



EB-2018-0028

Response to Interrogatories

**Consumers Council of Canada
(CCC)**

September 14, 2018

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Appendix CCC-1 (i).....

Appendix CCC-7.....

ADMINISTRATION

CCC-1

INTERROGATORY

Please provide all materials provided to the Board of Directors when seeking approval of this Application.

RESPONSE

Attached to this response are the following materials provided to the Board of Directors with respect to approval of this Application. Please refer to response to Interrogatory 1-Staff-6 for the 2018-2019 Budget Presentation.

Appendix CCC-1 (i) - 2019 Cost of Service Update to Board (April 2018)

Appendix CCC-1 (ii) - Board of Directors Resolution authorizing the 2018-2019 Budget

CCC-2

INTERROGATORY

Ref: Ex. 1/p.23

Please provide the actual 2017 Scorecard results.

RESPONSE

Please see the response to interrogatory 1-Staff-10c) for the Energy+ Scorecard updated with 2017 actual results.

CCC-3

INTERROGATORY

Ref: Ex. 1/p.24

Please explain why there is a significant increase in the 2017 Total Cost per Customer relative to 2016 (\$23,739 vs. \$28,244).

RESPONSE

Energy+'s Total Cost per Customer forecast for 2017 was \$652 compared to 2016 of \$639.

Energy+'s Total Cost per km of Line was \$28,244 compared to \$23,739.

In responding to this interrogatory, Energy+ has assumed that the question relates to the metric of Total Cost per km of Line. The km of line length represents the combined km of the former CND and BCP.

As explained in Exhibit 1, Pg. 154 Total Cost per km of Line, the main reason for the increase is due to an increase in operating and capital expenditures. The total cost metrics were higher in 2017 due to an increase in spending in the Brant area.

Also in 2017, Energy+ undertook an Asset Condition Assessment in preparation for its 2019 Cost of Service Rate Application. As part of this initiative, Energy+ identified that the ownership field information in its GIS data base for some overhead primary line sections supplying Energy+ customers was incorrect. A number of line sections were determined to be owned by Hydro One and not by Energy+. The errors were identified principally along the service area boundaries, external to the Energy+ service area back to supply stations. Energy+ corrected the ownership fields for the sections identified, which resulted in a revised total of primary overhead circuit km of line being reported for 2017.

Energy+ has experienced a low level of growth in its service territory over the past five years, both in terms of number of customers and kilometers of lines. As a result, cost per customer and cost per Km of line have increased year over year with the increase in operating and capital expenditures. Utilities with low growth rates with upward cost pressures experience higher increases in cost per customer and cost per Km of line as compared to utilities with higher growth rates that are able to fund capital renewal and operating costs through customer growth.

CCC-4

INTERROGATORY

Ref: Ex. 1/p.25

Please provide the 2017 Corporate Balanced Scorecard and Key Performance Indicator Report.

RESPONSE

Please refer to 1-SEC-6 a. for the 2017 Corporate Balanced Scorecard.

Please refer to 1-SEC-6 b. for the 2017 Key Performance Indicators.

CCC-5

INTERROGATORY

Please provide the actual ROE and Board approved ROE for each year 2013-2017. What is the projected ROE for 2018?

RESPONSE

The following Table CC-5 summarizes the Board approved ROE for each of the former CND and former BCP, as well as the actual regulated ROE for the former CND and former BCP for the years 2013, 2014 and 2015, and the actual regulated ROE for Energy+ Inc. for 2016 and 2017, and the forecast regulated ROE for Energy+ Inc. for 2018.

Table CCC-5: Role – Board Approved and Achieved

	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Forecast 2018
Historial Achieved Regulated ROE						
Former Cambridge and North Dumfries Hydro Inc.		8.32%	10.00%			
Former Brant County Power Inc.		9.84%	3.64%*			
Energy+ Inc. (January 1, 2016)				9.49%	7.75%	8.29%
Board Approved ROE	<u>EB-2009-0260</u>	EB-2013-0116				
Former Cambridge and North Dumfries Hydro Inc.	9.85%	9.36%	9.36%	9.36%	9.36%	9.36%
	EB-2010-0125					
Former Brant County Power Inc.	9.58%	9.58%	9.58%	9.58%	9.58%	9.58%
* As per Former BCP Scorecard MD&A, regulated net income in 2015 included a reduction of \$0.3MM related to financial differences arising from a prior period, which related to changes in the capitalization policies to align to IFRS.						

CCC-6

INTERROGATORY

Ref: Ex. 1/p.36

The evidence states that Energy+ recently completed new Collective Agreements with the IBEW for the Inside and Outside Bargaining Units. The Collective Agreements are for a six-year period (April 1, 2018 to March 31, 2024). Please confirm that the 2019 forecasts reflect those agreements.

RESPONSE

Energy+ confirms that the 2019 Test Year wages for Unionized employees included an assumption of a 2% wage increase, which is consistent with the rate in the new Collective Agreements.

CCC-7

INTERROGATORY

Please provide the 2016 Customer Satisfaction Survey. Has Energy+ completed a Customer Satisfaction Survey for 2018? If so, please provide a copy of the results.

RESPONSE

Appendix CCC-7 - The 2016 Customer Satisfaction Survey questions and results are attached.

Yes, Energy+ has completed a Customer Satisfaction Survey for use in the 2017 and 2018 Corporate Scorecard. Energy+ initiated augmented customer engagement activities in 2017 and early 2018, in order to genuinely understand customer's stated preferences and needs. The augmented engagement activities included focus group workshops, an online survey, a telephone survey and face-to-face meetings with customers. Customer Satisfaction was measured, as part of the customer engagement activities undertaken by Innovative Research Group (IRG). The Customer Satisfaction results are reported in Exhibit 1, Section 1.3.4 and Table 1-29 on pages 78-79. The IRG Report confirms that Energy+ customers are generally satisfied with the services provided by Energy+. There are high levels of satisfaction (75%-84%) as outlined on Table 1-29: Overall Low-Volume Customer Satisfaction Results, as shown below.

Table 1-29: Overall Low-Volume Customer Satisfaction Results

Telephone & Online Results Satisfaction and Customer Needs	Telephone				Online	
	Residential		Small Business		Residential	
	County of Brant	Cambridge and North Dumfries	County of Brant	Cambridge and North Dumfries	County of Brant	Cambridge and North Dumfries
Satisfaction with Service	80%	84%	77%	75%	82%	82%
Satisfaction with System Reliability (Very + Somewhat Satisfied)						
Number of Outages	81%	91%	80%	87%	85%	92%
Restoration Time	84%	89%	68%	92%	90%	90%
Power Quality	96%	90%	70%	89%	86%	89%
Energy+ Service Improvements (Open-Ended – Top Three Answers)						
No suggestion	42%	43%	52%		8%	18%
Lower electricity rates	28%	28%	23%		32%	28%
Reduce power outages	10%	3%	3%		11%	9%
Other	20%	26%	21%		49%	45%

RATE BASE

CCC-8

INTERROGATORY

Ref: Ex.2/p. 53 of PDF

Please provide the number of primary underground cable failures in the Brant area compared to the Cambridge and North Dumfries area and for each of the years 2013 to 2017.

RESPONSE

Please see Table CCC-8, below for the requested information:

Table CCC-8: Primary Underground Cable Failures

Number of Primary Underground Cable Failures					
	2013	2014	2015	2016	2017
CND	0	2	1	1	0
Brant	0	0	0	0	0

In 2018, Energy+ has experienced two underground primary cable failures to date. One was in the Brant area resulting in 292.8 unplanned Customer-Hours lost and one was in the Cambridge North Dumfries area resulting in 678.2 unplanned Customer-Hours lost. Injection had previously been done in 2013 on the primary cable that failed in Cambridge.

CCC-9

INTERROGATORY

Ref: Ex.2/p. 56 of PDF

Preamble: Energy+ states “Statistically even a unit in “very good” condition has a chance to fail (though the failure rate is extremely low).”

Please discuss if Energy+ tracks the condition and age of each asset failure.

RESPONSE

Energy+ does not track the condition and age of each asset failure. There is no central database that contains this information for each asset failure. Energy+ has condition information available for many assets and this was updated and enhanced as part of the preparation of the Asset Condition Assessment in 2017. Energy+ will investigate specific asset failures and an assessment of condition and determination of age is done as part of that work. Energy+ tracks age information for key assets in its Geographic Information System (GIS), such as for transformers, poles and underground primary cables. Energy+ is enhancing the amount of condition information that will be available in its GIS.

CCC-10
INTERROGATORY

Ref: Ex.2/Table 2-31/p.56 of PDF

For each of the Primary Drivers listed in Table 2-31, please provide the historical spending for each of the years 2013 to 2017 and forecast for 2019 to 2023.

RESPONSE

The historical spending for each of the years 2013 to 2017 and the forecast for 2019 to 2023 for each of the Primary Drivers listed in Table 2-31 is shown in Table CCC-10, below.

Table CCC-10: Primary Drivers Spending for Table 2-31

	2013	2014	2015	2016	2017	2019	2020	2021	2022	2023
<i>System Access Breakdown by Primary Drivers</i>										
System Expansion	\$ 6,630,732	\$ 1,241,958	\$ 3,853,744	\$ 1,875,657	\$ 1,232,670	\$ 1,518,015	\$ 1,567,115	\$ 1,478,095	\$ 1,401,315	\$ 1,566,715
New Customer Connections	\$ 683,240	\$ 1,009,050	\$ 730,073	\$ 1,419,229	\$ 1,265,964	\$ 1,488,500	\$ 1,470,000	\$ 1,470,000	\$ 1,470,000	\$ 1,470,000
Metering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 751,092	\$ 420,900	\$ 427,200	\$ 433,600	\$ 440,100
Relocations	\$ 1,062,469	\$ 1,529,813	\$ 3,480,487	\$ 2,190,643	\$ 3,100,437	\$ 766,600	\$ 548,900	\$ 977,000	\$ 629,800	\$ 651,850
System Access Total	\$ 8,376,441	\$ 3,780,821	\$ 8,064,304	\$ 5,485,529	\$ 5,599,071	\$ 4,524,207	\$ 4,006,915	\$ 4,352,295	\$ 3,934,715	\$ 4,128,665
Deferred Revenue	(717,867)	(756,000)	(4,496,000)	(2,763,000)	(3,212,000)	(817,000)	(769,000)	(886,000)	(772,000)	(782,000)
System Access (Net)	\$ 7,658,574	\$ 3,024,821	\$ 3,568,304	\$ 2,722,529	\$ 2,387,071	\$ 3,707,207	\$ 3,237,915	\$ 3,466,295	\$ 3,162,715	\$ 3,346,665

CCC-11
INTERROGATORY

Ref: Ex.2/Table 2-32/p.57 of PDF

For each of the Project Types listed in Table 2-32, please provide the historical spending for each of the years 2013 to 2017 and forecast for 2019 to 2023.

RESPONSE

The historical spending for each of the years 2013 to 2017 and the forecast for 2019 to 2023 for each of the Project Types listed in Table 2-32 is shown in Table CCC-11, below.

Table CCC-11: Project Type Spending for Table 2-32

<i>System Renewal Breakdown by Primary Drivers</i>	2014	2015	2016	2017	2019	2020	2021	2022	2023
Overhead Rebuild	\$ 1,296,760	\$ 2,719,878	\$ 3,520,239	\$ 3,622,718	\$ 3,048,000	\$ 2,801,750	\$ 2,408,900	\$ 5,726,950	\$ 5,012,100
Pole Replacements	\$ 619,925	\$ 557,401	\$ 642,503	\$ 1,054,235	\$ 548,100	\$ 792,400	\$ 950,400	\$ 949,400	\$ 949,400
Line Transformers Capitalized	\$ 467,247	\$ 306,845	\$ 679,308	\$ 360,752	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000
Underground Rebuild	\$ 1,105,822	\$ 1,602,478	\$ 2,527,892	\$ 3,500,366	\$ 1,748,100	\$ 3,273,550	\$ 2,669,865	\$ 195,000	\$ 1,251,700
Porcelain Insulator Replacements with Polymer	\$ 110,684	\$ 113,498	\$ 86,683	\$ 266,670	\$ 362,000	\$ 362,000	\$ 362,000	\$ 362,000	\$ 362,000
Vault Lid Replacements	\$ 4,916	\$ -	\$ 72,697	\$ 97,049	\$ 132,000	\$ 66,000	\$ 66,000	\$ 66,000	\$ 66,000
Porcelain SMD-20 / Fault Tamer Replacements with Polymer	\$ 56,387	\$ 82,370	\$ 242,425	\$ 138,427	\$ 110,500	\$ 110,500	\$ 110,500	\$ 110,500	\$ 110,500
Switchgear Replacements	\$ -	\$ 82,823	\$ 116,334	\$ 112,884	\$ 85,000	\$ 170,000	\$ 255,000	\$ 255,000	\$ 255,000
Pad-mounted Transformer Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83,000	\$ 83,000	\$ 83,000	\$ 83,000
MTS Equipment Renewal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000
Load-break Switch Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62,000	\$ 31,000	\$ 31,000	\$ 62,000
Misc	699,652	603,524	304,943	317,365	169,000	350,000	550,000	550,000	-
System Renewal Total	4,361,392	6,068,818	8,193,024	9,470,467	6,652,700	8,591,200	8,006,665	8,848,850	8,671,700

CCC-12
INTERROGATORY

Ref: Ex.2/Table 2-33/p.58 of PDF

For each of the Primary Drivers listed in Table 2-33, please provide the historical spending for each of the years 2013 to 2017 and forecast for 2019 to 2023.

RESPONSE

The historical spending for each of the years 2013 to 2017 and the forecast for 2019 to 2023 for each of the Primary Drivers listed in Table 2-33 is shown in Table CCC-12, below.

Table CCC-12: Primer Driver Spending for Table 2-33

System Service Breakdown by Primary Drivers	2013	2014	2015	2016	2017	2019	2020	2021	2022	2023
Enhanced Switching	\$ 258,610	\$ 98,853	\$ 584,391	\$ 187,583	\$ 23,737	\$ 271,000	\$ 301,000	\$ 400,000	\$ 240,000	\$ 240,000
Feeder Improvements	\$ 599,831	\$ 482,456	\$ 814,400	\$ 530,876	\$ 63,593	\$ 69,000	\$ 281,600	\$ 523,600	\$ 181,600	\$ 181,600
Enhanced Fault Detection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,000	\$ 8,500	\$ 30,000	\$ -	\$ -
System Service Total	\$ 858,441	\$ 581,309	\$ 1,398,791	\$ 718,459	\$ 87,330	\$ 367,000	\$ 591,100	\$ 953,600	\$ 421,600	\$ 421,600

CCC-13
INTERROGATORY

Ref: Ex.2/Table 2-34/p.58 of PDF

For each of the Project Types listed in Table 2-34, please provide the historical spending for each of the years 2013 to 2017 and forecast for 2019 to 2023.

RESPONSE

The historical spending for each of the years 2013 to 2017 and the forecast for 2019 to 2023 for each of the Project Types listed in Table 2-34 is shown in Table CCC-13, below.

Table CCC-13: Project Type Spending for Table 2-34

General Plant Breakdown by Primary Drivers	2013	2014	2015	2016	2017	2019	2020	2021	2022	2023
Buildings	\$ 416,000	\$ 230,000	\$ 84,000	\$ 39,000	\$ 394,000	\$ 4,400,000	\$ 4,500,000	\$ 150,000	\$ 2,000,000	\$ 150,000
Information System Technology	\$ 162,000	\$ 52,000	\$ 125,000	\$ 14,000	\$ 34,000	\$ 767,000	\$ 523,000	\$ 850,000	\$ 850,000	\$ 900,000
Vehicles	\$ 686,000	\$ 1,543,000	\$ 1,290,000	\$ 857,000	\$ 830,000	\$ 105,000	\$ 543,000	\$ 548,000	\$ 388,000	\$ 590,000
Tools and Equipment	\$ 612,000	\$ 848,000	\$ 596,000	\$ 468,000	\$ 419,000	\$ 67,000	\$ 90,000	\$ 95,000	\$ 100,000	\$ 100,000
Office Equipment and Furniture	\$ 162,000	\$ 68,000	\$ 45,000	\$ 88,000	\$ 175,000	\$ 4,000	\$ 500,000	\$ 25,000	\$ 200,000	\$ 25,000
Meters*	\$ 697,000	\$ 296,000	\$ 197,000	\$ 320,000	\$ 561,000	\$ -	\$ -	\$ -	\$ -	\$ -
General Plant Total	\$ 2,038,000	\$ 2,741,000	\$ 2,140,000	\$ 1,466,000	\$ 1,852,000	\$ 5,343,000	\$ 6,156,000	\$ 1,668,000	\$ 3,538,000	\$ 1,765,000

Note: Meters excluded from historical totals to provide an equal comparison between 2013-2017 to 2019-2023

The above summary of General Plant expenditures is based on the Application as filed.

Please refer to Responses to Interrogatories 1-Staff-12(f) and 1-Staff-15(f) with respect to revisions to the Facilities Plan.

CCC-14

INTERROGATORY

Ref: Ex.2/ p.46 of PDF

Preamble: Energy+ states “The team relies on condition information, operational data, and maintenance records to determine the trade-off between investments in capital versus refurbishment of the distribution asset.

By example, please explain further how operational data and maintenance records are accessed and used to determine the trade-off between investments in capital versus refurbishment of the distribution asset.

RESPONSE

Energy+’s Engineering and Operations teams determine the trade-off between investment in capital versus refurbishment of distribution assets. An example of this is the decision to replace or refurbish mini-pad transformers that are in poor condition. Energy+ reviews field inspection records which detail the following information in relation to the mini-pad transformer. Table CCC-14, below outlines the factors that are considered.

Table CCC-14: Mini-Pad Transformer Assessment

Mini-Pad Inspection	Details of Review
Paint Condition	Assessment of the paint condition to determine severity of rust. If there is surface rust that can be sanded/easily fixed, the unit is painted. If the rust has penetrated through or perforated, then the unit is replaced.
Placement on Pad or Vault	The mini-pad transformer will be relocated back to its original position if it has shifted. It will not be replaced in this case.
Lock and Penta Bolt In Place	Replace lock or penta bolt if broken.
Access (Shrubs/Trees, etc.)	Contact customer to discuss removal of obstructions.
Leaking Oil	Generally the unit is replaced unless the leak can be stopped.
Lid damage, missing bolts, cabinet damage, public security, lock damage	If damage is beyond repair and poses a safety hazard, the unit is replaced.
Elbow connections	Replace elbow if necessary. Transformer would not be replaced.
Overall Condition	Overall visual inspection of the asset.

Energy+ also performs an assessment of the condition of each transformer returned from the field to determine if the unit can be re-used with minor repairs in-house, or re-used after repairs are completed at a manufacturer, or whether it should be scrapped. Energy+ reviews the extent of repairs required, cost, and overall longevity of the unit.

Energy+ is progressing towards capturing asset inspection data electronically through the use of the Fulcrum application, which will be integrated into Energy+s GIS system to enable all team members to access information from a central repository.

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CCC-15

INTERROGATORY

Ref: Ex.2/2.9.1/p.87 of 160

Preamble: The 2019 Test Year includes net capital costs in the amount of \$4.4MM related to a capital lease with Brantford Power Inc. for a shared operations centre to service the Brant service territory. The existing operations facility in Paris, Ontario will be sold in 2018. Please discuss when the existing operations facility will be sold and the expected sale price.

RESPONSE

Please refer to the Responses to interrogatories 9-Staff-103c) and 9-Staff-103d).

CCC-16

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/p. 120 of 1497

Preamble: Energy+ uses the Kinectrics PROSORT tool for prioritization of investment across asset categories and investment portfolios based on Energy+'s Business Values and their attributes. Projects are ranked based on the ratios of the risks that are alleviated and the associated benefits resulting from the cost incurred. The tool serves as a guideline to provide a consistent approach to decision making and to optimize the overall risk to investment portfolio. This analysis will be performed annually.

- a) Please confirm the first time this tool is being used by Energy+ is in the development of the 2018 capital plan.

RESPONSE

Energy+ confirms that it purchased the PROSORT tool in 2017 and used it for the first time to evaluate and prioritize projects for the development of its 2018 to 2023 distribution capital plan.

CCC-16

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/p. 120 of 1497

b) Please provide the original PROSORT list of annual projects and spending compared to the final approved project list.

RESPONSE

Table CCC-16(i), below, shows the original PROSORT list of annual projects and spending compared to the final approved project list for 2018. Table CCC-16(ii) shows the same information, but for 2019..

Table CCC-16(i): Project Portfolio – Original vs Final - 2018

2018 System Renewal Project List	Project Part of Initial Pro-Sort List (Y/N)	Initial Budget	Final Approval (Y/N)	Final Budget
2018 Galt Core Area Upgrades (vault lid replacements) - CND Area (6-8 Lids per year)	Y	\$ 132,000	Y	\$ 132,000
2018 - Pole Replacements - CND Area (65 Poles Removed)	Y	\$ 497,000	Y	\$ 497,000
2018 - Porcelain Insulator Replacements with Polymer - CND Area	Y	\$ 272,000	Y	\$ 272,000
2018 - Porcelain SMD-20 / Fault Tamer Replacements with Polymer - CND Area	Y	\$ 92,500	Y	\$ 92,500
2018 - Loadbreak Switches - CND Area	Y	\$ 31,000	Y	\$ 31,000
2018 - Rusted mini-pad transformers (10)	Y	\$ 83,000	Y	\$ 83,000
2018 - Line Tx.'s Capitalized - CND Area (Replacement of transformers due to damage or failure)	Y	\$ 350,000	Y	\$ 350,000
Rebuild existing 27.6kV line on and behind Queen Street West from Shepherd Avenue to Guelph Avenue (20 Poles Removed) - CND Area - 1.6km	Y	\$ 328,250	Y	\$ 328,250
PMH Switching Unit Replacements (1) - CND Area	Y	\$ 85,000	Y	\$ 85,000
MTS#1 Equipment Replacement	Y	\$ 25,000	Y	\$ 25,000
Underground Rebuild - Cindy Avenue (1977) - 52 customers (presently 27.6kV) - CND Area - 0.7km	Y	\$ 281,000	Y	\$ 281,000
Underground Rebuild - Grand Ridge Drive Area - Part 2 of 2 (1977-1979) - 155 customers (presently 27.6kV) - CND Area - 1.6km	Y	\$ 713,300	Y	\$ 713,300
2018 Pole Replacements - Brant Area (50 Poles Removed)	Y	\$ 336,200	Y	\$ 336,200
2018 Porcelain Insulator Replacements with Polymer - Brant Area	Y	\$ 45,000	Y	\$ 45,000
2018 - Porcelain SMD-20 / Fault Tamer Replacements with Polymer - Brant area	Y	\$ 18,000	Y	\$ 18,000
2018 Line Tx.'s Capitalized - Brant Area (Replacement of transformers due to damage or failure)	Y	\$ 100,000	Y	\$ 100,000
Rebuild and Convert Overhead Line from 8.32/4.8kV to 27.6/16kV - Cockshutt Road from Sour Springs Road to River Road & McGill Road from Cockshutt Road to 2km West of Cockshutt Road (72 Poles Removed)- 3.3km - Brant Area	Y	\$ 964,000	Y	\$ 964,000
Concrete Pole Replacement - Colborne Street East - Part 2 of 2 - Brant Area (8 Poles Removed)	Y	\$ 85,650	Y	\$ 85,650
Powerline MTS Equipment Replacement	Y	\$ 10,000	Y	\$ 10,000
Rebuild and Convert Overhead Line from 8.32/4.8kV to 27.6/16kV - Burch Road from West of Biggars Lane to Cockshutt Road (53 Poles Removed) - 2.7km - Brant Area	Y	\$ 611,000	Y	\$ 611,000
Rebuild and Convert Overhead Line from 8.32/4.8kV to 27.6/16kV - Cockshutt Road from Burch Road to Sour Springs Road (43 Poles Removed) - 2.2km - Brant Area	Y	\$ 635,800	Y	\$ 635,800
Rebuild and Convert Overhead Line from 4.8kV to 27.6/16kV - Cockshutt Road from River Road to Tutela Heights Road - 1.6km (11 Poles FFA Removed)	Y	\$ 334,000	N	
Rebuild and Convert Overhead Line from 4.8kV to 16kV - Robinson Road from Mill Street to 0.7km West of Mill Street & Convert Tx's on Bishopsgate Rd (11 Poles Removed)- 0.7km - Brant Area	N		Y	\$ 123,000
2018 System Renewal - Grand Total		\$ 6,029,700		\$ 5,818,700

Table CCC-16(ii): Project Portfolio – Original vs Final - 2019

2019 System Renewal Project List	Project Part of Initial Pro-Sort List (Y/N)	Initial Budget	Final Approval (Y/N)	Final Budget
2019 Galt Core Area Upgrades (vault lid replacements) - CND Area	Y	\$ 132,000	Y	\$ 132,000
PMH Switching Unit Replacements (1) - CND Area	Y	\$ 85,000	Y	\$ 85,000
2019 Pole Replacements - CND Area (50 Poles FFA Removed)	Y	\$ 380,000	Y	\$ 380,000
2019 Porcelain Insulator Replacements with Polymer - CND Area	Y	\$ 272,000	Y	\$ 272,000
2019 Porcelain SMD-20 / Fault Tamer Replacements with Polymer - CND Area	Y	\$ 92,500	Y	\$ 92,500
2019 Loadbreak Switches - CND Area	Y	\$ 31,000	Y	\$ 31,000
2019 Line Tx.'s Capitalized - CND Area (Replacement of transformers due to damage or failure)	Y	\$ 350,000	Y	\$ 350,000
MTS #1 Equipment Replacement	Y	\$ 40,000	Y	\$ 40,000
Underground Rebuild - Bluerock Crescent (1979) - 60 customers (presently 27.6kV) - CND Area - 0.8km	Y	\$ 392,700	Y	\$ 392,700
2019 - Rusted mini-pad transformers (10)	Y	\$ 83,000	Y	\$ 83,000
2019 Pole Replacements - Brant Area (25 Poles FFA Removed)	Y	\$ 168,100	Y	\$ 168,100
2019 Porcelain Insulator Replacements with Polymer - Brant Area	Y	\$ 90,000	Y	\$ 90,000
2019 Porcelain SMD-20 / Fault Tamer Replacements with Polymer - Brant Area	Y	\$ 18,000	Y	\$ 18,000
2019 Line Tx.'s Capitalized - Brant Area (Replacement of transformers due to damage or failure)	Y	\$ 100,000	Y	\$ 100,000
Brant UG Rebuild existing 4.8kV primary - Isabel Dr. and August Ave. Approx. 50 customers (1976), - 0.7KM	Y	\$ 275,000	Y	\$ 275,000
Rebuild and Convert Overhead Line from 8.32/4.8kV to 27.6/16kV - Colborne Street East from East of McBay Road to Maden Road - 1.8km - 30 Poles FFA - Brant Area	Y	\$ 502,000	Y	\$ 502,000
Rebuild and Convert Overhead Line from 4.8kV to 16kV - Langford Church Rd from Colborne Street East to North of County Rd 8 - 4km (26 Poles FFA) - Brant Area	Y	\$ 600,000	Y	\$ 600,000
Rebuild and Convert Overhead Line from Single Phase to Three Phase (4.8kV to 27.6kV/16kV)- Park Road North from Powerline Road to Governors Road East - 2.1km (15 Poles FFA Removed)	Y	\$ 442,000	Y	\$ 442,000
Rebuild existing 16kV underground primary - Forest Drive, Columbine Crescent, Magnolia Drive, Larkspur Lane, Abeles Avenue, Clover Court (Paris) - approx.200 customers (1973) - 2.2KM Brant Area	Y	\$ 1,080,400	Y	\$ 1,080,400
Rebuild and Convert Overhead Line from 4.8kV to 27.6/16kV - Powerline Road from Rest Acres Road to Bishopsgate Road - 3.5km (50 Poles FFA Removed)	Y	\$ 750,000	Y	\$ 750,000
Rebuild and Convert Overhead 4.8kV to 16kV Line - River Road from Cockshutt Rd to Newport Rd - 1.2KM (15 Poles FFA)	Y	\$ 180,000	Y	\$ 180,000
Rebuild and Convert Overhead 4.8kV to 16kV Line - Governors Rd East from King George Rd to Park Road - 1.6KM (8 Poles FFA)	Y	\$ 240,000	Y	\$ 240,000
Powerline MTS Equipment Replacement	Y	\$ 15,000	Y	\$ 15,000
Rebuild and Convert Overhead Line from 4.8kV to 27.6/16kV - Cockshutt Road from River Road to Tutela Heights Road - 1.6km (11 Poles FFA Removed)	N		Y	\$ 334,000
Rebuild and Convert Overhead Line from 4.8kV to 16kV - Robinson Road from Mill Street to 0.7km West of Mill Street & Convert Tx's on Bishopsgate Rd (11 Poles Removed)- 0.7km - Brant Area	Y	\$ 123,000	N	
2019 System Renewal - Grand Total		\$ 6,441,700		\$ 6,652,700

The Cockshutt Road from River Road to Tutela Heights Road overhead line rebuild and voltage conversion project was deferred to 2019 even though it was ranked higher than other projects. This deferral was done because there is no source of 27.6kV until other 2018 projects were completed.

The Robinson Road from Mill Street to 0.7km West of Mill Street overhead line rebuild and voltage conversion was scored as a 2019 project, however it was advanced to 2018 to enable Energy+ to complete an overhead rebuild project previously started by Brant County Power (Bishopsgate Road).

There are no differences between the original and the final approved project list for System Service projects.

CCC-17

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/p. 171 of 1497/Figure 3-3

a) Please explain why Evaluation of Alternatives is not an input to the ProSort Tool.

RESPONSE

The Evaluation of Alternatives is a check that is in place to review a prioritized project list to determine if there are any better alternatives that may be viable. If such alternatives are identified, then Energy+ would run the alternatives through the PROSORT tool. It was not shown on the diagram presented in Figure 3-3 referenced above.

CCC-18

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/p. 142 of 1497/Table 2-8

a) Please provide the number of Customer Interruptions for each Defective Equipment Type for each of the years 2013 to 2017.

RESPONSE

Please note that based on an e-mail exchange with CCC on August 21, 2018 seeking clarification, this question should have read: "Please provide the number of Interruptions for each Defective Equipment Type for each of the years 2013 to 2017". This information is shown in Table CCC-18a), below.

Table CCC-18a): Number of Interruptions for Each Defective Equipment Type

Number of Interruptions - Defective Equipment					
Equipment	2013	2014	2015	2016	2017
Breaker	0	0	0	1	1
Cables	1	1	2	2	0
Cutouts	1	0	0	1	1
Elbows	3	5	9	4	4
Fuse	4	8	7	4	3
Insulators	3	3	2	2	3
Underground Primary Junction	1	0	0	0	0
Lightning Arresters	0	1	1	2	0
Neutral	0	0	1	0	0
NX Fuse	0	0	0	0	0
Overhead Hardware	0	2	7	0	1
PEDs	0	1	0	1	0
Pole	1	0	1	1	2
Rabbit	0	0	0	1	0
Recloser	0	0	0	0	0
Secondary	0	7	5	1	6
Splices	0	0	0	0	0
Switches	5	5	6	13	2
Switchgear	0	0	0	1	0
Termination	0	1	0	1	1
Thread Clamp	1	0	0	0	0
Transformers	28	30	32	20	17
Underground Hardware	0	0	0	0	0
Vac Pac switch	0	0	0	0	0

CCC-18

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/p. 142 of 1497/Table 2-8

b) Please provide the Customer Interruptions for each Defective Equipment Type for each of the years 2013 to 2017.

RESPONSE

Table CCC-18b), below, shows the number of Customer Interruptions for each Defective Equipment Type for each of the years 2013 to 2017.

Table CCC-18b): Number of Customer Interruptions for Each Defective Equipment Type

Number of Customer Interruptions – Defective Equipment					
Equipment	2013	2014	2015	2016	2017
Breaker	0	0	0	2010	3337
Cables	34	1013	14	405	0
Cutouts	1	0	0	1	1
Elbow	261	856	1327	389	3136
Fuse	306	121	105	14	1474
Insulators	1666	494	9177	753	3652
Underground Primary Junction	31	0	0	0	0
Lightning Arresters	0	108	1	982	0
Neutral	0	0	2	0	0
NX Fuse	0	0	0	0	0
Overhead Hardware	0	45	6705	0	262
PEDs	0	8	0	20	0
Pole	3	0	69	37	6033
Rabbit	0	0	0	4	0
Recloser	0	0	0	0	0
Secondary	0	282	344	20	271
Splices	0	0	0	0	0
Switches	1935	2323	40	6487	1325
Switchgears	0	0	0	4098	0
Terminations	0	93	0	62	1
Thread Clamp	28	0	0	0	0
Transformers	1683	3433	5876	4777	935
Underground Hardware	0	0	0	0	0
Vac Pac switch	0	0	0	0	0

CCC-19
INTERROGATORY

Ref: Ex.2/App 2-1/4.2.3/p. 250 of 1497

Preamble: Energy+ states “If a given project has additional benefits, those can be captured by the tool to improve the overall risk to benefit score.”

Please discuss the projects with additional benefits that were input into the tool resulting in an improved risk benefit score.

RESPONSE

Please see Table CCC-19, below, for a list of 2018 and 2019 projects for which additional benefits were added into the PROSORT tool, which resulted in the improvement of the total risk-benefit score.

Table CCC-19: Projects With Additional Benefits

#	Project Name	Budget Year	Change in Risk Score	Change in Benefit Score	Total Change in Risk-Benefit Score
1	Cockshutt Road from Sour Springs Road to River Road & McGill Road from Cockshutt Road to 2km West of Cockshutt Road	2018	16.1	43.1	59.2
2	Burtch Road from West of Biggars Lane to Cockshutt Road	2018	16.1	43.1	59.2
3	Cockshutt Road from Burtch Road to Sour Springs Road	2018	16.1	43.1	59.2
4	Cockshutt Road from River Road to Tutela Heights Road	2019	16.1	43.1	59.2

All of the projects listed above are overhead line rebuilds and conversion from 8.32/4.8kV to 27.6/16kV. These projects were all assigned additional benefits as they will enable Energy+ to ultimately loop the existing 27.6kV on McGill Road and provide a second supply to the Tutela Heights growth area created through the January 1, 2017 City of Brantford boundary adjustment.

The Cockshutt Road from River Road to Tutela Heights Road project (#4) above was selected to be completed in 2019 as the other three projects would need to be completed before from an electrical continuity standpoint.

CCC-20

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 710-712 of 1497

- a) For the Cambridge and North Dumfries area, please provide the forecast compared to actual customer hours of interruption due to Scheduled Outages for each of the years 2013 to 2017.

RESPONSE

Energy+ does not presently prepare an annual forecast of expected customer hours of interruption due to Scheduled Outages.

Energy+ will consider doing this in future years. In its job planning, Energy+ attempts to minimize the number and length of scheduled outages required to complete its planned work. Energy+ has a procedure for notification requirements to customers of planned power outages. Through engineering design, Energy+ includes switches in many projects to reduce the number of customers impacted. By utilizing skilled linepersons, Energy+ can do a lot of primary line work while the distribution system is still energized, thus reducing the number of required scheduled outages.

CCC-20

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 710-712 of 1497

- b) Please discuss the specific type of tree data collected for Customer Hours Lost and System Interruptions under Tree Contacts.

RESPONSE

Energy+ relies on visual confirmation from the on-site crews that the outage was caused by downed trees, broken limbs or tree branches before recording the outage caused a “Tree Contacts”. The System Control Operator will capture any information received from the crew in the “Action Required” section of the Outage Report that is circulated within Energy+. For example, “Tree trimming required on Johnson & Lynden Roads” was added under “Action Required” on a November 9, 2017 Outage Report as shown in the figure below:

Energy+ Outage Report

Outage # 3810

Outage Location Johnson Road, Lynden Road area *Community* Brant County

Outage Date 11/9/2017 *Weather* overcast & high winds -3 °C

Operator(s) [REDACTED]

Crews [REDACTED]

Equipment Fuse *Affect* blown *Voltage* 8.32/4.8 kV

Cause 3 - Tree Contacts *Subcause* _____ *Feeder* 64M27

Old Transformer _____ *New Transformer* _____

Previous Outages

<i>Time</i>	<i>Event Details</i>
21:05	N/P calls from Lynden Road & Johnson Road area
22:09	Wø high-side rabbit fuse blown on Johnson - patrolling the line
22:29	Line patrolled; possible tree contact due to high winds
22:30	Low side of rabbit opened
22:50	High side switch on rabbit replaced & closed
22:57	Low side of rabbit closed & holding; Wø restored
23:23	Meter Sense shows Bø still off - checking Bø rabbit location
23:27	Bø rabbit high side blown
23:50	Low side switch closed & holding - Bø restored

<i>Interruption Start Time</i>	<i>Interruption Stop Time</i>	<i># of Customers</i>	<i>Customer Hrs Lost</i>	<i>Duration (min.)</i>
21:05	22:57	52	97.10	112
21:05	23:50	2	5.50	165

Total C'hrs Lost 102.60

Action Required

Tree trimming required on Johnson & Lynden Roads

CCC-20

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 710-712 of 1497

- c) Please recast the following Cambridge and North Dumfries area tables excluding Loss of Supply and Major Event Days: Customer Hours Lost by Cause, System Interruptions by Cause and Customer Interruptions by Cause.

RESPONSE

Please see tables below for the Cambridge and North Dumfries area excluding Loss of Supply and Major Event Days.

Customer Hours Lost by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	2,697.10	2,608.10	1,503.70	2,409.30	828.4	6,092.50
1- Scheduled	3,383.10	13,103.60	6,476.90	10,442.30	6,141.50	11,581.40
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	7,206.30	5,390.80	11,249.10	12,768.30	1,322.00	7,710.10
4 - Lightning	487.5	1,060.00	770.5	283.3	264.5	3,482.30
5 - Defective Equipment	15,342.20	9,032.50	6,932.00	20,022.10	19,378.50	14,509.80
6 - Adverse Weather	3,561.70	349.40	12.7	4,801.30	683.30	3,489.00
7 - Adverse Environment	0	559.7	0	0	0.00	0
8 - Human Element	277.4	82.6	0	171	376.6	161.8
9 - Foreign Interference	10,953.30	7,238.60	6,732.50	6,739.90	4,067.10	6,560.60
TOTAL	43,908.60	39,425.30	33,677.40	57,637.50	33,061.90	53,587.50
SAIDI	0.84	0.76	0.64	1.09	0.61	0.99
Customer Count (Year-end)	51,983	52,212	52,684	53,106	53,832	54,358

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

System Interruptions by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	20	9	9	17	15	12
1- Scheduled	91	229	155	242	197	153
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	21	28	17	35	13	17
4 – Lightning	11	10	10	12	5	5
5 - Defective Equipment	38	48	64	73	54	41
6 - Adverse Weather	9	15	1	4	8	2
7 - Adverse Environment	0	1	0	0	0	0
8 - Human Element	1	4	0	2	5	2
9 - Foreign Interference	67	65	51	63	66	72
TOTAL	258	409	307	448	363	304
Customer Count (Year-end)	51,983	52,212	52,684	53,106	53,832	54,358

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

Customer Interruptions by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	12,955	4,636	14,644	2,901	2,402	8,672
1- Scheduled	5,078	13,561	7,100	10,079	9,555	14,639
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	9,312	10,589	18,881	9,894	11,907	11,503
4 – Lightning	160	264	279	110	96	2,684
5 - Defective Equipment	11,824	5,972	8,777	23,660	20,055	20,427
6 - Adverse Weather	5,628	4,006	19	6,333	9,103	5,618
7 - Adverse Environment	0	193	0	0	0	0
8 - Human Element	4,012	181	0	2,382	5,164	4,852
9 - Foreign Interference	18,188	13,663	20,436	16,732	11,179	25,842
TOTAL	67,157	53,065	70,136	72,091	69,461	94,237
SAIFI	1.29	1.02	1.33	1.36	1.29	1.73
Customer Count (Year-end)	51,983	52,212	52,684	53,106	53,832	54,358

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

Cambridge and North Dumfries Area excluding Loss of Supply and Major Event Days						
	2012	2013	2014	2015	2016	2017
SAIDI	0.84	0.76	0.64	1.09	0.61	0.99
SAIFI	1.29	1.02	1.33	1.36	1.29	1.73
CAIDI	0.65	0.74	0.48	0.80	0.48	0.57

CCC-20

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 710-712 of 1497

d) For the Cambridge and North Dumfries area, please provide the SAIDI, SAIFI and CAIDI results for each of the years 2013 to 2017 excluding all of the following: loss of supply, major event days and scheduled outages.

RESPONSE

SAIDI, SAIFI and CAIDI results for the Cambridge and North Dumfries area for the years 2013 to 2017 excluding Loss of Supply, Major Event Days and Scheduled Outages are shown in Table CCC-20d), below.

Table CCC-20d): Reliability Results Excluding Loss of Supply, Major Events and Schedule Outages

Cambridge and North Dumfries Area excluding Loss of Supply, Major Event Days and Scheduled Outages					
	2013	2014	2015	2016	2017
SAIDI	0.50	0.52	0.89	0.50	0.77
SAIFI	0.76	1.20	1.17	1.11	1.46
CAIDI	0.67	0.43	0.76	0.45	0.53

CCC-21

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 712-714 of 1497

- a) For the Brant area, please explain the high customer hours lost due to Scheduled Outages in 2017.

RESPONSE

The higher customer hours lost due to Scheduled Outages for the Brant area in 2017 is largely due to the higher level of rebuild activity in the Brant area. In addition, Energy+ has improved tracking of outage information due to the introduction of the Energy+ System Control Room for the Brant area and the integration/update of the Brant area GIS.

CCC-21

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 712-714 of 1497

b) Please recast the following Brant area tables excluding Loss of Supply and Major Event Days: Customer Hours Lost by Cause, System Interruptions by Cause and Customer Interruptions by Cause.

RESPONSE

The Brant area reliability tables and recast below.

Customer Hours Lost by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	42.8	37	10	78.8	1235.57	6,578.90
1- Scheduled	0	0	240	5	76.4	4,925.30
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	98.5	113.1	16,607.00	449.8	1,242.00	844.4
4 - Lightning	273.7	131.5	0	42.8	209.2	2,947.60
5 - Defective Equipment	597.3	1,049.90	4,548.00	434.9	3,709.30	20,636.10
6 - Adverse Weather	2,620.00	28,427.60	5,646.00	0	282.02	4,251.50
7 - Adverse Environment	0	0	53	2.3	2.5	0
8 - Human Element	2	0	0	0	72.7	526.9
9 - Foreign Interference	400.6	205.3	56	2,249.40	59.7	4,243.90
TOTAL	4,034.90	29,964.40	27,160.00	3,263.00	6,889.39	44,954.60
SAIDI	0.41	3.04	2.72	0.32	0.67	4.28
Customer Count (Year-end)	9,783	9,858	9,971	10,058	10,293	10,498

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

System Interruptions by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	8	10	5	6	16	19
1- Scheduled	0	0	5	1	34	110
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	9	6	12	16	16	14
4 - Lightning	10	7	0	6	7	13
5 - Defective Equipment	33	29	47	36	21	25
6 - Adverse Weather	15	19	11	0	6	5
7 - Adverse Environment	0	0	8	1	1	0
8 - Human Element	2	0	0	0	1	4
9 - Foreign Interference	41	36	13	18	13	41
TOTAL	118	107	101	84	115	231
Customer Count (Year-end)	9,783	9,858	9,971	10,058	10,293	10,498

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

Customer Interruptions by Cause Excluding Loss of Supply and Major Events						
Cause	2012	2013	2014	2015	2016	2017
0 - Unknown/Other	45	28	5	62	7,426	5,024
1- Scheduled	0	0	80	1	156	2,125
2 - Loss of Supply	Excluded	Excluded	Excluded	Excluded	Excluded	Excluded
3 - Tree Contacts	76	101	5,443	357	456	1,696
4 - Lightning	113	73	0	22	54	1,256
5 - Defective Equipment	423	503	2,508	195	3,107	23,551
6 - Adverse Weather	5,185	7,160	1,081	0	121	1,594
7 - Adverse Environment	0	0	37	1	1	0
8 - Human Element	2	0	0	0	20	4,097
9 - Foreign Interference	413	89	41	1,890	31	6,985
TOTAL	6,257	7,954	9,195	2,528	11,372	46,328
SAIFI	0.64	0.81	0.92	0.25	1.10	4.41
Customer Count (Year-end)	9,783	9,858	9,971	10,058	10,293	10,498

Note: The yellow highlighted cells are those that have changed from the original table presented in the DSP.

CCC-21

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/pp. 712-714 of 1497

c) For the Brant area, please provide the SAIDI, SAIFI and CAIDI results for each of the years 2013 to 2017 excluding all of the following: loss of supply, major event days and scheduled outages.

RESPONSE

Please see Table CCC-21, below for the Brant reliability data in the form requested.

Table CCC-21: Brant Area Reliability Excluding Loss of Supply, Major Events and Scheduled Outages

Brant Area excluding Loss of Supply, Major Event Days and Scheduled Outages					
	2013	2014	2015	2016	2017
SAIDI	3.04	2.70	0.32	0.66	3.81
SAIFI	0.81	0.91	0.25	1.09	4.21
CAIDI	3.77	2.95	1.29	0.61	0.91

CCC-22

INTERROGATORY

Ref: Appendix 2-AA

- a) Please add three columns to the spreadsheet: 2017 Actuals, 2018 Actuals to date and 2018 forecast as of Aug 2018 and provide an updated excel spreadsheet of Appendix 2-AA.

RESPONSE

Please refer to excel file "2019 EnergyPlus Chapter2 Appendices Updated for June 30_18 YTD_IRR.xlsx" in Response to Interrogatories 1-Staff-10 (b) and 2-SEC-18. The 2017 Actuals and YTD June 30, 2018 Actuals have been provided.

Energy+ notes that the 2018 Bridge Year has not changed. Energy+ has not completed a revised forecast for 2018.

CCC-22

INTERROGATORY

Ref: Appendix 2-AA

b) Please provide spending on storms for the years 2014 to 2017 and the storm budget for the years 2018 to 2023.

RESPONSE

Please see Table CCC-22b), below, for Energy+'s spending on storms for the years 2014 to 2017.

Table CCC-22b): Storm Spending – 2014 to 2017

Year	2014	2015	2016	2017
Cost	\$35,766	\$75,027	\$60,614	\$58,959

Please note that the spending shown for 2014 and 2015 is the combined total for the former BCP and the former CND. Spending for the other years is for the combined entity, Energy+.

Energy+ has identified a storm budget of \$75,000 for each of the years from 2018 to 2023.

CCC-22

INTERROGATORY

Ref: Appendix 2-AA

c) Please provide the number of System Renewal projects and total spend under each of the following capital categories for each of the years 2014 to 2017 and forecast for 2018 to 2023: Rebuild and Convert Overhead Line, Underground Rebuild, Rebuild Existing Line, Rebuild and Convert Underground Line.

RESPONSE

Please see Table CCC-22c) below, for the number of System Renewal projects and total spend under each of the following capital categories for each of the years 2014 to 2017 and forecast for 2018 to 2023: Rebuild and Convert Overhead Line, Underground Rebuild, Rebuild Existing Line, Rebuild and Convert Underground Line

Table CCC-22c): Renewal Project – Spending and Number

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Rebuild Existing Overhead Line										
Capital Spending	\$ 966,999	\$ 1,158,621	\$ 1,485,179	\$ 1,554,912	\$ 1,674,600	\$ 1,020,600	\$ 1,326,900	\$ 1,624,100	\$ 2,151,900	\$ 1,483,900
Number of Projects	4	5	6	5	5	3	4	7	5	4
Rebuild and Convert Existing Overhead Line										
Capital Spending	\$ 1,116,756	\$ 2,314,525	\$ 3,006,671	\$ 3,527,138	\$ 2,333,800	\$ 3,048,000	\$ 2,801,750	\$ 2,238,700	\$ 5,027,950	\$ 5,012,100
Number of Projects	4	4	8	9	4	7	8	12	11	13
Underground Rebuild										
Capital Spending	\$ 1,110,738	\$ 1,685,301	\$ 2,644,226	\$ 2,245,214	\$ 1,211,300	\$ 1,690,100	\$ 3,592,550	\$ 3,073,865	\$ 599,000	\$ 1,655,700
Number of Projects	2	4	5	9	4	4	9	11	3	5
Underground Rebuild and Conversion										
Capital Spending	\$ -	\$ -	\$ -	\$ 1,465,085	\$ -	\$ 275,000	\$ -	\$ -	\$ -	\$ -
Number of Projects	0	0	0	2	0	1	0	0	0	0
Misc (See Notes)										
Capital Spending	\$ 1,166,899	\$ 910,370	\$ 1,056,948	\$ 678,117	\$ 599,000	\$ 619,000	\$ 870,000	\$ 1,070,000	\$ 1,070,000	\$ 520,000
Number of Projects	N/A									
Total	\$ 4,361,392	\$ 6,068,818	\$ 8,193,024	\$ 9,470,467	\$ 5,818,700	\$ 6,652,700	\$ 8,591,200	\$ 8,006,665	\$ 8,848,850	\$ 8,671,700
Notes: Misc category includes line transformers capitalized which consists of overhead and underground.										
Misc category also includes station equipment, cost of third party engineering, and other projects										

CCC-23

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/Appendix A/p. 360 of 1497

a) Please provide the total number of poles replaced under the Pole Replacement Program for each of the years 2014 to 2017 broken down by pole type and by service area (CND & Brant areas).

RESPONSE

Please see Tables CCC-23a)(i) and CCC-23a)(ii), below for the total number of poles replaced under the Pole Replacement Program for each of the years 2014 to 2017 broken down by pole type, for the CND and Brant areas respectively

Table CCC-23a)(i): Pole Replacement Program - CND

Year	2014	2015	2016	2017
Number of Wood Poles Replaced	39	20	11	29
Number of Concrete Poles Replaced	0	0	5	0
Number of Steel Poles Replaced	0	0	0	0

Table CCC-23a)(ii): Pole Replacement Program – Brant

Year	2014	2015	2016	2017
Number of Wood Poles Replaced	95	86	98	162
Number of Concrete Poles Replaced	0	0	0	0
Number of Steel Poles Replaced	0	0	1	0

CCC-23

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/Appendix A/p. 360 of 1497

b) Please provide the percentage of poles replaced in each of the years 2014 to 2017 in poor or very poor condition.

RESPONSE

Energy+ did not calculate the health index scoring of poles removed/replaced between 2014 and 2017 since the Asset Condition Assessment was completed in 2017. The Health Index score determines whether a pole is in poor, very poor, fair, good, or very good condition. The following chart depicted in the Kinectrics ACA provides a range of health index scores:

Very Poor	Health Index < 25%
Poor	$25 \leq$ Health Index < 50%
Fair	$50 \leq$ Health Index < 70%
Good	$70 \leq$ Health Index < 85%
Very Good	Health Index \geq 85%

During the years 2014 to 2017, poles were replaced based on: (i) the results of pole testing; (ii) as part of overhead rebuilds as part of new/upgraded services; (iii) as a result of motor vehicle accidents; (iv) as a result of line patrols; and (v) as a result of roadway relocations.

540 wood poles were replaced between 2014 and 2017 under the pole replacement program. Although health indexing was not in place during most of these pole replacements, it is estimated that 90% of these poles would have met the criteria of being in "Very Poor" or "Poor" condition.

1,357 wood poles were replaced between 2014 and 2017 outside of the pole replacement program. The majority of these poles were replaced as a result of overhead 4.8kV to 16kV rebuilds and roadway relocations. Although health indexing was not in place during most of these pole replacements, it is estimated that 20% of these poles would have met the criteria of being in "Very Poor" and "Poor" condition.

All of the poles in overhead rebuilds do not deteriorate at the same rate. Therefore, some of them are still in “Fair” condition. It is more efficient to replace a whole set of poles as one project where there is a larger concentration of Very Poor, Poor, and Fair poles rather than replace a pole at a time through spot pole replacement – a process that would require Energy+ to keep returning annually to complete replacements.

The majority of concrete pole replacements were as a result of road relocations work and were not in “Very Poor” or “Poor” condition.

CCC-23

INTERROGATORY

Ref: Ex.2/App 2-1/DSP/Appendix A/p. 360 of 1497

c) Please provide the total number of poles replaced under programs/projects outside of the Pole Replacement Program for each of the years 2014 to 2017 broken down by pole type and by service area (CND & Brant areas).

RESPONSE

Please see Tables CCC-23c)(i) and CCC-23c)(ii), below for the total number of poles replaced under programs/projects outside of the Pole Replacement Program for each of the years 2014 to 2017 broken down by pole type, for the CND and Brant areas respectively.

Table CCC-23c)(i): Outside of Pole Replacement Program - CND

Year	2014	2015	2016	2017
Number of Wood Poles Replaced	287	321	270	86
Number of Concrete Poles Replaced	12	30	37	43
Number of Steel Poles Replaced	0	0	0	1

Table CCC-23c)(ii): Outside of Pole Replacement Program – Brant

Year	2014	2015	2016	2017
Number of Wood Poles Replaced	90	50	32	221
Number of Concrete Poles Replaced	0	0	0	6
Number of Steel Poles Replaced	0	0	0	0

CCC-24
INTERROGATORY

Ref: Ex.2/App 2-1/DSP/Appendix A/p. 379 of 1497

a) Please provide the total number of Line Transformers replaced for each of the years 2014 to 2017.

RESPONSE

Please see Tables CCC-24(i) and CCC-24(ii) for total number of Line Transformers replaced for each of the years 2014 to 2017, for the CND and Brant areas, respectively.

Table CCC-24(i): Line Transformer Replacement - CND

Year	2014	2015	2016	2017
Number of Transformers Replaced	130	198	161	136

Table CCC-24(ii): Line Transformer Replacement - Brant

Year	2014	2015	2016	2017
Number of Transformers Replaced	N.A.	N.A.	57	133

N.A. – Not Available

Replacement information for the former BCP was not available for the years 2014 and 2015.

CCC-25
INTERROGATORY

Ref: Ex.2/App 2-1/DSP/Appendix A/p. 402 of 1497

Please provide the total number of Porcelain Insulator Replacements with Polymer for each of the years 2014 to 2017 by service area (CND & Brant areas).

RESPONSE

Please see Tables CCC-25(i) and CCC-25(ii), below for a breakdown of Porcelain Insulator Replacements with Polymer, for CND and Brant areas respectively.

Table CCC-25(i) - Porcelain Insulator Replacements with Polymer – CND

Year	2014	2015	2016	2017
Number of Porcelain Linepost Insulators replaced with Polymer	332	233	216	235

Table CCC-25(ii) - Porcelain Insulator Replacements with Polymer - Brant

Year	2014	2015	2016	2017
Number of Porcelain Linepost Insulators replaced with Polymer	N.A	N.A	43	78

N.A – Not Available

Replacement information for the former BCP was not available for the years 2014 and 2015.

CCC-26

INTERROGATORY

Ref: Appendix 2-AB

Please add three columns to the spreadsheet: 2017 Actuals, 2018 Actuals to date and 2018 forecast as of Aug 2018, and provide an updated excel spreadsheet of Appendix 2-AB.

RESPONSE

Energy+ has updated the 2017 Actuals in Response to Interrogatories 1-Staff-10 b.

Please refer to excel file "2019 EnergyPlus Chapter2 Appendices Updated for June30_18 YTD_IRR.xlsx". Please refer to the tab "App.2-AB CCC-26".

Please also refer to Response to Interrogatories 1-Staff-12 f) and 1-Staff-15 f) with respect to changes to the 2019 to 2023 Plan for Facilities.

Energy+ notes that the 2018 Bridge Year has not changed. Energy+ has not completed a revised forecast for 2018.

CCC-27

INTERROGATORY

Ref: Appendix 2-1/DSP/Appendix J/p.850

Please provide Kinectrics' rating of the data quality of Cambridge and North Dumfries and Brant areas before and after the ACA with respect to completeness, accuracy, accessibility, and consistency.

RESPONSE

Energy+ requested that Kinectrics provide comments on this interrogatory and received the following response:

"In general, data quality of Cambridge and Brant areas is the same as or better than the majority of local distribution utilities that Kinectrics has worked with so far.

In terms of completeness, there was no asset group in which Energy+ collected less data than the majority of local distribution utilities did. Compared with other utilities, Energy+ had better data collection of:

- *Test data for wood poles*
- *Loading data for all the distribution transformers*

In terms of accuracy, both the test and inspection data were provided at a granularity level that is acceptable to Health Index calculation. The entries of inspection status were based on pre-set gradings rather than free-hand comments, which allowed quantitative interpretation.

In terms of accessibility, all the data from Energy+ were provided in excel spreadsheet, enabling automatic extraction of the requested entries. Whenever there were multiple input files for an asset group, they were linked using unique IDs of asset units.

In terms of consistency, for each asset group the data collection format kept unchanged during input data revisions, allowing updating the ACA study results on a regular basis. Among all the asset groups, data were collected targeting the major data types, namely inventory, inspection,

test and operation. This ensured the same underlying principle of data collection applied to all the asset groups.

The followings were the changes before and after ACA study, in data quality:

- 1. During the ACA study it was found that some inputs in the original files had sanity issues. This was corrected with Energy+ updating and resubmitting the input files.*
- 2. During the ACA study, it was found that although the requested data were available at Energy+, some of them were scattered and located outside the major database for data extraction. This helped Energy+ to put together all the information for database updating and re-documentation.*
- 3. During the ACA study, the discussion with Energy+ subject matter experts showed that some of the generic industrial curves on asset degradation did not fully reflect the actual practice at Energy+. Energy+ and Kinectrics then worked together to revise such curves so as to better represent the asset degradation mechanism at Energy+.”*

CCC-28

INTERROGATORY

Ref: Ex. 2/App 2-1/DSP/Appendix J/p. 852

Kinectrics makes the following recommendations. Please provide Energy+'s response to each recommendation.

- a) In the future, historic records of asset removal need to be collected for all the asset groups, so as to improve the accuracy of asset degradation curves.
- b) Inspection records at component level need to be collected for all the OH asset groups, all the UG asset groups, Capacitors and Voltage Regulators, so as to improve the input granularity for better assessment of component condition status.
- c) Manufacturer Specification limits for contact resistance and operation cycles need to be collected for Station Breakers, so as to set up the thresholds for assessing breaker usage.
- d) Operation cycle counts need to be collected for Station Breakers, for both the normal operation and fault interruption. This will help determine the degradation due to different usage.
- e) It was noticed that for many years Energy+ had tracked Underground Cables failures by location in the outage database. Such information could indicate historic trend in cable degradation in the future when sufficient data have been collected. Efforts would be taken to sort such data by cable segments for statistical processing before being incorporated in ACA study.

RESPONSE

Please find Energy+'s response to Kinectrics recommendations in the same order summarized in Section V – Recommendations (page 852, Exhibit 2) in the ACA study:

- a) Energy+ plans to capture asset removal information for all the asset groups studied as part of the Asset Condition Assessment in its GIS system.

- b) Energy+ agrees with Kinectric's recommendation of obtaining inspection records at a component level as it will provide further granularity and better assessment of component condition status.
- c) Energy+ will obtain the manufacturer specification limits for contact resistance and operation cycles from the equipment vendor.
- d) Energy+ agrees and will work to distinguish cycle counts as a result of normal operation and fault interruption operation.
- e) Energy+ agrees with Kinectric's recommendations that Underground Cable failure information can be used in future ACA studies once there have been a sufficient number of Underground Cable failures.

OPERATING, MAINTENANCE AND ADMINISTRATION COSTS

CCC-29

INTERROGATORY

Ref: Ex. 1/P. 47 and Ex. 4/26 Table 4-10

The evidence states that the acquisition of the former BCP and the subsequent amalgamation and integration of the operations, resulted in the achievement of approximately \$1.2 million in sustained savings by the end of 2017. Please explain, in detail, how those amounts were calculated. Please include all assumptions.

RESPONSE

Please refer to Response to Interrogatory 4-SEC-21.

Energy+ would note that the Table 4-10 reference contains the same information as Table 2-3 in the DSP referenced by SEC.

CCC-30

INTERROGATORY

Ref: Ex. 1/p. 48 and Ex. 4/p. 13

The evidence states that included in the 2019 OM&A Test Year is \$390,000 in incremental annual costs as a result of the transition to monthly billing. Has Energy+ benchmarked these costs against the costs of monthly billing for like utilities? If not, why not? If so, please provide that comparison. Please provide details regarding how that amount was derived.

RESPONSE

Exhibit 4, Table 4-11, Page 29 provides a summary of the incremental annual costs of \$390,000.

Energy+ did not benchmark the incremental costs as a result of the transition to monthly billing, for the following reasons:

Energy+ commenced transitioning to monthly billing in November 2016 with all customers being transitioned to monthly billing in January 2017. Costs increased incrementally based on the increase in the volume of bills issued and increased monthly collection activity and processes. Energy+ tracked the incremental costs related to monthly billing in a separate deferral account for 2017 and 2018, and the 2019 budget is based on this experience.

Energy+ determined that additional resources were required to ensure the additional incremental bills issued, an increase of approximately 26,000 bills monthly or 312,000 bills annually, were accurately billed on time and collection activity was undertaken in alignment with regulations. Energy+ hired an additional incremental resource, a Billing Representative I, in January 2017 based on the additional billing volumes and in Customer Care, a contract Customer Care Clerk was hired. Overtime for existing resources was utilized and a Summer Student was hired to address the additional time required to complete the higher volume of collection activity.

The transition to monthly billing increased bill volumes and collection activity, resulting in additional costs for postage, bill stock, envelope stock, monthly bill inserts, 3rd party telephone minutes for outbound Friendly Reminder Calls, direct Customer Care calls to customers prior to disconnect, increased customer contact for payment arrangements, 3rd party contractors hand delivering collection notices, bank fees to process increased transactions, increased costs of our 3rd party bill printer to print, stuff and deliver to Canada Post increased volumes.

CCC-31

INTERROGATORY

Ref: Ex. 1/p. 97

The evidence indicates that as part of the initial budget process, departmental budget requests for OM&A expenditures were approximately \$292,000 higher in the 2019 Test Year than the proposed level of OM&A included in the Application. Please identify where the reductions were made and what process was followed in terms of deciding what reductions were appropriate.

RESPONSE

As outlined in Interrogatory 1-Staff-4c), Energy+ revisited the initial departmental budget requests for 2019 OM&A expenditures and identified opportunities for reductions in the amount of \$292,000 in expenses including, Conferences and Seminars, Training, Professional Fees, Staffing, Legal and other various department expenses.

The process followed by Energy+ to decide what reductions were appropriate started with a roundtable discussion of the Leadership Team, comprised of the President & CEO, CFO and Vice Presidents representing all departments. The discussion included a review of the overall budgeted expenses, priorities, the Business Plan, customer engagement feedback and identification of what opportunities were available to reduce operating expenses. For example, the Leadership Team agreed that training expenses for staff could be reduced by using online HR Training Downloads to deliver training, by employing "train the trainer" training when possible, and collaboration with other utilities to undertake shared training. These alternate training methods would assist with reducing expenses to benefit the customer, without compromising on delivering staff training. Conference expenses were also reduced, based on the general principle to reduce the number of staff attending any given conference and/or alternating attendance biennially at conferences, where appropriate. Individual reviews were then undertaken by each Department of their initial budget requests against the Business Plan and timelines established in the Business Plan together with a review of department initiatives. Individual departments revised various department expenses, as they deemed achievable and appropriate.

CCC-32

INTERROGATORY

Ref: Ex. 1/p. 9

The evidence indicates that reductions in the Test Year Capital Expenditures by \$1 million. Please identify where the reductions were made and what process was followed in terms of deciding what reductions were appropriate.

RESPONSE

A net reduction of \$1 Million was made in the 2019 Test Year for Capital Expenditures based on customer feedback and in concert with information in the 2017 Asset Condition Assessment (ACA), together with the use of a prioritization tool, ProSort.

Based on augmented customer feedback, Energy+ heard overall that it should **maintain system reliability levels and keep costs reasonable**. Energy+ re-evaluated and re-allocated capital investment priorities and phasing of investments across its service territory, using the additional knowledge gained from the ACA, to reduce capital expenditures while ensuring the integrity of the infrastructure would not be compromised.

Capital Expenditures are categorized as System Access, System Renewal, System Service or General Plant. The following details summarize where reductions were made and why decisions were made, with respect to the changes made in the Test Year Capital Expenditures budget:

System Access projects relating to customer requests including new subdivisions, new padmount customer transformers and moving assets were revisited, and updated based on new customer information, but there was no net reduction in the revised 2019 proposed budget.

System Renewal projects and investments for 2019 were reduced. Based on customer feedback and the results of the Asset Condition Assessment (ACA), wood pole testing and prioritization analysis using the ProSort tool, Energy+ reduced its overall planned 2019 System Renewal investments. Energy+ reduced its planned System Renewal investment in the CND area, and increased its planned System Renewal investment in the Brant area. The original 2019 capital plan figures were based on a five-year capital forecast prepared in October, 2016. The revised figures were prepared, based on customer feedback, and with a significant amount

of additional knowledge gained through the 2017 Asset Condition Assessment and substantial wood pole testing especially in the Brant area. Energy+ also acquired the ProSort tool from Kinectrics to assist in the prioritization of projects.

In the CND area, the largest reduction was the deferral of 27.6kV pole line rebuilds. The results of the ACA showed that these planned projects could be delayed. Energy+ increased the spot wood pole replacement budget in the CND area to account for the fact that some poles would need replacement, versus the original plan to rebuild pole lines. Energy+ reduced the number of PMH switching unit replacements from two to one, for additional savings. Energy+ deferred a planned 8.32kV rebuild on Mohawk Road. Energy+ also deferred certain planned underground System Renewal projects. At the same time, Energy+ increased spending for porcelain insulator replacements and for porcelain fused cutout replacements, as a result of ongoing failures and resulting outages.

In the Brant area, the list of planned 2019 System Renewal investments changed based on customer feedback, using the results of the ACA, significant testing of wood poles and the prioritization process done using the ProSort tool. Large projects such as the rebuild of the 27.6kV PM6 feeder from Powerline MTS to Dundas Street East and the 8.32kV rebuild of Godby Road/Dekeer Road/Dorombozi Lane, were deferred based on the new condition-based information and extensive analysis done in the ACA. At the same time, other projects were added, such as the 8.32kV overhead rebuild on Langford Church Road, the 8.32kV overhead rebuild on Powerline Road and the overhead rebuild on Colborne Street East, as a result of the ACA and the prioritization outcomes of the ProSort tool, to align with customer expectations with respect to reliability and keeping costs down.

System Service investments for 2019 were revisited and reduced based on customer feedback. In the CND area, Energy+ reduced the number of planned SCADA switch installations. In the Brant area, Energy+ deferred the installation of an additional switching unit in the Brant Industrial Park, the creation of a looped 27.6kV supply on Consolidated Drive in Paris and feeder ties. Energy+ also reduced the number of planned SCADA switch installations in the Brant area. The deferrals and reductions were chosen because the projects were meant to improve, rather than maintain reliability. Energy+ could make these reductions without affecting existing reliability levels.

General Plant investments were revisited resulting in reductions in 2019. Reductions included not replacing a fleet vehicle; a service bucket truck that was scheduled for replacement in 2019. In line with customer's expectations to reduce costs, the vehicle engine was replaced, and the life of the truck was extended by at least five years. With the customers' first stated priority being reasonable rates, additional lesser reductions were made across departments, relating to Office Equipment and Furniture, Tools and Equipment and Computers.

Overall, Energy+ revisited the original 2019 Test Year Capital plan, as presented to customers during the augmented customer engagement activities, and through careful, deliberate and methodical review, reduced the 2019 Capital Budget by \$1.0 Million.

CCC-33
INTERROGATORY

Ref: Ex. 4/p. 11 – Table 4-3

Please provide the 2017 actual amounts and the 2018 year-to-date OM&A amounts.

RESPONSE

Energy+ has provided Table 4-3 for the 2017 actual amounts and the June 30, 2018 year-to-date OM&A amounts in the following table.

Table CCC-33: OM&A Summary – Updated for 2017 Actuals and YTD 2018

	Last Rebasing Year (Proxy 2014 Board Approved)	2014 Actuals	2015 Actuals	2016 Actuals	2017 Actuals	2018 June 30 YTD Actuals	2018 Bridge Year	2019 Test Year (Revised)
Operations	\$ 3,228,515	\$ 2,738,607	\$ 2,880,615	\$ 2,934,425	\$ 3,204,993	\$ 1,618,655	\$ 3,240,629	\$ 3,289,039
Maintenance	\$ 2,661,929	\$ 3,118,876	\$ 2,755,290	\$ 2,671,173	\$ 2,541,688	\$ 1,974,091	\$ 2,674,678	\$ 2,641,602
Billing and Collecting	\$ 3,730,609	\$ 3,477,666	\$ 3,330,327	\$ 3,548,298	\$ 3,084,314	\$ 1,631,859	\$ 3,372,867	\$ 3,945,340
Community Relations	\$ 333,707	\$ 256,788	\$ 117,727	\$ 97,839	\$ 97,712	\$ 57,076	\$ 93,555	\$ 98,215
Administrative and General	\$ 8,456,671	\$ 8,765,568	\$ 8,309,038	\$ 7,905,340	\$ 8,510,756	\$ 4,240,203	\$ 8,213,696	\$ 8,406,452
Total	\$ 18,411,431	\$ 18,357,504	\$ 17,392,997	\$ 17,157,075	\$ 17,439,463	\$ 9,521,884	\$ 17,595,425	\$ 18,380,648
2019 Test Year vs. 2014 Board Approved Proxy								\$ (30,783)
% Increase 2019 Test Year vs. 2014 Board Approved Proxy								-0.2%

Energy+ notes that the 2019 Test Year has also been updated in the above table in Response to Interrogatory 1-Staff-15 f).

CCC-34
INTERROGATORY

Ref: Ex. 4/p. 16

Please explain why there is an increased allocation of Distribution Maintenance Costs to Capital Projects of \$475,000. Where does this show up as an increase in the 2019 Capital Budget amounts?

RESPONSE

As explained in Exhibit 4, Section 4.2.4 Cost Drivers, Energy+ operations staff labour hours are allocated to projects based on work orders initiated for all projects, whether capital, operations, maintenance or recoverable from customers. In 2015, there was an increase of approximately \$475,000¹ in labour costs allocated to capital projects, resulting in a decrease in OM&A. This is principally explained by an increase in the level of capital investments. As summarized in Exhibit 2, net capital expenditures in 2014 were approximately \$11.0MM and increased to \$13.3MM in 2015.

Based on the planned capital expenditures and projects for 2019, the labour hours are estimated into the individual capital project costs.

¹ Note that Exhibit 4 Pg. 26 incorrectly said \$450,000 however, the driver table correctly showed \$475,000.

CCC-35

INTERROGATORY

Ref: Ex. 4/p. 20 – Table 4-6 Summary of Recoverable OM&A Expenses

Please provide the actual 2017 amounts for each of the listed categories.

RESPONSE

Energy+ has updated Appendix 2-JC Summary of Recoverable OM&A Expenses in Response to Interrogatory to 1-Staff-10 a).

CCC-36

INTERROGATORY

Ref: Ex. 4/p. 22 – Table 4-7 Recoverable OM&A Per Customer and Per FTE

Please provide the actual 2017 amounts for each of the listed categories.

RESPONSE

Energy+ has updated Appendix 2-L Recoverable OM&A Per Customer and per FTE in Response to Interrogatory 1-Staff-10 a).

CCC-37

INTERROGATORY

Ref: Ex. 4/p. 26 – Table 4-10 Summary of Operating Synergies

Table 4-10 refers to Operation Synergies but sets them out as cumulative. What are the ongoing annual OM&A savings resulting from the merger?

RESPONSE

The cumulative amount as set out in Table 4-10 represents the achieved annual operating savings as a result of the acquisition and amalgamation. The amount of annual operating savings has reduced the amount of OM&A that is being requested as part of the 2019 Test Year. Without these savings, on-going OM&A would have been \$1,197,000 higher on a combined basis.

Please refer to Response to 2-SEC-21 for further details with respect to the computation of the annual operating savings achieved.

CCC-38
INTERROGATORY

Ref: Ex. 4/p. 29

How many customers does Energy+ expect to enroll in e-billing in 2019 and beyond? Are there any associated savings incorporated into the 2019 forecast?

RESPONSE

Energy+ forecasts a 3% increase in the enrollment of its customers presently receiving paper bills, to register for e-billing in 2019 and continue to enroll 3% of customers annually.

There are savings associated with e-billing relating to paper stock, envelopes, postage and bill print processing. For 2019, an addition of 3% of the customer base enrolling in e-billing equates to approximately 1,700 customers. This results in a reduction of approximately 20,000 bills being printed with an estimated operating expense reduction of \$15,000. Table CCC-38, below outlines the enrollment in e-billing since launch in 2014.

Table CCC-38: e-Billing Enrollment

Year	Customers Enrolled eBill (Dec. 31)	Increase in Sign Ups	% Customer Base Enrolled
2014	1,245		2.2%
2015	2,554	+1,309	4.6%
2016	5,574	+3,020	8.5%
2017	7,409	+1,835	11.3%
2018*	9,100	+1,691	14.0% *
2019*	10,800	+1,700	17.0% *
* Total Customer enrollment to e-billing for 2018 and 2019 is Estimated.			

CCC-39

INTERROGATORY

Ref: Ex. 4/p. 38

Has Energy+ adjusted its Bad Debt Expense at all as a result of the Fair Hydro Plan? If not, why not?

RESPONSE

Energy+ has not adjusted its Bad Debt Expense, as a result of the introduction of the Fair Hydro Plan. While the Fair Hydro Plan does assist with potential reductions in electricity bills for Residential, GS<50kW small business and farms, it does not provide reductions for large commercial customers. In addition, the introduction of the permanent Disconnect Moratorium for residential customers in November 2017, prohibits residential disconnects from November 1st to May 1st each year, which Energy+ has assessed as increasing Energy+'s financial risk. Energy+'s experience with the disconnect moratorium has shown customers are becoming increasingly aware they can continue to use electricity, without consequence, even if they choose to not pay the monthly hydro bills issued during this moratorium period, In addition, Energy+ has experienced an increase in customers vacating their premises without paying their outstanding bills or advising Energy+ of their move out date or supplying a forwarding address for their final bill.

CCC-40

INTERROGATORY

Ref: Ex. 4/p. 41/Table 4-16 OM&A Program Tables

Please provide the 2017 Actual Amount for all of the categories in Table 4-16.

RESPONSE

Energy+ has updated Appendix 2-JC OM&A Program Tables in Response to Interrogatory 1-Staff-10 a).

CCC-41

INTERROGATORY

Ref: Ex. 4

Does Energy+ expect further synergies related to the merger? If so, have these been incorporated into the 2019 OM&A forecast?

RESPONSE

Energy+ does not anticipate any further OM&A synergies that are specifically related to the merger.

CCC-42

INTERROGATORY

Ref: Ex. 4/p.70

Please provide a more detailed description of Grand River Energy Solutions Corp. Does it intend to expand its activities over the next 5 years? If so, will it be purchasing more services from Energy+ over that time period?

RESPONSE

Grand River Energy Solutions Corp. ("GRE") is an unregulated generation and renewable energy solutions company; the scope of which currently comprises consulting with customers with respect to the benefits of clean energy and other technologies, such as combined heat and power, sub-metering solutions, and solar projects. The Corporation is jointly owned by Cambridge and North Dumfries Energy Solutions Inc. ("Energy Solutions"), Kitchener Power Corp., and Waterloo North Hydro Holding Corporation.

GRE has its own President and CEO and Board of Directors who are responsible for the strategic direction of the company. Currently, GRE is purchasing Accounting Services from Energy+. Energy+ is not aware of any additional services that GRE would require from Energy+ over the next five years.

CCC-43

INTERROGATORY

Ref: Ex. 4/p.75 – Table 4-36 Products and Services of Non Affiliates

Please explain why Energy + does not tender its purchases of poles? Please explain why Energy+ does not tender its purchases of Software/Support/Meter Maintenance services.

RESPONSE

In Table 4-36, Energy+ noted that the Poles purchased from Stella-Jones (formerly Guelph Utility Pole) were purchased via “Sole Source”. The purchasing of wood poles is done by quote and negotiating a final price on each of the various sizes and classes. There is essentially only one supplier in Ontario that supplies Western Red Cedar poles. In 2017, Energy+ negotiated a three year purchasing contract. As part of the agreement with Stella-Jones, poles can be delivered directly to a job site or to Energy+’s storage yard. With other suppliers in Canada, mainly from Western Canada, it is Energy+’s understanding that Energy+ would be expected to pick up the poles from a rail yard, and then pay additional fees to deliver the poles to the site or to Energy+’s storage yard.

The purchases of Software/Support/Meter Maintenance services refers to the products/services purchased from Harris Computer Systems. Harris Computer Systems is the vendor for Energy+’s Customer Information System (“CIS”), which was implemented in 2011. The source code for the CIS solution is owned by Harris Computer Systems. As such, all upgrades to the CIS system, including enhancements, are purchased from Harris Computer Systems. There is no other supplier/vendor in which to acquire these services.

CCC-44

INTERROGATORY

Ref: Ex. 4/p.82 – Table 4-38 – Cost of Service Application Costs

Please provide a detailed explanation as to how the Legal Cost and Consultants' Cost amounts were derived. Please include all assumptions.

RESPONSE

Please see the Response to Interrogatory 4-SEC-34 f), for details of the Consultant Costs included in the Cost of Service Application Costs.

The estimated Legal Costs and Consultants Costs were derived based: (i) quotes received from various consultants; and (ii) the historical experience that Energy+ has in preparing Cost of Service Applications. Consultant costs for the Augmented Customer Engagement and assistance with the DSP were derived through an RFQ process. Consulting costs with respect to the load forecast, rate design, and LRAM were based on estimates provided by the consultants. Witness training and public meeting expenses were based on historical experience and judgement.

Energy+ assumed that the majority of Consultant Costs would be incurred in 2017 and early 2018 as part of the preparation of the Application. Legal Costs were assumed to be incurred primarily during 2018, to support the Interrogatory, Settlement and, if applicable, the Oral Hearing portions of the Rate Application process.

CCC-45

INTERROGATORY

Ref: Ex. 4/p.82 – Table 4-39 2014 Board Approved Proxy – Regulatory Expenses

Please provide the actual Regulatory Expenses incurred for the last Cost of Service proceeding. Please include all of the detailed amounts in the same format at Table 4-39.

RESPONSE

Please refer to the response to Interrogatory 1-Staff-9 a) ii) for the completed Appendix 2M Regulatory Cost Schedule, which was modified by the OEB for 2019 Cost of Service filers. The completed Appendix 2M includes the actual regulatory expenses incurred for the combined former BCP and former CND in the previous Cost of Service proceedings, which was \$868,725.

The last Cost of Service proceeding for the former BCP was for 2011 rates (EB-2010-0125) and the total spent was \$226,125 and the last Cost of Service proceeding for the former CND was for 2014 rates (EB-2013-0116) and the total spent was \$642,600.

COST ALLOCATION

CCC-46

INTERROGATORY

Ref: Ex. 1/p.55

Please explain the rationale for moving the Residential Revenue to Cost Ratio from 88.7% (as per the cost allocation study) to 92%.

RESPONSE

This practice is consistent with the movement of the revenue to cost ratios approved by the OEB in recent settlement agreements. There is a reduction in revenue resulting from the movement of revenue to cost ratios for the GS >50 to 999 kW class and the Street Lighting class to the OEB's range, as well as moving the ratio to 100% for the Embedded Distributor classes. In order to maintain revenue neutrality, the revenue to cost ratios for Residential, USL and Sentinel Lighting classes have been moved to common ratio since these three classes have the lowest revenue to cost ratios. These are the classes that are being cross subsidized the most by other classes and the movement in revenue to cost ratios somewhat addresses this issue.

Appendices

Appendix CCC-1 (i)	2019 Cost of Service Update to Board (April 2018)
Appendix CCC-7	2016 Customer Satisfaction Survey Questions & Results

Appendix CCC-1 (i)

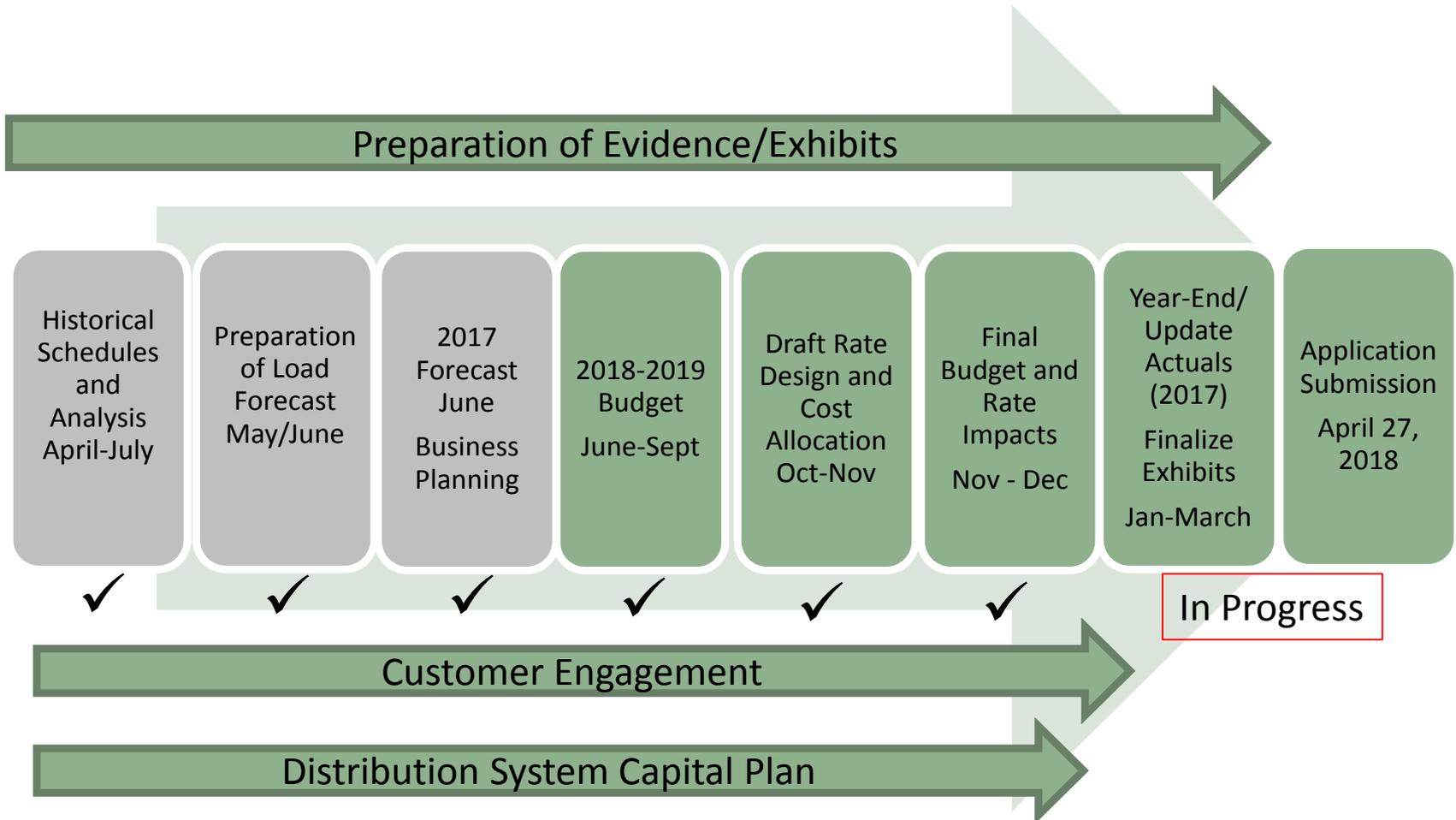
2019 Cost of Service Update to Board (April 2018)



2019 COST OF SERVICE UPDATE

March 29, 2018

2019 COST OF SERVICE PROCESS AND TIMELINE – TO APRIL 27, 2018



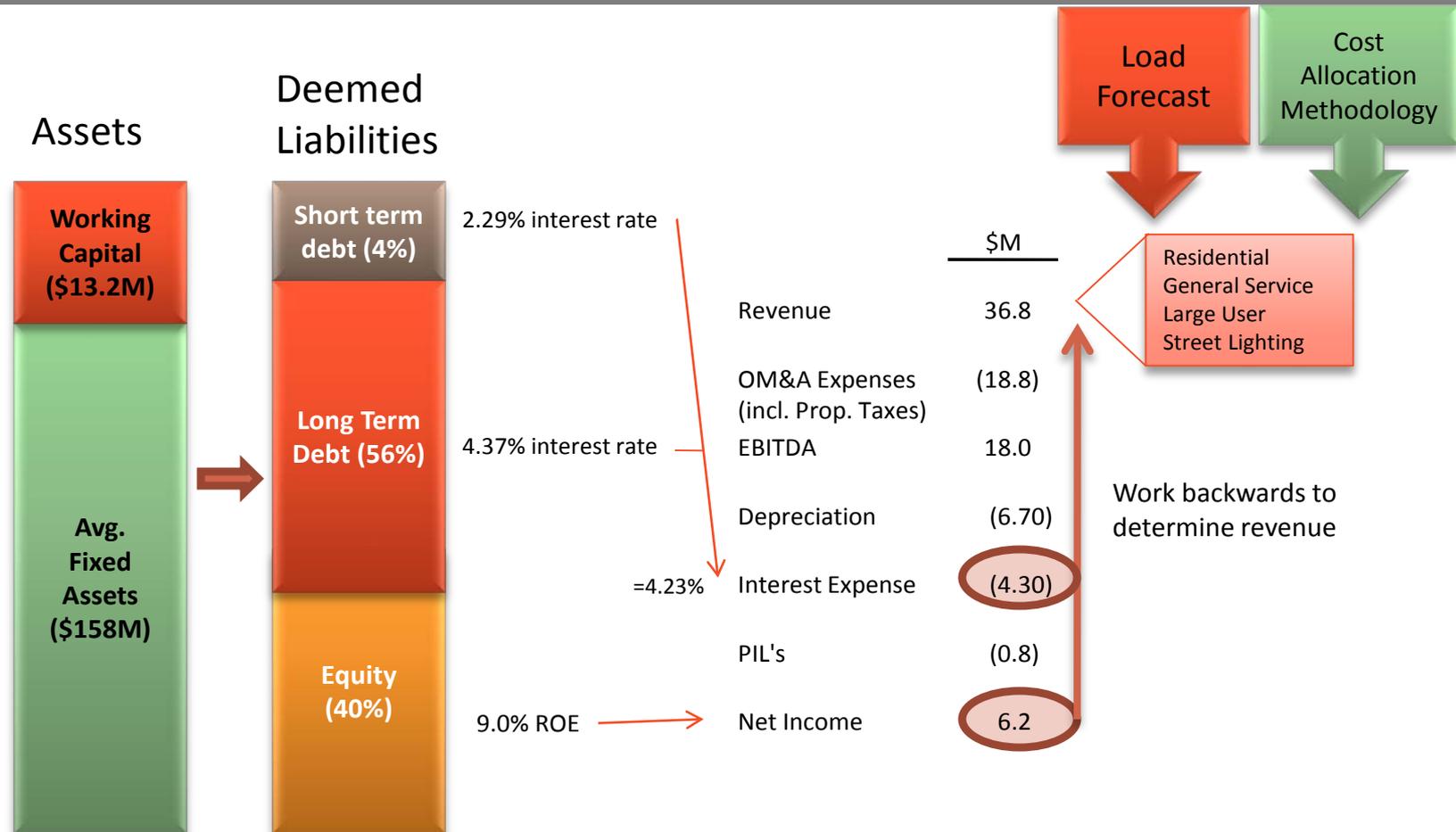
APPLICATION PREPARATION COSTS – ACTUAL TO-DATE VS. FORECAST

2019 Cost of Service Preparation	2017 Actuals	Revised Estimate - May 2017			Total - 2017- 2019
		Forecast 2017	2018	2019	
Borden Ladner Gervais					
Legal	66,556	55,000	125,000	50,000	230,000
Load Forecast	7,000	15,000			15,000
Cost Allocation Study		5,000			5,000
	<u>73,556</u>	<u>75,000</u>	<u>125,000</u>	<u>50,000</u>	<u>250,000</u>
Distribution System Capital Plan - Metsco	43,000	43,000	-	-	43,000
Customer Engagement Strategy and Execution - Innovative Research	143,531	146,250	-	-	146,250
Indeco Consulting - Conservation Impact re Load Forecast	13,705		10,000	5,000	15,000
Incremental Staffing/Labour/Employee Expenses					
C. MacDonald - CM Regulatory Services	55,625	100,000	50,000	-	150,000
Robert Half Management Resources (Finance/Regulatory Support)	107,538	72,000	-	-	72,000
Public meetings		5,000	10,000	-	15,000
Witness training			20,000		20,000
OEB Costs				35,000	35,000
Intervenor Costs				100,000	100,000
Miscellaneous	9,040				
Total 2019 COS Regulatory Expense	<u>445,995</u>	<u>441,250</u>	<u>215,000</u>	<u>190,000</u>	<u>846,250</u>
Variance to 2017 Budget - Increase in Estimate		<u><u>241,250</u></u>			
Variance re 2019 CoS Estimate vs. 2014 CoS Actuals					<u><u>203,650</u></u>
Increase principally due to:					
(1) Customer Engagement Strategy - Increased expectations by the OEB		121,250			
(2) External Regulatory Resources		<u>100,000</u>			
		<u><u>221,250</u></u>			
				Avg. 5 Years	<u><u>169,250</u></u>

Note: Excludes Asset Condition Assessment of \$95,000 - which is expected to be on-foing normal course expenditure.

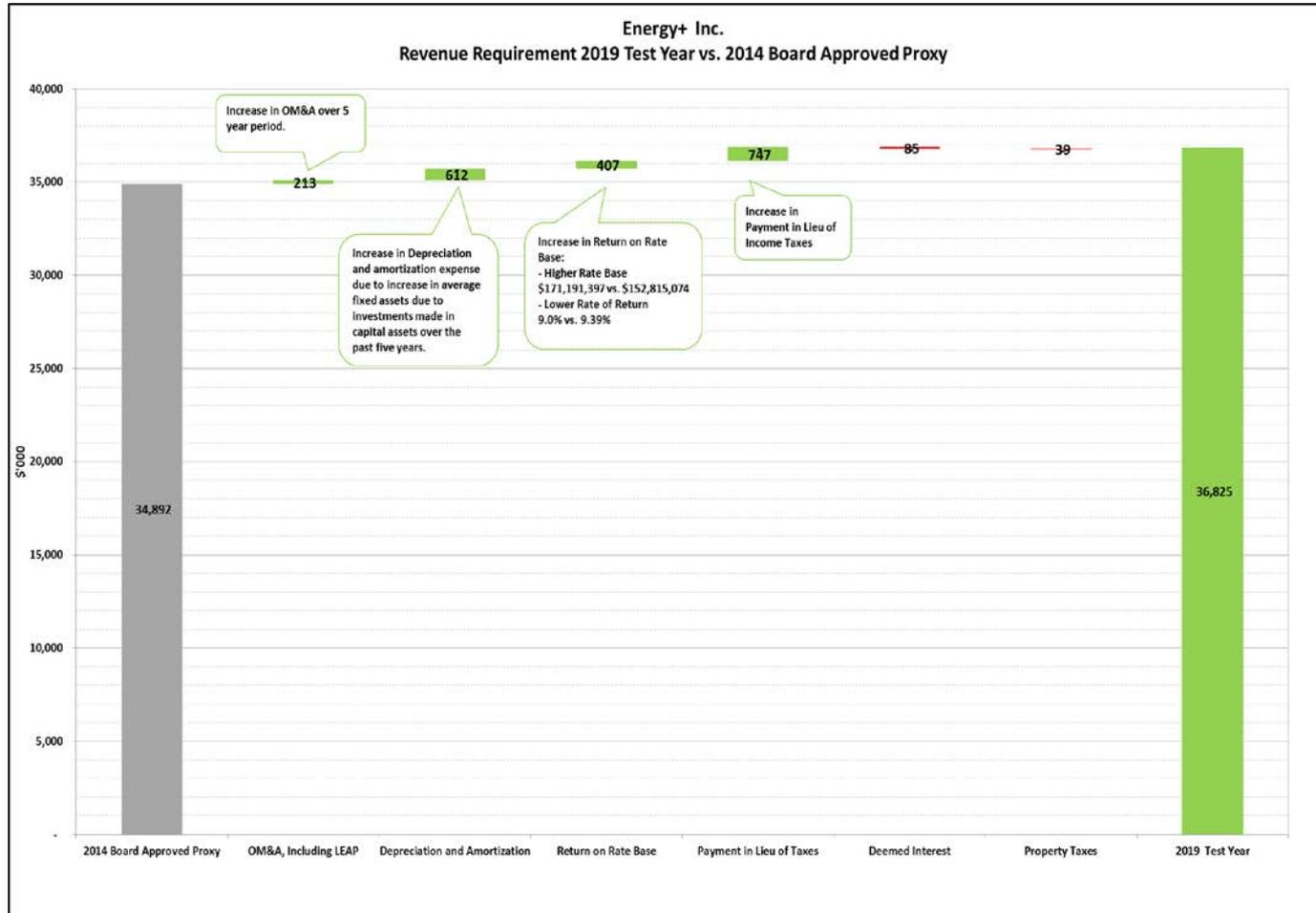


COMPUTATION OF "REVENUE REQUIREMENT" – COST OF SERVICE



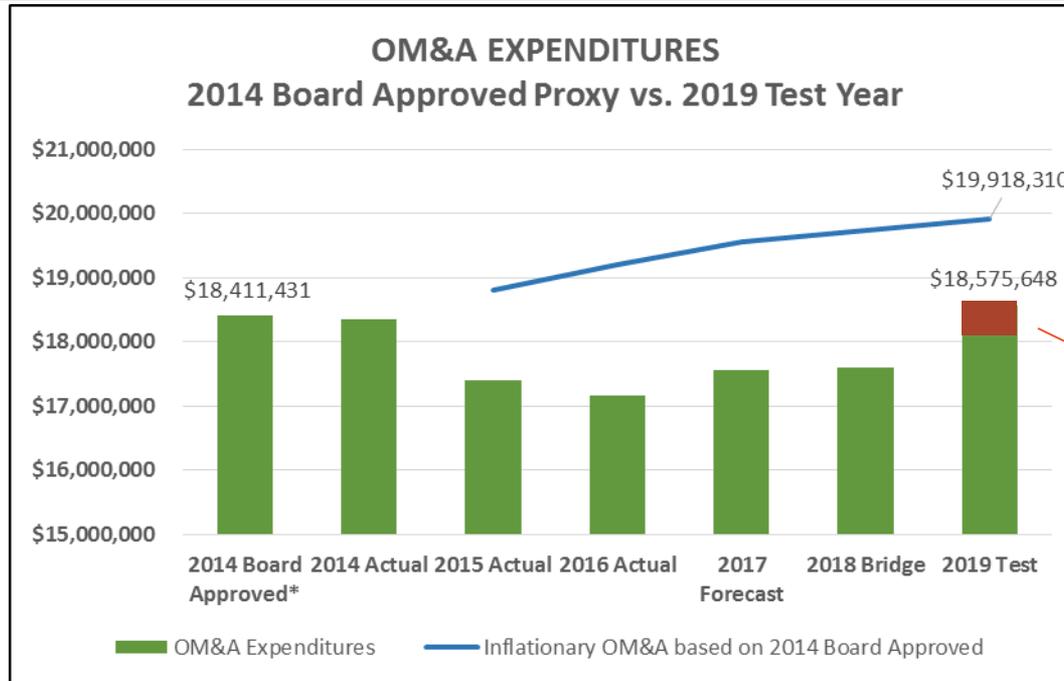
Computation based on Energy+ 2019 CoS Rate Base = \$171.2M (\$13.2M+\$158M)

REVENUE REQUIREMENT – 2014 BOARD APPROVED PROXY VS. 2019 TEST YEAR



- \$1.9MM or 5.5% increase in revenue requirement over 5 Years (2019 Test vs. 2014 Board Approved)
- Increase principally due to increased rate base reflecting investments in capital assets (Depreciation and Rate of Return).

OM&A EXPENDITURES



Monthly Billing & OEB Fees
 \$476,000

- Consolidated OM&A expenditures increased by \$162k or 0.9% since 2014 Board Approved
- 2019 Test Year includes \$390k re monthly billing and \$86k in incremental OEB fees
 - Excluding these expenditures, OM&A would be \$18.1MM or \$0.3MM less than 2014 Board Approved
- In the absence of no acquisition, OM&A expenditures would have been significantly higher for both organizations based on inflation.

2019 PROPOSED RATE AND BILL IMPACTS

CND Service Territory

Rate Class, Categories (E+ CND)	kWh	kW	Distribution (Fixed & Volumetric)				Total Bill (Excluding HST)			
			Current 2018	Proposed 2019	\$ Change	% Impact	Current 2018	Proposed 2019	\$ Change	% Impact
Residential	750	-	\$ 24.83	\$ 27.33	\$ 2.50	10.1%	\$ 96.02	\$ 102.43	\$ 6.41	6.7%
GS < 50 kW	2,000	-	\$ 43.21	\$ 47.58	\$ 4.37	10.1%	\$ 243.70	\$ 257.37	\$ 13.67	5.6%
GS >50 to 999 kW	20,000	60	\$ 368.05	\$ 357.29	\$ (10.75)	-2.9%	\$ 3,415.31	\$ 3,426.57	\$ 11.26	0.3%
GS >1,000 to 4,999	800,000	2,000	\$ 8,341.83	\$ 8,594.88	\$ 253.05	3.0%	\$ 124,738.16	\$ 125,180.09	\$ 441.93	0.4%
Large Use	6,600,000	16,000	\$ 48,858.20	\$ 45,599.25	\$ (3,258.95)	-6.7%	\$ 964,056.67	\$ 991,547.22	\$ 27,490.55	2.9%

Brant Service Territory

Rate Class, Categories (E+ Brant County)	kWh	kW	Distribution (Fixed & Volumetric)				Total Bill (Excluding HST)			
			Current 2018	Proposed 2019	\$ Change	% Impact	Current 2018	Proposed 2019	\$ Change	% Impact
Residential	750	-	\$ 28.28	\$ 27.33	\$ (0.95)	-3.3%	\$ 102.93	\$ 102.43	\$ (0.50)	-0.5%
GS < 50 kW	2,000	-	\$ 53.36	\$ 47.58	\$ (5.78)	-10.8%	\$ 262.81	\$ 257.37	\$ (5.45)	-2.1%
GS >50 to 999 kW	20,000	60	\$ 332.76	\$ 357.29	\$ 24.53	7.4%	\$ 3,496.48	\$ 3,426.57	\$ (69.91)	-2.0%
GS >1,000 to 4,999	800,000	2,000	\$ 7,956.38	\$ 8,594.88	\$ 638.50	8.0%	\$ 151,801.12	\$ 141,453.50	\$ (10,347.62)	-6.8%

- Total bill impacts are < 10% across all customer classes
 - OEB expects mitigation if rate impacts are > 10%
- Residential customer distribution rate impacts are higher than what was originally anticipated as part of 2018-2019 Budget
 - Higher revenue deficiency of \$1.5MM vs. \$0.7MM (Rev. Rqmt of \$36.8MM)
 - ❑ Decline in load forecast; Increase in Cost of Capital Parameters

BENCHMARKING – DISTRIBUTION RATES

2018 Distribution Portion of Electricity Bill	 ENERGY+ INC.			 Kitchener	 Waterloo	 Guelph	 Brantford	 Alectra (Avg. of Rate Zones 2017*)
	E+ (CND)	E+ (Brant)	E+ 2019 Proposed					
Residential [Avg. 750 kWh]	\$24.80	\$28.28	\$27.33	\$22.75	\$31.47	\$29.41	\$23.45	\$25.90
GS < 50 KWh [Avg. 2,000 kWh]	\$43.14	\$53.36	\$47.58	\$53.59	\$65.36	\$44.74	\$46.41	\$63.92
GS > 50-999 KWh [Avg. 60 kW]	\$368.05	\$332.76	\$357.29	\$462.81	\$433.91	\$347.38	\$403.94	\$393.74
GS > 1,000-4,999 [Avg. 2,000 kW with transformer allowance]	\$7,142	\$6,756	\$7,395	\$8,381	\$9,307	\$6,713	\$4,695	\$7,065
Large User (> 5,000 kW) [Avg. 25,000 kW]	\$71,291	-	\$65,968	\$55,775	\$110,169	\$70,046	\$70,992	\$68,921

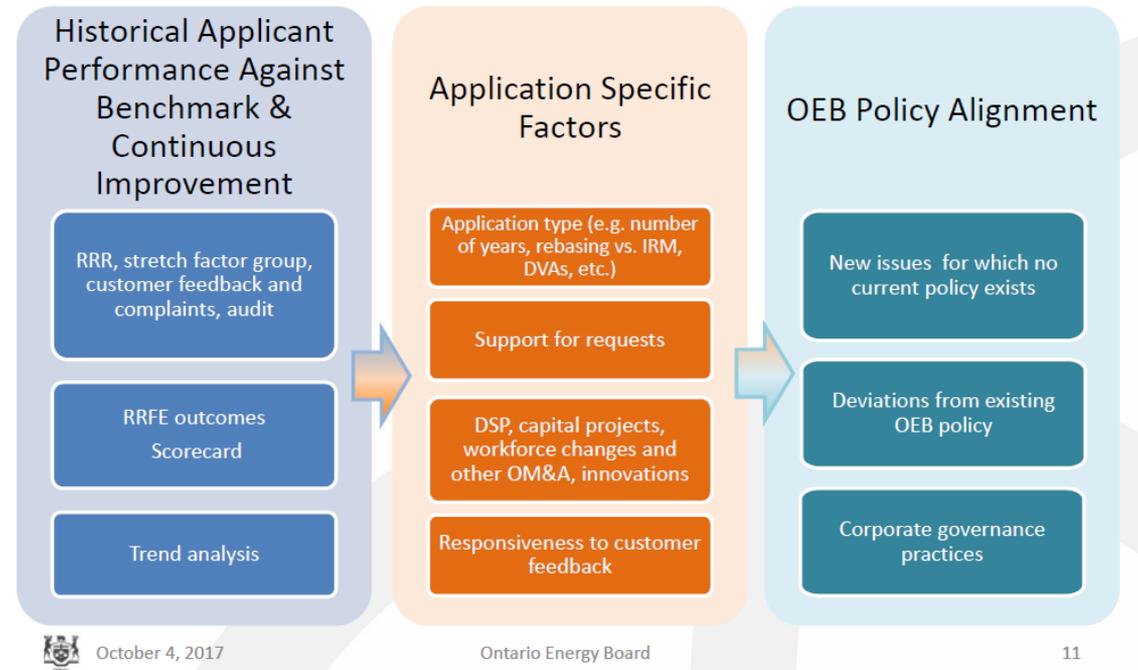
* 2018 Rates have not yet been approved for Alectra, therefore used the Avg. for all rate zones based on 2017 Rates.

NEXT STEPS - BEYOND THE FILING DATE

- Timing and Next Steps will be dependent upon OEB's assessment of the Application and decision on the "Proportionate Review Stream" that will apply to Energy+.

Assessment: Determining Level of Review

We plan to use criteria from three areas to determine level of review:



- Three main areas will be considered:
 - Historical performance
 - Application specific factors
 - OEB Policy Alignment (Governance, etc.)

PROPORTIONATE REVIEW PROCESS

- Expected that the OEB will take up to 60 days to make the determination
- Interrogatory process likely to occur in the July-August timeframe

Proportionate Review: Four Main Streams

	Community Meeting	Issues	Hearing Process	Cost Awards	Process & Scope
No hearing	✓	Case-by-case	-	-	No legal notice or hearing
Abridged hearing	✓	✓	✓	-	Minimal Process Few issues
Focused hearing	✓	✓	✓	For selected issues only	Moderate process Selected Issues only
Fully adjudicated	✓	✓	✓	✓	Full Process All Issues Open

Appendix CCC-1 (ii)

Board of Directors Resolution Authorizing the 2018-2019 Budget

Energy+ Inc.
Minutes of Board of Directors Meeting – December 14, 2017

A meeting of the Board of Directors was held on December 14, 2017 in the Board Room at 1500 Bishop Street, Cambridge, Ontario.

Present: Steven McCartney (via phone)
Anita Davis
Martyn Champ
Peter Ferraro
Susan Foxtan
John Keating
Ian Miles
Sandra Vos
Lynn Woeller

Regrets: Doug Craig

Guests: Sarah Hughes, CFO

Recording: Grace Williams

A. Davis called the meeting to order at 9:05 a.m.

1. There was no conflict of interest declared.
2. There were no additional items of business requested.

3. **Approval of the September 21, 2017 meeting minutes.**
MOVED by S. Vos, seconded by S. Foxtan, that the minutes of the Energy+ Inc. board meeting held September 21, 2017 be accepted. **CARRIED.**

Approval of the November 17, 2017 meeting minutes.
MOVED by S. Foxtan, seconded by I. Miles, that the minutes of the Energy+ Inc. board meeting held November 17, 2017 be accepted. **CARRIED.**

4. **Compliance Certificate**
Compliance Certificate received for information.

5. Financial Review

- 5.1. L. Woeller, Audit Committee Chair provided a verbal report of the December 5, 2017 Audit Committee Meeting.

The audit committee is concerned with the financial impacts with the IRM decreases and the wage and benefit increases.

- 5.2. The September 30, 2017 Unaudited Financial Statements were reviewed.

- 5.3. **MOVED** by S. Foxtan, seconded by L. Woeller, that the Energy+ Inc. 2018-2019 Budget be approved. **CARRIED.**

Appendix CCC-7

2016 Customer Satisfaction Survey



RESULTS - 2016 CUSTOMER FEEDBACK SURVEY

WHY ENERGY+ SURVEYS CUSTOMERS

- To understand our customer's priorities with respect to investments in our communities.
- To learn where we can improve in what we deliver and how we deliver.
- To demonstrate our commitment to deliver services and solutions, based on customer stated feedback and preferences.
- To measure customer satisfaction levels and report results on the Corporate Scorecard.



COMPARING 2014 AND 2016 CUSTOMER SATISFACTION SURVEY

2014

- 'A' Rating
- Telephone Survey (residential & small business customers)
- Cambridge, North Dumfries
- Conducted, by SimulCorp, a 3rd party research company
- Same survey questions since 2008
- Customer Priorities 1) Response to outages 2) High electricity bills

2016

- 'B' Rating
- Online Survey (residential & small business customers)
- County of Brant, Cambridge, North Dumfries
- Conducted, by Energy+ using i-create, survey tool
- New questions being considered as the standard (in development)
- Customer Priorities: 1) High electricity bills 2) Response to outages.

2016 SURVEY METHODOLOGY

- Email invitation to participate sent to 9,909 Residential & Small Commercial customers in Cambridge, North Dumfries and Brant County.
- Online survey conducted September 13 - October 18, 2016.
- Twelve questions – multiple choice, ranking, open comment.
- Survey questions aligned to OEB's five principles of customer satisfaction: power quality and reliability, price, billing and payment, communications and the customer service experience.
- Standard survey, measurement, methodology being finalized by OEB in 2017.

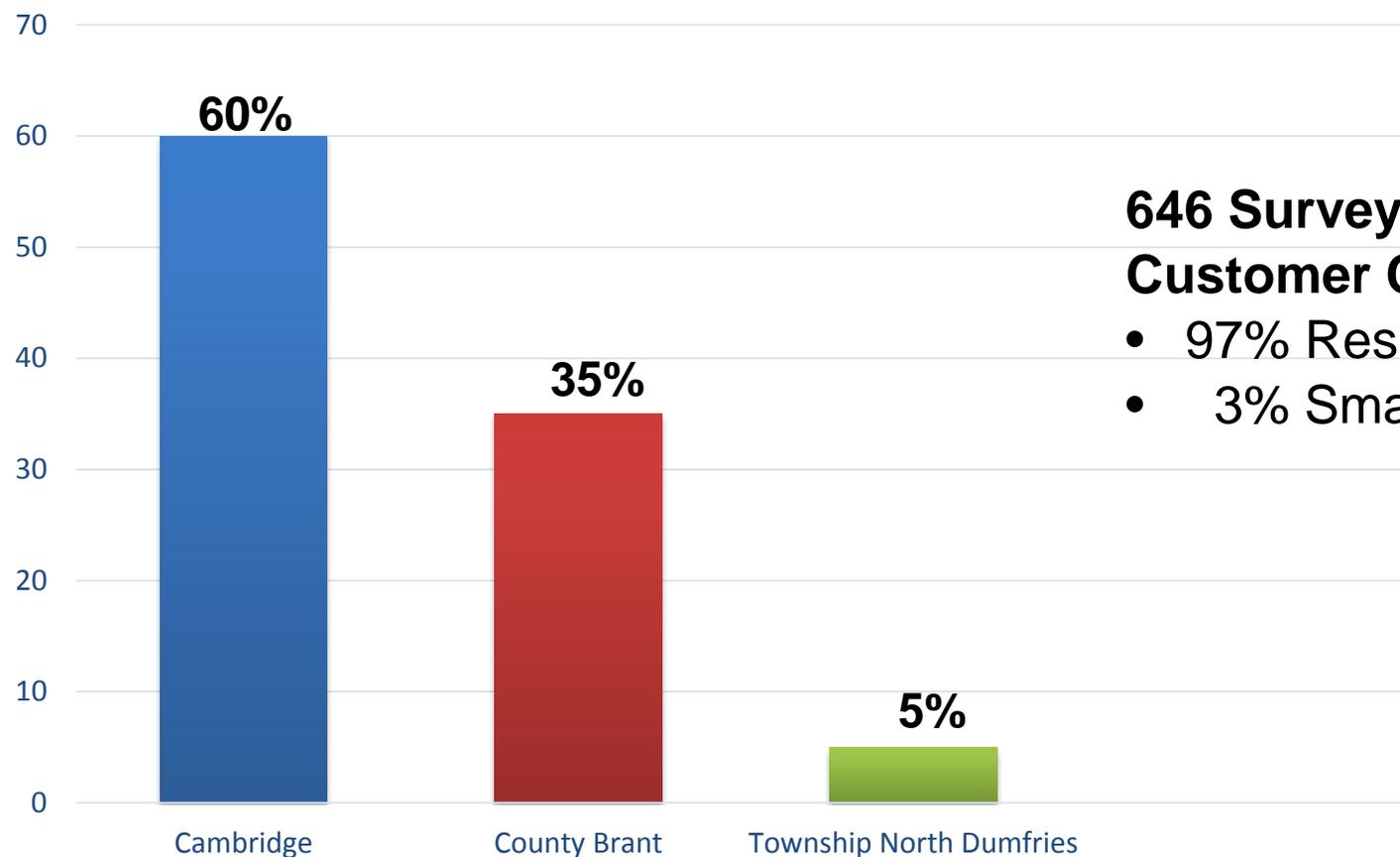
RESPONSE RATE

- E-Mail invitations sent using Constant Contact
- Open Rate 54% (21.7% industry average).
- Click Through Rate 23% (10.7% industry average).
- Completed Surveys 6.5% (646) (3% industry average).

Source: Industry Averages, Constant Contact research

CUSTOMER RESPONSE BY LOCATION / CLASS

Responses by Location



646 Surveys Completed
Customer Class:

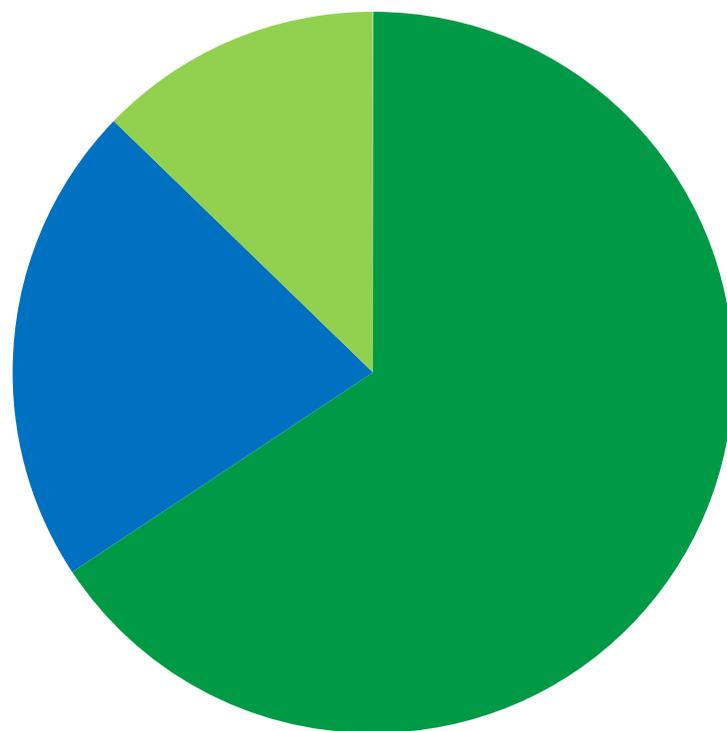
- 97% Residential
- 3% Small Commercial

Customer Distribution: City (81%) County (16%) Township (3%)

OVERALL SATISFACTION RATING

Thinking about Energy+' and your experience with the company, OVERALL, how would you rate your satisfaction with Energy+?

Satisfaction Rating



■ Very Satisfied/Satisfied

■ Indifferent

■ Dissatisfied/ Very Dissatisfied



Very Satisfied/Satisfied 69%

Indifferent 20%

Dissatisfied/Very Dissatisfied 11%

OEB DEFINED PRINCIPLES OF CUSTOMER SATISFACTION

Energy+ survey questions were aligned to OEB's five principles of customer satisfaction:

Power Quality and Reliability

Question 4

Price

Question 5

Billing and Payment

Question 6

Customer Service Experience

Question 7

Communications

Question 8

POWER QUALITY AND RELIABILITY

QUESTION 4:

Thinking of the Energy+ distribution system and power outage history (due to weather, animal contacts, equipment failures, MVA), how satisfied are you with.....

	VS/Satisfied %	Indifferent %	VD/ Dissatisfied %
Reliable delivery	87	11	2
Restoration time	78	18	4
Respond to outage questions	66	29	5
Outage communication	55	33	11
Works safely	69	29	2
Invests/rebuilds system	53	41	6

CONCLUSIONS – POWER QUALITY AND RELIABILITY

- Customers are very satisfied with reliable supply of power.
- Improvements needed to communicate during outage events – customers expect continuous updates on cause, restoration times need to be updated regularly.
- Expansion of Outage Map to include the County of Brant customers will be an important value add for County of Brant Customers.
- There is an opportunity to improve our communications about the value and extent of rebuilds undertaken in our communities.

PRICE (VALUE FOR SERVICE)

QUESTION 5: *Energy+ portion of the total bill is about 15%, which includes cost to deliver electricity to home/business, maintain the poles, wires, issue bills, respond to power outages, provide customer service. How satisfied are you with:*

	VS/Satisfied %	Indifferent %	VD/Dissatisfied %
Energy+'s Services Overall	62	21	17
Value of Services Energy+ provides	63	24	13

CONCLUSIONS – PRICE (VALUE FOR SERVICES)

- Customers indicated a consistent level of satisfaction between Energy+'s services overall and the Value of the services provided.
- Over 202 survey comments from Energy+ customers related to high bills and electricity rates.
- The elevated number and tone of articles in the news on high electricity rates, the provincial policies around electricity rates is impacting customer satisfaction with the Ontario hydro industry.

BILLING AND PAYMENTS

QUESTION 6: *Thinking of your electricity bill and Energy+ payment options, how satisfied are you with:*

	VS/Satisfied %	Indifferent %	VD/Dissatisfied %
Accuracy of the bill	69	22	9
Content of information on bill	72	17	11
Payment options available	87	6	7

CONCLUSIONS – BILLING AND PAYMENTS

- The majority of customers indicated satisfaction with the Accuracy of their bill or they indicated they were indifferent or neutral.
- Customers also indicated fair level of contentment with the content of information on their bill or they indicated they were indifferent or neutral.
- Customers expressed a good level of satisfaction with the available payment options offered by Energy+.

CUSTOMER SERVICE EXPERIENCE

QUESTION 7: *Please only answer if you had an interaction (phone, email, in-person) with an Energy+ employee in the past two years. If yes, rate your experience with:*

	VS/Satisfied %	Indifferent %	VD/Dissatisfied %
Employee Knowledge	66	28	6
Courtesy of employee	71	25	4
Ability to resolve concern	66	26	8

CONCLUSIONS – CUSTOMER SERVICE EXPERIENCE

- Customers have a high expectation that Energy+ staff will resolve their problems – number one problem is a high bill concern.
- There is always an opportunity of delivering additional training to Energy+ staff on how to deal with customers in an empathetic and understanding manner as they struggle to pay bills.

COMMUNICATIONS

QUESTION 8: *Thinking of Energy+ communications with customers in the community, how well does Energy+ keep you informed about:*

	VS/Satisfied %	Indifferent %	VD/Dissatisfied %
Rate Changes	50	30	20
Billing Changes	52	32	16
Safety Information	54	42	4
Energy/\$ Saving Tips	57	30	13
Participation in Events	50	41	9
Line/System Upgrades	39	49	12

CONCLUSIONS – COMMUNICATIONS

- The Communication results indicate an excellent opportunity to evaluate what can be changed, or done differently to shift our customers' satisfaction levels from neutral/indifferent to satisfied.
- Customers expressed the lowest levels of satisfaction and highest levels of indifference about communication with respect to system upgrades and participation in community events. This has been identified as a focus for increased communication going forward.

FUTURE INVESTMENT PREFERENCES

QUESTION 9: *Energy+ plans where to invest in distribution, billing and customer service activities over the next 5 years. What spending direction should be the priority? Using a scale from 1 to 5, where 1 means top priority and 5 means lowest priority:*

	Customer Ranking by Priority
#1	Fewer Outages
#2	Improve Restoration Time for Outages
#3	Increased Customer Self Service Online Options
#4	Increased Customer Communication & Education
#5	Invest in Research about Future Technologies

CONCLUSIONS – FUTURE INVESTMENT PREFERENCES

- The top three priorities from the customers perspective are investments that will result in:
 - Fewer outages
 - Improved restoration times
 - Self-Serve options
- Customers have an expectation Energy+ should invest in improvements relating to the delivery of our core business – keeping the lights on and being easy to deal with.

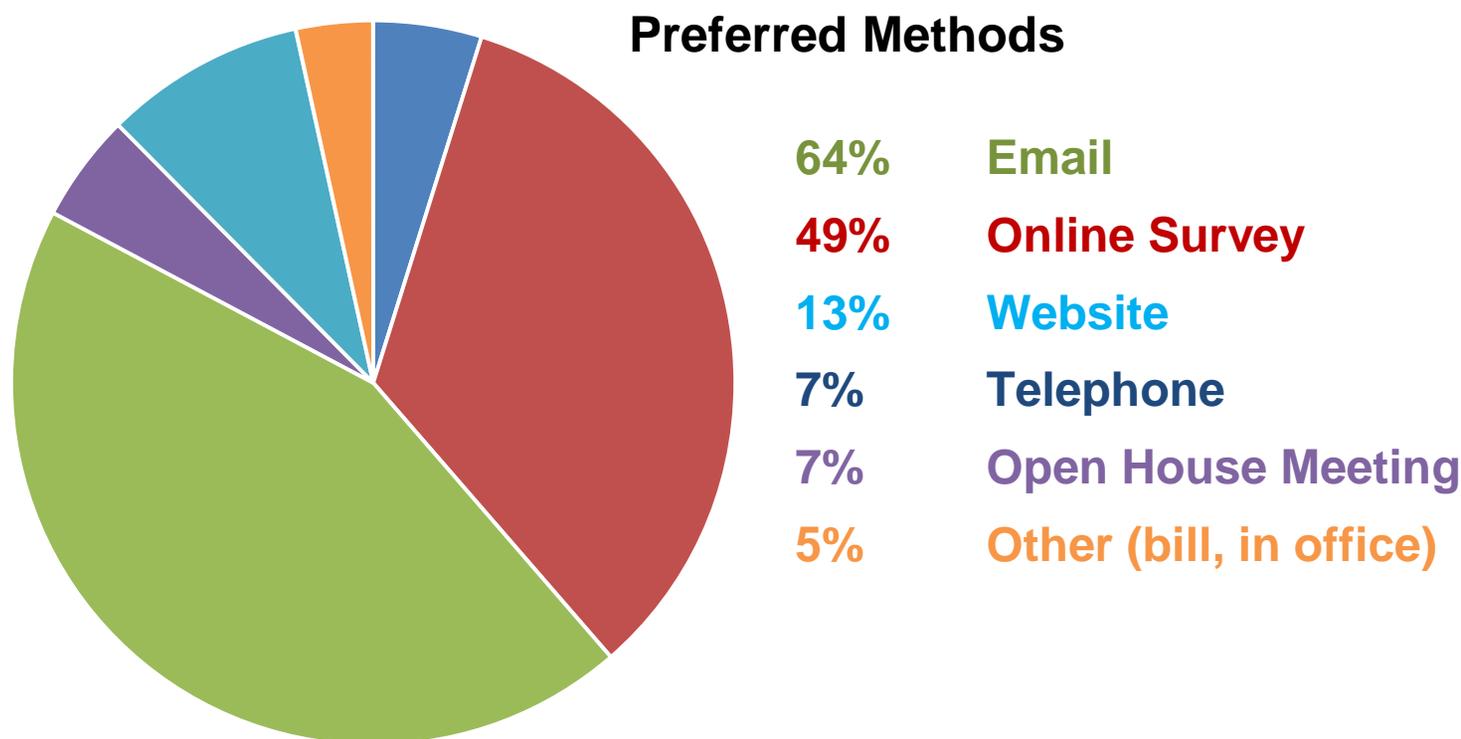
CUSTOMER COMMENTS & THEMES

QUESTION 11: *We are interested in knowing what you think are the most important areas where we could make changes or improve our service.*

- Customers took the opportunity to provide comments and suggestions in the survey.
- Of these comments, 62% were critical comments about high electricity bills, the need for relief from high rates.

PREFERENCES FOR PROVIDING FUTURE FEEDBACK

QUESTION 12: *Energy+ would like to communicate with customers like you more often in order to collect feedback about the services provided to you. How would you prefer to communicate with Energy+ in the future? Select all that apply.*

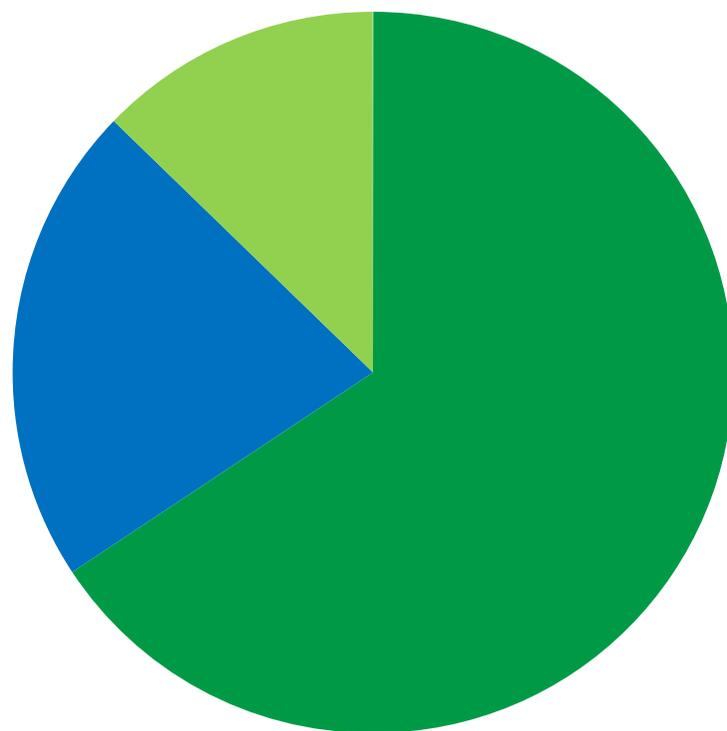


■ Telephone ■ Online Survey ■ Through Email ■ Open House ■ Website ■ Other

OVERALL SATISFACTION RATING

Thinking about Energy+' and your experience with the company, OVERALL, how would you rate your satisfaction with Energy+?

Satisfaction Rating



■ Very Satisfied/Satisfied

■ Indifferent

■ Dissatisfied/ Very Dissatisfied



Very Satisfied/Satisfied

Indifferent

Dissatisfied/Very Dissatisfied

LEARNINGS FROM 2016 SURVEY



- Electricity rates, increased coverage of Ontario energy policies in the media have influenced customer satisfaction levels.
- Energy+ and our relationship with The County of Brant customers is new and it takes time to build a strong relationship.
- Communication relating to outages (OMS/System Control Room) are different between County of Brant and Cambridge and North Dumfries Customers.
- Increased communication will improve satisfaction levels.
- Customers priorities continue to be lower hydro bills, fewer outages, improved restoration times and timely updates.

QUESTIONS AND ANSWERS

Thank you!

Have a Question or Comment

communications@energyplus.ca

