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# Exhibit 7 Cost Allocation

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#### 1 1.0 COST ALLOCATION OVERVIEW

## 2 1.1 Introduction and Background

- 3 In E.L.K.'s 2012 COS Application (EB-2011-0099), the 2012 cost allocation model was used
- 4 and updated to reflect 2012 test year costs, customer numbers and demand values. The 2012
- 5 demand values were based on the weather normalized load forecast used to design rates.
- 6 E.L.K. developed weighting factors based on discussions with staff experienced in the subject
- 7 area.
- 8 In this application, E.L.K. has used the 2022 cost allocation model released by the OEB on June
- 9 24, 2021. The model reflects 2022 test year trial balance data, customer numbers, load
- 10 forecast, and demand values. The 2022 demand values were based on the weather normalized
- load forecast used to design rates. E.L.K. reviewed the various weighting factors used in the
- 12 2012 study and believes the factors are still valid.

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## 2.0 WEIGHTING FACTORS

# 2 **2.1 Services (Account 1855)**

## **Table 7-1: Service Weighting Factors**

Rate Class	Factor
Residential	1.0
General Service < 50 kW	1.9
General Service 50 to 4,999 kW	1.9
Street Lighting	0.7
Sentinel Lighting	0.8
Unmetered Scattered Load	0.7

## 4 2.2 Billing and Collection (Accounts 5315 – 5340, except 5335)

Table 7-2: Billing Weighting Factors

Rate Class	Factor
Residential	1.0
General Service < 50 kW	1.0
General Service 50 to 4,999 kW	18.0
Street Lighting	15.3
Sentinel Lighting	1.0
Unmetered Scattered Load	1.0

## 6 2.3 Meter Capital (Sheet I7.1)

# **Table 7-3: Meter Capital Installation Costs**

Meter Type	Installation	
	Cost per Meter	
Smart Meter - Residential	\$165.29	
Smart Meter - General Service < 50 kW	\$335.88	
Demand with IT and Interval Capability - Secondary	\$2,100	
Demand with IT and Interval Capability - Primary	\$10,000	

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# 2.4 Meter Reading (Sheet I7.2)

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# **Table 7-4: Meter Reading Weighting Factor**

Meter Type	Factor
Smart Meter	1
GS - Vehicle with other services	3
Interval Meter	49

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#### 3.0 RESULTS AND PROPOSED CHANGES

#### 2 **3.1 Summary**

- 3 The data used in the updated cost allocation study is consistent with E.L.K.'s cost data that
- 4 supports the proposed 2022 revenue requirement outlined in this application. Consistent with
- 5 the Guidelines, E.L.K.'s assets were broken out into primary and secondary distribution
- 6 functions using breakout percentages consistent with the original cost allocation informational
- 7 filing. The breakout of assets, capital contributions, depreciation, accumulated depreciation,
- 8 customer data and load data by primary, line transformer and secondary categories were
- 9 developed from the best data available to E.L.K., its engineering records, and its customer and
- 10 financial information systems. An Excel version of the updated cost allocation study has been
- included with the filed application material. Input Sheets I-6 & I-8 and Output Sheets O-1 & O-2
- are provided as Exhibit 7, Tab 3, Attachment 1. Additionally, the cost allocation section of the
- 13 RRWF (sheet 11) is provided as Exhibit 7, Tab 3, Attachment 2.
- 14 Capital contributions, depreciation and accumulated depreciation by USoA are consistent with
- the information provided in the 2022 continuity statement provided in Exhibit 2. The rate class
- 16 consumption, billed demand, and customer data used in the cost allocation study is consistent
- with the 2022 forecast outlined in Exhibit 3.
- The load profiles for each rate class are the same as those used in the original information filing
- and have been scaled to match the 2022 load forecast. E.L.K. is not aware of any reason for the
- load profiles to have material changed between the classes. As a result, E.L.K. has not updated
- 21 its load profiles at this time.
- The following Table 7-5 outlines the scaling factors used by rate class:

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#### **Table 7-5 Load Profiling Scaling Factors**

Rate Class	2004 Weather Normal Values used Information Filing (kWh)	2022 Weather Normal Values (kWh)	Scaling Factor
Residential	75,584,844	93,507,179	123.71%
General Service < 50 kW	45,080,345	27,656,663	61.35%
General Service > 50 kW	69,650,366	59,482,525	85.40%
Street Lights	2,268,132	1,308,977	57.71%
Sentinel Lights	160,889	248,217	154.28%
Unmetered Scattered Load	283,513	141,998	50.09%
Total	193,028,087	182,345,559	

- 2 The allocated cost by rate class for the 2012 Cost of Service filing updated for New CGAAP
- deprecation in 2014 and the 2022 updated study are provided in the following Table 7-6.

**Table 7-6: Allocated Costs** 

Rate Class	2012 Board Approved Allocated Costs	%	2022 Allocated Costs	%
Residential	\$2,946,079	65.1%	\$2,986,641	66.20%
General Service <50 kW	\$675,740	14.9%	\$660,308	14.64%
General Service 50 to 4,999 kW	\$524,898	11.6%	\$591,842	13.12%
Street Lighting	\$194,447	4.3%	\$170,131	3.77%
Unmetered Scattered Load	\$4,791	0.1%	\$4,891	0.11%
Sentinel Lighting	\$605	0.0%	\$4,461	0.10%
Embedded Distributor	\$180,138	4.0%	\$93,121	2.06%
Total	\$4,526,698	100.0%	\$4,511,397	100.0%

The results of a cost allocation study are typically presented in the form of revenue-to-cost (or revenue-to-expense) ratios. The ratio is shown by rate classification and is the percentage of distribution revenue collected by rate classification compared to the costs allocated to the classification. The percentage identifies the rate classifications that are being subsidized and those that are over-contributing. A percentage of less than 100% means the rate classification is under-contributing and is being subsidized by other classes of customers. A percentage of greater than 100% indicates the rate classification is over-contributing and is subsidizing other classes of customers.

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#### **Table 7-7 Revenue to Cost Ratios**

	2012 Board Approved	2022 Cost	2022	_	ard gets
Rate Class	Cost Allocation Study	Allocation Study	Proposed Ratios	Min	Max
Residential	98.0%	102.26%	102.26%	85%	115%
General Service <50 kW	95.0%	74.01%	83.30%	80%	120%
General Service 50 to 4,999 kW	120.0%	109.14%	109.14%	80%	120%
Street Lighting	95.0%	65.46%	83.30%	80%	120%
Unmetered Scattered Load	95.0%	77.67%	83.30%	80%	120%
Sentinel Lighting	95.0%	80.71%	83.30%	80%	120%
Embedded Distributor	100.0%	218.90%	120.00%	80%	120%

- 2 The 2022 cost allocation study indicates the revenue-to-cost ratios for General Service < 50 kW,
- 3 Street Lighting, and Unmetered Scattered Load are below the 80% minimum revenue-to-cost
- 4 ratio. The Embedded Distributors is above the maximum 120% revenue-to-cost ratio. As a first
- 5 approximation, the classes below the minimum were increased to 80% and the Embedded
- 6 Distributor was decreased to 120%. This revenue reallocation results in a revenue deficiency.
- 7 The revenue deficiency is addressed by further increasing revenues from classes at the lower
- 8 bound (80%). The revenue deficiency is eliminated as the lower bound increases to 83.3%. The
- 9 results of the cost allocation model indicate the Sentinel Lighting rate class has a revenue-to-
- 10 cost ratio of 80.7%. Though the class is within the acceptable range, its revenue-to-cost ratio is
- also increased to 83.3% to align forecast revenues with the revenue requirement.
- 12 The following Table 7-8 provides information on calculated class revenue. The resulting 2020
- proposed base revenue will be the amount used in Exhibit 8 to design the proposed distribution
- 14 charges in this application.

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# **Table 7-8 Calculated Class Revenue**

Rate Class	2022 Base Revenues at Existing Rates	2022 Proposed Base Revenue at Status Quo Rates	2022 Proposed Base Revenue	Miscellaneous Revenue
Residential	\$2,516,821	\$2,720,023	\$2,720,023	\$334,146
General Service <50 kW	\$392,461	\$424,147	\$485,501	\$64,522
General Service 50-4,999	\$538,554	\$582,035	\$582,035	\$63,918
Street Lighting	\$91,099	\$98,454	\$128,810	\$12,906
USL	\$3,044	\$3,290	\$3,565	\$509
Sentinel Lighting	\$2,964	\$3,204	\$3,319	\$397
Embedded Distributor	\$179,041	\$193,496	\$101,397	\$10,349
Total	\$3,723,985	\$4,024,650	\$4,024,650	\$486,747

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#### 4.0 Embedded Distributor Class

- 2 E.L.K. has an Embedded Distributor customer which is Hydro One Networks Inc. ("HONI").
- 3 In connection with preparing its rate application, E.L.K. has consulted with HONI and advised
- 4 HONI on E.L.K.'s proposal to directly charge the costs that are directly assignable to HONI and
- 5 a share of General and Administrative expenses.
- 6 Following general discussion on methodology in July 2021, E.L.K. sent a memo to HONI to
- outline the proposal on October 14, 2021 (Exhibit 7, Tab 4, Attachment 1). E.L.K. provided a
- 8 follow-up memo on January 26, 2022 which included bill impacts (Exhibit 7, Tab 4, Attachment
- 9 2).

- HONI provided a response on ### (Exhibit 7, Tab 4, Attachment 2) and was in general
- agreement with the direct allocation approach. The following outlines the costs that are directly
- 12 allocated to the Embedded Distributor class in the cost allocation model.

**Table 7-9 Embedded Distributor Direct Allocation** 

USoA	Account Description	\$	
Direct All		Φ4 O4 E	
5305 5310	Supervision Motor Booding	\$1,015 \$20,911	
5315	Meter Reading Billing	\$30,649	
5705	Depreciation (Meters)	\$7,030	
	ect Allocation	\$59,605	
Indirect A	Heartien	. ,	
Indirect A 5410	Community Relations - Sundry	\$231	
5415	Energy Conservation	\$231 \$24	
5515	Advertising Expense	\$24	
5605	Executive Salaries and Expenses	\$599	
5610	Management Salaries and Expenses	\$15,442	
3010	General Administrative Salaries and		
5615	Expenses	\$1,446	
5620	Office Supplies and Expenses	\$2,248	
5630	Outside Services Employed	\$4,271	
5635	Property Insurance	\$465	
5640	Injuries and Damages	\$1,798	
5655	Regulatory Expenses	\$3,891	
5665	Miscellaneous General Expenses	\$133	
5675	Maintenance of General Plant	\$1,819	
5680	Electrical Safety Authority Fees	\$150	
6205-1	Sub-account LEAP Funding	\$128	
5705	Amortization Expense - PPE	\$847	
Total Indirect Allocation			
Total Dire	\$93,121		

- 2 The cost allocation model assigns a portion of administration costs and general plant assets to
- 3 the Embedded Distributor based on information provided in the above table. In total the cost
- 4 allocation model allocates \$93,121 to the Embedded Distributor class. This is offset by \$10,349
- 5 in Miscellaneous Revenues allocated to the Embedded Distributor.

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#### 1 5.0 Other Cost Allocation Information

#### 2 5.1 Unmetered Loads

- 3 E.L.K. communicates with unmetered load customers, including Street Lighting customers, to
- 4 assist them in understanding the regulatory context in which distributors operate and how it
- 5 affects unmetered load customers. This communication takes place on an on-going basis and
- 6 is not driven by the rate application process.
- 7 E.L.K. is not proposing to include microFIT as a separate class in the cost allocation model in
- 8 2022.

#### 9 5.2 New Customer Class

10 E.L.K. is not proposing to include a new customer class.

## 11 5.3 Eliminated Customer Class

12 E.L.K. is not proposing to eliminate a rate class.