# EXHIBIT 7

# COST ALLOCATION

**TABLE OF CONTENTS**

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1 **COST ALLOCATION**

2 **Overview**

3 The Board's requirements for Exhibit 7 - Cost Allocation are contained in section 2.7 of

4 the Filing Requirements. OPUCN's filing follows the Board's *Review of Electricity*

5 *Distribution Cost Allocation Policy* (EB-2010-0219) (the "Cost Allocation Review") dated

6 March 31, 2011, the Board's letter dated June 12, 2015 with regard to the treatment of

7 Street Lighting connections, and the 2021 Cost Allocation Model version 1.0 ("CA

8 Model").

9 For purposes of this Application, OPUCN has prepared a cost allocation model for test

10 year 2021 using the Board's CA Model and complied with the internal documentation

11 contained in the that model. The Board's CA Model has been used to determine the

12 proportion of OPUCN's total revenue requirement that is recoverable from each rate

13 class. The revenue-to-cost ratios for each class have been determined using the total

14 revenues over costs in the test year.

15 In preparation for this Application, OPUCN engaged Bruce Bacon at Borden Ladner

16 Gervais LLP to undertake a review of OPUCN's 2021 CA Model.

17 **LOAD AND CUSTOMER INFORMATION**

18 The OPUCN 2021 CA Model has been prepared using the following load and load profile

19 information:

20 **Load Profiles**

21 In a letter dated June 12, 2015, the OEB requested distributors to be mindful of material

22 changes to load profiles and propose updates, as appropriate, in cost of service rate

23 applications. OPUCN proposes to use the same method as was used in the 2014 Cost of

24 Service application to determine the demand data for the 2021 cost allocation model. This

25 method involves applying a scaling factor to the 2004 weather normalized volumes

26 supporting the 2004 load profiles to determine an estimate of the 2021 weather

27 normalized load profiles. Then the same method applied by Hydro One to the 2004 load

28  profiles to determine the demand data for the original cost allocation study, is applied to
29  the 2021 load profiles to determine the 2021 demand data. OPUCN has provided an
30  Excel spreadsheet named "2021_CA_Load_Profile_Model_Data" to show how the 2021
31  demand data is determined.

32  In order to be prepared for the next cost of service application, OPUCN will put in place
33  a process to prepare a load profile for each actual year after 2016. This will provide more
34  than one year of data to review the load profiles for the next cost of service application.

35  ***Annual Loads (kW and kWh, as appropriate) and customer counts:*** The 2021 load
36  forecast and customer counts by class provided in Exhibit 3 were also used for the 2021
37  CA Model.

38  ***Hourly load profile:*** The hourly load profiles prepared by Hydro One for the 2004 CAIF
39  were used for all classes. The hourly load profiles provided by Hydro One were
40  considered appropriate for use in the 2021 CA Model.

41  **Costs and Revenues**

42  In preparing the 2021 CA Model, OPUCN has provided financial information for the
43  forecast year at the level of detail embedded within the Board's 1.0 CA Model.

44  **Customer Classes**

45  OPUCN proposes the continuation of the following rate classes in this Application. No
46  new or discontinuation of rate classes is being requested.

47  • Residential
48  • General Service < 50 KW
49  • General Service 50 to 999 KW
50  • General Service 1,000 to 4,999 KW
51  • Large Use
52  • Unmetered Scattered Load
53  • Sentinel Lighting
54  • Street Lighting

55 **Demand Allocators**

56 The demand allocators for the 2021 CA models were derived using the same
57 methodology Hydro One used for the 2004 CAIF, but updated for the forecast 2021 hourly
58 load profiles resulting from the preceding step.

59 **Weighting Factors**

60 Weighting Factors for Services Account 1855

61 OPUCN does not separately identify service costs into USA account 1855 – these costs
62 are allocated to other USA accounts as appropriate, primarily USA accounts 1835
63 (Overhead Conductors and Devices) and 1845 (Underground Conductors and Devices).
64 As there are no costs in USA account 1855 to allocate, OPUCN has used a weighting
65 factor of 1.0 for each customer class in its Cost Allocation model.

66 Weighting Factors for Billing and Collecting

67 OPUCN splits billing & collection costs between amounts readily calculable by class (e.g.
68 mailing costs) and those not readily calculable by class. Costs not readily calculable by
69 class are allocated using actual collection activity as measured by collection charges
70 billed and by estimated incremental bill preparation costs by class. A weighting factor was
71 determined by assigning the Residential customer class a factor of one, as required, and
72 determining the relative weights of the rest of the classes. This base case reflects monthly
73 billing, based primarily on automated meter reads. It also reflects that most customer
74 service and collection calls for these customers are often settled in a single call, without
75 escalation.

76 The weighting factor for customer classes GS<50 kW and Street Lighting have been set
77 to 1.5 and 3.5, respectively, to reflect the additional effort in maintaining, reviewing and
78 auditing data for these customers with associated parameters for billing.

79 The weighting factors for customer classes GS 50kW to 999 kW, GS 1,000 kW to 4,999
80 kW, and Large Use, have been set to 7.0, 7.0 and 15.0, respectively, to reflect that billing
81 is significantly more complex due to validating, editing and adjustment of interval data,
82 incorporation of manual reads, and review of global adjustment amounts. From a

83 customer service and collection perspective, these accounts often require escalation to a

84 supervisor, increased follow up, and occasionally face-to-face meetings.

85 The resulting weighting factors are shown in the following Table 7-1.

86                               TABLE 7-1: WEIGHTING FACTORS

| Residential | GS<50 kW | GS 50 to 999 kW (I1 & I4) | GS 1,000 to 4,999 kW (I2) | Large Use (I3) | Street Lighting | USL | Sentinel Lights |
|---|---|---|---|---|---|---|---|
| 1.0 | 1.5 | 7.0 | 7.0 | 15.0 | 3.5 | 1.0 | 0.1 |

88 These weighting factors and supporting rationale were reviewed with OPUCN Customer

89 Service and Engineering supervisors during the preparation of the 2021 cost allocation

90 study.

91 <u>Weighting Factors for Meter Capital and Reading</u>

92 The Meter Capital and Reading weighting factors have been updated to incorporate the

93 costs per meter type. Table 7-2 below shows the Meter Capital and Reading weighting

94 factors per meter type.

95      TABLE 7-2: METER CAPITAL AND READING WEIGHTING FACTORS PER METER TYPE

| Meter Type | Installation Cost per Meter |
|---|---|
| Smart Meter (no IT, secondary, Single Phase 200 Amp urban) | $ 250 |
| Network Meter | $ 450 |
| Demand (without IT, 3-phase) | $ 750 |
| Smart Meter (3-phase, no demand, no IT) | $ 850 |
| Demand (with IT, interval capability, secondary) | $ 1,000 |
| Smart Meter (with IT, 3-phase) | $ 1,700 |
| FIT meter (with IT) | $ 1,750 |
| Generation meter | $ 6,500 |
| Smart Meter (primary) | $ 8,000 |
| Demand with IT (primary) | $ 12,000 |
| Demand with IT (whole sale metering point) | $ 15,000 |

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| Meter Type | Weight |
|---|---|
| Smart Meter | 1.00 |
| Network Meter | 1.25 |
| Smart Meter (no IT) | 2.00 |
| Smart Meter with Demand | 3.00 |
| Smart Meter (3-phase, secondary) | 5.00 |
| Generation Meter | 6.00 |
| Smart Meter (primary) | 7.00 |
| Interval Meter | 8.00 |

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## CLASS REVENUE REQUIREMENTS AND REVENUE TO COST RATIOS

99 The results of a cost allocation study are typically presented in the form of revenue-to-
100 cost ratios. This is shown by rate classification and is the ratio of distribution revenue
101 collected by rate classification compared to the costs allocated to the classification. A
102 ratio lower than the Board's floor for that rate class indicates the rate classification is
103 under-contributing and is being subsidized by other classes of customers. A ratio greater
104 than the Board's ceiling indicates the rate classification is over-contributing and is
105 subsidizing other classes of customers.

106 In its Cost Allocation Review, the Board established appropriate ranges of revenue-to-
107 cost ratios as summarized in Table 7-3 below. The Streetlight class is shown with the
108 targets as established in the OEB's June 12, 2015 letter. In addition, the table below
109 provides: OPUCN's revenue-to-cost ratios from its last Cost of Service Application (EB-
110 2014-0101); and the proposed 2021 ratios.

111 Tables 7-1, 7-2, and 7-3 provide information on calculated class revenues, and are
112 consistent with the Revenue Requirement Work Form ("RRWF"), Tab 11 Cost Allocation,
113 Allocated Costs. The resulting 2021 proposed base revenue amounts are used in Exhibit
114 8 to design the proposed distribution charges in this Application.

115 Table 7-3 shows that all classes, other than the Street Lighting and Sentinel Light classes,
116 fall within the OEB target range. The Street Lighting and Sentinel Light rate classes are
117 higher than OEB targets. It is proposed that all rate classes be brought into the target
118 range.

119 As required in the Chapter 2 Filing Requirements, copies of input sheets I-6, I-8, output

120  O-1 and O-2 are included as Appendix 7-1. In addition, a live excel version of the 2021

121  CA model has been filed with this Application.

122  <u>Unmetered Loads (Including Street Lighting)</u>

123  OPUCN acknowledges the OEB's change in cost allocation policy for the Street Lighting

124  rate class, and confirms that the "street lighting adjustment factor" has been appropriately

125  calculated by the OEB cost allocation model, and reflected in other aspects of its 2021

126  cost allocation study. OPUCN has communicated changes to, and impacts of, the OEB's

127  policy with respect to cost allocation for Street Lights to its municipal customer. OPUCN's

128  unmetered scattered load customers are included as general service customers. As such,

129  rates for these customers are adjusted annually are unaffected by changes in cost

130  allocation.

131  **Host Distributor**

132  OPUCN is not a host distributor to any distributor within its service territory.

133  **TABLE 7-3: REVENUE REQUIREMENT WORKFORM – TAB 11 - ALLOCATED COSTS – 2021**

| Rate Class | 2019 Board Approved Cost Allocation Study | % | 2021 Proposed Cost Allocation Study | % |
|---|---|---|---|---|
| Residential | $ 17,508,798 | 65.27% | $ 19,194,323 | 67.00% |
| GS < 50 kW | $ 2,833,131 | 10.56% | $ 3,112,011 | 10.86% |
| GS 50 to 999 kW | $ 4,391,044 | 16.37% | $ 4,932,042 | 17.21% |
| GS 1,000 to 4,999 kW | $ 561,412 | 2.09% | $ 566,937 | 1.98% |
| Large Use | $ 255,893 | 0.95% | $ 272,554 | 0.95% |
| Street Lighting | $ 1,199,029 | 4.47% | $ 492,347 | 1.72% |
| Sentinel Lights | $ 2,017 | 0.01% | $ 1,998 | 0.01% |
| USL | $ 75,309 | 0.28% | $ 77,850 | 0.27% |
| Total | $ 26,826,633 | 100.00% | $ 28,650,063 | 100.00% |

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136    **TABLE 7-4: REVENUE REQUIREMENT WORKFORM – TAB 11 – CALCULATED CLASS**

137    **REVENUES – 2021**

| Rate Class | 2021 Base Revenue at Existing Rates | 2021 Proposed Base Revenue Allocated at Existing Rates Proportion | 2021 Proposed Base Revenue | Misc. Revenue |
|---|---|---|---|---|
| Residential | $ 17,565,350 | $ 18,484,060 | $ 19,194,323 | $ 930,934 |
| GS < 50 kW | $ 3,292,459 | $ 3,467,480 | $ 3,112,011 | $ 123,475 |
| GS 50 to 999 kW | $ 4,611,711 | $ 4,857,738 | $ 4,932,042 | $ 157,083 |
| GS 1,000 to 4,999 kW | $ 579,233 | $ 609,926 | $ 566,937 | $ 23,482 |
| Large Use | $ 268,982 | $ 283,311 | $ 272,554 | $ 9,544 |
| Street Lighting | $ 829,334 | $ 872,253 | $ 492,347 | $ 52,238 |
| Sentinel Lights | $ 2,341 | $ 2,463 | $ 1,998 | $ 125 |
| USL | $ 69,181 | $ 72,831 | $ 77,850 | $ 3,099 |
| | | | | |
| **Total** | $ 27,218,590 | $ 28,650,063 | $ 28,650,063 | $ 1,299,981 |

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139    **TABLE 7-5: REVENUE REQUIREMENT WORKFORM – TAB 11 – REBALANCING REVENUE-TO-**

140    **COST (R/C) RATIOS – 2021**

| Rate Class | 2019 Board Approved Cost Allocation Study | 2021 Cost Allocation Study | 2021 Proposed Ratios | Policy Range (%) |
|---|---|---|---|---|
| Residential | 96.57% | 96.38% | 97.80% | 85 - 115 |
| GS < 50 kW | 119.63% | 111.71% | 111.71% | 80 - 120 |
| GS 50 to 999 kW | 108.29% | 98.17% | 98.17% | 80 - 120 |
| GS 1,000 to 4,999 kW | 101.81% | 107.12% | 107.12% | 80 - 120 |
| Large Use | 105.36% | 103.44% | 103.44% | 85 - 115 |
| Street Lighting | 71.59% | 175.82% | 120.00% | 80 - 120 |
| Sentinel Lights | 110.37% | 122.51% | 120.00% | 80 - 120 |
| USL | 95.57% | 93.01% | 97.80% | 80 - 120 |

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142 **APPENDIX 7-1: 2021 COST ALLOCATION MODEL**

Ontario Energy Board

## 2021 Cost Allocation Model

**EB-2020-0048**

Sheet I6.1 Revenue Worksheet - For May 31 filing

| | |
|---|---|
| Total kWhs from Load Forecast | 1,075,667,737 |

| | |
|---|---|
| Total kWs from Load Forecast | 1,107,288 |

| | |
|---|---|
| Deficiency/sufficiency ( RRWF 8. cell F51) | - 1,431,472 |

| | |
|---|---|
| Miscellaneous Revenue (RRWF 5. cell F48) | 1,299,981 |

| | | | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| | ID | Total | Residential | GS <50 | GS 50 to 999 kW (I1 & I4) | GS 1,000 to 4,999 kW (I2) | Large Use (I3) | Street Light | Sentinel Lights | USL |
| **Billing Data** | | | | | | | | | | |
| Forecast kWh | CEN | 1,075,667,737 | 496,495,068 | 128,706,195 | 328,035,469 | 76,465,711 | 38,878,939 | 4,555,628 | 24,360 | 2,506,367 |
| Forecast kW | CDEM | 1,107,288 | - | - | 825,711 | 182,480 | 86,319 | 12,698 | 81 | - |
| Forecast kW, included in CDEM, of customers receiving line transformer allowance | | 341,916 | | | 81,760 | 181,618 | 78,538 | | | |
| Optional - Forecast kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank. | | - | | | | | | | | |
| KWh excluding KWh from Wholesale Market Participants | CEN EWMP | 1,069,133,858 | 496,495,068 | 128,706,195 | 321,501,590 | 76,465,711 | 38,878,939 | 4,555,628 | 24,360 | 2,506,367 |
| | | | | | | | | | | |
| Existing Monthly Charge | | | $24.67 | $17.39 | $58.43 | $1,227.87 | $9,343.15 | $2.11 | $5.88 | $4.87 |
| Existing Distribution kWh Rate | | | $0.0000 | $0.0177 | | | | | | $0.0200 |
| Existing Distribution kW Rate | | | | | $4.9998 | $2.6132 | $2.2526 | $32.5022 | $8.4045 | |
| Existing TOA Rate | | | | | $0.60 | $0.60 | $0.60 | | | |
| Additional Charges | | | | | | | | | | |
| Distribution Revenue from Rates | | $26,123,759 | $16,634,415 | $3,168,984 | $4,503,684 | $664,721 | $306,560 | $777,096 | $2,216 | $66,082 |
| Transformer Ownership Allowance | | $205,149 | $0 | $0 | $49,056 | $108,971 | $47,123 | $0 | $0 | $0 |
| Net Class Revenue | CREV | $25,918,610 | $16,634,415 | $3,168,984 | $4,454,629 | $555,750 | $259,438 | $777,096 | $2,216 | $66,082 |

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# 2021 Cost Allocation Model

EB-2020-0048

**Sheet I6.2 Customer Data Worksheet - For May 31 filing**

| | ID | Total | 1 Residential | 2 GS <50 | 3 GS 50 to 999 kW (I1 & I4) | 5 GS 1,000 to 4,999 kW (I2) | 6 Large Use (I3) | 7 Street Light | 8 Sentinel Lights | 9 USL |
|---|---|---|---|---|---|---|---|---|---|---|
| **Billing Data** | | | | | | | | | | |
| Bad Debt 3 Year Historical Average | BDHA | $703,896 | $674,068 | $21,607 | $8,220 | $0 | $0 | $0 | $0 | $0 |
| Late Payment 3 Year Historical Average | LPHA | $257,473 | $204,734 | $24,544 | $23,286 | $4,909 | $0 | $0 | $0 | $0 |
| Number of Bills | CNB | 735,645 | 674,277 | 51,229.70 | 6,423.00 | 153.00 | 12.00 | 12 | 261.72 | 3,276.04 |
| Number of Devices | CDEV | | | | | | | 14,391 | 22 | 273 |
| Number of Connections (Unmetered) | CCON | 14,686 | | | | | | 14,391 | 22 | 273 |
| Total Number of Customers | CCA | 61,008 | 56,190 | 4,269 | 535 | 13 | 1 | | | |
| Bulk Customer Base | CCB | - | | | | | | | | |
| Primary Customer Base | CCP | 61,565 | 56,190 | 4,269 | 535 | 13 | 1 | 557 | | |
| Line Transformer Customer Base | CCLT | 61,534 | 56,190 | 4,269 | 516 | 2 | - | 557 | | |
| Secondary Customer Base | CCS | 60,985 | 56,190 | 4,268 | 525 | 2 | - | | | |
| Weighted - Services | CWCS | 75,671 | 56,190 | 4,268 | 525 | 2 | - | 14,391 | 22 | 273 |
| Weighted Meter -Capital | CWMC | 18,717,699 | 14,504,189 | 2,864,560 | 1,233,950 | 85,000 | 30,000 | - | - | - |
| Weighted Meter Reading | CWMR | 68,910 | 57,560 | 8,480 | 2,750 | 104 | 16 | - | - | - |
| Weighted Bills | CWNB | 800,678 | 674,277 | 76,845 | 44,961 | 1,071 | 180 | 42 | 26 | 3,276 |

**Bad Debt Data**

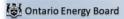| | | Total | 1 | 2 | 3 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Historic Year: | 2017 | 858,953 | 822,555 | 26,367 | 10,031 | | | | | |
| Historic Year: | 2018 | 688,251 | 659,086 | 21,127 | 8,038 | | | | | |
| Historic Year: | 2019 | 564,483 | 540,563 | 17,328 | 6,592 | | | | | |
| Three-year average | | 703,896 | 674,068 | 21,607 | 8,220 | - | - | - | - | - |

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# 2021 Cost Allocation Model

**EB-2020-0048**
**Sheet I8 Demand Data Worksheet - For May 31 filing**

This is an input sheet for demand allocators.

| CP TEST RESULTS | 12 CP |
|---|---|
| NCP TEST RESULTS | 4 NCP |

| Co-incident Peak | Indicator |
|---|---|
| 1 CP | CP 1 |
| 4 CP | CP 4 |
| 12 CP | CP 12 |

| Non-co-incident Peak | Indicator |
|---|---|
| 1 NCP | NCP 1 |
| 4 NCP | NCP 4 |
| 12 NCP | NCP 12 |

| **Customer Classes** | | Total | 1 Residential | 2 GS <50 | 3 GS 50 to 999 kW (I1 & I4) | 5 GS 1,000 to 4,999 kW (I2) | 6 Large Use (I3) | 7 Street Light | 8 Sentinel Lights | 9 USL |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **CP Sanity Check** | Pass | Pass | Pass | Check 4CP and 12CP | Pass | Pass | Pass | Pass |
| **CO-INCIDENT PEAK** | | | | | | | | | | |
| **1 CP** | | | | | | | | | | |
| Transformation CP | TCP1 | 196,337 | 106,822 | 19,569 | 53,567 | 8,336 | 6,418 | 1,045 | 6 | 575 |
| Bulk Delivery CP | BCP1 | 196,337 | 106,822 | 19,569 | 53,567 | 8,336 | 6,418 | 1,045 | 6 | 575 |
| Total Sytem CP | DCP1 | 196,337 | 106,822 | 19,569 | 53,567 | 8,336 | 6,418 | 1,045 | 6 | 575 |
| **4 CP** | | | | | | | | | | |
| Transformation CP | TCP4 | 753,733 | 410,802 | 72,532 | 207,269 | 39,054 | 19,148 | 3,168 | 17 | 1,743 |
| Bulk Delivery CP | BCP4 | 753,733 | 410,802 | 72,532 | 207,269 | 39,054 | 19,148 | 3,168 | 17 | 1,743 |
| Total Sytem CP | DCP4 | 753,733 | 410,802 | 72,532 | 207,269 | 39,054 | 19,148 | 3,168 | 17 | 1,743 |
| **12 CP** | | | | | | | | | | |
| Transformation CP | TCP12 | 2,043,829 | 1,082,842 | 203,844 | 567,515 | 117,240 | 61,337 | 7,104 | 38 | 3,909 |
| Bulk Delivery CP | BCP12 | 2,043,829 | 1,082,842 | 203,844 | 567,515 | 117,240 | 61,337 | 7,104 | 38 | 3,909 |
| Total Sytem CP | DCP12 | 2,043,829 | 1,082,842 | 203,844 | 567,515 | 117,240 | 61,337 | 7,104 | 38 | 3,909 |
| **NON CO_INCIDENT PEAK** | | | | | | | | | | |
| | | **NCP Sanity Check** | Pass | Pass | Pass | Pass | Pass | Pass | Pass | Pass |
| **1 NCP** | | | | | | | | | | |
| Classification NCP from Load Data Provider | DNCP1 | 219,744 | 113,882 | 23,981 | 60,637 | 12,676 | 6,905 | 1,069 | 6 | 588 |
| Primary NCP | PNCP1 | 219,744 | 113,882 | 23,981 | 60,637 | 12,676 | 6,905 | 1,069 | 6 | 588 |
| Line Transformer NCP | LTNCP1 | 199,750 | 113,882 | 23,981 | 58,485 | 1,740 | - | 1,069 | 6 | 588 |
| Secondary NCP | SNCP1 | 200,764 | 113,881.63 | 23,975.52 | 59,504.51 | 1,739.83 | - | 1,069 | 6 | 588 |
| **4 NCP** | | | | | | | | | | |
| Classification NCP from Load Data Provider | DNCP4 | 827,971 | 429,052 | 94,714 | 221,606 | 48,630 | 27,355 | 4,252 | 23 | 2,339 |
| Primary NCP | PNCP4 | 827,971 | 429,052 | 94,714 | 221,606 | 48,630 | 27,355 | 4,252 | 23 | 2,339 |
| Line Transformer NCP | LTNCP4 | 750,794 | 429,052.47 | 94,713.50 | 213,739.77 | 6,674.74 | - | 4,252 | 23 | 2,339 |
| Secondary NCP | SNCP4 | 754,499 | 429,052.47 | 94,691.32 | 217,465.98 | 6,674.74 | - | 4,252 | 23 | 2,339 |
| **12 NCP** | | | | | | | | | | |
| Classification NCP from Load Data Provider | DNCP12 | 2,251,341 | 1,148,157 | 255,834 | 611,928 | 135,163 | 80,541 | 12,676 | 68 | 6,974 |
| Primary NCP | PNCP12 | 2,251,341 | 1,148,157 | 255,834 | 611,928 | 135,163 | 80,541 | 12,676 | 68 | 6,974 |
| Line Transformer NCP | LTNCP12 | 2,032,467 | 1,148,156.95 | 255,834.43 | 590,206.51 | 18,551.72 | - | 12,676 | 68 | 6,974 |
| Secondary NCP | SNCP12 | 2,042,696 | 1,148,156.95 | 255,774.51 | 600,495.82 | 18,551.72 | - | 12,676 | 68 | 6,974 |

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Ontario Energy Board

# 2021 Cost Allocation Model

EB-2020-0048

**Sheet O1 Revenue to Cost Summary Worksheet - For May 31 filing**

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

Class Revenue, Cost Analysis, and Return on Rate Base

| | | | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Rate Base Assets | | Total | Residential | GS <50 | GS 50 to 999 kW (I1 & I4) | GS 1,000 to 4,999 kW (I2) | Large Use (I3) | Street Light | Sentinel Lights | USL |
| crev | Distribution Revenue at Existing Rates | $25,918,610 | $16,634,415 | $3,168,984 | $4,454,629 | $555,750 | $259,438 | $777,096 | $2,216 | $66,082 |
| mi | Miscellaneous Revenue (mi) | $1,299,981 | $930,934 | $123,475 | $157,083 | $23,482 | $9,544 | $52,238 | $125 | $3,099 |
| | | Miscellaneous Revenue Input equals Output | | | | | | | | |
| | Total Revenue at Existing Rates | $27,218,590 | $17,565,350 | $3,292,459 | $4,611,711 | $579,233 | $268,982 | $829,334 | $2,341 | $69,181 |
| | Factor required to recover deficiency (1 + D) | 1.0552 | | | | | | | | |
| | Distribution Revenue at Status Quo Rates | $27,350,082 | $17,553,126 | $3,344,006 | $4,700,655 | $586,444 | $273,766 | $820,015 | $2,338 | $69,731 |
| | Miscellaneous Revenue (mi) | $1,299,981 | $930,934 | $123,475 | $157,083 | $23,482 | $9,544 | $52,238 | $125 | $3,099 |
| | Total Revenue at Status Quo Rates | $28,650,063 | $18,484,060 | $3,467,480 | $4,857,738 | $609,926 | $283,311 | $872,253 | $2,463 | $72,831 |
| | **Expenses** | | | | | | | | | |
| di | Distribution Costs (di) | $2,499,205 | $1,503,207 | $263,621 | $536,036 | $73,694 | $37,355 | $77,167 | $263 | $7,862 |
| cu | Customer Related Costs (cu) | $3,242,329 | $2,734,874 | $332,344 | $160,723 | $5,952 | $1,552 | $86 | $54 | $6,744 |
| ad | General and Administration (ad) | $8,552,486 | $6,252,276 | $890,720 | $1,082,917 | $124,107 | $60,532 | $119,480 | $488 | $21,965 |
| dep | Depreciation and Amortization (dep) | $6,216,997 | $3,824,604 | $717,438 | $1,315,645 | $149,962 | $71,273 | $120,371 | $492 | $17,011 |
| INPUT | PILs (INPUT) | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| INT | Interest | $3,113,225 | $1,866,303 | $347,272 | $702,555 | $81,558 | $38,955 | $67,031 | $268 | $9,282 |
| | Total Expenses | $23,624,242 | $16,181,465 | $2,551,395 | $3,797,876 | $435,273 | $209,667 | $384,136 | $1,565 | $62,865 |
| | Direct Allocation | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| NI | Allocated Net Income (NI) | $5,025,821 | $3,012,859 | $560,616 | $1,134,166 | $131,663 | $62,887 | $108,212 | $433 | $14,985 |
| | Revenue Requirement (includes NI) | $28,650,063 | $19,194,323 | $3,112,011 | $4,932,042 | $566,937 | $272,554 | $492,347 | $1,998 | $77,850 |
| | | Revenue Requirement Input equals Output | | | | | | | | |
| | **Rate Base Calculation** | | | | | | | | | |
| | **Net Assets** | | | | | | | | | |
| dp | Distribution Plant - Gross | $264,101,465 | $160,705,813 | $29,523,859 | $57,700,938 | $6,447,141 | $3,044,459 | $5,870,405 | $23,804 | $785,045 |
| gp | General Plant - Gross | $27,859,197 | $16,766,675 | $3,064,705 | $6,178,259 | $730,887 | $352,161 | $679,483 | $2,570 | $84,456 |
| accum dep | Accumulated Depreciation | ($102,083,682) | ($63,073,694) | ($11,781,660) | ($21,975,515) | ($2,194,622) | ($989,715) | ($1,768,689) | ($8,543) | ($291,244) |
| co | Capital Contribution | ($52,573,338) | ($32,065,163) | ($5,506,332) | ($10,957,330) | ($1,386,037) | ($687,595) | ($1,796,559) | ($6,938) | ($168,384) |
| | Total Net Plant | $137,303,642 | $82,333,632 | $15,300,572 | $30,946,352 | $3,597,369 | $1,719,310 | $2,984,640 | $11,892 | $409,875 |
| | Directly Allocated Net Fixed Assets | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| COP | Cost of Power (COP) | $121,274,382 | $56,463,932 | $14,569,147 | $36,409,296 | $8,638,941 | $4,392,464 | $514,686 | $2,752 | $283,164 |
| | OM&A Expenses | $14,294,020 | $10,490,357 | $1,486,685 | $1,779,676 | $203,753 | $99,439 | $196,734 | $805 | $36,572 |
| | Directly Allocated Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | *Subtotal* | *$135,568,402* | *$66,954,289* | *$16,055,832* | *$38,188,972* | *$8,842,694* | *$4,491,903* | *$711,419* | *$3,557* | *$319,736* |
| | Working Capital | $10,167,630 | $5,021,572 | $1,204,187 | $2,864,173 | $663,202 | $336,893 | $53,356 | $267 | $23,980 |
| | Total Rate Base | $147,471,272 | $87,355,203 | $16,504,759 | $33,810,525 | $4,260,571 | $2,056,203 | $3,037,996 | $12,159 | $433,855 |
| | | Rate Base Input equals Output | | | | | | | | |
| | Equity Component of Rate Base | $58,988,509 | $34,942,081 | $6,601,904 | $13,524,210 | $1,704,228 | $822,481 | $1,215,199 | $4,864 | $173,542 |
| | Net Income on Allocated Assets | $5,025,821 | $2,302,596 | $916,085 | $1,059,863 | $174,653 | $73,644 | $488,117 | $898 | $9,965 |
| | Net Income on Direct Allocation Assets | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | Net Income | $5,025,821 | $2,302,596 | $916,085 | $1,059,863 | $174,653 | $73,644 | $488,117 | $898 | $9,965 |
| | **RATIOS ANALYSIS** | | | | | | | | | |
| | REVENUE TO EXPENSES STATUS QUO% | 100.00% | 96.30% | 111.42% | 98.49% | 107.58% | 103.95% | 177.16% | 123.27% | 93.55% |
| | EXISTING REVENUE MINUS ALLOCATED COSTS | ($1,431,472) | ($1,628,974) | 180,448 | ($320,330) | $12,296 | ($3,572) | $336,987 | $343 | ($8,669) |
| | | Deficiency Input equals Output | | | | | | | | |
| | STATUS QUO REVENUE MINUS ALLOCATED COSTS | $0 | ($710,263) | 355,469 | ($74,304) | $42,990 | $10,757 | $379,905 | $465 | ($5,019) |
| | RETURN ON EQUITY COMPONENT OF RATE BASE | 8.52% | 6.59% | 13.88% | 7.84% | 10.25% | 8.95% | 40.17% | 18.47% | 5.74% |

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Ontario Energy Board

# 2021 Cost Allocation Model

**EB-2020-0048**
**Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet - For May 31 filing**

Output sheet showing minimum and maximum level for
Monthly Fixed Charge

### Summary

| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| | Residential | GS <50 | GS 50 to 999 kW (I1 & I4) | GS 1,000 to 4,999 kW (I2) | Large Use (I3) | Street Light | Sentinel Lights | USL |
| Customer Unit Cost per month - Avoided Cost | $4.08 | $8.46 | $29.59 | $35.31 | $260.53 | $0.00 | $0.19 | $1.88 |
| Customer Unit Cost per month - Directly Related | $8.94 | $17.62 | $66.16 | $96.74 | $470.22 | $0.00 | $0.48 | $4.70 |
| Customer Unit Cost per month - Minimum System with PLCC Adjustment | $16.03 | $24.05 | $76.57 | $101.93 | $479.34 | $2.52 | $7.59 | $10.22 |
| Existing Approved Fixed Charge | $24.67 | $17.39 | $58.43 | $1,227.87 | $9,343.15 | $2.11 | $5.88 | $4.87 |

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