the four year 2011-2014 CDM target. This then determined the 2018 is the fourth year of the six-year (2015-2020) Conservation First program. Final results for the 2011-14 program were issued in the fall of 2015, and the program is completed, although in some instances the new six year (2015-2020) CDM program works in a slightly different manner to the previous 2011-2014 CDM program. Distributors will offer programs each year that, over the six years (from January 1,

2015-2020 CDM Program - 2018 fourth year of the current CDM plan

For the first year of the new 2015-2020 CDM plan, it is assumed that each year's program will achieve an equal amount of new CDM savings. This results in each year's program being about 1/6 (16.67%) of

6 Year (2015-2020) kWh Target:							
31,430,000							
	2015	2016	2017	2018	2019	2020	Total
	%						
2015 CDM Programs						12.15%	12.15%
2016 CDM Programs						17.57%	17.57%
2017 CDM Programs						17.57%	17.57%
2018 CDM Programs						17.57%	17.57%
2019 CDM Programs						17.57%	17.57%
2020 CDM Programs						17.57%	17.57%
Total in Year						100.00%	100.00%
	kWh						
2015 CDM Programs	3,819,710.00	3,819,710.00	3,819,710.00	3,819,710.00	3,819,710.00	3,819,710.00	3,819,710.00
2016 CDM Programs		5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00
2017 CDM Programs			5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00
2018 CDM Programs				5,522,058.00	5,522,058.00	5,522,058.00	5,522,058.00
2019 CDM Programs					5,522,058.00	5,522,058.00	5,522,058.00
2020 CDM Programs						5,522,058.00	5,522,058.00
Total in Year	3,819,710.00	9,341,768.00	14,863,826.00	20,385,884.00	25,907,942.00	31,430,000.00	31,430,000.00

Note: The default formulae in the above table assume that the 2015-2020 kWh CDM target is achieved through persistence of CDM savings to the end of 2020. The distributor should enter measured CDM

Determination of 2018 Load Forecast Adjustment

The Board determined that the "net" number should be used in its Decision and Order with respect to Centre Wellington Hydro Ltd.'s 2013 Cost of Service rates (EB-2012-0113). This approach has also been used in previous decisions. From each of the 2006-2010 CDM Final Report, and the 2011 to 2016 CDM Final Reports, issued by the OPA/IESO for the distributor, the distributor should input the "gross" and "net" results of the cumulative

Net-to-Gross Conversion				
Is CDM adjustment being done on a "net" or "gross" basis?	net			
	"Gross" kWh	"Net" kWh	Difference kWh	"Net-to-Gross" Conversion Factor (%)
Persistence of Historical CDM programs to 2015				
2006-2010 CDM programs	6,034,000	3,213,000	2,821,000	
2011 CDM program	2,911,673	1,762,640	1,149,033	
2012 CDM program	2,453,965	1,834,086	619,879	
2013 CDM program	3,231,110	1,595,768	1,635,342	
2014 CDM program	4,590,608	3,628,004	962,604	
2015 CDM program	17,262,381	12,809,928	4,452,453	
2016 CDM program				
2006 to 2016 OPA CDM programs: Persistence to 2018.	36,483,737	24,843,426	11,640,311	0.00%

The default values below represent the factor used for how each year's CDM program is factored into the manual CDM adjustment. Distributors can choose alternative weights of "0", "0.5" or "1" from the dropdown list.

These factors do not mean that CDM programs are excluded, but the assumption that impacts of previous year CDM programs are already implicitly reflected in the actual data for historical years that are included in the forecast.

Weight Factor for Inclusion in CDM Adjustment to 2018 Load Forecast						
	2015	2016	2017	2018	2019	2020
Weight Factor for each year's CDM program impact on 2018 load forecast	0	0.5	1	0.5	0	0
Default Value selection rationale.	Full year impact of 2015 CDM is assumed to be reflected in the base forecast, as the full year persistence of 2015 CDM programs is in the 2016 historical actual data. No further impact is necessary for the manual adjustment to the load forecast.	Default is 0.5, but one option is for full year impact of persistence of 2016 CDM programs on 2018 load forecast, but 50% impact in base forecast (first year impact of 2016 CDM programs on 2016 actuals, which is part of the data underlying the base forecast).	Full year impact of persistence of 2017 programs on 2018 load forecast. 2017 CDM program impacts are not in the base forecast.	Only 50% of 2017 CDM programs are assumed to impact the 2018 load forecast based on the "half-year" rule.	2019 and 2020 are future years beyond the 2018 test year. No impacts of CDM programs beyond the 2018 test year are factored into the test year load forecast.	

Distributor can select "0", "0.5", or "1" from drop-down list

2015-2020 LRAMVA and 2018 CDM adjustment to Load Forecast

One manual adjustment for CDM impacts to the 2018 load forecast is made. There is a different but related threshold amount that is used for the 2018 LRAMVA amount for Account 1568.

The amount used for the CDM threshold of the LRAMVA is the kWh that will be used to determine the base amount for the LRAMVA balance for 2018, for assessing performance against the six-year target.

If used to determine the manual CDM adjustment for the system purchased kWh, the proposed loss factor should correspond with the proposed total loss factor calculated in Appendix 2-R .

The Manual Adjustment for the 2018 Load Forecast is the amount manually subtracted from the system-wide load forecast (either based on a purchased or billed basis) derived from the base forecast from historical data. If the distributor has developed their load forecast on a system purchased basis, then the manual adjustment should be on a system purchased basis, including the adjustment for losses. If the load forecast has been developed on a billed basis, either on a system basis or on a class-specific basis, the manual adjustment should be on a billed basis, excluding losses.

The distributor should determine the allocation of the savings to all customer classes in a reasonable manner (e.g. taking into account what programs and what IESO-measured impacts were directed at specific customer classes), for both the LRAMVA and for the load forecast adjustment.

	2015	2016	2017	2018	2019	2020	Total for 2018
Amount used for CDM threshold for LRAMVA (2018)	3,819,710.00	5,522,058.00	5,522,058.00	5,522,058.00			20,385,884.00
Manual Adjustment for 2018 Load Forecast (billed basis)	-	2,761,029.00	5,522,058.00	2,761,029.00			11,044,116.00
Manual Adjustment for 2018 LDC-only CDM programs (billed basis)				-			
Total Manual Forecast to Load Forecast	-	2,761,029.00	5,522,058.00	2,761,029.00			11,044,116.00
Proposed Loss Factor (TLF)	3.55%	Format: X.XX%					
Manual Adjustment for 2018 Load Forecast (system purchased basis)	-	2,859,045.53	5,718,091.06	2,859,045.53			11,436,182.12

Manual adjustment uses "gross" versus "net" (i.e. numbers multiplied by (1 + g). The Weight factor is also used to calculate the impact of each year's program on the CDM adjustment to the 2018 load

Attachment 3-C

EPLC CDM Plan 2015-2020

OVERVIEW OF CDM PLAN
This CDM Plan must be used by the LDC in submitting a CDM Plan to the IESO under the Energy Conservation Agreement between the LDC and the IESO. The CDM Plan will consist of the information provided in this document and any additional information and supporting documents provided by the LDC to the IESO in support of this CDM Plan. Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Energy Conservation Agreement as may be applicable.
Complete all fields within the CDM Plan that are applicable. Where additional space is required to complete a section of the CDM Plan, please append additional pages as required. The LDC should indicate that additional information has been attached in the related question field on the CDM Plan. Please refer to the CDM Plan Submission and Review Criteria Rules for further information.

A. General Information

1.	CDM Plan Submission Date: <i>(DD-Mon-YYYY)</i>	30-Mar-2017
	CDM Plan Version	4

2.	LDC INFORMATION									
	LDC 1	LDC 2	LDC 3	LDC 4	LDC 5	LDC 6	LDC 7	LDC 8	LDC 9	LDC 10
	LDC Name:	Entegrus Powerlines Inc.	Essex Powerlines Corporation							
	Company Representative:									
	Name:	Tomo Matesic								
	Title:	Conservation Officer								
	Email Address:	tomo.matesic@entegrus.com								
	Phone Number (XXX-XXX-XXXX):	519-352-6300 x 349								

3.	Primary Contact for CDM Plan	
	Name:	Tomo Matesic
	LDC Name:	Entegrus Powerlines
	Title:	Conservation Officer
	Email Address:	tomo.matesic@entegrus.com
	Phone Number (XXX-XXX-XXXX):	519-352-6300 x 349

Estimated Start Date of CDM Plan: <i>(DD-Mon-YYYY)</i>	1-May-2017
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LDC CONFIRMATION FOR CDM PLAN	
Each LDC to this CDM Plan has executed the Energy Conservation Agreement.	
A completed Cost-Effectiveness Tool is attached and forms part of the CDM Plan.	
A completed Achievable Potential Tool is attached and forms part of the CDM Plan.	
All customer segments in each LDC's service area are served by the Programs set out in this CDM Plan.	
The CDM Plan includes all electricity savings attributable to all Programs and pilot programs that have in-service dates between Jan 1, 2015 and December 31, 2020.	
The CDM Plan Budget for each LDC includes all eligible funding under the full cost recovery and pay-for-performance mechanisms for Programs under its CDM Plan.	
Frequency of LDC Invoicing to IESO (subsequent changes to the frequency should be notified to us by email).	

COMPLETE FOR CDM PLAN AMENDMENTS ONLY		
Select the reason(s) for CDM Plan amendment, as per ECA.		
One time each calendar year of the term		Yes
LDC wishes to request an adjustment to the CDM Plan Budget		
The amendments to a provision of the ECA or any Rules will have a material effect on the CDM Plan		
LDC's actual spending under CDM Plan has exceeded (or is reasonably expected to exceed) the portion of the CDM Plan Budget allocated to the current year of the term		
Under a joint CDM Plan, LDCs that are parties to a joint CDM Plan reallocate any portion of their respective CDM Plan Targets and CDM Plan Budgets <i>[Reallocation not subject to IESO approval]</i>		
IESO has triggered remedies under Article 5 of the ECA		Yes
LDC seeking to change its selection of the type of funding that it wishes to receive for each Program in the CDM Plan [ECA, section 4.1]		
Other (Please specify reason)	submitting as a new joint plan	Yes

B. LDC Authorization

LDC DECLARATION	
Please complete the declaration for each LDC that is listed in this CDM Plan. A separate page with each LDC's signed declaration should be included as part of the CDM Plan submission.	

LDC	
<i>I represent that the information contained in this CDM Plan as it relates to the LDC is complete, true, and accurate in all respects. I acknowledge and agree to the following terms and conditions: (1) if this CDM Plan is approved by the IESO and accepted by each LDC to this CDM Plan, the CDM Plan together with any conditions to that approval is incorporated by reference into the Energy Conservation Agreement between the LDC and the IESO (2) the LDC will offer the Programs set out in Table 2 of this CDM Plan to customers in its service area; and (3) the LDC of will implement this CDM Plan in accordance with the CDM Plan Budget.</i>	
LDC's Legal Name:	Entegrus Powerlines Inc.
Company Representative:	Tomo Matesic
Signature	
	<i>I/We have the authority to bind the Corporation.</i>
Date (DD-Mon-YYYY)	

B. LDC Authorization

LDC DECLARATION	
Please complete the declaration for each LDC that is listed in this CDM Plan. A separate page with each LDC's signed declaration should be included as part of the CDM Plan submission.	
LDC	
<i>I represent that the information contained in this CDM Plan as it relates to the LDC is complete, true, and accurate in all respects. I acknowledge and agree to the following terms and conditions: (1) if this CDM Plan is approved by the IESO and accepted by each LDC to this CDM Plan, the CDM Plan together with any conditions to that approval is incorporated by reference into the Energy Conservation Agreement between the LDC and the IESO (2) the LDC will offer the Programs set out in Table 2 of this CDM Plan to customers in its service area; and (3) the LDC of will implement this CDM Plan in accordance with the CDM Plan Budget.</i>	
LDC's Legal Name:	Essex Powerlines
Company Representative:	
Signature	
	<i>I/We have the authority to bind the Corporation.</i>
Date (DD-Mon-YYYY)	

C. CDM Plan Summary

TABLE 1: SUMMARY OF CDM PORTFOLIO SAVINGS AND BUDGET												
		CDM PLAN TOTAL	LDC 1	LDC 2	LDC 3	LDC 4	LDC 5	LCD 6	LCD 7	LCD 8	LCD 9	LCD 10
a.	Allocated LDC CDM Plan Target (MWh) <i>Indicate total CDM Plan Target allocated to LDC(s)</i>	88,260	56,830.0	31,430.0								
b.	CDM Plan MWh Savings <i>Calculated as part of CDM Plan</i>	116,396	69,513	46,883	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
c.	Allocated LDC CDM Plan Budget (\$) <i>Indicate total budget allocated to LDC</i>	\$23,228,440	\$14,695,867.00	\$8,532,573.00								
d.	Total CDM Plan Budget (\$) <i>Calculated as part of CDM Plan</i>	\$22,370,503	\$14,661,028	7,709,475	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
f.	CDM Plan Cost Effectiveness <i>Indicate annual portfolio-level Cost Effectiveness for CDM Plan as determined by LDC(s) using output from Cost-Effectiveness Tool</i>	Program Year	Total Resource Cost (TRC)			Program Administrator Cost (PAC)			Levelized Cost (\$/kWh)			
			Benefits (\$)	Costs (\$)	Ratio	Benefits (\$)	Costs (\$)	Ratio				
		2015	\$39,646,000.66	\$15,600,828.21	2.5	\$34,677,960.83	\$1,380,967.92	25.1	\$0.002			
		2016	\$10,994,198.60	\$7,695,699.71	1.4	\$9,782,116.98	\$4,755,888.75	2.1	\$0.032			
		2017	\$8,025,206.85	\$5,990,636.47	1.3	\$6,841,039.99	\$4,147,942.96	1.6	\$0.053			
		2018	\$29,046,718.88	\$6,438,052.71	4.5	\$25,173,181.63	\$4,753,161.53	5.3	\$0.017			
		2019	\$6,406,627.31	\$4,948,443.32	1.3	\$5,478,931.59	\$3,443,170.83	1.6	\$0.056			
		2020	\$6,338,113.01	\$4,809,446.90	1.3	\$5,442,495.76	\$3,509,658.08	1.6	\$0.058			
			CDM Plan Total	\$100,456,865	\$45,483,107	2.2	\$87,395,727	\$21,990,790	4.0	\$0.019		
g.	Plan Cost Effectiveness-Exceptions Rationale <i>Complete this section if proposed plan <u>does not</u> meet minimum Cost-Effectiveness Thresholds set out in CDM Plan Submission and Review Criteria Rules.</i>											

D. CDM Plan Detailed List of Programs, Election of Funding Mechanism, and Annual Milestones

NOTES																			
1. CDM Plan	Complete Table 2 for all Programs for which will contribute towards the CDM Plan Target.																		
2. Program Name	Province-wide LDC Program names are found in the applicable Program Rules. Regional & local Program names should be consistent with those included in approved business cases (if applicable) and consistent throughout this CDM Plan.																		
3. Anticipated Annual Budget	Include annual budgets for each Program to be allocated against the CDM Plan Budget by funding mechanism. Note: LDC Eligible Expenses incurred in 2014 for programs delivered in 2015 (and not funded as part of the 2011-2014 Master CDM Program Agreement) should be included in 2015 Annual anticipated budget amounts.																		
4. Target Gap	Portion of the CDM Plan Target that the LDC reasonably expects, based on qualified independent third party analysis as accepted by the IESO could only be achieved with funding in addition to the CDM Plan Budget.																		

LDC 1:Entegrus Powerlines Inc.

TABLE 2. PROGRAM AND MILESTONE SCHEDULE																												
Funding Mechanism	Approved Province Wide Programs	Approved Local, Regional, or Pilot Programs	Proposed Pilots or Programs	Program Start Date (DD-Mon-YYYY)	Customer Segments Targeted by Program								Program Implementation Schedule (Annual Anticipated Budget & Incremental Annual Milestones by Program)															
					Residential	Low-income	Small business	Commercial (inc. Multi-F)	Agricultural	Institutional	Industrial	2015		2016		2017		2018		2019		2020		Total 2015 - 2020				
												Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Total CDM Plan Budget (\$)	Total Persisting Energy Savings in 2020 (MWh)			
Full Cost Recovery Programs	Coupon Program			1-Oct-2015	Yes								\$159,367	589.0	\$426,568	1,753.3	\$326,864	292.4	\$328,335	291.7	\$333,912	291.7	\$339,600	291.7	\$1,914,645	3,505.0		
	Heating and Cooling			1-Oct-2015	Yes								\$85,361	121.0	\$274,193	310.0	\$485,144	387.0	\$434,758	423.0	\$447,661	460.0	\$369,373	450.0	\$2,099,510	2,152.0		
	New Construction Program			1-Oct-2015	Yes								\$0	0.0	\$25,102	0.0	\$98,267	9.0	\$105,145	9.0	\$107,173	9.0	\$109,241	9.0	\$444,928	37.0		
	Home Assistance Program			1-Oct-2015		Yes							\$0	0.0	\$76,653	38.0	\$229,725	196.0	\$183,022	196.0	\$183,781	196.0	\$162,546	157.0	\$835,727	783.0		
	Audit Funding Program			1-Oct-2015			Yes						\$4,229	0.0	\$34,942	0.0	\$56,471	607.0	\$45,070	379.0	\$45,439	379.0	\$35,160	228.0	\$221,311	1,593.0		
	Retrofit			1-Oct-2015			Yes	Yes	Yes	Yes	Yes		\$109,617	274.0	\$1,585,916	8,771.2	\$1,382,315	2,837.7	\$881,514	1,774.4	\$1,187,544	2,766.8	\$984,684	2,096.2	\$6,131,590	18,511.0		
	High Performance New Construction			1-Oct-2015									\$0	0.0	\$16,426	0.0	\$32,571	57.0	\$37,152	57.0	\$37,521	57.0	\$37,896	57.0	\$161,566	228.0		
	Process and Systems Upgrades Program			1-Oct-2015					Yes	Yes	Yes	Yes	\$0	0.0	\$190,711	0.0	\$43,517	0.0	\$1,077,220	1,021.0	\$88,964	0.0	\$490,744	1,021.0	\$1,891,156	2,042.0		
	Small Business Lighting							Yes					\$0	0.0	\$0	0.0	\$208,898	582.0	\$230,303	688.0	\$231,409	688.0	\$232,536	688.0	\$903,146	2,647.0		
		Instant Savings Program		1-May-2017	Yes								\$0	0.0	\$0	0.0	\$56,109	390.0								\$56,109	390.0	
	Existing Building Commissioning			1-May-2017				Yes	Yes	Yes	Yes	Yes																
	Monitoring and Targeting Program			1-May-2017					Yes	Yes	Yes	Yes																
	Energy Manager Program			1-May-2017					Yes	Yes	Yes	Yes																
		Provincial BRI		1-May-2017				Yes	Yes	Yes	Yes	Yes							\$335	1.0	\$335	1.0	\$335	1.0	\$335	1.0	\$1,340	3.0

D. CDM Plan Detailed List of Programs, Election of Funding Mechanism, and Annual Milestones

NOTES																										
1. CDM Plan	Complete Table 2 for all Programs for which will contribute towards the CDM Plan Target.																									
2. Program Name	Province-wide LDC Program names are found in the applicable Program Rules. Regional & local Program names should be consistent with those included in approved business cases (if applicable) and consistent throughout this CDM Plan.																									
3. Anticipated Annual Budget	Include annual budgets for each Program to be allocated against the CDM Plan Budget by funding mechanism. Note: LDC Eligible Expenses incurred in 2014 for programs delivered in 2015 (and not funded as part of the 2011-2014 Master CDM Program Agreement) should be included in 2015 Annual anticipated budget amounts.																									
4. Target Gap	Portion of the CDM Plan Target that the LDC reasonably expects, based on qualified independent third party analysis as accepted by the IESO, could only be achieved with funding in addition to the CDM Plan Budget.																									
LDC 2:	Essex Powerlines Corporation																									
TABLE 2. PROGRAM AND MILESTONE SCHEDULE																										
Funding Mechanism	Approved Province Wide Programs	Approved Local, Regional, or Pilot Programs	Proposed Pilots or Programs	Program Start Date (DD-Mon-YYYY)	Customer Segments Targeted by Program							Program Implementation Schedule (Annual Anticipated Budget & Incremental Annual Milestones by Program)														
					Residential	Low-income	Small Business	Commercial (inc. Multi-F)	Agricultural	Institutional	Industrial	2015		2016		2017		2018		2019		2020		Total 2015 - 2020		
												Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Anticipated Annual Budget (\$)	Energy Savings (MWh)	Total CDM Plan Budget (\$)	Total Persisting Energy Savings in 2020 (MWh)	
Full Cost Recovery Programs	Retrofit			1-Oct-2015							\$25,546	152.0	\$1,312,989	3,976.0	\$699,500	2,097.0	\$321,500	963.0	\$583,000	1,555.0	\$787,000	1,880.0	\$3,729,535	10,624.0		
	Small Business Lighting			1-Jun-2016							\$0	0.0	\$0	0.0	\$120,000	180.0	\$100,000	144.0	\$60,000	72.0	\$20,000	0.0	\$300,000	396.0		
	High Performance New Construction			1-Oct-2015							\$0	0.0	\$27,574	0.0	\$27,500	57.0	\$27,500	57.0	\$7,500	0.0	\$7,000	0.0	\$97,074	114.0		
	Audit Funding Program			1-Oct-2015							\$0	0.0	\$32,031	0.0	\$15,000	76.0	\$15,000	76.0	\$15,000	76.0	\$10,000	0.0	\$87,031	228.0		
	Process and Systems Upgrades Program			1-Oct-2015							\$0	0.0	\$39,264	0.0	\$20,000	0.0	\$720,866	17,527.0	\$20,000	0.0	\$20,000	0.0	\$820,130	17,527.0		
	Energy Manager Program			1-Jan-2017							\$0	0.0	\$0	0.0	\$10,000	0.0	\$10,000	0.0	\$7,500	0.0	\$7,500	0.0	\$35,000	0.0		
	Existing Building Commissioning			1-Oct-2015							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0		
	Monitoring and Targeting Program			1-Oct-2015							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0		
	Coupon Program			1-Oct-2015							\$113,392	535.0	\$280,162	1,156.0	\$209,886	828.0	\$183,653	704.0	\$160,918	596.0	\$139,932	497.0	\$1,087,943	4,311.0		
	Home Assistance Program			1-Oct-2015									\$144,565	30.0	\$44,597	3.0	\$40,000	0.0	\$40,000	0.0	\$40,000	0.0	\$309,162	33.0		
	New Construction Program			1-Oct-2015							\$0	0.0	\$40,250	34.0	\$22,500	28.0	\$22,500	28.0	\$22,500	28.0	\$22,500	28.0	\$130,250	147.0		
	Heating and Cooling Program			1-Oct-2015							\$59,560	80.0	\$343,661	474.0	\$192,635	311.0	\$176,105	284.0	\$147,251	232.0	\$131,660	206.0	\$1,050,872	1,587.0		
	Provincial BRI			1-May-2017							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0
	Instant Savings Clotheslines			1-May-2017							\$0	0.0	\$0	0.0	\$18,682	165.0	\$15,610	103.0	\$14,586	82.0	\$13,572	62.0	\$62,450	413.0		
	Appliance Retirement			1-Oct-2015							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0
	Program Enabled Savings			1-Oct-2015							\$0	8,572.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	8,572.0
	Smart T-stat			1-Oct-2017							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0
	Residential DIL			1-Oct-2017							\$0	0.0	\$0	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$1	0.0	\$4	0.0

E. Proposed Local and Regional Pilot CDM Programs

Notes			
Complete the following Table(s) for each proposed local and regional Program or Pilot Program in the CDM Plan for which a business case has NOT previously been approved by the IESO. Please refer to the Program Development and Rule Revision Guideline and the Business Case Template for full details on requirements and submission of a business case for approval of a local or regional Program. For the process for receiving funding for a Pilot Program, refer to the LDC Program Innovation Guideline.			

TABLE 3a. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot	Provide overview of key objectives and elements of proposed program or pilot.		

TABLE 3c. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name	Smart Thermostat Program	Use same "Program name" included in other worksheets	
b. Program Type	Proposed Regional Program		
b. Estimated Business Case Submission Date (DD-Mon-YYYY)	1-Aug-2017		
c. Customer Segment(s) Served by Programs	Residential	Low Income	Small Business
d. Participating LDCs (if applicable)	Essex Powerlines Corporation		
e. Overview of Proposed Program or Pilot	The objective of the program is to provide more detailed, relevant, and actionable energy consumption information to the end user by way of smart thermostat devices. The program would launch with rebates of \$50 payable to consumers who purchase, install, and register a "NEST" brand thermostat. The smart thermostats will help reduce energy use in the occupied property, as well as allowing for possible participation in DR events. Rebate amounts are subject to periodic review and adjustment in accordance with cost effectiveness methodology. Other smart thermostats may be incorporated into the program in future iterations. The program is anticipated to endure through 2020.		

TABLE 3e. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot	Provide overview of key objectives and elements of proposed program or pilot.		

TABLE 3b. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot	Provide overview of key objectives and elements of proposed program or pilot.		

TABLE 3d. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot	Provide overview of key objectives and elements of proposed program or pilot.		

TABLE 3f. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot	Provide overview of key objectives and elements of proposed program or pilot.		

E. Proposed Local and Regional Pilot CDM Programs

Notes		
Complete the following Table(s) for each proposed local and regional Program or Pilot Program in the CDM Plan for which a business case has NOT previously been approved by the IESO. Please refer to the Program Development and Rule Revision Guideline and the Business Case Template for full details on requirements and submission of a business case for approval of a local or regional Program. For the process for receiving funding for a Pilot Program, refer to the LDC Program Innovation Guideline.		

TABLE 3g. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot			
Provide overview of key objectives and elements of proposed program or pilot.			

TABLE 3i. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot			
Provide overview of key objectives and elements of proposed program or pilot.			

TABLE 3h. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot			
Provide overview of key objectives and elements of proposed program or pilot.			

TABLE 3j. PROPOSED LOCAL AND REGIONAL CDM PROGRAMS / PILOTS			
a. Program Name		Use same "Program name" included in other worksheets	
b. Program Type			
b. Estimated Business Case Submission Date (DD-Mon-YYYY)			
c. Customer Segment(s) Served by Programs			
d. Participating LDCs (if applicable)			
e. Overview of Proposed Program or Pilot			
Provide overview of key objectives and elements of proposed program or pilot.			

F. Detailed Information on Collaboration and Regional Planning

ADDITIONAL DETAILED INFORMATION	
<p>Regional LDC(s) Collaboration <i>Description of how the LDC(s) will collaborate with other LDCs. If collaboration will not occur, description of why it will not occur.</i></p>	<p>Entegrus Powerlines Inc. and Essex Energy are submitting a joint plan in an effort to maximize cost effectiveness and attain mid-term targets. Essex does retrofit technical review for Entegrus, and as partners, Entegrus will receive a better rate for this service. Essex is not on track to meet their mid-term incentive, however, as a joint plan and because of the strong start Entegrus has had, we will collectively meet our mid-term target.</p> <p>Entegrus and Essex have been working collaboratively with the West LDC Collaboration group to offer the Small Business Lighting program.</p> <p>In 2016, the West LDC Collaboration group utilized the collaboration fund to offer a roving energy manager to industrial customers across the region.</p> <p>Entegrus and Essex will be offering the Clothesline Instant Savings program, which was developed and shared through CNP, a member of the Southwest group.</p>
<p>Gas Collaboration <i>Description of how the LDC(s) will collaborate with other gas utility programs delivered in service area (if applicable). If collaboration will not occur, description of why it will not occur.</i></p>	<p>Entegrus is currently working with Union Gas on a potential pilot program for small business and multi-residential customers in our service territory. We have had two preliminary meetings in 2017, and there is a high desire to pursue this project from both utilities.</p> <p>Entegrus is also working with Union on a possible CHP project for their head office in Chatham.</p> <p>Essex has approached Union Gaws with regards to a proposed Smart Thermostat program. Discussions were shelved while Union Gas investigated the possibility of the Whole Home Program. Essex intends to re-engage with Union Gas in an effort to bring a smart thermostat incentive program to market locally.</p>
<p>CDM Contribution to Regional Planning <i>Description of how the CDM Plan considers the electricity needs and investments identified in other plans or planned initiatives, completed or underway within the LDC(s)' service area or region. This may include Integrated Regional Resource Plans or Municipal Community Energy Plans.</i></p>	<p>Entegrus Powerlines participates in the IESO driven regional planning activities to develop integrated regional resource plans. These plans are developed in consultation with all affected LDC's and the IESO to ensure adequate electrical supply is available for the next 20 years. Entegrus' service territory straddles three IESO planning zones. One of these regional plans is now complete (Windsor-Essex), one is under way (London Region), and one is scheduled for next group (Chatham-Sarnia). Entegrus has been involved from the beginning, and continues to be involved in the Leamington SECTR application.</p> <p>Entegrus is a member of the planning committee for the development of the Chatham-Kent Community Energy Plan, and has reached out to the municipalities of Middlesex-Caradoc and Elgin to offer our support and expertise in the development of their Community Energy Plans as well.</p> <p>Entegrus will continue to align their efforts to meet provincially mandated CDM targets with their commitment to both informing the IESO regional planning processes as well as leveraging this resource to strengthen the regional impact of CDM.</p> <p>Essex Powerlines' CDM Plan directly supports the 2013 Windsor-Essex IRRP. The study identified two immediate needs in the Windsor-Essex region: 1) the need for additional supply in the Kingsville-Leamington area, and 2) the need for additional restoration capability in the broader region. To address these needs, the former OPA/IESO recommended an integrated solution, consisting specifically of Conservation and Demand Management, distributed generation resources, and transmission investments. The CDM activities proposed herein are a key element of the three-pronged solution to address the immediate reliability needs. Essex Powerlines' 2015-2020 CDM plan will serve as the lead mechanism by which needs shall be initially mitigated, and will be further supported by the build out of additional supply.</p>

G. Additional Documentation for CDM Plan (If applicable)

ADDITIONAL INFORMATION AND DOCUMENTATION	
Programs <i>Opportunity to provide any additional information on assumptions used for budgets and/or savings for approved 2015-2020 province-wide programs</i>	<p>Assumptions for program volumes were based on historical program performance, conservative increases in program participation rates and Entegrus' view on the evolution of certain programs. The majority of the plan and cost effectiveness testing is based on the IESO Archetypes provided in the Cost Effectiveness Testing Tool. Adjustments made to these archetypes are based on 2016 results, and are an attempt to increase accuracy. We would like to point out that many measures are out of date. This has a direct influence on savings and TRC results. Every attempt was made to provide accurate representation and forecasts, using the measures available.</p> <p>Please see the supplemental information document for more details.</p> <p>As for the administration budget, Entegrus's 2015 and 2016 costs were used as the baseline. As for labour costs, the budget was based on Entegrus' current staffing compliment along with planned headcount additions. Costs were increased over time based on inflation, forecasted large projects and studies, and an increase in application or customer volumes. We would like to point out that the administration to incentive ratio for 2016 dropped from an estimated 41:51, to an actual of 33:67. This ratio is top of mind at Entegrus, and we fully expect for the ratio to continue to improve as projects in the pipeline come to fruition, and labour allocations are honed with program experience.</p> <p>Essex Powerlines' assumptions are based on historical performance and participation, and internal forecasts for program participation levels. Forecasts take into account factors such as program marketing, market saturation, program fatigue, and anticipated adjustments to current program incentives.</p>
Approved Local and/or Regional Programs and Pilot Programs <i>Opportunity to provide any additional information on assumptions used for budgets and/or savings for approved 2015-2020 local or regional programs or pilot programs</i>	<p>The assumptions for the approved local Instant Savings program came from the approved business case.</p>
Proposed Local and/or Regional Programs and Pilot Programs <i>Opportunity to provide additional information on assumptions used for forecast budgets and/or savings for proposed programs or pilot programs</i>	<p>N/A</p>
Programs from 2011-2014/2015 CDM Framework <i>Opportunity to provide any additional information on assumptions used for budgets and/or savings from existing 2011-2014/2015 CDM Programs</i>	<p>The information for 2011-2014, and 2015 budget and savings came from the portfolio CET provided to the LDCs by the IESO. These values are final and have been verified by the IESO.</p>
Programs funded through Pay-for-Performance <i>Opportunity to provide any additional information on assumptions used for budgets and/or savings for Pay for Performance Programs</i>	<p>N/A</p>
Other <i>Additional assumptions used in the CDM Plan</i>	<p>Please see the supplemental information document for details.</p>

Summary of Changes to CDM Template

Version No.	Date	Tab	Change Summary
2	20-Jan-15	A. General Information	Inclusion of "Company Name" for Primary Contact
			Inclusion of frequency of invoicing (monthly vs. quarterly)
			Update date format to eliminate confusion
			Change reference to OPA
			Additional LDCs for joint plan
		B. LDC Authorization	Update date format to eliminate confusion
		D. CDM Plan Milestone LDC 1-10	Additional line items for FRC program names
			Additional LDCs for joint plan
			Update on the program names
			Update date format to eliminate confusion
			Update column headers: - "Province Wide Program Name" - "Proposed Regional or Local CDM Program or Pilot Program Name"
			Change reference to OPA
			Update Header and Footer
		E.. Proposed Program&Pilots	Additional boxes for proposed programs
			Update date format to eliminate confusion
		F. Detailed Information	Clarify if it is primary LDC or all LDCs in a joint CDM Plan.



Attachment 3-D

Summary of Variances of Actual and
Forecast Data

Appendix 2-IB

Customer, Connections, Load Forecast and Revenues Data and Analysis

This sheet is to be filled in accordance with the instructions documented in section 2.3.2 of Chapter 2 of the Filing Requirements for Distribution Rate Applications, in terms of one set of tables per customer class.

Color coding for Cells:

<div style="background-color: #d9ead3; border: 1px solid black; width: 50px; height: 15px; display: inline-block;"></div> Data input	<div style="background-color: #d9d9e3; border: 1px solid black; width: 50px; height: 15px; display: inline-block;"></div> Drop-down List
<div style="background-color: #cccccc; border: 1px solid black; width: 50px; height: 15px; display: inline-block;"></div> No data entry required	<div style="border: 1px solid black; width: 50px; height: 15px; display: inline-block;"></div> Blank or calculated value

Distribution System (Total)

	Calendar Year (for 2018 Cost of Service)		Consumption (kWh) ⁽³⁾			
				Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012		Actual	527,521,454	527,521,454	
Historical	2013		Actual	526,053,625	526,053,625	
Historical	2014		Actual	523,146,227	523,146,227	
Historical	2015		Actual	528,742,855	528,742,855	
Historical	2016		Actual	547,976,678	527,900,141	
Bridge Year	2017		Forecast		528,989,785	
Test Year	2018		Forecast		518,917,436	

Variance Analysis	Year	Year-over-year		Versus Board- approved
	2012			
	2013	-0.3%	-0.3%	
	2014	-0.6%	-0.6%	
	2015	1.1%	1.1%	
	2016	3.6%	-0.2%	
	2017		0.2%	
	2018		-1.9%	
	Geometric Mean	1.3%	-0.3%	

Customer Class Analysis (one for each Customer Class, excluding MicroFIT and Standby)

1 Customer Class: Residential Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kWh

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾				Consumption (kWh) per Customer			
					Actual (Weather actual)	Weather- normalized		Weather- normalized	Actual (Weather actual)	Weather- normalized		Weather- normalized
Historical	2012	Actual	26,337		Actual	256,003,979	256,003,979		Actual	9720.3166	9720.31663	
Historical	2013	Actual	26,466		Actual	250,406,105	250,406,105		Actual	9461.4262	9461.42617	
Historical	2014	Actual	26,590		Actual	245,551,953	245,551,953		Actual	9234.7481	9234.74814	
Historical	2015	Actual	26,815		Actual	244,757,239	244,757,239		Actual	9127.6241	9127.62405	
Historical	2016	Actual	27,137		Actual	255,390,422	249,168,165		Actual	9411.1516	9181.86111	
Bridge Year	2017	Forecast	27,310		Forecast		247,700,344		Forecast	0	9069.95035	
Test Year	2018	Forecast	27,484		Forecast		245,374,118		Forecast	0	8927.88961	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board- approved
	2012			2012			2012		
	2013	0.5%		2013	-2.2%	-2.2%	2013	-2.7%	-2.7%
	2014	0.5%		2014	-1.9%	-1.9%	2014	-2.4%	-2.4%
	2015	0.8%		2015	-0.3%	-0.3%	2015	-1.2%	-1.2%
	2016	1.2%		2016	4.3%	1.8%	2016	3.1%	0.6%
	2017	0.6%		2017		-0.6%	2017		-1.2%
	2018	0.6%		2018		-0.9%	2018		-1.6%
	Geometric Mean	0.9%		Geometric Mean	-0.1%	-0.8%	Geometric Mean	-1.1%	-1.7%

	Calendar Year (for 2018 Cost of Service)	Revenues		
Historical	2012	Actual	\$ 7,804,704	
Historical	2013	Actual	\$ 7,876,390	
Historical	2014	Actual	\$ 7,711,531	
Historical	2015	Actual	\$ 9,894,481	
Historical	2016	Actual	\$ 8,394,579	
Bridge Year (Forecast)	2017	Forecast	\$ 8,588,056	
Test Year (Forecast)	2018	Forecast	\$ 8,612,319	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved
	2012		
	2013	0.9%	
	2014	-2.1%	
	2015	28.3%	
	2016	-15.2%	
	2017	2.3%	
	2018	0.3%	
	Geometric Mean	2.0%	

2 Customer Class:

GS < 50 kW

Is the customer class billed on consumption (kWh) or demand (kW or kVA)?

kWh

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾				Consumption (kWh) per Customer			
					Actual (Weather actual)	Weather- normalized		Weather- normalized	Actual (Weather actual)	Weather- normalized		Weather- normalized
Historical	2012	Actual	1,906		Actual	67,056,278	67,056,278		Actual	35181.678	35181.6779	
Historical	2013	Actual	1,904		Actual	65,663,990	65,663,990		Actual	34487.39	34487.3897	
Historical	2014	Actual	1,910		Actual	65,242,011	65,242,011		Actual	34158.121	34158.1209	
Historical	2015	Actual	1,936		Actual	65,329,579	65,329,579		Actual	33744.617	33744.6173	
Historical	2016	Actual	1,953		Actual	66,808,993	64,675,919		Actual	34208.394	33116.19	
Bridge Year	2017	Forecast	1,965		Forecast		65,087,892		Forecast	0	33123.6092	
Test Year	2018	Forecast	1,977		Forecast		62,707,450		Forecast	0	31718.4876	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board- approved
	2012			2012			2012		
	2013	-0.1%		2013	-2.1%	-2.1%	2013	-2.0%	-2.0%
	2014	0.3%		2014	-0.6%	-0.6%	2014	-1.0%	-1.0%
	2015	1.4%		2015	0.1%	0.1%	2015	-1.2%	-1.2%
	2016	0.9%		2016	2.3%	-1.0%	2016	1.4%	-1.9%
	2017	0.6%		2017		0.6%	2017		0.0%
	2018	0.6%		2018		-3.7%	2018		-4.2%
	Geometric Mean	0.7%		Geometric Mean	-0.1%	-1.3%	Geometric Mean	-0.9%	-2.1%

	Calendar Year (for 2018 Cost of Service)	Revenues		
Historical	2012	Actual	\$ 1,437,971	
Historical	2013	Actual	\$ 1,591,911	
Historical	2014	Actual	\$ 1,537,373	
Historical	2015	Actual	\$ 1,919,833	
Historical	2016	Actual	\$ 1,795,691	
Bridge Year (Forecast)	2017	Forecast	\$ 1,609,420	
Test Year (Forecast)	2018	Forecast	\$ 1,585,914	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved
	2012		
	2013	10.7%	
	2014	-3.4%	
	2015	24.9%	
	2016	-6.5%	
	2017	-10.4%	
	2018	-1.5%	
	Geometric Mean	2.0%	

3 Customer Class:

GS > 50 kW

Is the customer class billed on consumption (kWh) or demand (kW or kVA)?

kW

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	215		Actual	193,368,936	193,368,936	Actual	899390.4	899390.4
Historical	2013	Actual	214		Actual	199,814,450	199,814,450	Actual	933712.38	933712.383
Historical	2014	Actual	217		Actual	203,591,284	203,591,284	Actual	938208.68	938208.682
Historical	2015	Actual	217		Actual	210,477,740	210,477,740	Actual	969943.5	969943.502
Historical	2016	Actual	223		Actual	219,618,449	207,897,243	Actual	984836.09	932274.632
Bridge Year	2017	Forecast	219		Forecast		179,829,958	Forecast	0	821141.361
Test Year	2018	Forecast	219		Forecast		176,280,306	Forecast	0	804932.904

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board- approved
	2012			2012			2012		
	2013	-0.5%		2013	3.3%	3.3%	2013	3.8%	3.8%
	2014	1.4%		2014	1.9%	1.9%	2014	0.5%	0.5%
	2015	0.0%		2015	3.4%	3.4%	2015	3.4%	3.4%
	2016	2.8%		2016	4.3%	-1.2%	2016	1.5%	-3.9%
	2017	-1.6%		2017		-13.5%	2017		-11.9%
	2018	0.0%		2018		-2.0%	2018		-2.0%
	Geometric Mean	0.4%		Geometric Mean	4.3%	-1.8%	Geometric Mean	3.1%	-2.2%

	Calendar Year (for 2018 Cost of Service)	Revenues			Demand (kW)			Demand (kW) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	\$ 1,588,021		Actual	514,811	514,811	Actual	0.3241839	0.3241839
Historical	2013	Actual	\$ 1,415,445		Actual	480,276	480,276	Actual	0.3393109	0.3393109
Historical	2014	Actual	\$ 1,499,281		Actual	473,538	473,538	Actual	0.3158435	0.3158435
Historical	2015	Actual	\$ 1,598,368		Actual	561,575	561,575	Actual	0.3513428	0.35134283
Historical	2016	Actual	\$ 1,603,629		Actual	563,949	532,036	Actual	0.3516704	0.33176993
Bridge Year (Forecast)	2017	Forecast	\$ 1,551,690		Forecast		455,239	Forecast	0	0.29338269
Test Year (Forecast)	2018	Forecast	\$ 1,528,407		Forecast		446,253	Forecast	0	0.2919728

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board- approved
	2012			2012			2012		
	2013	-10.9%		2013	-6.7%	-6.7%	2013	4.7%	4.7%
	2014	5.9%		2014	-1.4%	-1.4%	2014	-6.9%	-6.9%
	2015	6.6%		2015	18.6%	18.6%	2015	11.2%	11.2%
	2016	0.3%		2016	0.4%	-5.3%	2016	0.1%	-5.6%
	2017	-3.2%		2017		-14.4%	2017		-11.6%
	2018	-1.5%		2018		-2.0%	2018		-0.5%
	Geometric Mean	-0.8%		Geometric Mean	3.1%	-2.8%	Geometric Mean	2.7%	-2.1%

4 Customer Class: **Streetsighting** Is the customer class billed on consumption (kWh) or demand (kW or kVA)? **kW**

	Calendar Year (for 2018 Cost of Service)	Connections			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Connection		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	2,474		Actual	6,205,705	6,205,705	Actual	2508.369	2508.36904
Historical	2013	Actual	2,621		Actual	6,271,491	6,271,491	Actual	2392.7856	2392.78558
Historical	2014	Actual	2,713		Actual	6,286,758	6,286,758	Actual	2317.2717	2317.27165
Historical	2015	Actual	2,701		Actual	6,227,063	6,227,063	Actual	2305.4658	2305.46575
Historical	2016	Actual	2,720		Actual	4,268,688	4,268,688	Actual	1569.3706	1569.37059
Bridge Year	2017	Forecast	2,740		Forecast		2,799,882	Forecast	0	1021.85474
Test Year	2018	Forecast	2,740		Forecast		2,799,882	Forecast	0	1021.85474

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2012			2012			2012		
	2013	5.9%		2013	1.1%	1.1%	2013	-4.6%	-4.6%
	2014	3.5%		2014	0.2%	0.2%	2014	-3.2%	-3.2%
	2015	-0.4%		2015	-0.9%	-0.9%	2015	-0.5%	-0.5%
	2016	0.7%		2016	-31.4%	-31.4%	2016	-31.9%	-31.9%
	2017	0.7%		2017	-34.4%	-34.4%	2017	-34.9%	-34.9%
	2018	0.0%		2018		0.0%	2018		0.0%
	Geometric Mean	2.1%		Geometric Mean	-11.7%	-14.7%	Geometric Mean	-14.5%	-16.4%

	Calendar Year (for 2018 Cost of Service)	Revenues			Demand (kW)			Demand (kW) per Connection		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	\$ 203,924		Actual	18,742	18,742	Actual	0.0919066	0.09190664
Historical	2013	Actual	\$ 242,863		Actual	19,025	19,025	Actual	0.0783363	0.07833629
Historical	2014	Actual	\$ 266,073		Actual	15,872	15,872	Actual	0.0596529	0.05965286
Historical	2015	Actual	\$ 272,332		Actual	18,023	18,023	Actual	0.0661803	0.06618028
Historical	2016	Actual	\$ 232,782		Actual	13,490	13,490	Actual	0.0579513	0.0579513
Bridge Year (Forecast)	2017	Forecast	\$ 187,615		Forecast		8,848	Forecast	0	0.04716257
Test Year (Forecast)	2018	Forecast	\$ 187,611		Forecast		8,848	Forecast	0	0.04716133

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year		Test Year Versus Board-approved	Year	Year-over-year		Test Year Versus Board-approved
	2012			2012				2012			
	2013	19.1%		2013	1.5%	1.5%		2013	-14.8%	-14.8%	
	2014	9.6%		2014	-16.6%	-16.6%		2014	-23.9%	-23.9%	
	2015	2.4%		2015	13.6%	13.6%		2015	10.9%	10.9%	
	2016	-14.5%		2016	-25.2%	-25.2%		2016	-12.4%	-12.4%	
	2017	-19.4%		2017		-34.4%		2017		-18.6%	
	2018	0.0%		2018		0.0%		2018		0.0%	
	Geometric Mean	-1.7%		Geometric Mean	-10.4%	-13.9%		Geometric Mean	-14.2%	-12.5%	

Date: August 28th, 2017

5 Customer Class: **Unmetered Scattered Load** Is the customer class billed on consumption (kWh) or demand (kW or kVA)?

kWh

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾				Consumption (kWh) per Customer			
						Actual (Weather actual)	Weather- normalized	Weather- normalized		Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	141		Actual	1,558,152	1,558,152		Actual	11050.723	11050.7234	
Historical	2013	Actual	140		Actual	1,549,960	1,549,960		Actual	11071.143	11071.1429	
Historical	2014	Actual	140		Actual	1,555,546	1,555,546		Actual	11111.043	11111.0429	
Historical	2015	Actual	141		Actual	1,558,152	1,558,152		Actual	11050.723	11050.7234	
Historical	2016	Actual	140		Actual	1,554,368	1,554,368		Actual	11102.629	11102.6286	
Bridge Year	2017	Forecast	140		Forecast		1,554,368		Forecast	0	11102.6286	
Test Year	2018	Forecast	140		Forecast		1,554,368		Forecast	0	11102.6286	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board- approved
	2012			2012			2012		
	2013	-0.7%		2013	-0.5%	-0.5%	2013	0.2%	0.2%
	2014	0.0%		2014	0.4%	0.4%	2014	0.4%	0.4%
	2015	0.7%		2015	0.2%	0.2%	2015	-0.5%	-0.5%
	2016	-0.7%		2016	-0.2%	-0.2%	2016	0.5%	0.5%
	2017	0.0%		2017	0.0%	0.0%	2017	0.0%	0.0%
	2018	0.0%		2018	0.0%	0.0%	2018	0.0%	0.0%
	Geometric Mean	-0.1%		Geometric Mean	-0.1%	0.0%	Geometric Mean	0.2%	0.1%

	Calendar Year (for 2018 Cost of Service)	Revenues		
Historical	2012	Actual	\$ 60,158	
Historical	2013	Actual	\$ 59,767	
Historical	2014	Actual	\$ 59,384	
Historical	2015	Actual	\$ 60,378	
Historical	2016	Actual	\$ 59,476	
Bridge Year (Forecast)	2017	Forecast	\$ 62,175	
Test Year (Forecast)	2018	Forecast	\$ 62,175	

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved
	2012		
	2013	-0.7%	
	2014	-0.6%	
	2015	1.7%	
	2016	-1.5%	
	2017	4.5%	
	2018	0.0%	
	Geometric Mean	0.7%	

6 Customer Class:

Sentinel Lighting

Is the customer class billed on consumption (kWh) or demand (kW or kVA)?

kW

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	175		Actual	383,994	383,994	Actual	2194.2514	2194.25143
Historical	2013	Actual	175		Actual	342,834	342,834	Actual	1959.0514	1959.05143
Historical	2014	Actual	172		Actual	350,518	350,518	Actual	2037.8953	2037.89535
Historical	2015	Actual	174		Actual	341,136	341,136	Actual	1960.5517	1960.55172
Historical	2016	Actual	173		Actual	335,758	335,758	Actual	1940.7977	1940.79769
Bridge Year	2017	Forecast	173		Forecast		335,758	Forecast	0	1940.79769
Test Year	2018	Forecast	173		Forecast		335,758	Forecast	0	1940.79769

Variance Analysis	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved	Year	Year-over-year	Test Year Versus Board-approved
	2012			2012			2012		
	2013	0.0%		2013	-10.7%	-10.7%	2013	-10.7%	-10.7%
	2014	-1.7%		2014	2.2%	2.2%	2014	4.0%	4.0%
	2015	1.2%		2015	-2.7%	-2.7%	2015	-3.8%	-3.8%
	2016	-0.6%		2016	-1.6%	-1.6%	2016	-1.0%	-1.0%
	2017	0.0%		2017	0.0%	0.0%	2017	0.0%	0.0%
	2018	0.0%		2018	0.0%	0.0%	2018	0.0%	0.0%
	Geometric Mean	-0.2%		Geometric Mean	-4.4%	-2.6%	Geometric Mean	-4.0%	-2.4%

	Calendar Year (for 2018 Cost of Service)	Revenues			Demand (kW)			Demand (kW) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	\$ 14,310		Actual	2,100	2,100	Actual	0.1467487	0.14674868
Historical	2013	Actual	\$ 15,810		Actual	2,100	2,100	Actual	0.1328305	0.13283052
Historical	2014	Actual	\$ 17,431		Actual	2,068	2,068	Actual	0.1186426	0.11864261
Historical	2015	Actual	\$ 17,371		Actual	2,088	2,088	Actual	0.1201986	0.12019856
Historical	2016	Actual	\$ 17,204		Actual	2,080	2,080	Actual	0.1208987	0.12089874
Bridge Year (Forecast)	2017	Forecast	\$ 27,447		Forecast		2,080	Forecast	0	0.07578259
Test Year (Forecast)	2018	Forecast	\$ 27,447		Forecast		2,080	Forecast	0	0.07578259

Variance Analysis	Year	Year-over-year	Test Year Versus Board- approved	Year	Year-over-year		Test Year Versus Board-approved	Year	Year-over-year		Test Year Versus Board- approved
	2012			2012				2012			
2013	10.3%	2013		0.0%	0.0%	2013		-3.3%	-3.3%		
2014		2014		-1.5%	-1.5%	2014					
2015	10.3%	2015		1.0%	1.0%	2015		-10.7%	-10.7%		
2016	-0.3%	2016		-0.4%	-0.4%	2016		1.3%	1.3%		
2017	-1.0%	2017		0.0%	0.0%	2017		0.6%	0.6%		
2018	59.5%		2018	0.0%	0.0%	2018	-37.3%	-37.3%			
2018	0.0%		2018	0.0%	0.0%	2018	0.0%	0.0%			
Geometric Mean			Geometric Mean	-0.3%	-0.2%	Geometric Mean	-6.3%	-12.4%			
		13.9%									

7 Customer Class: Embedded Distributor Is the customer class billed on consumption (kWh) or demand (kW or kVA)? kW

	Calendar Year (for 2018 Cost of Service)	Customers			Consumption (kWh) ⁽³⁾			Consumption (kWh) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	-		Actual	0	0	Actual		
Historical	2013	Actual	-		Actual	0	0	Actual		
Historical	2014	Actual	-		Actual	0	0	Actual		
Historical	2015	Actual	-		Actual	0	0	Actual		
Historical	2016	Actual	-		Actual	0	0	Actual		
Bridge Year	2017	Forecast	3		Forecast	31,681,583		Forecast	0	10560527.7
Test Year	2018	Forecast	3		Forecast	29,865,554		Forecast	0	9955184.67

Variance Analysis	Year-over-year			Test Year Versus Board- approved	Year-over-year			Test Year Versus Board-approved	Year-over-year			Test Year Versus Board- approved
	Year				Year				Year			
	2012				2012				2012			
	2013				2013				2013			
	2014				2014				2014			
	2015				2015				2015			
	2016				2016				2016			
	2017				2017				2017			
	2018		0.0%		2018		-5.7%		2018		-5.7%	
	Geometric Mean				Geometric Mean				Geometric Mean			

	Calendar Year (for 2018 Cost of Service)	Revenues			Demand (kW)			Demand (kW) per Customer		
					Actual (Weather actual)	Weather- normalized	Weather- normalized	Actual (Weather actual)	Weather- normalized	Weather- normalized
Historical	2012	Actual	\$ -		Actual	0	0	Actual		
Historical	2013	Actual	\$ -		Actual	0	0	Actual		
Historical	2014	Actual	\$ -		Actual	0	0	Actual		
Historical	2015	Actual	\$ -		Actual	0	0	Actual		
Historical	2016	Actual	\$ -		Actual	0	0	Actual		
Bridge Year (Forecast)	2017	Forecast	\$ 197,973		Forecast	85,786		Forecast	0	0.43332294
Test Year (Forecast)	2018	Forecast	\$ 187,106		Forecast	80,869		Forecast	0	0.43221099

Variance Analysis	Year-over-year			Test Year Versus Board- approved	Year-over-year			Test Year Versus Board-approved	Year-over-year			Test Year Versus Board- approved
	Year				Year				Year			
	2012				2012				2012			
	2013				2013				2013			
	2014				2014				2014			
	2015				2015				2015			
	2016				2016				2016			
	2017				2017				2017			
	2018		-5.5%		2018		-5.7%		2018		-0.3%	
	Geometric Mean				Geometric Mean				Geometric Mean			

Attachment 3-E

Other Operating Revenue

Appendix 2-H Other Operating Revenue

USoA #	USoA Description	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
	Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
4235	Specific Service Charges	\$ 162,778	\$ 144,884	\$ 156,010	\$ 163,155	\$ 146,338	\$ 154,685	\$ 153,296	\$ 166,480	\$ 166,480
4225	Late Payment Charges	\$ 193,108	\$ 269,465	\$ 252,832	\$ 274,425	\$ 259,613	\$ 261,627	\$ 266,735	\$ 260,400	\$ 260,400
4080	SSS Revenue	\$ 78,655	\$ 76,745	\$ 82,855	\$ 83,263	\$ 84,366	\$ 84,690	\$ 86,653	\$ 80,000	\$ 80,000
4082	Retail Services Revenues	\$ 45,485	\$ 38,946	\$ 35,298	\$ 27,420	\$ 27,350	\$ 23,454	\$ 21,106	\$ 28,000	\$ 28,000
4084	Service Transaction Requests	\$ 12,374	\$ 14,114	\$ 15,068	\$ 15,224	\$ 10,688	\$ 15,118	\$ 15,464	\$ 7,640	\$ 7,640
4210	Rent from Electric Property	\$ 102,337	\$ 105,058	\$ 102,121	\$ 110,034	\$ 129,986	\$ 114,671	\$ 117,193	\$ 109,515	\$ 109,515
4220	Other Electric Revenues	\$ 74	\$ 2,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4305	Regulatory Debits	\$ -	\$ -	\$ -	\$ -465,810	\$ -160,213	\$ -	\$ -781,900	\$ -	\$ -
4355	Gain on Disposition of Utility and Other Property	\$ 23,879	\$ 120,531	\$ 37,915	\$ 79,457	\$ 30,602	\$ 17,612	\$ 122,721	\$ -	\$ -
4360	Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,845	\$ 65,458	\$ -	\$ -
4375	Revenues from Non-Utility Operations	\$ 2,196,295	\$ 1,807,744	\$ 1,961,905	\$ 2,218,439	\$ 1,906,609	\$ 2,316,678	\$ 2,862,081	\$ 1,865,253	\$ 1,875,456
4380	Expenses from Non-Utility Operations	\$ 1,711,586	\$ 1,473,362	\$ 1,604,419	\$ 1,936,340	\$ 1,879,975	\$ 2,415,303	\$ 3,063,638	\$ 1,784,228	\$ 1,865,670
4390	Miscellaneous Non-Operating Income	\$ 8,611	\$ 26,161	\$ 31,371	\$ 48,106	\$ 22,396	\$ 11,371	\$ 12,176	\$ 14,000	\$ -
4398	Foreign Exchange Gains and Losses, Including Amortization	\$ 36,067	\$ 41	\$ 11	\$ 468	\$ 642	\$ 17,576	\$ 7,335	\$ -	\$ -
4405	Interest and Dividend Income	\$ 87,470	\$ 136,817	\$ 163,754	\$ 283,682	\$ 335,181	\$ 98,824	\$ 141,380	\$ 101,310	\$ 30,000
	Specific Service Charges	\$ 162,778	\$ 144,884	\$ 156,010	\$ 163,155	\$ 146,338	\$ 154,685	\$ 153,296	\$ 166,480	\$ 166,480
	Late Payment Charges	\$ 193,108	\$ 269,465	\$ 252,832	\$ 274,425	\$ 259,613	\$ 261,627	\$ 266,735	\$ 260,400	\$ 260,400
	Other Operating Revenues	\$ 238,925	\$ 237,015	\$ 235,342	\$ 235,941	\$ 252,390	\$ 237,933	\$ 240,416	\$ 225,155	\$ 225,155
	Other Income or Deductions	\$ 568,602	\$ 617,850	\$ 590,514	\$ 228,001	\$ 253,959	\$ 58,087	\$ 799,973	\$ 196,335	\$ 39,788
Total		\$ 1,163,413	\$ 1,269,214	\$ 1,234,698	\$ 901,522	\$ 912,299	\$ 596,158	\$ 139,526	\$ 848,370	\$ 691,821

Description	Account(s)
Specific Service Charges:	4235
Late Payment Charges:	4225
Other Distribution Revenues:	4080, 4082, 4084, 4090, 4205, 4210, 4215, 4220, 4240, 4245
Other Income and Expenses:	4305, 4310, 4315, 4320, 4325, 4330, 4335, 4340, 4345, 4350, 4355, 4360, 4365, 4370, 4375, 4380, 4385, 4390, 4395, 4398, 4405, 4415

Note: Add all applicable accounts listed above to the table and include all relevant information.

Account Breakdown Details

For each "Other Operating Revenue" and "Other Income or Deductions" Account, a detailed breakdown of the account components is required. See the example below for Account 4405, Interest and Dividend Income.

Account 4080 - SSS Revenue	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
SSS Administration	\$ 78,655	\$ 76,745	\$ 82,855	\$ 83,263	\$ 84,366	\$ 84,690	\$ 86,653	\$ 80,000	\$ 80,000
Total	\$ 78,655	\$ 76,745	\$ 82,855	\$ 83,263	\$ 84,366	\$ 84,690	\$ 86,653	\$ 80,000	\$ 80,000

Account 4082 - Retail Services Revenues	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Standard Charge	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Monthly Fixed Charge	\$ 4,240	\$ 4,020	\$ 5,400	\$ 4,280	\$ 5,260	\$ 4,560	\$ 4,460	\$ 4,800	\$ 4,800
Monthly Variable Charge	\$ 28,971	\$ 21,816	\$ 18,686	\$ 14,929	\$ 13,340	\$ 11,809	\$ 10,404	\$ 14,500	\$ 14,500
DCB - Monthly Charge	\$ 12,274	\$ 13,110	\$ 11,212	\$ 8,211	\$ 8,750	\$ 7,085	\$ 6,242	\$ 8,700	\$ 8,700
Total	\$ 45,485	\$ 38,946	\$ 35,298	\$ 27,420	\$ 27,350	\$ 23,454	\$ 21,106	\$ 28,000	\$ 28,000

Account 4084 - Service Transaction Requests	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Request Fee	\$ 825	\$ 348	\$ 323	\$ 225	\$ 147	\$ 160	\$ 125	\$ 150	\$ 150
Processing Fee	\$ 1,528	\$ 264	\$ 371	\$ 361	\$ 196	\$ 204	\$ 174	\$ 200	\$ 200
Easement Letter	\$ 4,965	\$ 6,735	\$ 7,185	\$ 7,320	\$ 5,175	\$ 7,380	\$ 7,545	\$ 60	\$ 60
Arrears Certificate	\$ 4,966	\$ 6,737	\$ 7,189	\$ 7,318	\$ 5,170	\$ 7,374	\$ 7,545	\$ 7,200	\$ 7,200
Statement of Account	\$ 90	\$ 30	\$ -	\$ -	\$ -	\$ 75	\$ 30	\$ 30	\$ 30
Total	\$ 12,374	\$ 14,114	\$ 15,068	\$ 15,224	\$ 10,688	\$ 15,118	\$ 15,464	\$ 7,640	\$ 7,640

Account 4210 - Rent from Electric Property	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Pole Joint Use	\$ 102,337	\$ 105,058	\$ 102,121	\$ 110,034	\$ 129,986	\$ 114,671	\$ 117,193	\$ 109,515	\$ 109,515
Total	\$ 102,337	\$ 105,058	\$ 102,121	\$ 110,034	\$ 129,986	\$ 114,671	\$ 117,193	\$ 109,515	\$ 109,515

Account 4220 - Other Electric Revenues	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Other miscellaneous revenues	\$ 74	\$ 2,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 74	\$ 2,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Account 4305 - Regulatory Debits	2010 Actual ² 2010	2011 Actual ² 2011	2012 Actual ² 2012	2013 Actual ² 2013	2014 Actual ² 2014	2015 Actual ² 2015	Actual Year 2016	Bridge Year 2017	Test Year 2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Accounting Change	\$ -	\$ -	\$ -	\$ -465,810	\$ -160,213	\$ -	\$ -781,900	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -465,810	\$ -160,213	\$ -	\$ -781,900	\$ -	\$ -

Account 4355 - Gain on Disposition of Utility and Other Property

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Gain on Disposition of Utility and Other Property	\$ 23,879	\$ 120,531	\$ 37,915	\$ 79,457	\$ 30,602	\$ 17,612	\$ 122,721	\$ -	\$ -
Total	\$ 23,879	\$ 120,531	\$ 37,915	\$ 79,457	\$ 30,602	\$ 17,612	\$ 122,721	\$ -	\$ -

Account 4360 - Loss on Disposition of Utility and Other Property

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Loss on Disposition of Utility and Other Property	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,845	\$ 85,458	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 104,845	\$ 85,458	\$ -	\$ -

Account 4375 - Revenues from Non-Utility Operations

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Municipal Water Billing & Collecting	\$ 907,509	\$ 971,321	\$ 993,795	\$ 993,795	\$ 1,013,671	\$ 1,013,671	\$ 1,013,671	\$ 755,253	\$ 765,456
Streetlight & Traffic Light Services	\$ 385,464	\$ 227,512	\$ 310,395	\$ 286,520	\$ 284,053	\$ 219,650	\$ 145,021	\$ 110,000	\$ 110,000
CDM Related	\$ 903,322	\$ 608,910	\$ 657,714	\$ 938,124	\$ 628,885	\$ 1,083,357	\$ 1,703,389	\$ 1,000,000	\$ 1,000,000
Total	\$ 2,196,295	\$ 1,807,744	\$ 1,961,905	\$ 2,218,439	\$ 1,906,609	\$ 2,316,678	\$ 2,862,081	\$ 1,865,253	\$ 1,875,456

Account 4380 - Expenses from Non-Utility Operations

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Municipal Water Billing & Collecting	\$ 772,334	\$ 895,442	\$ 848,242	\$ 929,921	\$ 947,980	\$ 948,337	\$ 941,723	\$ 684,228	\$ 765,456
Streetlight & Traffic Light Services	\$ 336,434	\$ 195,947	\$ 322,698	\$ 274,929	\$ 302,680	\$ 216,869	\$ 142,872	\$ 100,000	\$ 100,214
CDM Related	\$ 602,818	\$ 548,677	\$ 631,081	\$ 927,651	\$ 762,512	\$ 1,083,357	\$ 1,703,389	\$ 1,000,000	\$ 1,000,000
Non-Recoverable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 166,740	\$ 275,654	\$ -	\$ -
Total	\$ 1,711,586	\$ 1,640,066	\$ 1,802,020	\$ 2,132,501	\$ 2,013,171	\$ 2,415,303	\$ 3,063,638	\$ 1,784,228	\$ 1,865,670

Account 4390 - Miscellaneous Non-Operating Income

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Miscellaneous Non-Operating Income	\$ 8,611	\$ 26,161	\$ 31,371	\$ 48,106	\$ 22,396	\$ 11,371	\$ 12,176	\$ 14,000	\$ -
Total	\$ 8,611	\$ 26,161	\$ 31,371	\$ 48,106	\$ 22,396	\$ 11,371	\$ 12,176	\$ 14,000	\$ -

Account 4398 - Foreign Exchange Gains and Losses, including Amortization

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
Gain/(Loss) on Foreign Exchange	\$ 36,067	\$ 41	\$ 11	\$ 468	\$ 642	\$ 17,576	\$ 7,335	\$ -	\$ -
Total	\$ 36,067	\$ 41	\$ 11	\$ 468	\$ 642	\$ 17,576	\$ 7,335	\$ -	\$ -

Account 4405 - Interest and Dividend Income

	2010 Actual ²	2011 Actual ²	2012 Actual ²	2013 Actual ²	2014 Actual ²	2015 Actual ²	Actual Year	Bridge Year	Test Year
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS
DVA Balance Interest	\$ 22,245	\$ 67,938	\$ 103,056	\$ 215,535	\$ 299,988	\$ 63,816	\$ 121,510	\$ 71,300	\$ -
Miscellaneous Interest Revenue	\$ 65,225	\$ 68,879	\$ 60,698	\$ 68,147	\$ 35,192	\$ 35,008	\$ 19,870	\$ 30,000	\$ 30,000
Total	\$ 87,470	\$ 136,817	\$ 163,754	\$ 283,682	\$ 335,181	\$ 98,824	\$ 141,380	\$ 101,300	\$ 30,000

Notes:

2

In the transition year to IFRS, the applicant is to present information in both MIFRS and CGAAP. For the typical applicant that adopted IFRS on January 1, 2015, 2014 must be presented in both a CGAAP and MIFRS basis.