
# Exhibit 7

## Cost Allocation

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# 2.7.1 Cost Allocation Study Requirements

Cost allocation is the process by which the OEB would like LDCs to determine the allocation of revenue requirements between rate classes that is used to determine the relative rates. There are benefits to this approach as it is an attempt to set rates based on an impartial analysis of the underlying data. However, there are also drawbacks with this approach that need to be recognized:

- It is not the only approach. For instance, many US jurisdictions set their rate allocations based on an economic development approach rather than cost allocation. This leads to higher rates for residential customers and lower rates for industrial and commercial customers.
- The process of allocating costs is, by definition, one that involves a large number of assumptions and estimates in terms of how individual costs are allocated between rate classes. The OEB has recognized this with their band of acceptable revenue to cost ratios.
- Whether cost allocation is "fair" as compared to the continuation of existing rate structures is also debatable as there will be classes that benefit and classes that are penalized in any change in the allocation.
- NOTL Hydro's own situation with a potential Large Use customer whose demand could range from 0 to 50 MW with a corresponding range of kwh consumption also complicates matters.

NOTL Hydro has structured its rate setting using the OEB cost allocation methodology but also trying to align it in the best interests of its customers.

## 2.7.1.1 Load Profiles and Demand Allocators

NOTL Hydro has prepared and filed its cost allocation study consistent with its understanding of the Directions and Policies in the Board's reports of November 28, 2007 Application of Cost Allocation for Electricity Distributors, and March 31, 2011 Review of Electricity Distribution Cost Allocation Policy (EB-2010-0219) (the "Cost Allocation Reports") and all subsequent updates.

NOTL Hydro ran the cost allocation model with two different load profiles. The first was the load profile used in both the 2014 and 2019 Cost of Service applications based on Hydro One 2004 data updated with the 2024 load forecast. The results of this load profile were used in determining the proposed results of the cost allocation process. While the OEB is encouraging LDCs to

develop their own load profiles, NOTL Hydro understands that LDCs are also still being requested to provide the results based on this historical load profile as it has the benefit of consistency over multiple years and across multiple LDCs.

The second load profile was internally developed using the model developed by Wellington North and the USF group. The results using this model are provided further below in section 7.4. Unfortunately, the first year for which the complete smart meter data needed for this profile was ready was 2021. Due to the pandemic, 2021 was not a representative year for determining cost allocations. Due to timing constraints, 2022 data was not available in time to complete the model to be used for this filling.

## Weighting Factors

These weightings are based on a review of time and costs incurred in servicing its customer classes; they are discussed further below:

**Table 7.1: Weighting Factors**

**Sheet I5.2 Weighting Factors Worksheet - First Draft**

| | 1 | 2 | 3 | 4 | 6 | 7 | 9 |
|---|---|---|---|---|---|---|---|
| | Residential | GS <50 | GS>50-Regular | GS> 50-TOU | Large Use >5MW | Street Light | Unmetered Scattered Load |
| Insert Weighting Factor for Services Account 1855 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Insert Weighting Factor for Billing and Collecting | 1.0 | 1.0 | 8.0 | - | 8.0 | 7.8 | 0.9 |

## Proposed Services Weighting Factors

Account 1855 includes the installed cost of overhead and underground conductors leading from a point where wires leave the last pole of the overhead system or the transformers or manhole, or the top of the pole of the distribution line, to the point of connection with the customer's electrical panel. NOTL Hydro services all Residential accounts as well as GS<50kW and GS 50kW - 4,999kW accounts with a 200 amp or less service.

**Residential**:

The weighting factor is set to "1" as per the instructions contained within the Cost Allocation model.

**General Service less than 50 kW:**

The weighting factor "0.5" is proposed on the basis of the ratio of customers in this class with a 200 amp or less service. This factor is lower than the 0.8 factor used in the 2019 Cost of Service as more customers in this class now have services of 400 amps or greater.

**General Service 50kW – 4,999kW:**

The weighting factor "0.0" is proposed as almost none of the customers in this class have a 200 amp or less service. This factor was 0.1 in 2019.

**Large User:**

The weighting factor of "0" is proposed because the customer is responsible for the cost of services.

**Street Lighting:**

A weighting factor of "0" is proposed for this customer class as the services are privately owned by the customers.

**Unmetered Scattered Load:**

A weighting factor of "0" is proposed for this customer class as the services are privately owned by the customers.

**Proposed Billing and Collecting Weighting Factors**

NOTL Hydro undertook a detailed review of expenses in accounts 5315, 5320 and 5340 to determine the costs associated with customers in each rate class.

**Residential**:

The weighting factor is set at "1" as per Cost Allocation instruction sheet.

**General Service less than 50 kW:**

The weighting factor "1" is proposed because costs associated with billing this class are similar to the Residential class. This is consistent with 2019.

**General Service 50kW – 4,999kW:**

The weighting factor "8" is proposed as compared to "0.9" in 2019. The weighting is significantly higher due to the incremental costs of the Utilismart smart meter reading and settlement software.

**Large User:**

The weighting factor "8" is proposed as compared to "0.9" in 2019. The weighting is significantly higher due to the incremental costs of the Utilismart smart meter reading and settlement software.

**Street Lighting:**

The weighting factor "7.8" is proposed as compared to "0.9" in 2019. The weighting is significantly higher due to the incremental costs of the Utilismart smart meter reading and settlement software.

**Unmetered Scattered Load:**

The "0.9" is proposed for this customer class which is similar to the "0.8" in 2019.

The data used in the cost allocation model reflects the findings of the 2004 hour by hour load data being scaled to be consistent with NOTL Hydro's 2024 load forecast. No historical information was available for the new Large User rate class and therefore NOTL Hydro utilized load profile estimates provided by this customer to estimate the demand data at 5,000kW. The scaling factor used for each rate class is summarized in the table below:

**Table 7.2: Summary of Scaling Factors 2004 to 2019.**

| Rate Class | 2024 Forecast (kwh) | 2004 Forecast (kwh) | Scaling Factor |
|---|---|---|---|
| Residential | 79,654,824 | 60,076,821 | 1.33 |
| GS < 50 kW | 45,316,433 | 35,538,971 | 1.28 |
| GS > 50 kW | 86,743,031 | 84,045,518 | 1.03 |
| Large User | 39,420,000 | 0 | 1 |
| Street Lighting | 563,345 | 971,353 | 0.58 |
| Sentinel Lighting | 0 | 163,176 | -1 |
| Unmetered Load | 379,083 | 358,487 | 1.06 |

## 2.7.1.2 Specific Customer Classes

### Large General Service and Large Use Classes

The treatment of the Transformer Ownership Allowance has been kept consistent in the current version of the cost allocation model.

### Embedded Distributor Class

NOTL Hydro does not host any embedded distributors.

### Unmetered Loads (including Street Lighting)

NOTL Hydro changed the “street light allocation factor” to allocate cost to the street lighting rate class in its 2019 Cost of Service application so has kept the factor consistent in this application.

### MicroFIT Class

NOTL Hydro was approved to increase the MicroFIT rate from $5.40 to $10.00 per month in 2019. The increase was due to the increase in costs related to meter reading and billing for MicroFIT customers, including the implementation of Utilismart Settlement manager to allow for automated billing and improved 1598 reporting with regards to embedded generation. The cost of these services is $8.00 per meter per month. The additional $2.00 is deemed to cover labour and other costs associated with MicroFIT customers. NOTL Hydro is proposing to maintain the $10.00 charge per month.

### Standby Rates

NOTL Hydro had a Standby Power Service Classification approved in its 2019 Cost of Service application. NOTL Hydro is proposing to maintain this customer class. The new potential Large Use customer will have a load approved by the IESO to be up to 50 MW and would like to have a higher load. The customer is also situated in a location that has access to large gas lines. The risk of load displacement is therefore very high; especially as the customer is a participant in the Industrial Conservation Initiative. The standby rate is needed to protect other NOTL Hydro customers.

## New Customer Class

NOTL Hydro is not proposing a new customer class.

## Eliminated Customer Class(es)

NOTL Hydro is not proposing to eliminate any customer class.

# 2.7.2 Class Revenue Requirements

The table below provides the revenue to cost ratios calculated in worksheet "O1 – Revenue to Cost" of the Cost Allocation model:

**Table 7.3: Revenue to Cost of the Cost Allocation Model (Worksheet O1)**

| | Total | 1 Residential | 2 GS <50 | 3 GS>50-Regular | 4 GS> 50-TOU | 6 Large Use >5MW | 7 Street Light | 9 Unmetered Scattered Load |
|---|---|---|---|---|---|---|---|---|
| Distribution Revenue at Existing Rates | $6,046,134 | $3,224,031 | $1,380,423 | $1,032,781 | $0 | $171,714 | $218,041 | $19,144 |
| Miscellaneous Revenue (mi) | $608,681 | $392,386 | $108,009 | $77,698 | $0 | $9,988 | $18,646 | $1,953 |
| Miscellaneous Revenue Input equals Output | | | | | | | | |
| **Total Revenue at Existing Rates** | $6,654,815 | $3,616,417 | $1,488,432 | $1,110,479 | $0 | $181,702 | $236,687 | $21,097 |
| Factor required to recover deficiency (1 + D) | 1.1124 | | | | | | | |
| Distribution Revenue at Status Quo Rates | $6,725,757 | $3,586,432 | $1,535,591 | $1,148,872 | $0 | $191,016 | $242,550 | $21,296 |
| Miscellaneous Revenue (mi) | $608,681 | $392,386 | $108,009 | $77,698 | $0 | $9,988 | $18,646 | $1,953 |
| **Total Revenue at Status Quo Rates** | $7,334,438 | $3,978,818 | $1,643,600 | $1,226,570 | $0 | $201,004 | $261,196 | $23,249 |
| **Expenses** | | | | | | | | |
| Distribution Costs (di) | $1,082,336 | $684,411 | $207,256 | $135,339 | $0 | $26,555 | $26,046 | $2,730 |
| Customer Related Costs (cu) | $1,024,040 | $732,289 | $142,345 | $113,354 | $0 | $836 | $31,414 | $3,802 |
| General and Administration (ad) | $1,508,892 | $1,002,880 | $255,584 | $183,288 | $0 | $21,594 | $40,930 | $4,616 |
| Depreciation and Amortization (dep) | $1,417,700 | $786,250 | $313,515 | $240,545 | $0 | $43,740 | $30,578 | $3,072 |
| PILs (INPUT) | $140,029 | $72,397 | $32,302 | $26,098 | $0 | $5,490 | $3,410 | $332 |
| Interest | $830,536 | $429,402 | $191,587 | $154,789 | $0 | $32,565 | $20,223 | $1,969 |
| **Total Expenses** | $6,003,533 | $3,707,630 | $1,142,588 | $853,413 | $0 | $130,780 | $152,600 | $16,521 |
| **Direct Allocation** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Allocated Net Income (NI) | $1,330,905 | $688,102 | $307,012 | $248,044 | $0 | $52,184 | $32,407 | $3,156 |
| **Revenue Requirement (includes NI)** | $7,334,438 | $4,395,732 | $1,449,599 | $1,101,458 | $0 | $182,964 | $185,007 | $19,677 |
| Revenue Requirement Input equals Output | | | | | | | | |
| **Rate Base Calculation** | | | | | | | | |
| Net Assets | | | | | | | | |
| Distribution Plant - Gross | $70,923,736 | $39,949,303 | $15,398,301 | $11,458,409 | $0 | $1,993,105 | $1,948,473 | $176,145 |
| General Plant - Gross | $9,732,551 | $5,399,826 | $2,129,875 | $1,626,869 | $0 | $310,207 | $242,541 | $23,234 |
| Accumulated Depreciation | ($31,669,176) | ($17,704,232) | ($6,948,791) | ($5,131,645) | $0 | ($841,640) | ($960,827) | ($82,042) |
| Capital Contribution | ($15,801,321) | ($10,372,218) | ($2,960,142) | ($1,827,166) | $0 | ($182,805) | ($420,395) | ($38,596) |
| **Total Net Plant** | $33,185,789 | $17,272,679 | $7,619,243 | $6,126,468 | $0 | $1,278,866 | $809,792 | $78,742 |
| **Directly Allocated Net Fixed Assets** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Cost of Power (COP) | $27,876,388 | $8,835,328 | $5,010,085 | $9,575,429 | $0 | $4,351,513 | $62,187 | $41,846 |
| OM&A Expenses | $3,615,268 | $2,419,580 | $605,185 | $431,982 | $0 | $48,985 | $98,390 | $11,148 |
| Directly Allocated Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| *Subtotal* | *$31,491,657* | *$11,254,908* | *$5,615,269* | *$10,007,411* | *$0* | *$4,400,498* | *$160,577* | *$52,994* |
| **Working Capital** | $2,361,874 | $844,118 | $421,145 | $750,556 | $0 | $330,037 | $12,043 | $3,975 |
| **Total Rate Base** | $35,547,664 | $18,116,797 | $8,040,388 | $6,877,024 | $0 | $1,608,903 | $821,835 | $82,716 |
| Rate Base Input equals Output | | | | | | | | |
| **Equity Component of Rate Base** | $14,219,065 | $7,246,719 | $3,216,155 | $2,750,809 | $0 | $643,561 | $328,734 | $33,086 |
| **Net Income on Allocated Assets** | $1,330,905 | $271,188 | $501,012 | $373,157 | $0 | $70,224 | $108,595 | $6,728 |
| **Net Income on Direct Allocation Assets** | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| **Net Income** | $1,330,905 | $271,188 | $501,012 | $373,157 | $0 | $70,224 | $108,595 | $6,728 |
| **RATIOS ANALYSIS** | | | | | | | | |
| **REVENUE TO EXPENSES STATUS QUO%** | 100.00% | 90.52% | 113.38% | 111.36% | 0.00% | 109.86% | 141.18% | 118.15% |
| EXISTING REVENUE MINUS ALLOCATED COSTS | ($679,623) | ($779,315) | $38,833 | $9,021 | $0 | ($1,261) | $51,680 | $1,420 |
| Deficiency Input Does Not Equal Output | | | | | | | | |
| STATUS QUO REVENUE MINUS ALLOCATED COSTS | ($0) | ($416,914) | $194,001 | $125,112 | $0 | $18,040 | $76,189 | $3,572 |
| RETURN ON EQUITY COMPONENT OF RATE BASE | 9.36% | 3.74% | 15.58% | 13.57% | 0.00% | 10.91% | 33.03% | 20.33% |

NOTL Hydro recognizes that the Deficiency Input Does Not Equal Output. This is due to the treatment of PILs. In the Revenue Requirement Work Form (RRWF), the PILS amount is zero

based on the income at current rates and the adjustments to arrive a taxable income, the Cost Allocation model does not include the adjustments. The deficiency on tab 8 on the RRWF is $539,594 while the Cost Allocation model calculates the deficiency on tab O1 as $679,623, a difference of $140,029 which is equivalent to the grossed up PILs amount.

The table below shows the revenue allocation based on the cost allocation study, based on existing rates proportionately increased, and the proposed allocation based on existing rates proportionately increased and adjusted for any cost allocation underages or overages. NOTL Hydro is not proposing any adjustments.

**Table 7.4: Three Revenue Scenarios by Rate Class**

| Revenue Reallocation - Service Revenue Requirement | | | | | | |
|---|---|---|---|---|---|---|
| Customer Class Name | Proposed Base Revenue Requirement % | | | | | |
| | Cost Allocation Results | | Existing Rates | | Proposed Allocation | |
| Residential | 59.52% | 4,003,346 | 53.32% | 3,586,432 | 53.32% | 3,586,432 |
| General Service < 50 kW | 19.95% | 1,341,590 | 22.83% | 1,535,591 | 22.83% | 1,535,591 |
| General Service > 50 kW | 15.22% | 1,023,760 | 17.08% | 1,148,872 | 17.08% | 1,148,872 |
| Large User | 2.57% | 172,975 | 2.84% | 191,016 | 2.84% | 191,016 |
| Unmetered Scattered Load | 0.26% | 17,724 | 0.32% | 21,296 | 0.32% | 21,296 |
| Street Lighting | 2.47% | 166,361 | 3.61% | 242,550 | 3.61% | 242,550 |
| **TOTAL** | **100.00%** | **6,725,757** | **100.00%** | **6,725,757** | **100.00%** | **6,725,757** |

# 2.7.3 Revenue-to-Cost Ratios

The table below shows the NOTL Hydro's proposed Revenue to Cost reallocation based on an analysis of the proposed results from the Cost Allocation Study versus the Board imposed floor and ceiling ranges:

**Table 7.5: Proposed Revenue to Cost Ratio Allocation**

| Revenue to Cost Ratio Allocation | | | | Target Range | |
|---|---|---|---|---|---|
| Customer Class Name | Calculated R/C Ratio | Proposed R/C Ratio | Variance | Floor | Celiling |
| Residential | 0.9052 | 0.9052 | 0.00 | 0.85 | 1.15 |
| General Service < 50 kW | 1.1338 | 1.1338 | 0.00 | 0.80 | 1.20 |
| General Service > 50 kW | 1.1136 | 1.1136 | 0.00 | 0.80 | 1.20 |
| Large User | 1.0986 | 1.0986 | 0.00 | 0.80 | 1.20 |
| Unmetered Scattered Load | 1.1815 | 1.1815 | 0.00 | 0.80 | 1.20 |
| Street Lighting | 1.4118 | 1.4118 | 0.00 | 0.80 | 1.20 |

The revenue to cost ratios for all customer classes except street lighting are within the OEB approved ranges. No rebalancing is therefore required or proposed for these classes.

Based on the filing requirements, NOTL Hydro should be rebalancing the streetlighting cost allocation to bring their allocation within the target range. NOTL Hydro is proposing not to rebalance streetlights for the following reasons:

1. If the cost allocation to streetlights is reduced the allocation to the residential class will increase by the same amount. Streetlights are owned by the Town of Niagara-on-the-Lake. The Town of Niagara-on-the-Lake owns 100% of NOTL Hydro so effectively the residential customers own 100% of NOTL Hydro. All we would be doing is adjusting costs between the Town and their ratepayers who also pay the costs of the Town. It is circular so making this rebalancing has no effective impact.
2. Increasing residential rates causes economic hardship to a segment of the population. Streetlight rates do not.
3. No rebalancing leaves the increase in distribution rates consistent across all rate classes. This is fair.
4. Streetlight rates have already fallen considerably over the last 5 years while residential rates have increased moderately. NOTL Hydro revenue from streetlights has fallen 25% in that 5-year period as the variable rate has gone from $30.6934 to 1.9144, a decline of 94%. While some of this is due to the conversion to LED lighting, largely paid for with CDM contributions, some of this is also due to the rebalancing in 2019.

## 2.7.4 NOTL Hydro Load Profile Results

The table below shows the customer class allocation using the three revenue scenarios as well as the revenue to cost ratio using the NOTL Hydro developed load profile and 2021 data. The allocations to the residential class are much higher than in the previous study while the allocations to the two general service classes are much lower. In fact, the GS < 50 kW class falls outside the accepted range.

NOTL Hydro believes these results are distorted by the use of 2021 data due to the impact of the pandemic. NOTL Hydro notes that residential consumption was 7.4% higher in January of 2021 as compared to January of 2020 (pre-pandemic) while GS < 50 kW consumption was down 9.7% and GS > 50 kW demand was down 14.7%. Use of this data will lead to cost allocations that result in inappropriate rebalancing.

## Table 7.6: NOTL Hydro Load Profile Results

| Revenue Reallocation - Service Revenue Requirement | | | | | |
|---|---|---|---|---|---|
| Customer Class Name | Proposed Base Revenue Requirement % | | | | |
| | Cost Allocation Results | | Existing Rates | Proposed Allocation | |
| Residential | 59.52% | 4,003,346 | 53.32% | 53.32% | 3,586,432 |
| General Service < 50 kW | 19.95% | 1,341,590 | 22.83% | 22.83% | 1,535,591 |
| General Service > 50 kW | 15.22% | 1,023,760 | 17.08% | 17.08% | 1,148,872 |
| Large User | 2.57% | 172,975 | 2.84% | 2.84% | 191,016 |
| Unmetered Scattered Load | 0.26% | 17,724 | 0.32% | 0.32% | 21,296 |
| Street Lighting | 2.47% | 166,361 | 3.61% | 3.61% | 242,550 |
| **TOTAL** | **100.00%** | **6,725,757** | **100.00%** | **100.00%** | **6,725,757** |

| Revenue to Cost Ratio Allocation | | | | Target Range | |
|---|---|---|---|---|---|
| Customer Class Name | Calculated R/C Ratio | Proposed R/C Ratio | Variance | Floor | Celiling |
| Residential | 0.9052 | 0.9052 | 0.00 | 0.85 | 1.15 |
| General Service < 50 kW | 1.1338 | 1.1338 | 0.00 | 0.80 | 1.20 |
| General Service > 50 kW | 1.1136 | 1.1136 | 0.00 | 0.80 | 1.20 |
| Large User | 1.0986 | 1.0986 | 0.00 | 0.80 | 1.20 |
| Unmetered Scattered Load | 1.1815 | 1.1815 | 0.00 | 0.80 | 1.20 |
| Street Lighting | 1.4118 | 1.4118 | 0.00 | 0.80 | 1.20 |

# Appendix

List of Appendices

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|---|---|
| **Appendix 7A** | NOTLH_2024_Cost_Allocation_Model_ )OEB 2023_Model) – filed in excel |