

ONTARIO ENERGY BOARD

IN THE MATTER the *Ontario Energy Board Act, 1998*, S.O.
1998, c. 15 (Schedule B);

AND IN THE MATTER OF an application to the Ontario
Energy Board by Energy+ Inc. pursuant to Section 78 of the
Ontario Energy Board Act, 1998 for approval of its proposed
distribution rates and other charges effective January 1, 2019.

CONTAINS CONFIDENTIAL INFORMATION

Responses of Toyota Motor Manufacturing Canada Inc. (“TMMC”)

to

Interrogatories (Round #2, Updated Evidence)

from

Vulnerable Energy Consumers Coalition (“VECC”)

March 1, 2019

1.0 Reference: TMMC Updated Evidence, p. 7 (lines 8-10)

Preamble: The updated evidence states: "After further consideration, I now believe that the One Large Use Class/Partial Direct Assignment study and the rate designs derived from that study would not be consistent with the Board's current practice and policy."

1.1 Please explain why Mr. Pollock does not believe the One Large Use Class/Partial Direct Assignment study is consistent with the Board's current practice and policy".

Response:

1.1 The Board has stated that the primary criterion in developing a cost allocation methodology is to follow sound cost causality. While the One Large Use Class/Partial Direct Assignment study and the rate design derived therefrom follow cost causation, Mr. Pollock does not believe that the Board would accept a two-part Volumetric rate for the reasons stated in TMMC's Updated Evidence (pages 6-10 and 19-20).

The rate design derived from the One Large Use Class/Partial Direct Assignment study also does not comport with the Board's rate design policy as applied to Large Use customers, which generally requires a two-part structure (*i.e.*, a Service Charge and a Volumetric rate). The One Large Use Class/Partial Direct Assignment structure limits the ability to develop a cost-based rate that recognizes TMMC's unique circumstances that result in a lower per unit cost to serve.

- 2.0 Reference:** TMMC Updated Evidence, p. 9 (line 19) to p. 10 (line 2)
TMMC Updated Evidence, p. 13 (line 13)
TMMC Updated Evidence, p. 22 (lines 6-16)
TMMC Updated Evidence, Schedule JP-11, Sheet O2

Preamble: At page 22 the updated evidence states – “I would observe that applying the OEB’s guidance would result in a maximum monthly fixed charge for TMMC of approximately \$140 per month based on the Two Large Use Classes/Direct Assignment study shown in Schedule JP-11. By contrast, the maximum monthly fixed charge for the other Large Use customer would be \$878 per month.”

- 2.1 What are the major reasons of the difference in the maximum monthly fixed charges of the two Large Use classes?
- 2.2 Please review the calculation of the maximum fixed charges as set out in Sheet O2 and confirm whether the value for TMMC includes the costs associated with the metering equipment that was directly assigned to TMMC (per page 13). If not, how would including these costs impact the value for the maximum monthly fixed charge?
- 2.3 A review of Sheet O2 indicates that while meter expense (USOA 5065) has been included in the maximum monthly fixed charge for the other Large Use customer, there are no meter expenses included for TMMC. Please confirm if this is the case and whether, in Mr. Pollock’s view, this result is appropriate.

Responses:

- 2.1 The principle reason is that the discrete cost of the meters that are used to serve only TMMC are known and have, accordingly, been directly assigned to TMMC in accordance with OEB policy.
- 2.2 Confirmed. The directly assigned cost of the meters that serve only TMMC was inadvertently omitted in the calculation of TMMC’s maximum monthly fixed charge. If these costs had been included, the maximum the per-unit customer-related cost would be \$244 per month rather than \$140, or 72% less than the corresponding charge for the other Large Use customer. The workpapers to Schedule JP-11 Revised corrects this omission.
- 2.3 The \$244 per month amount quantified in response to Question 2.2 includes meter reading expense.

3.0 Reference: TMMC Updated Evidence, p. 9 (lines 11-14)

Preamble: The updated evidence states: "The presence of LDG means that TMMC would have different load characteristics than the other Large Use customer, which does not have LDG."

- 3.1 Are the results of the cost of service study (per JP-11) meant to represent the cost to serve: i) TMMC inclusive of the cost of Standby for its LDG or ii) TMMC excluding the cost of Standby for its LDG?
- 3.2 Were the load characteristics of the TMMC and the Other Large Use customer analyzed by TMMC or Mr. Pollock in order to assess whether there were differences (e.g. load factor, peak vs. off-peak usage etc.)? If yes, please provide the results of the analysis.

Responses:

- 3.1 Schedule JP-11 determines the cost of providing Supplementary Distribution service to TMMC.
- 3.2 Mr. Pollock did not specifically analyze the load characteristics of the other Large Use customer, other than with respect to differences in size and diversity as discussed on pages 21-23 of Mr. Pollock's original (September 27, 2018) evidence. Information about the other Large Use customer's load characteristics are not available to Mr. Pollock.

**4.0 Reference: TMMC Updated Evidence, p. 9 (line 5) to p. 10 (line 17)
TMMC Updated Evidence, p. 19 (line 9) to p. 20 (line 14)
2019 EnergyPlus Settlement Proposal, Tariff Schedule
Model, Tab 2.2**

Preamble: Energy+'s tariff schedule includes a description of each customer classification. The description for the current Large Use class is:

"General Service refers to the supply of electrical energy to business customers, to bulk-metered residential buildings and to combined residential and business or residential and agricultural buildings. Apartment buildings that are bulk metered will be billed at the appropriate General Service rate. This classification refers to an account whose average monthly peak demand is equal to or greater than, or is forecast to be equal to or greater than, 5,000 kW. Class A and Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service."

- 4.1 Assuming a new customer, with average monthly peak demand forecast to be equal to or greater than 5,000 kW requested service from EnergyPlus, what would be the determining factors in establishing which of the two Large Use classes proposed in the TMMC Updated evidence the customer would be assigned to?
- 4.2 Please provide the proposed wording that would be included in EnergyPlus' approved tariff schedule that would describe each of the two Large Use customer classifications proposed in the TMMC Updated Evidence.

Responses:

- 4.1 Please see TMMC's response to OEB Staff-TMMC-5(c).
- 4.2 No change would be needed to the current Large Use Service Classification. Draft tariff language for the second Large Use Service Classification would be as follows:

LARGE USE SERVICE CLASSIFICATION NO. 2

This classification refers to an account whose average monthly peak demand is equal to or greater than, or is forecast to be equal to or greater than 5,000 kW, where the customer operates load displacement generation, and delivery service is supplied from dedicated primary distribution feeders that do not serve other Energy+ customers.

However, because TMMC is unique in that the dedicated M24 and M30 feeders cannot be used serve any other customers, a separate Volumetric rate would have to implemented for each new customer added to the class to ensure there is no intra-class cross-subsidization.

**5.0 Reference: TMMC Updated Evidence, p. 17 (lines 5-6)
TMMC Updated Evidence, Appendix D-1, p. 47 (lines 4-7)**

Preamble: At page 17 the updated evidence states: "In allocating the primary poles, which are booked to USoA 1830-4, I removed Energy+'s LDG facility adjustment".

Appendix D-1 states: "The dedicated distribution feeders that serve TMMC were energized long before TMMC's LDG went into service on January 1, 2016. Prior to installing that facility, TMMC's peak demand was as high as ■ MW. Accordingly, the dedicated distribution feeders are already more than adequate to deliver TMMC's gross peak demand."

5.1 If the dedicated lines and the supporting poles were designed and costs incurred so as to support TMMC's load prior to the installation of the LDG facility, why would it not be appropriate to allocate the primary poles assuming TMMC has no LDG?

Response:

5.1 TMMC's Two Large Use Classes/Direct Assignment study appropriately allocates the costs of primary poles to TMMC based on TMMC's 4NCP demand excluding Energy+'s LDG adjustment because this study determines the cost of providing Supplementary Distribution service and these are the demands that reflect each class's Supplementary Distribution service requirements. It would not be appropriate to include an adjustment for TMMC's LDG because it would be inconsistent with the purpose of the study, which is to quantify the cost of providing Supplementary Distribution service. Further, it would improperly assume that outages of TMMC's LDG always occur 100% coincident with each of the 4NCP demands of the loads that utilize the primary poles supporting the M24 and M30 dedicated feeders.

With respect of the allocation of poles:

- TMMC's proposed Daily Volumetric Rate would allocate additional pole costs to the extent that TMMC actually takes Standby service; and
- The pole costs allocated to TMMC for its Supplementary Distribution service, only, already exceed the actual total costs of the specific poles that support Feeders M24 and M30 serving only TMMC. This was demonstrated by Energy+ in its Direct Assignment study. Specifically, this study would directly assign \$357,322¹ of primary pole investment to TMMC, whereas Schedule JP-11 allocates \$1,551,082² of primary pole investment to TMMC

Further, and in respect of the second point noted above, as a consequence of sharing poles with other customers, TMMC will assume more pole-related costs than it would have if the same poles were dedicated assets that served only TMMC. Hence, Mr. Pollock's proposed allocation of poles

¹ Energy+ Response to TMMC Technical Conference TMMC-IR-2d.

² Schedule JP-11, Schedule O4 Summary of Class & Account.

cannot be said to be unreasonable or insufficient from any perspective that incorporates considerations of cost causality, fairness, or costs of infrastructure duplication or bypass.

6.0 Reference: TMMC Updated Evidence, p. 13 (line13)

Preamble: The updated evidence states: "The metering equipment that is similarly dedicated to TMMC."

- 6.1 Do the other customers served by Energy+ also have dedicated metering equipment?
- 6.2 If the answer were yes, why would it be appropriate to directly assign meter equipment costs in the case of TMMC but not the other customer classes?

Responses:

- 6.1 In Mr. Pollock's experience, with the exception of very large customers, such as TMMC, it is unlikely that the cost of metering equipment used to serve individual customers would be specifically identified in a utility's accounting system. Without this information, it is not possible to directly assign such costs.
- 6.2 Not applicable.

7.0 Reference: TMMC Updated Evidence, page 16 (lines 3-6)
Energy+ Application, Exhibit 1, p. 177-178
TMMC's Response to VECC 11.2
Technical Conference Transcript, page 102

Preamble: The updated evidence states: "Shared distribution facilities are generally used by all customers, whereas local distribution facilities serve only a specific customer or customer groups."

- 7.1 Are "shared distribution facilities" the same as the "integrated network" referred to in the response to VECC 11.2? If not, what is the difference?
- 7.2 Are the primary poles that support the dedicated M24 and M30 Feeders "generally used by all customers"? If yes, please explain how this is the case? If not, why are they considered "shared distribution facilities"?

Responses:

7.1 & 7.2 No, not necessarily. In this specific instance, the primary poles that support dedicated Feeders M24 and M30 are "shared facilities" because the same primary poles also support the three other (non-dedicated) feeders that serve other customers. This does not mean that these primary poles are part of an integrated system. If Feeders M24 and M30 were fully integrated with Energy+'s other 27.6 kV feeders, then the poles would be part of an integrated system.

8.0 Reference: TMMC Updated Evidence, page 16 (lines 3-6)
Energy+ Application, Exhibit 1, p. 177-178
Energy+ Application, Exhibit 8, p. 3
TMMC Updated Evidence, Schedule JP-11

Preamble: The updated evidence states: "Shared distribution facilities are generally used by all customers, whereas local distribution facilities serve only a specific customer or customer groups."

- 8.1 Apart from the facilities directly assigned to TMMC, does Mr. Pollock consider the balance of Energy+'s distribution facilities to be "shared distribution facilities"? If not, please identify what other facilities should be considered "local distribution facilities" and how the cost allocation model provided in JP-11 treats them accordingly.
- 8.2 Given the separation of Energy+'s service area into two geographically distinct service areas (per Exhibit 1) and the definition of "shared distribution facilities" as those generally used by all customers, why is it appropriate to group the balance of the assets in USOA #1830, #1835, #1840 and #1845 and allocate them to all customers (except TMMC and Embedded Distributors) in both distinct service areas regardless of which service area they support?
- 8.3 Given the separation of Energy+'s service area into two geographically distinct service areas (per Exhibit 1) and the definition of "shared distribution facilities" as those generally used by all customers, does Mr. Pollock consider Energy+'s plans (per Exhibit 8) to harmonize the rates in its two service areas as being appropriate? If yes, why?

Responses:

- 8.1 Mr. Pollock has not identified which of the Energy+ distribution facilities are shared and which facilities are local, other than in his analysis that is specific to the distribution facilities used to serve TMMC.
- 8.2 Mr. Pollock has not formulated an opinion on how costs should be allocated to the Embedded Distributors or other Energy+ customers besides TMMC.
- 8.3 Mr. Pollock has not formulated an opinion on whether Energy+'s plans to harmonize the rates is appropriate.

9.0 Reference: TMMC Updated Evidence, page 16 (lines 3-6)
Energy+ Application, Exhibit 1, p. 177-178
Energy+ Application, Exhibit 8, p. 3

Preamble: The updated evidence states: "Shared distribution facilities are generally used by all customers, whereas local distribution facilities serve only a specific customer or customer groups." Exhibit 1 states: "Energy+ is supplied through seven high voltage transformer stations. Five of these stations are owned and operated by Hydro One Networks, one is owned and operated by Energy+ and one is jointly owned and operated by Energy+ and Brantford Power. The 35 feeders emanating from these stations supply Energy+ customers and operate at 27.6kV."

9.1 Is it Mr. Pollock's contention that, excluding the feeders used to serve TMMC, the balance of TMMC's feeders operate as an integrated network such that any of the remaining feeders can be used to serve a specific customer? If yes, what is the basis for this contention? If not, how can all of the remaining feeders be considered "shared distribution facilities" that are generally used by all customers?

Response:

9.1 The dedicated Feeders M24 and M30 serve only TMMC and no other customers. Moreover, they cannot be used to serve any other Energy+ customer due to the differential protection equipment and because it could cause the protection to activate resulting in a power interruption to the plant. Further, Energy+ has confirmed that the M24 and M30 feeders are not integrated with the rest of Energy+'s distribution system.³ Accordingly, and for all of these reasons, the M24 and M30 feeders comprise a "radial overhead" distribution system that serves only one customer, namely TMMC. Mr. Pollock has not analysed Energy+'s other distribution feeders to determine the extent to which they serve specific customers (or customer groups) directly or indirectly or, on the other hand, whether these other feeders serve all of Energy+'s customers other than TMMC.

³ Energy+'s Response to TMMC Technical Conference Question TMMC IR-3.

10. Reference: TMMC Updated Evidence, p. 15 (line 6) to p. 16 (line 6)
TMMC Updated Evidence, Schedules JP-11 & JP-12
Energy+ Response to VECC TCQ 74 b) & c)

- 10.1 How was the 4NCP allocation factor for the TMMC Large Use class determined (Schedule JP-12)?
- 10.2 In establishing the 4NCP allocation factors for the TMMC Large Use class and the Other Large Use class to be used in Schedule JP-11, was the loss of diversity when moving from one Large Use class to two Large Use classes, as demonstrated in the response to VECC TCQ 74, taken into account?

Responses:

- 10.1 & 10.2 The 4NCP allocation factors were derived from Energy+'s response to TMMC TCQ-IR-2.

**11.0 Reference: TMMC Updated Evidence, p. 12
Energy+ Response to VECC TCQ 67**

Preamble: The updated evidence states: "I did not allocate any >50 kV (Bulk) distribution costs to TMMC and to the other Large Use customer in Schedule JP-11."

11.1 For purposes of JP-11 were the allocation factors used to allocate >50 kV (Bulk) distribution cost to the other customer classes adjusted to remove the load not served by >50 kV facilities owned by Energy+ (per VECC TCQ 67 c)? If not, why not?

11.2 With respect to Energy+'s response to VECC TCQ 67 b), since customers served from >50 KV facilities owned by Energy+ do not use the Hydro One-owned transformers, should they be excluded from the allocation of the Hydro One charges related to these transformers for purposes of determining/applying the Retail Transmission Service Rates?

Responses:

11.1 Yes. In the Two Large Use Classes/Direct Assignment study presented in Schedule JP-11, the >50 kV facilities owned by Energy+ were allocated in the same manner as Energy+ is proposing in its cost allocation study, with the exception that none of these facilities were allocated to either Large Use customer class.

11.2 Mr. Pollock has not formulated an opinion on how Hydro One charges should be allocated to customer classes.

12.0 Reference: TMMC Updated Evidence, p. 12

- 12.1 Apart from the fact that the updated Schedule JP-5 is based on one Large Use class while Schedule JP-11 is based on two Large Use classes, please describe any other differences between the two Schedules.
- 12.2 Please provide an alternative CCROSS where the only change from the approach used for Schedule JP-11 is that there is only one Large Use class (not two).

Responses:

- 12.1 The differences between the One Large Use Class/Partial Direct Assignment and the Two Large Use Class/Direct Assignment cost-of-service studies are discussed in detail in Mr. Pollock's Updated Evidence at pages 12-18.
- 12.2 The requested alternative CCROSS is attached as Schedule JP-5-VECC12.2.

13.0 Reference: TMMC Updated Evidence, p. 23 (lines 2-17)
TMMC Updated Evidence, JP-13
TMMC Updated Evidence, JP-6 Updated

- 13.1 With respect to lines 5-6, does the Distribution Volumetric Rate recover \$314,330 when applied to the Supplementary Distribution Service forecast billing demand? If yes, please provide a schedule that shows this is the case.
- 13.2 Please reconcile the billing kW values associated with TMMC in JP-6 Updated (page 1 & 4) with those in JP-13.

Responses:

- 13.1 The revenues to be recovered in the Distribution Volumetric rate include both Supplementary and Standby Distribution services. Of this amount \$ [REDACTED] (kW) would be recovered based on the Supplementary Distribution service billing demand and \$ [REDACTED] x 82,800 kW) would be recovered based on the assumed 6,900 kW monthly Standby Contract Demand. Note: any differences are due to rounding. These amounts will change in Schedule JP-13 Revised.
- 13.2 The billing kW values are different because Schedule JP-6 Updated assumes a Contract Standby Demand of 4,600 kW per month whereas Schedule JP-13 assumes a Contract Standby Demand of 6,900 kW per month.

14.0 Reference: TMMC Updated Evidence, p. 26 (line 3) to p. 27 (line 12)
TMMC Updated Evidence, p. 28 (line 10) to p. 29 (line 3)
TMMC Updated Evidence, p. 31 (lines 5-8)
TMMC Updated Evidence, Schedule JP-11, Tab E4
Energy+ Response to VECC TCQ 81
TMMC Response to VECC 18

- 14.1 Please confirm that the Daily Volumetric rate for Standby is based the primary pole costs allocated to TMMC.
- 14.2 Please confirm that this allocation is based on the 4NCP allocator and for TMMC this will represent its four highest monthly peak demands (as TMMC is the only customer in its class) – per JP-11.
- 14.3 Given that TMMC's (net load) monthly peaks can occur in the off-peak as well as the peak period (see VECC TCQ 81), why is the proposed Daily Volumetric rate for the TMMC only applied during the weekdays?
- 14.4 Please confirm that the derivation of the Daily Volumetric Rate implicitly assumes that 100% coincidence occurs between Standby load requirements and TMMC's monthly peak occurs only when Standby is required for all weekdays in the month and that the relationship is linear for Standby requirements for fewer weekdays in the month.
- 14.4.1 If not confirmed, what is the implicit assumption in the derivation regarding the number of weekdays of outage and the coincidence between Standby load and TMMC's monthly peak and what is the basis for this assumption?
- 14.4.2 If confirmed, please provide any analysis Mr. Pollock or TMMC have undertaken to support this implicit assumption?

Responses:

- 14.1 Confirmed.
- 14.2 Confirmed.
- 14.3 As discussed on page 63 of Mr. Pollock's Updated Evidence, ignoring the demands during off-peak hours would provide a price signal to encourage a customer to defer/schedule outages during the off-peak hours. The benefits of shifting load to off-peak hours were articulated in a Staff Discussion Paper, Rate Design for Commercial and Industrial Electricity Customers: Aligning the Interests of Customers and Distributors (EB-2015-0043, Mar. 31, 2016).
- 14.4 Confirmed.
- 14.4.1 Not applicable.
- 14.4.2 The assumption that coincidence increases with the number of days that Standby Distribution service is provided is based on the Bary Curve. The Bary Curve measures the

relationship between load factor and coincidence factor; that is, in general as load factor increases (as a result of taking Standby Distribution service for more days in a billing month) the likelihood of the load occurring coincident with a system peak increases.

15.0 Reference: TMMC Updated Evidence, page 28 (lines 10-17)
TMMC Updated Evidence, page 29 (lines 15-20)

- 15.1 It is noted that the costs of primary poles, towers and fixtures (USoA #1830-4) are allocated across all rate classes including the TMMC Large Use rate class using the 4NCP allocation factor. Given this common treatment, please explain why in the derivation of the Standby Rate applicable to TMMC the poles, towers and fixtures costs allocated to the TMMC Large Use class are considered to be a shared facility cost and used to derive the daily volumetric rate (per page 28). However, in the derivation of the Standby Rate applicable to the GS 50-999 kW class they are considered to be a local distribution facility cost (as opposed to a shared facility cost) and used to derive the contract volumetric rate.

Response:

- 15.1 The identity of local and shared distribution facilities, and the corresponding costs, can only be determined from a specific analysis. Mr. Pollock has conducted a specific analysis for TMMC. That analysis identified all directly assigned facilities as local facilities and all allocated facilities (*i.e.*, the primary poles supporting Feeders M24 and M30) as shared facilities.

The very same analysis should be conducted for other customer classes. As stated in Mr. Pollock's Updated Evidence, the illustration presented in Schedule JP-15 assumed that all primary and secondary facilities were local and the >50 kV facilities were shared. A more in-depth analysis could reveal that some of the primary facilities are shared, rather than local, facilities. Mr. Pollock has not conducted this analysis for any customer class other than TMMC.

Alternatively, generic estimates may be used. For example, in New York, the New York State Public Service Commission has used the following assumptions to define the percentage of "local" and "shared" distribution costs in designing cost-based rates for Standby Distribution service.

Percent of Local vs. Shared Distribution Facilities			
Function	Secondary Customers	Primary Customers	≥138 kV Customers
Secondary	75%/25%		
Primary	25%/75%	75%/25%	100%/0%
Substation	0%/100%	50%/50%	100%/0%
Transmission	0%/100%	0%/100%	25%/75%

Schedule JP-5-VECC12.2
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Ontario Energy Board

2019 Cost Allocation Model

EB-2018-0028

Sheet 01 Revenue to Cost Summary Worksheet -
1 Lg Use Class/Direct Assignment

Class Revenue, Cost Analysis, and Return on Rate Base

Line	Description	Total	1 Residential	2 GS <50	3 GS> 50- 999 kW	5 GS> 1,000 - 4,999 kW	6 Large Use	7 Street Light	8 Sentinel
1	Distribution Revenue at Existing Rates	\$33,454,354	\$17,528,595	\$4,131,617	\$7,466,138	\$2,140,493	\$1,040,061	\$671,811	\$14,573
2	Miscellaneous Revenue (mi)	\$2,022,079	\$1,357,571	\$222,389	\$245,251	\$91,016	\$40,472	\$56,446	\$1,326
	Miscellaneous Revenue Input equals Output								
3	Total Revenue at Existing Rates	\$35,476,433	\$18,886,165	\$4,354,006	\$7,711,389	\$2,231,509	\$1,080,533	\$728,257	\$15,899
4	Factor required to recover deficiency (1 + D)	1.0261							
5	Distribution Revenue at Status Quo Rates	\$34,327,788	\$17,986,235	\$4,239,487	\$7,661,066	\$2,196,378	\$1,067,215	\$689,351	\$14,953
6	Miscellaneous Revenue (mi)	\$2,022,079	\$1,357,571	\$222,389	\$245,251	\$91,016	\$40,472	\$56,446	\$1,326
7	Total Revenue at Status Quo Rates	\$36,349,867	\$19,343,806	\$4,461,876	\$7,906,317	\$2,287,394	\$1,107,687	\$745,797	\$16,279
	Expenses								
8	Distribution Costs (di)	\$4,860,260	\$2,894,316	\$496,784	\$924,005	\$368,553	\$69,440	\$89,526	\$4,097
9	Customer Related Costs (cu)	\$4,893,912	\$3,864,560	\$637,560	\$290,389	\$88,329	\$4,420	\$1,531	\$181
10	General and Administration (ad)	\$8,577,377	\$5,835,914	\$983,941	\$1,078,449	\$404,664	\$144,818	\$82,040	\$3,850
11	Depreciation and Amortization (dep)	\$6,376,711	\$3,703,988	\$787,998	\$1,234,578	\$426,165	\$90,602	\$102,838	\$5,032
12	PILs (INPUT)	\$768,693	\$437,561	\$85,014	\$155,976	\$56,051	\$12,476	\$14,651	\$679
13	Interest	\$4,420,641	\$2,516,348	\$488,904	\$896,994	\$322,342	\$71,749	\$84,255	\$3,904
14	Total Expenses	\$29,897,594	\$19,252,687	\$3,480,201	\$4,580,390	\$1,666,104	\$393,506	\$374,840	\$17,741
15	Direct Allocation	\$245,744	\$0	\$0	\$0	\$0	\$103,784	\$0	\$0
16	Allocated Net Income (NI)	\$6,206,530	\$3,532,924	\$686,416	\$1,259,369	\$452,565	\$100,735	\$118,293	\$5,481
17	Revenue Requirement (includes NI)	\$36,349,867	\$22,785,611	\$4,166,617	\$5,839,759	\$2,118,669	\$598,025	\$493,133	\$23,223
	Rate Base Calculation								
	Net Assets								
18	Distribution Plant - Gross	\$197,935,948	\$113,846,137	\$22,412,577	\$39,822,637	\$14,301,722	\$3,025,366	\$3,760,150	\$172,865
19	General Plant - Gross	\$15,515,903	\$8,867,916	\$1,720,645	\$3,118,731	\$1,112,649	\$251,983	\$297,680	\$13,780
20	Accumulated Depreciation	(\$25,245,338)	(\$14,456,166)	(\$3,130,315)	(\$4,913,555)	(\$1,856,300)	(\$327,017)	(\$423,008)	(\$18,397)
21	Capital Contribution	(\$31,975,089)	(\$18,800,044)	(\$3,623,018)	(\$6,157,118)	(\$2,108,504)	(\$518,304)	(\$639,181)	(\$29,448)
22	Total Net Plant	\$156,231,424	\$89,457,843	\$17,379,889	\$31,870,695	\$11,449,566	\$2,432,028	\$2,995,641	\$138,801
23	Directly Allocated Net Fixed Assets	\$898,672	\$0	\$0	\$0	\$0	\$118,327	\$0	\$0
24	Working Capital	\$16,695,208	\$5,237,227.16	\$1,953,883	\$4,710,067	\$2,183,424	\$1,364,074	\$48,068	\$1,783
25	Total Rate Base	\$173,825,304	\$94,695,070	\$19,333,772	\$36,580,762	\$13,632,990	\$3,914,428	\$3,043,709	\$140,583
26	REVENUE TO EXPENSES STATUS QUO%	100.00%	84.89%	107.09%	135.39%	107.96%	185.22%	151.24%	70.10%

Schedule JP-5-VECC12.2
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Ontario Energy Board

2019 Cost Allocation Mode

EB-2018-0028

Sheet 01 Revenue to Cost Summary Worksheet -
1 Lg Use Class/Direct Assignment

Class Revenue, Cost Analysis, and Return on Rate Base

Line	Description	Total	9 Unmetered Scattered Load	10 Embedded Distributor Hydro One - CND	12 Embedded Distributor Waterloo North Hydro - CND	13 Embedded Distributor Hydro One 1 - BCP	14 Embedded Distributor Brantford Power BCP	15 Embedded Distributor Hydro One 2 - BCP
1	Distribution Revenue at Existing Rates	\$33,454,354	\$64,042	\$50,527	\$221,287	\$115,168	\$5,388	\$4,655
2	Miscellaneous Revenue (mi)	\$2,022,079	\$4,532	\$634	\$1,666	\$351	\$201	\$224
3	Total Revenue at Existing Rates	\$35,476,433	\$68,574	\$51,160	\$222,954	\$115,519	\$5,589	\$4,879
4	Factor required to recover deficiency (1 + D)	1.0261						
5	Distribution Revenue at Status Quo Rates	\$34,327,788	\$65,714	\$51,846	\$227,064	\$118,174	\$5,529	\$4,777
6	Miscellaneous Revenue (mi)	\$2,022,079	\$4,532	\$634	\$1,666	\$351	\$201	\$224
7	Total Revenue at Status Quo Rates	\$36,349,867	\$70,246	\$52,479	\$228,731	\$118,525	\$5,730	\$5,000
	Expenses							
8	Distribution Costs (di)	\$4,860,260	\$13,539	\$0	\$0	\$0	\$0	\$0
9	Customer Related Costs (cu)	\$4,893,912	\$1,388	\$2,419	\$405	\$405	\$705	\$1,620
10	General and Administration (ad)	\$8,577,377	\$13,384	\$6,040	\$17,599	\$3,502	\$1,820	\$1,358
11	Depreciation and Amortization (dep)	\$6,376,711	\$16,591	\$2,921	\$4,561	\$836	\$602	\$0
12	PILs (INPUT)	\$768,693	\$2,238	\$675	\$2,682	\$491	\$199	\$0
13	Interest	\$4,420,641	\$12,870	\$3,882	\$15,424	\$2,826	\$1,142	\$0
14	Total Expenses	\$29,897,594	\$60,009	\$15,936	\$40,672	\$8,060	\$4,468	\$2,978
15	Direct Allocation	\$245,744	\$0	\$22,095	\$95,569	\$17,510	\$6,787	\$0
16	Allocated Net Income (NI)	\$6,206,530	\$18,069	\$5,450	\$21,656	\$3,968	\$1,604	\$0
17	Revenue Requirement (includes NI)	\$36,349,867	\$78,078	\$43,481	\$157,897	\$29,537	\$12,859	\$2,978
	Rate Base Calculation							
	Net Assets							
18	Distribution Plant - Gross	\$197,935,948	\$569,415	\$21,826	\$0	\$0	\$3,252	\$0
19	General Plant - Gross	\$15,515,903	\$45,279	\$14,580	\$57,785	\$10,587	\$4,285	\$0
20	Accumulated Depreciation	(\$25,245,338)	(\$62,018)	(\$15,707)	(\$33,215)	(\$6,085)	(\$3,555)	\$0
21	Capital Contribution	(\$31,975,089)	(\$95,175)	(\$3,739)	\$0	\$0	(\$557)	\$0
22	Total Net Plant	\$156,231,424	\$457,501	\$16,960	\$24,571	\$4,502	\$3,426	\$0
23	Directly Allocated Net Fixed Assets	\$898,672	\$0	\$121,453	\$525,336	\$96,250	\$37,305	\$0
24	Working Capital	\$16,695,208	\$23,128	\$117,405	\$539,518	\$113,175	\$3,505	\$399,953
25	Total Rate Base	\$173,825,304	\$480,630	\$255,819	\$1,089,425	\$213,927	\$44,235	\$399,953
26	REVENUE TO EXPENSES STATUS QUO%	100.00%	89.97%	120.69%	144.86%	401.27%	44.56%	167.90%