EXHIBIT 8

RATE DESIGN

ESSEX POWERLINES CORPORATION

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8.1 Distribution Rates Overview

8.1.1 Overview

This Exhibit documents the calculation of EPLC's proposed distribution rates by rate class for the 2025 Test Year, based on the rate design as proposed in this Exhibit.

EPLC has determined its Total 2025 Test Year Service Revenue Requirement to be $19,494,342. The total revenue offsets in the amount of $1,106,244 reduces EPLC's Total Service Revenue Requirement to a Base Revenue Requirement of $18,388,098, which is used to determine the proposed distribution rates. The Base Revenue Requirement calculation is based on 2025 Test Year capital and operating forecasts, weather normalized consumption and demand, forecast customer/connection counts, and regulated return on rate base. Table 8-1 below summarizes EPLC's Revenue Requirement.

Table 8-1: Revenue Requirement

Description	Amount
OM&A Expenses	$10,312,735
Amortization/ Depreciation	$4,050,033
Property Taxes	$44,000
Income Taxes (Grossed Up)	$197,057
Return:	
Deemed Interest Expense	$1,815,791
Return on Deemed Equity	$3,074,726
Service Revenue Requirement	**$19,494,342**
Other Revenue	$1,106,244
Base Revenue Requirement	**$18,388,098**

The Base Revenue Requirement is allocated to EPLC's rate classes based on the Cost Allocation study outlined in Exhibit 7 of this Application. Table 8-2 below outlines the resulting cost allocations by rate class.

Table 8-2: EPLC Proposed Apportionment of Base Revenue to Rate Classes

Rate Class	2025 Proposed Base Revenue Requirement
Residential	$ 12,934,921
GS <50 kW	$ 2,375,274
GS >50kW	$ 2,555,629
Embedded Distributor	$ 140,322
Street Lighting	$ 273,496
Sentinel Lighting	$ 50,040
Unmetered Scattered Load	$ 58,415
Total	**$ 18,388,098**

8.2 Fixed/Variable Portion

8.2.1 Current Fixed/Variable Portion

Table 8-3 below outlines EPLC's current split between fixed and variable distribution revenue. The information below is based on applying existing Board approved monthly service and volumetric charges to the forecasted number of customers and volumes for the 2025 Test Year, excluding all rate riders and the Transformer Ownership Allowance.

Table 8-3: Proposed Fixed/Variable Distribution Revenue Split

Rate Class	2025 Projected Distribution Revenue at Existing Rates				
	Fixed Charge Revenue	Variable Revenue	Total Revenue	% Fixed Revenue	% Variable Revenue
Residential	$ 10,992,335	$-	$ 10,992,335	100.00%	0
GS< 50kW	$ 1,055,005	$ 1,020,028	$ 2,075,034	50.84%	49.16%
GS> 50kW	$ 772,157	$ 1,777,291	$ 2,549,448	30.29%	69.71%
Embedded Distributor	$ 31,130	$ 130,473	$ 161,603	19.26%	80.74%
Street Light	$ 131,005	$ 77,076	$ 208,082	62.96%	37.04%
Sentinel	$ 9,562	$ 7,583	$ 17,145	55.77%	44.23%
USL	$ 15,322	$ 44,827	$ 60,149	25.47%	74.53%
Total	**$ 13,006,516**	**$ 3,057,278**	**$ 16,063,796**		

8.2.2 Proposed Monthly Service Charge

In accordance with OEB's Board Policy: A New Distribution Rate Design for Residential Electricity Customers, residential rates are fully fixed. Based on the fixed revenue portion of the Total Base Revenue Requirement the following Table 8-4 outlines the proposed monthly service charge for the remaining rate classes for the 2025 Test Year. The proposed proportion of fixed revenue is lower than the current proportion for the GS<50 kW and GS>50 kW rate classes as these two rate classes would have fixed charges exceeding the maximum as per Table 8-5.

Table 8-4: Proposed Monthly Service Charge

Rate Class	Total Base Revenue Requirement	% Fixed Revenue	Fixed Revenue	2025 Customers/ Connections	Proposed Monthly Fixed Distribution Charge
Residential	$ 12,956,334	100.00%	$ 12,956,334	29,454	$ 36.66
GS< 50kW	$ 2,375,274	47.36%	$ 1,124,987	2,098	$ 44.69
GS> 50kW	$ 2,555,629	30.21%	$ 772,157	235	$ 274.38
Embedded Distributor	$ 140,322	19.26%	$ 27,031	4	$ 563.14
Street Light	$ 273,941	62.94%	$ 172,411	2,828	$ 5.80
Sentinel	$ 28,182	55.81%	$ 15,729	216	$ 6.07
USL	$ 58,415	25.47%	$ 14,880	123	$ 10.10
Total	**$ 18,388,097**				

For comparison purposes, the following Table 8-5 provides the current and proposed monthly service charge by rate class as well as monthly service charge information from the cost allocation model. The

maximum GS<50 kW and GS>50 kW between the current fixed charge and minimum system with PLCC adjustment is used as the proposed 2025 fixed charge for those classes.

Table 8-5: Monthly Service Charge Comparison

Rate Class	Current 2024 Bridge Year Fixed Distribution Charge	Proposed 2025 Fixed Distribution Service Charge	Minimum System w/ PLCC Adjustment
Residential	$ 31.10	$ 36.66	$ 27.14
GS< 50kW	$ 41.91	$ 44.69	$ 44.69
GS> 50kW	$ 274.38	$ 274.38	$ 61.05
Embedded Distributor	$ 648.55	$ 563.14	$ 115.31
Street Light	$ 3.86	$ 5.80	$ 8.16
Sentinel	$ 10.40	$ 6.07	$ 21.62
USL	$ 3.69	$ 10.10	$ 27.68

8.2.3 Proposed Volumetric/Variable Charge

EPLC calculated the variable distribution charge by dividing the variable distribution portion of Base Revenue by the applicable 2025 Test Year usage, consumption, or demand.

Table 8-6 below outlines EPLC's calculation of the proposed variable charges, by rate class for the 2025 Test Year with considerations for Transformer Ownership Allowance. The Transformer Ownership Allowance applies solely to the General Service 50 to 4,999 kW rate class.

Table 8-6: Proposed Volumetric/Variable Charge

Rate Class	Total Base Revenue Requirement	Base Fixed Revenue	Base Variable Revenue	Transformer Ownership Allowance	Adjusted Variable Revenue	Total Variable Revenue
Residential	$ 12,956,334	$ 12,956,334	$ -		$ -	
GS< 50kW	$ 2,375,275	$ 1,250,288	$ 1,124,987		$ 1,124,987	$ 0.0177
GS> 50kW	$ 2,555,629	$ 1,783,472	$ 772,157	$ 75,811	$ 847,968	$ 2.6622
Embedded Distributor	$ 140,322	$ 113,291	$ 27,031		$ 27,031	$ 1.2467
Street Light	$ 273,941	$ 101,530	$ 172,411		$ 172,411	$ 13.7715
Sentinel	$ 28,182	$ 12,453	$ 15,729		$ 15,729	$ 17.3835
USL	$ 48,415	$ 43,535	$ 4,880		$ 4,880	$ 0.0315
Total	$ 18,378,098	$ 16,260,903	$ 2,117,195	$ 75,811	$ 2,193,006	

Table 8-7 below outlines a comparison between Board Approved 2024 variable charges for all rate classes versus the proposed 2025 Test Year variable charges.

Table 8-7: Variable Charge Comparison

Rate Class	Current 2024 Variable Rates	Proposed 2025 Variable Rates
Residential	$ -	$ -
GS< 50kW	$ 0.0144	$ 0.0177
GS> 50kW	$ 2.6533	$ 2.6622
Embedded Distributor	$ 1.4358	$ 1.2467
Street Light	$ 10.4546	$ 13.7715
Sentinel	$ 10.5858	$ 17.3835
USL	$ 0.0324	$ 0.0315

8.2.4 Proposed Distribution Rate

Table 8-8 below outlines EPLC's proposed 2025 Test Year distribution rates by rate class. These rates include adjustments for transformer ownership allowance.

Table 8-8: Proposed Distribution Rates

Rate Class	Proposed Fixed Distribution Charge	Billing Determinant	Proposed Volumetric Charge
Residential	$ 36.66	kWh	
GS< 50kW	$ 44.69	kWh	$ 0.0177
GS> 50kW	$ 274.38	kW	$ 2.6620
Embedded Distributor	$ 563.14	kW	$ 1.2467
Street Light	$ 5.08	kW	$ 13.7715
Sentinel	$ 6.07	kW	$ 17.3835
USL	$ 10.10	kWh	$ 0.0315

8.3 Retail Transmission Service Rates

EPLC's load is not subject to the IESO's Uniform Transmission Rates ("UTR") and is solely subject to Hydro One's Retail Transmission Service Rates ("RTSRs"). For each distributor rate class, there are two applicable RTSR rates; one for Network and one for Line & Connection. The Network charge is intended to recover UTR wholesale network service charge, and the RTSR Line & Connection charge is intended to recover the UTR wholesale line and transformation connection charges. EPLC has deferral accounts set up to capture the timing variances between the RTSR charges paid to HONI and what is recovered from EPLC customers.

8.3.1 2025 Proposed Retail Transmission Service Rates

For the purpose of calculating RTSR rates for 2025, EPLC has completed the Board's 2025 RTSR Workform for Electricity Distributors. The RTSR Workform for Electricity Distributors is included as

Attachment 8-A of this Exhibit. Table 8-9 below outlines EPLC's proposed 2025 RTSR rates by customer class.

Table 8-9: EPLC Proposed RTSR Rates

Rate Class	Unit	Proposed Network	Proposed Line & Connection
Residential	kWh	0.0092	0.0071
GS< 50kW	kWh	0.0078	0.0068
GS> 50kW	kW	4.0039	3.0172
Embedded Distributor		-	-
Street Light	kW	2.4673	2.0606
Sentinel	kW	0.0078	0.0068
USL	kWh	2.5024	2.0739

8.4 Retail Service Rates

EPLC charges Retail Service Rates as listed below. These have been increasing historically only through the IRM process and therefore at the OEB Approved inflation factor. For purposes of this Application, EPLC proposes to use the most recently approved rates. Table 8-10 below presents the proposed Retail Service Charges for this Application.

Table 8-10: Retail Service Rates

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity		
One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	117.02
Monthly fixed charge, per retailer	$	46.81
Monthly variable charge, per customer, per retailer	$	1.16
Distributor-consolidated billing monthly charge, per customer, per retailer	$	0.69
Retailer-consolidated billing monthly credit, per customer, per retailer	$	(0.69)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	$	0.59
Processing fee, per request, applied to the requesting party	$	1.16
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year	$	no charge
More than twice a year, per request (plus incremental delivery costs)	$	4.68
Notice of switch letter charge, per letter (unless the distributor has opted out of applying the charge as per the Ontario Energy Board's Decision and Order EB-2015-0304, issued on February 14, 2019)	$	2.34

8.5 Wholesale Market Service Rates

The Wholesale Market Service Rate ("WMS") is designed to allow distributors to recover costs charged by the Independent Electricity Service Operator ("IESO") for the operation of the IESO administered

markets and the operation of the IESO controlled grid. The WMS Rate is an energy-based rate (per kWh) and is set by the Board on a generic basis.

On December 8, 2022, the Board issued a Decision and Rate Order (EB-2022-0269) establishing that the WMSR rate used by rate regulated distributors to bill their customers shall be $0.0041 per kilowatt hour ($0.0045 per kilowatt hour including CBR) effective January 1, 2023. Accordingly, EPLC proposes to continue to utilize the approved $0.0041/kWh rate ($0.0045/kWh with CBR).

8.6 Smart Metering Entity Charge

The Board issued a Decision and Order (EB-2022-0137) reducing the Smart Metering Entity Charge on September 8, 2022. The Smart Metering Entity Charge is set at $0.42 per smart meter per month for each applicable Residential and General Service<50kW customers, and a fixed charge of $0.79 per month for Residential and General Service < 50 kW customers effective January 1, 2023, through December 31, 2027. EPLC has reflected this updated Smart Metering Entity Charge of $0.42 in this Application.

8.7 Low Voltage Service Rates

8.7.1 Historical Low Voltage Charges

EPLC is an Embedded Distributor to HONI and pays HONI Low Voltage ("LV") at 20 separate points based on HONI's approved sub-transmission rates. EPLC records these costs in Account 4750 (Charges Low Voltage). EPLC subsequently charges all its customers an LV charge and records these revenues in Account 4075 (Billed Low Voltage). Every month, EPLC records the difference between the two accounts in Account 1550. A summary of these variances can be found in Exhibit 9 of this Application.

8.7.2 Proposed Low Voltage Charges

EPLC derived LV rates outlined in this section using the same rate class allocation methodology used in the calculation of the RTSR Connection Charge outlined in Section 8.3 above. The resulting percentages were applied against the 2025 estimated LV payable described in Table 8-13 ($1,767,704).

Table 8-11: Allocation of Low Voltage Charges

Rate Class	Billing Determinants kWh	Billing Determinants kW	Current RTSR kWh	Current RTSR kW	Basis for Allocation ($)	Allocation Percent	Allocated Low Voltage
Residential	268,273,916		0.0066		$ 1,770,608	47.60%	$ 841,441
GS< 50kW	65,608,265		0.0063		$ 413,332	11.11%	$ 196,427
GS> 50kW	188,060,429	537,456		2.8116	$ 1,511,111	40.62%	$ 718,121
Embedded Distributor		91,292			$ -	0.00%	$ -
Street Light		737		1.9326	$ 1,424	0.04%	$ 677
Sentinel		7,310		1.9202	$ 14,037	0.38%	$ 6,671
USL	1,458,714		0.0063		$ 9,190	0.25%	$ 4,367
Total	**523,401,324**	**636,795**			**$ 3,719,703**		**$ 1,767,704**

Table 8-12: Estimated Low Voltage Charged – Allocated by Rate Class

Rate Class	2025 Forecast- Uplifted kWh	2025 Forecast- Uplifted kW	2025 Proposed RTSR kWh	2025 Proposed RTSR kW	Basis for Allocation ($)	Allocation Percent	Allocated Low Voltage
Residential	293,146,797		0.0071		$ 2,076,271	74.47%	$ 1,316,349
GS< 50kW	59,673,078		0.0068		$ 403,435	14.47%	$ 255,777
GS> 50kW		95,673		3.0172	$ 288,669	10.35%	$ 183,015
Embedded Distributor					$ -	0.00%	$ -
Street Light		6,713		2.0606	$ 4,498	0.50%	$ 8,770
Sentinel		716		2.0739	$ 1,485	0.05%	$ 941
USL	665,289		0.0068		$ 13,833	0.16%	$ 2,852
Total	**353,485,164**	**103,102**					

EPLC used the 2025 forecasted kWh and kW to determine the appropriate LV rate by rate class rounded to four decimal places. The resulting LV rates are outlined below as Table 8-13.

Table 8-13: Proposed 2025 Low Voltage Rates

Rate Class	Allocated Low Voltage	2025 Forecast kWh	2025 Forecast kW	2025 Proposed Low Voltage kWh	2025 Proposed Low Voltage kW
Residential	1,316,349	281,195,968		$ 0.0045	
GS< 50kW	255,777	57,240,363		$ 0.0043	
GS> 50kW	183,015	95,673	95,673		$ 1.9129
Embedded Distributor	-		-		
Street Light	8,770		6,713		$ 1.3064
Sentinel	941		716		$ 1.3149
USL	2,852	638,167		$ 0.0043	
Total	**1,767,704**	**339,170,171**	**103,102**		

8.8 Rural or Remote Electricity Rate Protection Charge

The Rural or Remote Electricity Rate Protection Charge ("RRRP") is a source of revenue for identified rural or remote electricity distributors whose costs are higher because they serve small numbers of customers over large geographic areas or in remote regions. The RRRP revenue allows eligible distributors to reduce the amount they would otherwise have to charge affected customers for distribution service.

EPLC does not have any eligible RRRP customers, however, collects RRRP to remit back to the IESO to distributes applicable revenues to eligible distributors.

On December 7, 2023, the Board issued a Decision and Order (EB-2023-0268) determining that the RRRP rate to be used by distributors effective January 1, 2024, is $0.0014 per kWh.

EPLC proposes to use the RRRP rate of $0.0014 per kWh until updated by the Board.

8.9 Standard Supply Service – Administrative Charge

EPLC proposes to use the previously approved Standard Supply Service rate of $0.25 per customer unless otherwise directed by the Board.

8.10 MicroFIT

EPLC currently has a MicroFIT monthly service charge of $4.55 as approved by the Board on it Decision and Order (EB-2023-020) effective May 1, 2024.

EPLC proposed to continue with the $4.55 monthly service charge as approved until updated by the Board.

8.11 Transformer Ownership Allowance

EPLC currently provides a Transformer Ownership Allowance ("TOA") to customers that own their own transformation assets. The TOA is intended to represent the avoided EPLC cost of providing step down transformation to a customer's utilization voltage. Generally, the cost of transformation is included in distribution rates, and therefore it is appropriate to provide a rebate to customers that provide their own respective transformation.

EPLC currently has an approved TOA credit of ($0.60) per kW of billed demand.

Table 8-14 below outlines EPLC's forecasted demand for the 2025 Test Year and the associated estimated TOA. EPLC used 2023 demand for the purpose of billed demand below.

Table 8-14: EPLC Proposed Transformer Ownership Allowance

Year	Billed Demand (kW)	Rate ($/kW)	Transformer Ownership Allowance ($)
2025	126,351	$ 0.60	$ 75,811

8.12 Specific Service Charges

EPLC requests no changes to its existing Specific Service Charges. Table 8-15 below outlines EPLC's proposed Specific Service Charges for this Application.

Table 8-15: EPLC Proposed Specific Service Charges

Customer Administration		
Arrears certificate	$	15.00
Statement of account	$	15.00
Duplicate invoices for previous billing	$	15.00
Request for other billing information	$	15.00
Easement letter	$	15.00
Income tax letter	$	15.00
Account history	$	15.00
Returned cheque (plus bank charges)	$	15.00
Legal letter charge	$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	$	30.00
Special meter reads	$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	$	30.00
Non-Payment of Account		
Late payment – per month (effective annual rate 19.56% per annum or 0.04896% compounded daily rate)	%	1.50
Reconnection at meter - during regular hours	$	65.00
Reconnection at meter - after regular hours	$	185.00
Reconnection at pole - during regular hours	$	185.00
Reconnection at pole - after regular hours	$	415.00
Other		
Service call - customer owned equipment	$	30.00
Service call - after regular hours	$	165.00
Temporary service install & remove - overhead - no transformer	$	500.00
Temporary service install & remove - underground - no transformer	$	300.00
Temporary service install & remove - overhead - with transformer	$	1,000.00
Specific charge for access to the power poles - $/pole/year		37.78
(with the exception of wireless attachments)	$	37.78

8.13 Retail Service Charges

EPLC's current Retail Service Charges are consistent with the Board's standard rates. EPLC requests no changes to its existing Retail Service Charges. Table 8-16 below outlines EPLC's proposed Retail Service Charges for this Application.

Table 8-16: EPLC Proposed Retail Service Charges

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	117.02
Monthly fixed charge, per retailer	$	46.81
Monthly variable charge, per customer, per retailer	$	1.16
Distributor-consolidated billing monthly charge, per customer, per retailer	$	0.69
Retailer-consolidated billing monthly credit, per customer, per retailer	$	(0.69)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	$	0.59
Processing fee, per request, applied to the requesting party	$	1.16
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year	$	no charge
More than twice a year, per request (plus incremental delivery costs)	$	4.68
Notice of switch letter charge, per letter (unless the distributor has opted out of applying the charge as per the Ontario Energy Board's Decision and Order EB-2015-0304, issued on February 14, 2019)	$	2.34

8.14 Loss Adjustment Factors

EPLC has calculated the total loss factor for the 2025 Test Year based on the average wholesale and retail kWh for the years 2019-2023. Table 8-17 below, which is consistent with Board Appendix 2-R and Attachment 8-B of this Exhibit, summarizes EPLC's Total Loss Factor Calculation. This is consistent with RRR filing.

Table 8-17: EPLC Total Loss Factor Calculation

Description	2019	2020	2021	2022	2023	5 Year Average
Losses within Distributor's System						
Wholesale kWh Delivered to EPLC (with Losses)	561,091,139	551,033,276	565,966,526	565,463,300	550,816,025	558,874,053
Wholesale kWh Delivered to EPLC (without Losses)	545,983,302	536,628,958	552,040,521	552,287,772	537,890,333	544,966,177
Wholesale kWh Delivered to Large Users	-	-	-	-	-	-
Net Wholesale kWh Delivered to EPLC	**545,983,302**	**536,628,958**	**552,040,521**	**552,287,772**	**537,890,333**	**544,966,177**
Retail kWh Delivered by EPLC	530,252,495	528,427,511	540,259,209	546,438,079	535,187,638	535,187,638
Portion of Retail kWh Delivered to Large Use Customers	-	-	-	-	-	-
Net Retail kWh Delivered by EPLC	**530,252,495**	**528,427,511**	**540,259,209**	**546,438,079**	**535,187,638**	**535,187,638**
Loss Factor in EPLC System	1.0297	1.0155	1.0218	1.0107	1.0050	1.0183
Supply Facility Loss Factor	1.0277	1.0268	1.0252	1.0239	1.0240	1.0255
Total Loss Factor	**1.0582**	**1.0428**	**1.0476**	**1.0348**	**1.0292**	**1.0443**

EPLC's supply facility loss factor (the "SFLF") has been derived based on the standard SFLF referenced in the table above. The SFLF is calculated above based on the summation of the total wholesale metered kWh of energy delivered to EPLC adjusted for supply facility losses, divided by the total wholesale metered kWh of energy delivered to EPLC with no losses.

Table 8-18 below sets out EPLC's proposed loss factors. It is noted that EPLC is proposing to increase its loss factors in this Application, and a review of the 2018 loss factor calculation included 1 year that was recorded to have zero losses and was reducing the 5-year average loss factor as calculated at that time.

Table 8-18: Proposed Loss Factors

Description	2024 Approved	2025 Proposed
Total Loss Factor- Secondary Metered Customer < 5000 kW	1.0355	1.0443
Total Loss Factor- Primary Metered Customer <5000kW	1.0251	1.0339

8.15 Conditions of Service Rates

EPLC does not have any rates and/or charges in its current Conditions of Service that are not currently reflected on its OEB approved Tariff Sheet.

8.16 Tariff of Rates & Charges

EPLC's current Tariff of Rates and Charges, which is reflective of EB-2023-0020, is included as Attachment 8-B of this Exhibit.

EPLC's proposed Tariff of Rates and Charges is included as Attachment 8-C of this Exhibit.

8.17 Bill Impacts

Table 8-19 below outlines EPLC's proposed 2025 Total Bill Impacts. EPLC has also included in this Exhibit Attachment 8-D.

Table 8-19: EPLC's Proposed 2025 Total Bill Impacts

Rate Class	kWh	kW	2024 OEB Approved Rates	2025 Proposed Rates	$ Increase (Decrease)	% Increase (Decrease)
Residential	750	-	$ 137.24	$ 132.03	($5.21)	-3.8%
GS <50kW	2,000	-	$ 354.10	$ 332.20	($21.90)	-6.2%
GS >50kW	40,000	100	$ 6,001.58	$ 5,406.65	($594.93)	-9.9%
Embedded Distributor	200,000	50	$ 25,000.66	$ 23,170.74	($1,829.92)	-7.3%
Street Lighting	115,297	-	$ 52,240.21	$ 51,414.52	($825.69)	-1.6%
Sentinel Lighting	21,860	60	$ 4,898.54	$ 5,388.91	$490.37	10.0%
Unmetered Scattered Load	202,800	614	$ 25,387.40	$ 23,182.79	($2,204.61)	-8.7%

The bill impacts associated with Table 8-19 above include:

- Distribution rate increases;
- Elimination of all rate riders that expire December 31, 2024 per the current Rate Order (EB-2023-0020;
- Addition of new rate riders as outlined in Exhibit 9 of this Application;

In absence of any rate mitigation, there would be total bill impacts of more than 10% for the Sentinel Lighting rate class. Sentinel Light distribution rates increase in 2025 and 2026 so the total bill impact is 10%, and in 2027 distribution rates increase so it reaches the 80% revenue-to-cost floor. The lower Sentinel Light rate increases in 2025 and 2026 are offset by small increases to Residential and General Service < 50 rates.

Based on this mitigation, EPLC submits that since all rate classes are now experiencing a total bill impact no greater than the 10% threshold, these rates are reasonable and do not require any further mitigation.

8.18 Z-Factor

Z Factor Claim

Overview

Essex Powerlines Inc. ("Essex Powerlines") experienced a Z-factor event on February 22, 2023, specifically a significant ice storm. This event was outside Essex Powerlines' control, significantly impacted operations and resulted in Essex Powerlines incurring a material level of prudently incurred costs. This event meets the Z-factor amount eligibility criteria as set out in Section 2.6 of the *Board's Report on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors* dated July 14, 2008 and Section 3.2.8 of the *Board's Chapter 3 Filing Requirements for Electricity Distribution Rate Applications*, dated May 24, 2022.

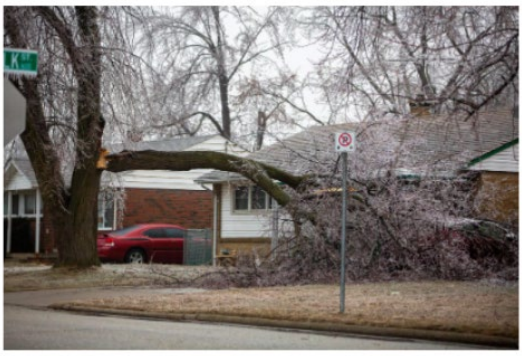
On August 8, 2023, Essex Powerlines advised the OEB in writing of a potential Z-factor event which occurred on February 22, 2023, specifically a significant ice storm. At that time, Essex Powerlines also advised the OEB that Essex Powerlines would be filing a Z-factor application to recover the costs associated with the restoration of electricity service to our customers during this event, and requested that this Z-factor application be combined with its IRM proceeding due [at that time] on October 11, 2023 or in the alternative as part of its Cost of Service rate application due April 30, 2024.

Essex Powerlines is, via this Application, submitting the aforementioned Z-Factor claim as part of this Cost of Service Proceeding (EB-2024-0022). The rate riders calculated as a result of this claim have been included in the rate rider and bill impact calculations included in the Application.

Background

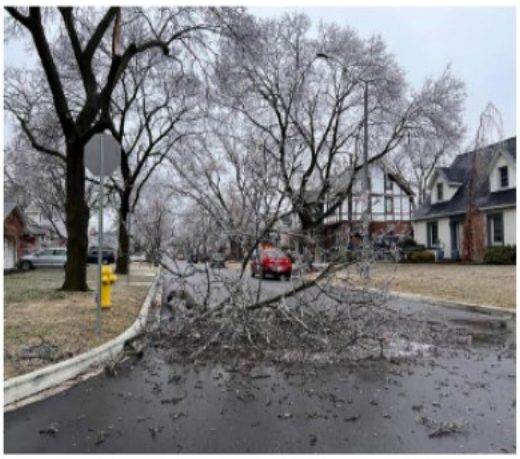
On February 22, 2023 a significant ice-storm swept through the Windsor-Essex region. This resulted in dangerous conditions, with heavy ice accretion on trees, buildings and roads.

The ice storm affected 8,481 or 25% of Essex Powerlines' customers. Essex Powerlines restored service to 95% of customers by February 23 at 02:11. Restoration took approximately 7 hours for the majority of customers, while small numbers of customers were affected for significantly longer periods and planned outages to permit necessary and significant clean-up efforts over many subsequent days were necessary. The ice storm was one of the most severe winter storms in Essex Powerlines' recent history - the harm caused by this extraordinary event was incremental to Essex Powerlines' experience and expectations.



Residents of Windsor and Essex County are waking up to storm damage following Wednesday's ice storm.

Heavy ice accretion weighed power and utility lines, causing them to sag into trees, and fall to the ground altogether. Layers of ice were too much for some tree limbs, causing downed



News reports highlighted the severity of the storm and associated risks.

Power outages affect thousands, close schools and municipal buildings in Windsor-Essex after freezing rain

Dalson Chen

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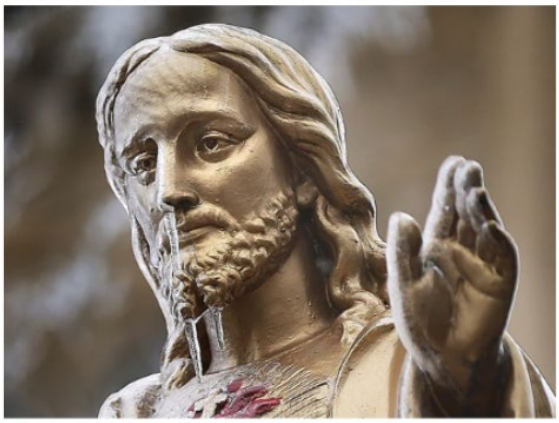
5 Comments



An ice covered statue in front of the St. Anne's Church in Tecumseh is shown on Thursday, February 23, 2023. PHOTO BY DAN JANISSE /Windsor Star

Windsor-Essex residents were prepared for the freezing rain that the region experienced on Wednesday — but the area's power infrastructure might have not been so ready.

The weather conditions caused electrical outages that affected thousands of households across the region throughout Wednesday evening and into Thursday, with EnWin Utilities and Essex Powerlines Corp. reporting blackouts in multiple areas.

Eligibility Criteria

Z-factors are unforeseen events that are not within management's control. The eligibility criteria for applications to recover amounts in the Z-factor are set out in the Incentive Regulation Report. In order for amounts to be considered for recovery in the Z-factor, the amounts must satisfy all three criteria as follows:

Materiality: The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor; otherwise, they should be expensed in the normal course and addressed through organizational productivity improvements.

Causation: Amounts should be directly related to the Z-factor event. The amount must be clearly outside of the base upon which rates were derived.

Prudence: The amount must have been prudently incurred. This means that the distributor's decision to incur the amount must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Materiality

The total incremental operating costs and capital expenditures associated with the restoration of electricity service to Essex Powerlines' customers during the February 22 storm were $209,862.74 and $43,370.12 respectively as identified in Table 8-20 below.

Table 8-20: Z Factor Event Costs

Category	Operating Costs	Capital Expenditures	Total $
Incremental Labour/Material/Vehicle Costs	$176,883.36	$41,870.12	$218,753.48
3rd Party Contractors	$32,979.38	$1,500.00	$34,479.38
Total	**$209,862.74**	**$43,370.12**	**$253,232.86**

Essex Powerlines is seeking cost recovery of $209,862.74 as shown in Table 8-21 below. EPLC is not pursuing the revenue requirement associated with capital expenditures incurred due to the event as the amount in minimal. The calculation of the revenue requirement associated with capital expenditures of $43,370 as identified in Table 8-22 below.

Table 8-21: Relief Requested

Category	Amount
Operating Costs	$209,862.74
Capital Expenditures	$0.00
Total	$209,862.74

Table 8-22: Revenue Requirement Impact of Capital Expenditures

Description	%	Amount
Incremental Capital		$43,370
Depreciation Expense		($1,036)
Incremental Capital to be included in Rate Base		**$42,335**
Deemed Short Term Debt (4%)	2.29%	$ 39
Deemed Long Term Debt (56%)	3.69%	$ 875
Deemed Equity (40%)	9.00%	$ 1,524
Amortization Expense		($1,036)
Grossed up PILs		($1,032)
Revenue Requirement		**$ 370**
PILs Calculation		
Deemed Equity		$1,524
Add Back Amortization Expense		$1,036
Deduct CCA	12.5%	($5,421)
Taxable Income		($2,862)
PILs Before Gross Up	26.5%	($758)
Incremental Grossed Up PILs		**($1,032)**

Essex Powerlines' materiality threshold is defined as 0.5% of distribution revenue requirement which is the threshold applicable for distributors with a revenue requirement greater than $10MM and less than or equal to $200MM. Essex Powerlines' materiality threshold is $61,755.71 which represents 0.5% of its distribution revenue requirement of $12,351,142, as approved in its 2018 Cost of Service application (EB-2017-0039). The relief requested of $209,862.74 as a result of expenditures incurred during the February 23 ice storm exceeds the materiality threshold.

Causation

The amounts incurred were directly related to the restoration of service as a result of the February 23 ice storm, thus, if the ice storm had not occurred, Essex Powerlines would not have incurred any of these costs. The amounts incurred are outside of the base upon which Essex Powerlines' rates were derived. Additionally, Essex Powerlines has planned and implemented several strategies for mitigating the potential impact of extreme and severe weather events such as proactive vegetation management, disaster recovery planning and emergency response preparedness, however it could not have foreseen, planned or budgeted for the storm experienced on February 23.

Prudence

The amounts associated with restoring service to customers during the February 23 ice storm were incurred prudently. Essex Powerlines' decision to incur these amounts represented the most cost-effective option for rate payers.

- Labour costs were incurred according to existing negotiated agreements;
- Contractor costs were incurred according to previously negotiated agreements;
- Repairs were made where possible, and where repairs were made those repairs were on a 'like-for-like' basis;
- Essex Powerlines used materials available from Stores and thereby avoided costs to procure materials on an emergency basis;
- Essex Powerlines prioritized and coordinated work to ensure restoration of power to customers was completed as efficiently and quickly as possible

Recoverability of Z-Factor Costs

Essex Powerlines proposes to recover a total of $209,862.74 through a fixed rate rider over a 12- month period commencing January 1, 2025 as set out in Table 8-23 below. Essex Powerlines proposes allocation of costs across all rate classes based on Essex Powerlines Board Approved distribution revenue by rate class (from) EB-2017-0039 and calculated using customer count by rate class from December 31, 2023 as filed in it 2023 RRR filing.

Table 8-23: Determination of Proposed Z-Factor Rate Riders

Rate Class	2018 COS (EB-2017-0039) Revenue Requirement	Allocation of Revenue Requirement	# of cusomter connections at Dec 31, 2023	Monthly Rate Rider
Residential	$8,787,753	$149,316	29,028	$0.43
General Service < 50 kW	$1,638,595	$27,842	2,083	$1.11
General Service > 50 kW	$1,545,657	$26,263	236	$9.27
Street Lighting	$178,160	$3,027	2,827	$0.09
Unmetered Scattered Load	$57,552	$978	125	$0.65
Sentinel Lights	$25,162	$428	221	$0.16
Embedded Distributor	$118,265	$2,009	4	$41.86
Total	$12,351,142	$209,863		

Conclusion

Essex Powerlines respectfully requests recovery of $209,862.74 associated with the restoration of electricity service to its customers during the February 23 ice storm. This event meets the Z-factor amount eligibility criteria as set out in the Incentive Regulation Report and the Chapter 3 Filing Requirements. It proposes to recover this amount from rate payers through a 12-month fixed rate rider effective January 1, 2025.

ATTACHMENTS

Attachment 8-A

OEB RTSR Workform

Attachment 8-B

EPLC Current Tariff of Rates and Charges – Effective May 1, 2024

Attachment 8-C

EPLC Proposed Tariff of Rates and Charges – Effective January 1, 2025

Attachment 8-D

EPLC Tariff Schedule and Bill Impacts Model