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EB-2018-0028 Response to Interrogatories

Toyota Motor Manufacturing Canada Inc. (TMMC) September 14, 2018

Energy+ Inc. Response to Interrogatories Toyota Motor Manufacturing Canada Inc. (TMMC)

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INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions III

Issue: Standby Charge Proposal; Recovery of "Lost" Revenue

Preamble: In its response to Question 10, Sub-Question III, Energy+ notes that implementation of a standby charge is based on a number of considerations, including "Fairness to all Customers". In respect of the fairness concept, Energy+ further notes that:

"Load displacement, in the absence of a capacity charge, will result in lower distribution revenue to Energy+ and will impact future rate impacts for all customer rate classes (cost will be socialized across other rate classes)."

Energy+ does not propose to recover revenue that is "lost" in other circumstances, for example, where a customer's load fluctuates up and down over time, or where a customer installs energy efficient equipment that serves to reduce load.

Confirm that Energy+ is not proposing to impose the equivalent of a standby charge on its load customers who install behind-the-fence efficiency and conservation-related facilities that reduce (as opposed to displace) their load or on its load customers whose loads fluctuate, up and down, over time.

RESPONSE

Not confirmed.

Since Residential customers will be charged on the basis of a 100% fixed charge effective in 2019, there is no need to impose a specific standby charge on Residential customers who install load displacement generation, efficiency or other conservation related facilities that either reduce or displace their load or on Residential load customers whose loads fluctuate up and down over time. This is because a fixed Residential rate structure ensures that no revenue is "lost" in a wide variety of circumstances, including load displacement generation, or other reasons.

Since load displacement generation is often considered as a "conservation-related facility", Energy+ notes that it is proposing the same standby charge for load displacement generation to apply to all GS>50-999 kW, GS 1,000 to 4,999 kW; and Large User class customers.

At this time Energy+ is not proposing a standby charge on its load customers who install behind-the-fence efficiency and conservation-related facilities other than load displacement generation that may reduce their load.

With regards to other behind-the-fence efficiency and conservation related activities, the Lost Revenue Adjustment Mechanism ("LRAM") is in place to compensate a distributor with variable distribution rates for reduced consumption due to conservation programs. With the LRAM, a distributor can recover revenues it has lost in the past because a CDM program has lowered customers' consumption levels. The LRAM mechanism is available for periods between a Cost of Service Application.

In 2014, the Minister of Energy, by Order in Council, issued a Minister's Directive to the Ontario Energy Board ("OEB") to take a number of steps to promote electricity conservation and demand management ("CDM"), which included:

- Under the new Conservation First Framework, Distributors were required, by condition of license, to meet CDM requirements (targets).
- The OEB shall establish CDM Requirement guidelines, which shall have regard to one of the following objectives:

"that lost revenues that result from Province-Wide Distributor CDM Programs or Local Distributor CDM Programs should not act as a disincentive to Distributors in meeting their CDM Requirement".

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions III

Explain the rationale for requiring customers who reduce their loads by installing load displacement generation facilities to compensate Energy+ for the associated "lost" distribution revenue, but not requiring customers who reduce their loads by installing energy efficient equipment to similarly compensate Energy+.

RESPONSE

As noted in response to part (1) of this question, all Residential load customers must pay distribution revenue on the basis of a fixed monthly fee. This ensures that Energy+ is protected from any "lost" distribution revenue whether it is due to the installation of load displacement generation, energy efficiency equipment or otherwise.

Energy+'s proposal for a standby charge is based on the following:

- Contracted capacity is "reserved" for customers with load displacement whereby the customer wishes to ensure that the Energy+ infrastructure is in place at all times to provide the contracted peak load at any time.
- The standby charge is an option for the customer the customer can chose whether they
 require Energy+ to reserve capacity or not; the standby rate is charged to the extent the
 customer wishes to take power from the distributor if its own generation is at some point
 inadequate; and
- Fairness to all customers When customers displace load with generation, the expected revenue to cover capital, operating, maintenance and administration costs are not realized, and the burden falls on other customers to subsidize those revenue shortfalls, therefore impacting <u>future rates</u> for all customer rate classes (costs will be socialized across other rate classes).

• The purpose of the standby charge is to ensure that distributor's costs are covered, even if the customer does not actually use the service. Energy+ submits that the value to the customer with respect to standby is that Energy+ stands ready to serve when called upon.

Energy+ would be compensated via the LRAM mechanism for lost distribution revenue for customers who reduce their loads by installing energy efficient equipment between the periods before the next Cost of Service Application. See Response to Interrogatory IR-TMMC-1 (1).

Energy+ would also highlight the fact that at the time of rebasing (a Cost of Service Application), the load forecast is "reset". Any future LRAM computation will be based on the change in consumption based on the latest approved load forecast underlying the rates set under the Cost of Service Application. In the absence of a standby rate for those customers with LDG who want access to Energy+'s distribution system capacity, distribution rates for all other customers are impacted as the computation of the variable rate is based on lower consumption levels, therefore resulting in increased distribution rates to other customer rate classes. Energy+ submits that other customer classes should not experience increased distribution rates when the LDG customer expects the distributor to have the infrastructure in place and to be available for the customer.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions III

Explain the rationale for requiring customers who reduce their loads by installing load displacement generation facilities to compensate Energy+ for associated "lost" distribution revenue, but not requiring customers whose loads fluctuate over time as a result of other factors, to similarly compensate Energy+ (perhaps outside of some agreed upon "deadband").

RESPONSE

Please refer to Response to Interrogatory IR-TMMC-1 (2).

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions III

Provide examples of other OEB-approved electricity distribution rates that are founded on the concept of recovering "lost" revenue as opposed to recovering the costs of providing the service in question.

RESPONSE

In Response to TMMC Question 10, Sub-Question III, Energy+ did not state that the Standby/Capacity charge was founded on the concept of "lost" revenue, as is implied in the preamble above.

In Response to TMMC Question 10, Sub-Question III, Energy+ provided the following response.

"As outlined in its Customer Meeting presentation in October 2017, and again in January, 2018, Energy+ advised TMMC that it was considering the implementation of a Standby Charge for all GS>50 kW and Large User Class customers based upon the following considerations:

- Contracted capacity is "reserved" for customer with load displacement whereby the customer wishes to ensure that the Energy+ infrastructure is in place at all times to provide the contracted peak load at any time.
- Energy+'s operating costs have not and are not expected to materially change due to load displacement;
- Energy+ provides the infrastructure and back up supply when generation is not fully utilized;
- Energy+ continues to invest in its distribution system, and incurs operations, maintenance and administrative costs to operate the distribution system based upon the expected capacity required; and

Fairness to all customers – Load displacement by any customer, in the absence of a capacity charge, will result in lower distribution revenue to Energy+ and will impact future rate impacts for all customer rate classes (costs will be socialized across other rate classes).

Energy+ specifically noted "costs" will be socialized across other rate classes."

This response is consistent with the Response to Interrogatories 1-TMMC-1 (2).

Energy+ notes that the LRAM Mechanism, as approved by the Ontario Energy Board, is founded on the concept of "lost" revenue as it relates to lower distribution rates earned by distributors as a result of CDM initiatives.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions III

Provide examples of other OEB-approved electricity distribution rates that are based on a contract capacity amount negotiated with reference to a customer's historical maximum peak load.

RESPONSE

Energy+ acknowledges that there are varying methodologies utilized by distributors across Ontario with respect to Standby/Capacity charges. While methodologies may vary, Energy+ submits that the premises identified in Response to Interrogatory IR-TMMC-1 (2) are consistent amongst the other utilities.

As outlined in Exhibit 7, Page 14 of 105, Energy+ understands the proposed approach to a standby rate is similar to the approach used by Alectra Utilities (Horizon Utilities Rate Zone) and Entegrus Powerlines Inc.

Energy+ has attached to this Response the "Schedule A –Distributor Specific Load Displacement Generation Information – Distributors that do have a Standby Rate for Load Displacement Generation", which is on file with the OEB under EB-2013-0004. This Schedule identifies the varying methodologies and approaches taken by other distributors.

At least two utilities on this list identify a reference to "Monthly Peak load displaced by the generating facility". Energy+ acknowledges that there may be differences in the fine details of the approach for each distributor.

Appendix - "Schedule A – Distributor Specific Load Displacement Generation Information – Distributors that do have a Standby Rate for Load Displacement Generation"

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Question I

Issue: Standby Charge Proposal; Contact Capacity

<u>Preamble:</u> In response to Question 7, Sub-Question I, Energy+ notes that "[T]he contract capacity amount will be negotiated between TMMC and Energy+, based on an agreed upon historical maximum peak load".

We note that Energy+ does not propose to rely on contract capacity amounts for designing the distribution rates of other customers who do not have load displacement generation but who may experience load variation as a result of internal process fluctuations that are not related specifically to load displacement generation but which otherwise have similar impacts on the Energy+. We further note that establishing a contract capacity value for TMMC may put it at a competitive disadvantage with other automobile manufacturers that do not have a contract capacity value imposed upon them.

1. Explain why it is appropriate for Energy+ to determine a contract capacity amount only for customers with load displacement generation, whereas it does not similarly establish comparable contract capacity amounts for other customers.

RESPONSE

Please refer to Response to IR-TMMC-1 (2).

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Question I

 To what extent have contract capacities been established for other manufacturers in Ontario? Is there any precedent in Ontario for establishing contract capacities for customers who do not have load displacement generation? If so, please provide examples.

RESPONSE

Please refer to Response to Interrogatories IR-TMMC-1 (5) for a list of distributors across Ontario that charge a Standby Rate for Load Displacement Generation. Based upon information in EB-2013-0004, the OEB's consultation on Standby Rate policy for Load Displacement Generation, the following is a list of the number of customers by LDC with standby rates/charges:

LDC's with standby rates/charges and the number of LDG customers (as of 2013). The nature of the business by customer is not available and therefore Energy+ cannot comment on whether the customers by distributor are manufacturers in Ontario.

- Alectra Utilities 10 Customers
- Brantford Power 1 Customer
- Canadian Niagara Power Port Colborne 2 Customers
- Entegrus Powerlines 1 Customer
- Hydro Ottawa 2 Customers
- Kingston Hydro 2 Customers
- Kitchener-Wilmot Hydro 1 Customer
- London Hydro 3 Customers
- Orillia Power 1 Customer
- Toronto Hydro 4 Customers

Energy+ is not aware of a precedent in Ontario for establishing contract capacities for customers who do not have load displacement generation.

INTERROGATORY

<u>Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Questions II and III;</u> <u>TMMC Question 10, Sub-Question IV.</u>

Issue: Standby Charge Proposal; Adjustments to Contract Capacity

Preamble: In response to Question 7, Sub-Question II, Energy+ notes the following:

"Energy+ is willing to consider reasonable proposals from TMMC on how the capacity level should be set as a starting point. The acceptance on such a proposal could include a condition that if the monthly peak load exceeds that level a new capacity level will be established at the new level going forward until the capacity level is reviewed and adjusted based on the peak load of the next actual year."

In response to Question 10, Sub-Question IV, Energy+ notes the following:

"Energy+ proposes that a contracted capacity reserve value be established for each customer. On a monthly basis, the peak load taken by the customer will be determined by the load reading meter...If the load taken is less than the contracted capacity reserve value, the difference between that value and the load taken will be charged a standby rate, which will be equivalent to the distribution rate for the applicable rate class. If the load taken is equal to or greater than the capacity reserve value, the rate will not be applied."

It appears that the application of the contract capacity value is asymmetrical in the following sense: If the customer draws power in excess of the contract amount, the capacity level will be adjusted upward. If the customer draws less power than the contract capacity amount, the contract capacity amount will remain unchanged and the Standby Tariff applied will be based on this fixed contract capacity amount.

1. Confirm that TMMC's understanding of Energy+'s proposed application of the contract capacity amount is correct.

RESPONSE

Energy+ does not confirm that TMMC's understanding of Energy+'s proposal is correct.

As explained in Exhibit 7, Section 7.1.3.8, Pg. 14 of 105, and as also outlined in Slide 40 of the Customer Engagement Presentation provided on January 19, 2018, the proposal and mechanism for the capacity/standby charge is as follows:

• Energy+ consults with the customer with respect to the amount of power that is needed by the customer when the generation is not running, which results in the contracted capacity. Energy+ had utilized the 2016 highest monthly peak to establish the level of contracted capacity for TMMC.

In Response to Interrogatories 7-Staff-78, Energy+ has updated the 2017 forecast data for 2017 actuals. As part of this update, Energy+ has utilized the actual 2017 peak load amount as the contract capacity for TMMC. Energy+ would highlight that the 2017 highest peak load is in fact <u>lower</u> than the 2016 highest monthly peak. In Energy+'s proposal for a capacity charge, the capacity level is proposed to be a negotiated level based on the requirements of the customer. The update for 2017 remains contingent upon our original proposal based on the needs of our customer.

The preamble above specifically states that "Energy+ is willing to consider reasonable proposals from TMMC on how the capacity level should be set as a starting point. The acceptance on such a proposal <u>could include</u> a condition that if the monthly peak load exceeds that level a new capacity level will be established at the new level going forward until the capacity level is reviewed and adjusted based on the peak load of the next actual year."

On a <u>monthly basis</u>, the peak load will be charged the distribution volumetric rate. If the load taken is less than the contracted reserve value, the difference between that value and the load taken will be charged a Standby rate, which will be equivalent to the distribution volumetric rate. If the load taken is equal to or greater than the contracted capacity reserve value the load taken is equal to or greater than the contracted capacity reserve value the Standby rate will not be applied.

• Energy+'s proposal is to undertake a review on an <u>annual basis</u> to review the monthly peak loads and after a discussion with the customer possibly adjust the contracted capacity reserve value.

The proposal <u>does not state</u> "If the customer draws power in excess of the contract amount, the capacity level will be adjusted upward".

• Please refer to Response to Interrogatories 7-SEC-39 whereby Energy+ identifies the factors that will be considered in determining whether the contracted capacity would be increased or decreased.

INTERROGATORY

<u>Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Questions II and III;</u> <u>TMMC Question 10, Sub-Question IV.</u>

2. Explain the rationale for the "asymmetric" approach described above.

RESPONSE

Please refer to Response to Interrogatory IR-TMMC-3 (1) which confirms that the proposal is not "asymmetric" as suggested by TMMC. Please refer to Response to Interrogatory IR-TMMC-1 (2) where Energy+ provides its rationale for the Standby Charge.

INTERROGATORY

Ref: EnergyPlus 2019 Cost Allocation Model 20180430

Issue: Standby Charge Proposal; Adjustments to Demand Allocators

- Confirm that Energy+ has made the following adjustments to the demand allocators for the Large User Class in its rate model in order to account for the introduction of a Standby Tariff:
 - increased the 12 NCP value and the 12 CP values by 50,379 kW; and
 - increased the 4 NCP value and the 4 CP values by 5,720 kW.
- 2. Confirm that the adjustments to the demand allocators reflect the additional demand quantities that Energy+ will bill TMMC (i.e., additional billing demand) pursuant to the imposition of a Standby Tariff.
- 3. What quantum of incremental costs (in dollars) will be allocated to the Large User Class as a result of the adjustments noted in Question 1?
- 4. Provide all documents that underpin and support the adjustments referred to in Question 1.
- Provide authoritative support for the decision to make the adjustments referred to in Question 1, including past OEB orders, staff discussion papers, OEB guidelines and/or published articles and books.

RESPONSE

Preamble: As outlined in response to 1-Staff-2, Energy+ has updated the models to reflect changes that Energy+ proposes to make to the application as a result of responding to the interrogatories from various parties. The main change to the models was to update for 2017 actual data which impacted the assumptions supporting the proposed Standby Tariff and assumes a contract capacity of **Contract**. The changes have been noted in the various responses that follow.

1. In the Application Energy+ has made the adjustments to the demand allocators referenced in the question for the Large User Class in the cost allocation model in order to account for the introduction of a Standby Tariff:

However, in the updated cost allocation model provided in 7-Staff 76 b) the data associated with the proposed Standby Tariff has been revised to reflect a contract capacity of MW. In this case the following adjustments were made to the demand allocators for the Large User Class in the cost allocation model.

- increased the 12 NCP value and the 12 CP values by kW; and
- increased the 4 NCP value and the 4 CP values by kW.
- The adjustments to the 12 NCP demand allocator reflect the annual additional demand quantities that Energy+ will bill TMMC pursuant to the implementation of the proposed Standby Tariff.
- 3. The quantum of incremental costs (in dollars) allocated to the Large User Class as a result of the adjustments noted in Question 1 with the updated demand units is \$33,385. However, there is no difference in the revenue requirement for rate design purposes for the Large User Class as a result of the Standby Charge proposal. The revenue requirement for rate setting purposes is determined in the following manner. The first step is to calculate the revenue that would be achieved from the Large User class assuming the demand from Standby does not exist. The calculated revenue amount is the current Large User rates increased by the average Energy+ 2019 distribution rate increase (i.e. 3.3%) times the Large User demand excluding Standby demand. The calculated revenue could be classified as revenue at existing rates increased by the average by the average by the average by the average for the calculated revenue could be classified as revenue at existing rates increased by the average for the average for the calculated revenue could be classified as revenue at existing rates increased by the average for the average for the calculated revenue could be classified as revenue at existing rates increased by the average rate increase.

Next, the calculated revenue amount plus an adjustment for miscellaneous revenue is compared to allocated cost from the cost allocation model. The comparison produces a revenue to cost ratio. It both the No Standby case and the Standby case at **MW** the revenue to cost ratio is slightly above 100%. This means the calculated revenue is enough to cover the cost allocated to Large User class in both cases. In other words, additional allocated cost associated with the proposed Standby service do not impact the rates for the Large User Class. The calculated revenue is the amount used to determine distribution rates

in both cases which is also the same in both cases. The calculated revenue is split into fixed and variable costs using the current fixed variable split. Fixed costs are used to determine the monthly service charge and variable costs are used to determine the volumetric rate. In the No Standby case the Large User monthly service charge and the volumetric charge are simply existing rates times 3.3%. In the Standby case at MW, the monthly service charge is the same as the No Standby case since the fixed costs and the number of Large Use customers are the same. However, the volumetric rate in the Standby case at MW is less than the existing Large User rate since the variable cost are divided by demand units which include the Standby units.

For TMMC, the difference in annual charges between No Standby and Standby at MW is since TMMC is assigned a greater portion of the calculated revenue when the demand associated with Standby is included.

4. The following tables provides the documentation that support the adjustments referred to in Question 1.



- 5. The adjustments referred to in Question 1 have been made to be consistent with generally accepted ratemaking principles. The source of these principles is the "Principles of Public Utility Rates by James C. Bonbright" and are summarized below
 - Rate attributes: simplicity, understandability, public acceptability, and feasibility of application and interpretation;
 - Effectiveness of yielding total revenue requirements;
 - Revenue (and cash flow) stability from year to year;
 - Stability of rates themselves, minimal unexpected changes that are seriously adverse to existing customers;
 - Fairness in apportioning cost of service among different consumers;
 - Avoidance of "undue discrimination"; and
 - Efficiency, promoting efficient use of energy and competing products and services.

It is Energy+'s view the adjustments have been made to particularly support the principle of fairness in apportioning cost of service among different consumers.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Questions II and III

Issue: Standby Charge Proposal; Adjustments to Contract Capacity

Preamble: In its response to Question 7, Sub-Question II, Energy+ notes the following:

"Energy+ is willing to consider reasonable proposals from TMMC on how the capacity level should be set as a starting point. The acceptance on such a proposal could include a condition that if the monthly peak load exceeds that level a new capacity level will be established at the new level going forward until the capacity level is reviewed and adjusted based on the peak load of the next actual year."

However, in its response to Question 7, Sub-Question III, Energy+ notes the following:

"Energy+ has not proposed any penalty provisions or ratchet mechanism. Energy+ did propose that on an annual basis it would review the monthly peak loads and after a discussion with the customer possibly adjust the contracted capacity reserve value."

There appears to be an inconsistency between the two responses noted above. The first suggests that increases in capacity value will be automatic and will occur immediately after a new peak has been observed and the second suggests that peak loads will be reviewed only on annual basis (resulting in some time delay for adjustments) and also that adjustments will not be automatic.

1. Clarify the proposed adjustment process in light of the apparent inconsistencies noted above.

RESPONSE

Energy+ submits that there is not an inconsistency between the two responses. The condition noted in Question 7, Sub-Question II, was intended to allow for a reasonable proposal from

TMMC on the capacity level that is required <u>as a starting point</u>, but to recognize that the acceptance of the proposal <u>could</u> include a condition with respect to the establishment of a new capacity level. Energy+ understood based on the customer meeting with TMMC, that it is possible that the load requirements of TMMC may change as a result of changes in its business and therefore the capacity reserve required by TMMC may be higher than the level established in this Application, which used the highest monthly peak in 2017 (previously 2016).

Energy+'s proposal does include an annual review and discussion with the customer to determine whether an adjustment is required.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7, Sub-Questions II and III

2. Under what circumstances would the contract capacity amount ever be reduced?

RESPONSE

Please refer to Response to Interrogatory 7-SEC-39.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7

Issue: Standby Charge Proposal; Incentives to Minimize System Load

Preamble: It appears that the proposed design for a standby tariff does not provide any incentive for a customer to minimize the duration and timing of outages of its load displacement generation, or to otherwise minimize its load on the distribution system, so long as the customer's net load remains less than its contracted capacity reserve value. This is because the total Energy+ tariffs paid (distribution + standby) will reflect only the capacity value in effect, and will not be affected by fluctuations in net load that are within the envelope set by the contracted capacity reserve value.1. Clarify the proposed adjustment process in light of the apparent inconsistencies noted above.

1. Confirm that under Energy+'s proposed tariff structure there are no incentives to minimize outages of load displacement generation or to otherwise minimize the customers' load on the Energy+ system so long as this load is below the contract capacity value. If you disagree there are no incentives to minimize the frequency and duration of such outages under the proposed tariff structure, please explain how such incentives are included or otherwise arise under the proposed tariff structure.

RESPONSE

Energy+ confirms that the proposal for the Standby Charge based on contracted capacity does not include a specific financial incentive as part of the distribution volumetric rate for the customer to minimize outages of load displacement generation or to minimize the customers' load on the Energy+ system. Energy+'s proposal does include the opportunity to review the amount of contracted capacity required on an annual basis. As explained in Response to Interrogatory IR-TMMC-1 (2), Energy+'s proposal is based on (i) customer choice – the standby rate is charged to the extent the customer wishes to take power from Energy+; and (ii) the contracted capacity is "reserved" for the customer, whereby the customer wishes to ensure that the Energy+ infrastructure is in place at all time to provide the contracted peak load at any time.

Ultimately, the operation of the load displacement generation is at the discretion of the customer. The financial incentives for the customer with respect to maximizing its use of the load displacement generation would be based on its business case for installing the load displacement generation in the first instance.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 7

 Given the lack of incentives noted in Question 1 above to minimize outage duration or frequency, please explain why Energy+'s proposed rate structure is appropriate or meets utility standards for good rate design.

RESPONSE

Energy+s proposal for a Standby/Capacity charge meets utility standards for good rate design in that it is premised on:

- Customer choice; and
- Just and reasonable rates and fairness to all Customers
 - When customers displace load with generation, the expected revenue to cover capital, operating, maintenance and administration costs are not realized, and the burden falls on other customers to subsidize these revenue shortfalls, therefore impacting future rates for all customer classes (costs will be socialized across other rate classes).
 - The Retail Transmission Network Rates, charged by the IESO, are billed on a gross load basis, which includes the load displacement generation. Aligning the RTSR rates on this basis ensures that the load displacement customer pays the appropriate charge and such is not passed onto other customers.

Energy+ notes that the Standby/Capacity charge is not a new concept that Energy+ has developed and plans to implement. As identified in Response to Interrogatory TMMC-IR-1, Standby charges have been implemented by many distributors across Ontario and such have been approved as part of the overall rate design by the Ontario Energy Board.

INTERROGATORY

<u>Ref: Energy+ responses to TMMC April 10, 2018 Question 8, Sub-Question II and to</u> <u>TMMC Question 9, Sub-Questions VI, VII and VIII</u>

Issue: Standby Charge Proposal; Class Allocated Costs

Preamble: In its response to Question 8, Sub-Question II, Energy+ notes:

"Energy+ considers that costs to provide a standby service are fixed and do not vary with amount of standby service taken or not taken. As a result, Energy+ believes its proposal to use a capacity charge for standby service is the fairest approach to recover the fixed cost associated with standby service." [emphasis added]

In its response to Question 9, Sub-Questions VI, VII and VIII, however, Energy+ includes tables that specify, inter alia, "Class Allocated Costs" that vary depending on the standby rate methodology considered by Energy+.

- Why are the Class Allocated Costs specified in the tables in each of the responses to TMMC Question 9, Sub-Questions VI, VII and VIII different? More specifically, why do Class Allocated Costs vary given that Energy+ maintains, in its response to Question 8, Sub-Question II (outlined above), that the costs to provide standby service are fixed?
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,099,775 shown in Column 1 of the table provided in response to Sub-Question VI for the rate design "2019 Rates No Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,172,064 shown in Column 2 of the table provided in response to Sub-Question VI for the rate design "2019 Rates with 28,778 kW Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,494,402 shown in Column 3 of the table provided in response to Sub-Question VI for the rate design "2019 Rates with 38,000 kW Capacity".

- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,074,921 shown in Column 1 of the table provided in response to Sub-Question VII for the rate design "2019 Rates No Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,108,297 shown in Column 2 of the table provided in response to Sub-Question VII for the rate design "2019 Rates with 26,221 kW Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,145,487 shown in Column 3 of the table provided in response to Sub-Question VII for the rate design "2019 Rates with 28,778 kW Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,518,830 shown in Column 4 of the table provided in response to Sub-Question VII for the rate design "2019 Rates with 38,000 kW Capacity".
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,401,170 shown in Column 2 of the table provided in response to Sub-Question VIII for the rate design "2019 Rates with 9,200 kW Name Plate Capacity.
- Provide supporting calculations or the rationale for the Class Allocated Cost of \$1,321,613 shown in Column 3 of the table provided in response to Sub-Question VII for the rate design "2019 Rates with Gross Load Billing".

RESPONSE

 The Class Allocated Costs specified in the tables in each of the responses to TMMC Question 9, Sub-Questions VI, VII and VIII are different since the cost drivers used in the cost allocation model are different in each case. The cost drivers are provided in the responses below. Once the cost allocation model defines the costs, they are classified as fixed costs since they are based on number of customers and peak load and the costs would vary minimally with usage.

- 2. The following table provides supporting information for the Class Allocated Cost in each of the cases provided in response to Sub-Question VI.

3 & 4. See response to 2.

- 5. The following table provides supporting information for the Class Allocated Cost in each of the cases provided in response to Sub-Question VII.

- The following table provides supporting information for the Class Allocated Cost in each of the cases provided in response to Sub-Question VIII

10. See response to 9.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 9, Sub-Questions VI and VII

Issue: Standby Charge Proposal; Class Allocated Costs

Preamble: In the calculations identifying the rate impacts of alternative rate setting approaches that are provided by Energy+ in its responses to Question 9, Sub-Questions VI, and VII, it appears that differences in class allocated cost are based on differences in the billing demand that is applied to TMMC, under each of the rate structures. <u>As a consequence, class allocated cost is an outcome of the rate setting approach rather than the outcome of an independent calculation of the actual underlying costs associated with providing standby service.</u>

1. Confirm TMMC's understanding that differences in class allocated costs, as set out in Energy+'s responses, are a function of billing demand as opposed to the actual costs associated with providing standby service.

RESPONSE

Energy+ confirms that the allocated costs, as set out in Energy+'s responses, are a function of billing demand.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 9, Sub-Questions VI and VII

2. Has Energy+ assessed the actual costs of providing standby service. If "no", explain the reasons why not to TMMC, on either a short-term or long-term basis? If "yes", please provide this analysis.

RESPONSE

Energy+ has not assessed the actual costs of providing standby service and therefore has not prepared any further analysis.

Energy+ has utilized the OEB's Cost Allocation Model to apportion the assets and expenses using cost-causality principles approved by the OEB and included in the OEB's Cost Allocation Model. Energy+ submits that this approach is an appropriate methodology when assets and expenses are shared by more than one customer class.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 9, Sub-Questions VI, VII and VIII

Issue: Standby Charge Proposal; Revenue to Costs Ratios

<u>Preamble</u>: The proposed Revenue to Cost Ratio vary for each of the approaches to implementation of the standby Tariff. For example, in the response to Question 9, Sub-Question VIII, the ratio varies from 98.17% to 85.00%.

1. What is the basis of the specific revenue to cost ratios shown in the tables provided in response to Sub-Questions VI, VII, and VIII?

RESPONSE

Please refer to Response to Interrogatories IR-TMMC-4 (3).
INTERROGATORY

<u>Ref: Energy+ responses to TMMC April 10, 2018 Question 8, Sub-Question IV and to</u> <u>Question 9, Sub-Question VIII</u>

Issue: Standby Charge Proposal; Distribution Revenue Impact vs. Class Allocated Cost

Preamble: In its response to Question 8, Sub-Question IV, Energy+ indicates that it has not considered a tariff structure with different rates for net load versus gross load because of the administrative costs associated with designing such a rate. In particular, Energy+ notes that the "Capacity" versus "No Capacity" options results in an annual distribution revenue impact of only \$40,000.

- Confirm that the figure of \$40,000 represents the approximate difference between \$894,237 and \$932,038, which are the numbers shown in the bottom rows of the first and second columns of the table provided in response to Question 9, Sub-Question VIII.
- 2. We note that the Class Allocated Cost shown in the first row of the table referenced in Question 1 above is \$1,145,487 for the first column (i.e. "2019 Rates with 28,778 kW Capacity") and \$1,401,170 for the second column (i.e. "2019 Rates with 9,200 kW Name Plate Capacity"). The difference between these two figures for class allocated cost is \$255,638. Explain why the difference in Class Allocated Cost is much larger than the cited revenue impact of \$40,000 referenced in Energy+'s response to Question 8, Sub-Question IV.

RESPONSE

The figure of \$40,000 represents the approximate difference between and and which are the numbers shown in the bottom row of the first and third columns of the table provided in response to Question 9, Sub-Question VII. The reference of Question 9, Sub-Question VIII was incorrect in the original response.

2. Please refer to Response to Interrogatories IR-TMMC-4 (3). In addition, the revenue requirement used to determine rates for the two referenced cases is shown in the row titled "Revenue with Adjusted Revenue to Cost Ratio (H) = (A) * (G) - (C)" in the table provided in response to Question 9, Sub-Question VIII. The difference in the revenue requirement amount is **1** minus **1** minus **1** or **1** minus. Of this amount about would be assigned to TMMC in the 2019 Rates with 9,200 kW Name Plate

Capacity case.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Question I

Issue: Standby Charge Proposal; Dedicated Assets

Preamble: In its response to Question 10, Sub-Question I, Energy+ notes the following:

"The assets used exclusive to TMMC would mainly be the 795MCM aluminum wire and associated clamps/bracket/insulators/bolts along with two TMMC specific loadbreak switches and a few solid blade switches.

"Energy+ has recorded the costs of these assets in the Overhead Conductors and Devices assets category on a pooled asset basis and therefore the asset value, net book value, and annual depreciation expense for these exclusive assets is not specifically available."

While recognizing that <u>specific asset values</u> may not be available as a result of group asset accounting, it should be possible to provide <u>estimates of asset values</u> based on average data for the relevant asset groups.

It should also be noted that demand at TMMC has grown significantly since connection assets were initially installed in 1996.

 Provide estimates, based on average data from the associated asset groups, of the <u>asset</u> <u>value</u>, <u>net book value</u> and <u>annual depreciation expense</u> for assets used exclusively to provide service to TMMC. If Energy+ cannot provide such estimates, please explain the reasons why not.

RESPONSE

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IR-TMMC-11

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Question I

2. What assets, if any, have been installed since 1996 to accommodate load growth at TMMC?

RESPONSE

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Question I

3. How does demand at TMMC in 2016 compare to demand at TMMC in 1996?

RESPONSE

The monthly peak demand at TMMC in 2016 compared to the demand in 1996 and 1997 is shown in the table below:



INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

Issue: Standby Charge Proposal; Dedicated Assets

<u>Preamble</u>: In its response to Question 10, Sub-Question III, Energy+ lays out the following as a "consideration" in requesting a standby charge:

"Contracted capacity is 'reserved' for customer with load displacement [generation] whereby the customer wishes to ensure that the Energy+ infrastructure is in place at all times to provide the contracted peak load at any time."

In response to Question 10, Sub-Question I, Energy+ notes the following:

"Energy+ is not proposing the Standby/Capacity Charge to protect its revenue stream from stranded assets...

"There are relatively few assets used exclusively for TMMC since almost all the poles are multicircuit (two of three 27.6kV circuits with one circuit used to supply TMMC and the other circuit(2) used to supply other customer). The only poles exclusive to TMMC are located at the Preston TS."

1. If, as noted in the response to Sub-Question I, there are relatively few TMMC-dedicated assets, why is it necessary to "reserve" contracted capacity for TMMC?

RESPONSE

Please refer to Response to Interrogatory IR-TMMC-1.

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IR-TMMC-12

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

2. What specific capacity is being reserved on behalf of TMMC?

RESPONSE

Energy+ has reserved W of capacity at TS to provide back-up supply to TMMC in the event the behind-the-meter Combined Heat and Power (CHP) generation goes offline.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

3. On which specific assets is this capacity being reserved?

RESPONSE

Energy+ is reserving this capacity at TS on the 230kV-27.6kV transformers. The transformers supply multiple distribution feeders including the second distribution feeders from Preston the TMMC plant.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

4. What is the net book value and the annual depreciation expense of the specific assets on which capacity is being reserved on behalf of TMMC? If the specific asset value and annual depreciation expense cannot be identified because of the use of group accounting methods, please provide an estimate of these values based on group asset characteristics and values.

RESPONSE

Energy+ has utilized the OEB's Cost Allocation Model to apportion the assets and expenses using cost-causality principles approved by the OEB and included in the OEB's Cost Allocation Model. Energy+ submits that this approach is an appropriate methodology when assets and expenses are shared by more than one customer class.

Energy+ is not able to identify the specific asset values and annual depreciation expense amounts for the assets that are being reserved as the assets are categorized on a pooled asset basis and therefore the asset values, net book value, and annual depreciation is not specifically available.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

5. Has Energy+ been able to defer any new asset additions or upgrades as a result of the installation of load displacement generation at TMMC? If so, what are the additions or upgrades that have been deferred or avoided, and what are the cost savings associated with these deferrals or avoidances?

RESPONSE

No, Energy+ has not deferred or avoided any new asset additions or upgrades as a result of the installation of the load displacement generation at TMMC. From an operating perspective, Energy+ must assume that TMMC's load-displacement generation may drop offline at any time, and as a result instantaneously add **MW** of load to **TS**. Therefore, **MW** of transformer capacity must be kept at **TS**.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

6. Does the reduction in load as a result of TMMC load displacement generation assist in increasing the longevity of equipment at Energy+?

RESPONSE

No, the reduction in load as a result of TMMC's load displacement generation does not assist in increasing the longevity of equipment owned by Energy+.

INTERROGATORY

Ref: Energy+ response to TMMC April 10, 2018 Question 10, Sub-Questions 1 and III

7. If the answer to question 6 is "yes", has Energy+ done an analysis of the financial benefit associated with reduced loading as a result of TMMC generation? Are these benefits taken into account in the Energy+ Standby Rate proposal?

RESPONSE

Not applicable as the answer to IR_TMMC_12 (6) is No.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

Issue: Standby Charge Proposal; Customer Peaks vs. System Peaks

Preamble: In designing distribution systems and planning for maximum loads, it is general utility practice to take into account load diversity and the fact that not all customers will need to be served at their maximum potential load or their historical peak load at the time of a utility's own system peak. Instead, coincidence factors and probabilistic analyses are used to take into account the fact that individual customers will not all reach their maximum load at the exact same time.

As found on page 230 of 1497 in Exhibit 2, the Distribution System Plan indicates that the Energy+ local load forecast projection takes into account, among other things, "10 MW required on standby for an industrial customer". We assume that the reference to 10 MW required on standby for an industrial customer is a reference to TMMC's 9.2 MW of load displacement generation.

1. Confirm that the reference to 10 MW of load displacement generation is a reference to TMMC's existing on-site generation unit with 9.2 MW nameplate capacity.

RESPONSE

Energy+ confirms that the reference to 10 MW of load displacement generation is a reference to TMMC's existing on-site generation unit with 9.2 MW nameplate capacity. The output of the generation sometimes exceeds the 9.2 MW nameplate capacity.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

2. Does the Energy+ local load forecast projection assume that the 10 MW required on standby for TMMC adds to its system load forecast on a one-to-one basis or, in other words, with no allowance for diversity or the fact that TMMC requests for standby service are not likely to occur at the time of Energy+'s system peak load?

RESPONSE

The 2019 load forecast for the Large Use class has the demand units adjusted by **W** to account for the proposed standby service on contracted capacity basis for **W**. The calculation of **W** is shown in Response to Interrogatories IR–TMMC-4(4).

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

3. For the load forecast projection used in Energy+'s Distribution System Plan, what is the base amount of load (before allowance for the 10 MW required on standby) used in the load forecast to represent TMMC's contribution to Energy+'s 2018 to 2023 Peak Demand Forecast Scenarios, as shown in Figure 4-3 of the Distribution System Plan? Please provide assumed base load data for each of the relevant years 2018 through 2023.

RESPONSE

For the load forecast projection used in Energy+'s Distribution System Plan, the base amount (before allowance for the MW required on standby) of load used in the load forecast was MW to represent TMMC's contribution to Energy+'s 2018 to 2023 Peak Demand Forecast Scenarios.

Energy+'s peak load forecast for 2018 to 2023 takes into account the load on the system as a whole and forecasts the trend based on growth rates, energy conservation activities, embedded generation, and wholesale market participants. TMMC's base load was kept constant at MW for each year from 2018 to 2023.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

4. Does Energy+ design its distribution system to meet, simultaneously, the maximum noncoincident demand that has been observed to date at each of its customers individually? If the answer differs for different parts of the Energy+ system, please differentiate among these different parts, as required.

RESPONSE

No, Energy+ does not design its distribution system to meet, simultaneously, the maximum noncoincident demand that has been observed to date at each of its customers individually.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

5. In the event that the answer to Question 4 above is that Energy+ designs its distribution system to meet, simultaneously, the maximum non-coincident demand that has been observed to date at each of its individual customers, please explain how this design approach is efficient and produces an optimally sized distribution system.

RESPONSE

Not applicable as the answer to IR-TMMC-13 (4) is "no".

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

6. In the event that the answer to Question 4 above is that Energy+ does not design its distribution system to meet, simultaneously, the maximum non-coincident demand that has been observed to date at each of its individual customers, please explain how it is reasonable for Energy+ to assume that its system will need to be sized to meet TMMC's historical maximum net load plus the nameplate capacity of its load displacement generation, at the same time that load from its remaining customers also reaches its peak.

RESPONSE

It is reasonable for Energy+ to assume that its system will need to be sized to meet TMMC's historical maximum net load plus the nameplate capacity of its load displacement generation (LDG) at the same time that load from its remaining customers also reaches its peak because:

- a) The LDG can and has dropped off-line or reduced output with **CALLER** TS and the **CALLER** and **CALLER** feeders instantaneously picking up the full load of the TMMC plant. The timing of these events can not be predicted, therefore, Energy+ must, from an operating perspective, always reserve sufficient capacity at **CALLER** TS including at peak load periods to ensure that the transformers at **CALLER** TS are not overloaded in the event that the LDG either drops offline or reduces output.
- b) The size of the LDG generation at TMMC is a factor. An instantaneous loss of 9.2 MW of generation is much larger than the variation in either load or generation of any other customer on Energy+'s distribution system. It has a material impact.
- c) There are only two units rated at MW each. Load variations at each of Energy+'s individual customers occurs across a base of 65,000 total customers. The probability of all 65,000 customers running at maximum non-coincident demand is very low as compared to two generation units dropping off-line.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

7. Has Energy+ done any analysis of the frequency and timing of outages by TMMC load displacement generation and the coincidence of these outages with Energy+'s own system peaks?

RESPONSE

No, Energy+ has not done any analysis of the frequency and timing of outages by TMMC load displacement generation and the coincidence of these outages with Energy+'s own system peaks.

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IR-TMMC-13

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

8. If the answer to Question 7 is "yes", provide the results of this analysis.

RESPONSE

Not Applicable, as the answer for IR_TMMC-13 (7) is "no".

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IR-TMMC-13

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

 If the answer to Question 7 is "no", explain why has Energy+ not done an analysis of the timing of outages by TMMC load displacement generation and the coincidence of these outages with Energy's own system peaks.

RESPONSE

Energy+ has not completed an analysis of the timing of outages by TMMC load displacement generation and the coincidence of these outages with Energy+'s own system peaks because the load displacement generation can drop out at any time. It is not based on a schedule. From an operating perspective, Energy+ must always consider that 9.2MW of power on an instantaneous basis may be added to the load at TS if the generation drops offline.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

Issue: Standby Charge Proposal; Peak Loads

Preamble: Understanding the coincidence between TMMC's requirements for back-up support for its load displacement generation and the system peak for the Energy+ system is important for understanding the true costs of providing standby power. This is particularly true for those common assets that are shared amongst various Energy+ customers and that can and do serve multiple customers.

 Provide actual hourly load data for Energy+'s Cambridge system for each of the years 2016, 2017, and 2018 (YTD) in EXCEL format.

RESPONSE

Please find the excel file attached title "IR-TMMC-14 Hourly Data_Response 1 2 5_2018_08_30 – CONFIDENTIAL FILE" and refer to Tab titled 'Response 1'.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

2. Provide a schedule listing the hourly peak load on Energy+'s Cambridge system, and the date and time (i.e. hour) during which this peak load occurred, for each month of the years 2016, 2017, and 2018 (YTD).

RESPONSE

Please find the excel file attached title "IR-TMMC-14 Hourly Data_Response 1 2 5_2018_08_30 – CONFIDENTIAL FILE" and refer to Tab titled 'Response 2'.

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INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

3. Provide the same information as requested in Question 2 for Energy+'s primary distribution system.

RESPONSE

Please refer to the data provided for question 1. Energy+ does not have a complete data set separated for the primary distribution system.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

4. Provide the same information as requested in Question 2 for Energy+'s secondary distribution system.

RESPONSE

Please refer to the data provided for question 2. Energy+ does not have a complete data set separated for the secondary distribution system.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

5. Provide the energy deliveries by Hydro One to Energy+'s Cambridge system for each of the following hours: (Note: these are the peak hours for TMMC net load.)

Date	Hour Ending
07-Jan-16	13:00
03-Feb-16	11:00
02-Mar-16	2:00
22-Apr-16	12:00
16-May-16	10:00
20-Jun-16	12:00
07-Jul-16	23:00
05-Aug-16	10:00
08-Sep-16	14:00
06-Oct-16	14:00
02-Nov-16	12:00
15-Dec-16	15:00
26-Jan-17	21:00
22-Feb-17	21:00
27-Mar-17	18:00
21-Apr-17	10:00
25-May-17	14:00

Date	Hour Ending
12-Jun-17	12:00
12-Jul-17	18:00
22-Aug-17	10:00
26-Sep-17	14:00
23-Oct-17	7:00
08-Nov-17	8:00
05-Dec-17	8:00
04-Jan-18	12:00
27-Feb-18	13:00
01-Mar-18	11:00
25-Apr-18	10:00
31-May-18	12:00
27-Jun-18	18:00

RESPONSE

Please find the excel file attached title "IR-TMMC-14 Hourly Data_Response 1 2 5_2018_08_30

- CONFIDENTIAL FILE" and refer to Tab titled 'Response 5'.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

Issue: Standby Charge Proposal; System Benefits of Load Displacement

<u>Preamble</u>: Load displacement generation can provide benefits to the system by reducing the need to add new capacity to meet load growth.

1. When and where does Energy+ expect to add additional capacity to its Cambridge distribution system to meet load growth in the next 10 years?'

RESPONSE

Energy+ is expecting to add additional capacity in the North West part of Cambridge as shown in the figure below by constructing a new transformer station, designated as Cambridge MTS#2.



The need for MTS#2 depends on load growth in the area, particularly in an area designated as the "East Side Lands". Although the load growth is not expected to be substantial enough to drive investment for MTS#2 over the forecast period of 2018-2023, the timing may be expedited if data centres or other large, industrial facilities are constructed earlier than expected.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

2. What are the estimated costs of the asset upgrades or additions identified in response to Question 1 above? In addition to providing the capital cost per project, please identify the effective cost per kW per year of the additional capacity to be provided.

RESPONSE

It is estimated that the cost of Cambridge MTS#2 would be \$20 million. The additional capacity of Cambridge MTS#2 is expected to be 113,000 kVA. A typical power factor of 0.9 would put the capacity at 101,700 kW. Therefore, the cost per kW will be \$196.66 per kW (\$20 million / 101,700 kW).

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

3. How would increases or decreases in electricity distribution capacity required at the TMMC plant influence the timing of new asset upgrades or additions that may be required on the Energy+ system in the next 10 years?

RESPONSE

Any increase in load would advance the timing of Cambridge MTS#2 and any increase beyond the capacity of the existing 27.6kV feeders would also require additional investment on the distribution system.

Any permanent decrease in load (e.g. not as a result of load displacement generation which may disappear at any time) would delay the timing of Cambridge MTS#2.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

4. Provide an electric one-line diagram that shows the interconnection between the Energy+ distribution system, TMMC, and each customer in the Large User class, and that identifies the specific distribution facilities owned by Energy+ that serve TMMC and other customers in the Large User class. For these facilities, please also indicate whether these facilities also serve other (non-Large User) loads and, if so, state the peak demand(s) of these other loads.

RESPONSE

There are two Large User Class customers on Energy+'s distribution system. TMMC is one of the Large Users. There is no interconnection between the supply to TMMC on the overhead supplied from 27.6kV feeders designated as and Transformer Station (TS) and any other customers. These feeders are dedicated exclusively to TMMC. A one line diagram of the supply to TMMC is shown below. Hydro One owns the TS and the and feeder breakers. Energy+ owns the 795MCM Aluminum overhead feeder wires from TS to TMMC along with insulators, clamps, bolts, brackets, connectors, inline switches (designated as IL1105, IL1106, IL24CB1 and IL30CB2 on the one line diagram), loadbreak switches (designated as LB2367 and LB2466 on the one line diagram), poles located TS and lightning arresters on directly at and None of these assets serve other customers. The poles, guying and anchoring supporting the and circuits also support other 27.6kV circuits supplying other customers in a wide range of service classes except for poles located directly at TS.

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One-Line Diagram – Supply to TMMC

The other Large User customer on Energy+'s distribution system is supplied quite differently. This customer is supplied from the Hydro One owned Galt Transformer Station (TS) on the 27.6kV 65M21 feeder. The 65M21 feeder is shared with other residential, institutional, industrial and commercial customers. A high level one line diagram of the 65M21 feeder is shown below. A detailed diagram is very involved as it supplies 1,982 customers. Energy+ owns overhead and underground 27.6kV and secondary wires, distribution transformers, fused cutouts, lightning arresters, loadbreak switches, poles, brackets, insulators, clamps, bolts, guying/anchoring, lightning arresters and other distribution equipment along the 65M21 feeder.



One-Line Diagram - Supply to Other Large User Customer

The peak loading of the 65M21 feeder in 2017 was 11.9MVA.

INTERROGATORY

Ref: Energy+ Application, Exhibit 2, Appendix 2-1 Distribution System Plan

5. Provide estimates, based on average data from the associated asset groups, of the asset value, the net book value, and annual the depreciation expense of the specific distribution facilities that serve the Large User class, as identified in the response to Question 4 above.

RESPONSE

Energy+ has utilized the OEB's Cost Allocation Model to apportion the assets and expenses using cost-causality principles approved by the OEB and included in the OEB's Cost Allocation Model. Energy+ submits that this approach is an appropriate methodology when assets and expenses are shared by more than one customer class.

Energy+ is not able to identify the specific asset values and annual depreciation expense amounts for the specific distribution facilities that serve the Large User class as assets are categorized on a pooled asset basis and therefore the asset values, net book value, and annual depreciation is not specifically available.

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IR-TMMC-16

INTERROGATORY

Issue: Standby Charge Proposal; Applicability

1. Is there a size threshold or alternatively, a size limit for the behind the meter generation to which the application of a standby charge will apply? If so, what are these size thresholds and/or limits?

RESPONSE

Please refer to Response to Interrogatory 7-Staff-77 (c).
INTERROGATORY

2. For the purpose of applying the stated policy for the application of a standby charge, does "behind the meter generation" include emergency or back-up generation?

RESPONSE

Energy+'s proposal would not include a Standby charge for emergency or back-up generation based on a permit approval to operate only for emergency or back-up purposes. The generation by definition would not be load displacing, as it would only operate in emergency and back-up purposes.

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and Tab</u> <u>9 of LRAMVA workform, Energy+ (CND rate zone)</u>

Issue: Lost Revenue Adjustment Mechanism

Preamble: To the extent that Energy+ uses the total amount of demand billed to TMMC (i.e. including the amounts billed through both the base distribution tariff and the Standby Tariff) in its calculations for the recovery of regulatory variances, TMMC's share of regulatory variances will be increased, relative to a scenario in which the allocation of such charges is based on the base distribution tariff only. As a result, acceptance of Energy+'s Standby Tariff proposal will increase TMMC's liability for a variety of charges, and not just for the costs of distribution.

1. Confirm that inclusion of kW amounts billed under the Standby Tariff will increase TMMC's future share of the disposition of regulatory variances.

RESPONSE

Energy+ does not confirm that the inclusion of kW amounts billed under the Standby Tariff will increase TMMC's future share of the disposition of regulatory variances.

The table below summarizes the proposed allocators that were used by Energy+ for each D&V account (Please refer to Tab 5. Allocation of Balances in the 2019_DVA_ Continuity Schedule).

The basis of allocation of the D&V balances are based on consumed/metered kWh, number of customers, or an allocation specific to the customer class (i.e. LRAMVA).

As the kWh in the 2019 load forecast are based on forecasted consumed/metered kWh for TMMC, which do not include the generation kWh, TMMC's share of the disposition of the regulatory variance accounts (for 2017 D&V balances, and future D&V balances) are not expected to be impacted by the Standby Tariff.

Description	Account	Basis of Allocation	
Low Voltage Account	1550	kWh	
Smart Metering Entity Charge Variance Account	1551	# Customers	
RSVA - Wholesale Market Service Charge	1580	kWh	
RSVA - Retail Transmission Network Charge	1584	kWh	
RSVA - Retail Transmission Connection Charge	1586	kWh	
RSVA - Power (excluding Global Adjustment)	1588	kWh	
RSVA - Power - Global Adjustment	1589	kWh	
Disposition and Recovery of Regulatory Balances	1595	kWh	
Other Regulatory Assets	1508		
Other Regulatory Assets - Sub-Account - Deferred IFRS Transition Costs		Distribution Rev.	One-Time
Other Regulatory Assets - Sub-Account - Incremental Capital Charges		Distribution Rev.	One-Time
Other Regulatory Assets - Sub-Account - Financial Assistance Payment and Recovery Variance - Ontario Clean Energy Benefit Act		Distribution Rev.	One-Time
Other Regulatory Assets - Sub-Account - Monthly Bills		Distribution Rev.	One-Time
Other Regulatory Assets - Sub-Account - OEB Cost Assessment		Distribution Rev.	One-Time
Other Regulatory Assets - Sub-Account - Gain on Sale of Property		kWh	One-Time
Retail Cost Variance Account - Retail	1518	# Customers	
Retail Cost Variance Account - STR	1548	# Customers	
	4500	Specific to	
LKAW Variance Account	1508		One Time
IFRS-UGAAP Transition PP&E Amounts Balance + Return Component	15/5		One-Time
Accounting Changes Under CGAAP Balance + Return Component	15/6	kvVh	One-Time

Table: D&V Account Allocators

With respect to the Other Regulatory Asset Balances in Accounts 1508, these represent disposition of account balances that are one-time or not expected to be recurring. As the balances are allocated based on a percentage of distribution revenue, and the distribution revenue is based on the 2019 proposed distribution rates, there would be an increase in the amount allocated to the large user class as a result of the Standby Tariff. Energy+ notes that the amounts allocated to the Large User Class, for the One-Time items, represents a disposition (or return) to the Large User Class of approximately \$24,000.

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and Tab</u> <u>9 of LRAMVA_workform, Energy+ (CND rate zone)</u>

2. What is the cost impact on TMMC of an increased share of regulatory variances as noted above? Please provide figures for 2019 for each regulatory variance account.

RESPONSE

Not Applicable. Please refer to Response to IR-TMMC-17 (1).

INTERROGATORY

Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism

Issue: Lost Revenue Adjustment Mechanism

<u>Preamble</u>: TMMC worked closely with Energy+ over a number of years planning the installation of TMMC's load displacement generation. Such generation was an important component of Energy+'s plan for meeting its CDM targets.

In addition to seeing variances as a result of CDM initiatives, Energy+ experiences variances in system load that are related to normal fluctuations in the demand of individual customers as well as to the total number of load customers.

 In light of the long planning cycle associated with the TMMC generation project and Energy+'s close involvement with this project, why did the load forecast prepared for the 2014 rebasing process not include estimates of the impact of TMMC load displacement generation on consumption for the Large User class?

RESPONSE

Energy+'s load forecast underlying its 2014 Cost of Service Application was based on the projected load forecast for the 2014 Test Year. As the load displacement generation was not expected to be in-service in 2014, the 2014 load forecast did not include the TMMC load displacement generation. The actual in-service date for the load displacement generation was December 2015.

INTERROGATORY

Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism

2. For each of the years 2015 through 2017, what were the variances (both positive and negative) in volume and revenue, relative to forecast, for the Large User class that are not accounted for by CDM programs and hence not part of the Energy+ proposal for the recovery of lost revenues through the LRAMVA mechanism?

RESPONSE

The following is a table of the variances in volume and revenue, relative to the 2014 Load Forecast for the Large User class, that are not accounted for by CDM programs included in the LRAMVA:

Year	Forecast (kW)	Forecast CDM (kW)	Forecast excluding CDM	Actual load (kW)	LRAMVA (kW)	Load net of CDM (kW)	Variance net of LRAMVA (kW)	Rate (\$/kW)	Variance net of LRAMVA (\$)
2015	429,057	11,778	440,835	430,087	6,983	437,070	(3,765)	\$2 3783	(8,955)
2016	429,057	11,778	440,835	358,566	81,509	440,075	(760)	\$2.4172	(1,837)
2017	429,057	11,778	440,835	348,189	80,801	428,990	(11,845)	\$2.4574	(29,108)
Total	1,287,171	35,334	1,322,505	1,136,842	169,293	1,306,135	(16,370)		(39,900)

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and</u> <u>Energy+ response to TMMC Question 6, Sub-Question 4</u>

Issue: Lost Revenue Adjustment Mechanism

Preamble: The LRAM process recovers lost revenue from CDM programs that are associated with a given rate class only from the customers within that rate class. There are only two customers in Energy+'s Large Use Class and TMMC is forecast to account for approximately 90% of the forecast billing demand for this class. In consequence, TMMC will end up "repaying" most of the distribution cost savings associated with its load displacement generation, over the period 2016 through 2017, through the LRAM mechanism.

1. Confirm our understanding of the LRAM process as outlined above.

RESPONSE

Energy+ confirms that TMMC's understanding of the LRAM process is accurate in that TMMC will be allocated a portion of the LRAMVA balance, however, Energy+ would note the following corrections to the statements in the preamble above:

- The LRAMVA amount represents the estimated lost distribution revenue for Energy+ as a result of the load displacement generation in 2016 and 2017, as opposed to "distribution cost savings" described in the preamble above.
- Based upon the 2017 actual demand for the Large User Class of 348,189 kW (billed plus unbilled quantities), TMMC represents approximately The 2019 demand kW used in the allocation of D&V accounts for the Large User class is 361,276 kW, which includes of demand related to the proposed Capacity charge. TMMC will be billed an LRAMVA rate rider on a per kW basis, which will be applied to the actual per kW demand in 2019. Assuming that TMMC's kW demand in 2019 is consistent with the 2017 demand and accounting for the proposed increase in demand kW for capacity, TMMC would repay approximately of the lost revenue for the years 2016 and 2017.

An LRAMVA allocation of represents a allocation to the other Large User in this • rate class and therefore Energy+ submits that this does not mean that TMMC is repaying "most" of the LRAMVA. Based on the LRAMVA balance of \$321,919 for 2016 and 2017, the allocation to TMMC would be approximately based on with the balance of

being allocated to the other Large User in this rate class.

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and</u> <u>Energy+ response to TMMC Question 6, Sub-Question 4</u>

2. If TMMC's understanding is correct, please comment on the customer's financial incentive to implement CDM measures, in circumstances where the customer accounts for most of the billing demand in its class.

RESPONSE

A customer's financial incentive to implement CDM measures extends beyond the portion of the Total Bill that represents Energy+'s distribution rates. As illustrated in Exhibit 1,Table 1-27: Summary of Total Monthly Bill Impacts, the Energy+ distribution revenue, based on an average Large User consuming 6,600,000 kWh, or demand of 16,000 per month, represents less than 5% of the total monthly bill.

Financial incentives to customers for implementing CDM measures include:

• Reduction in the commodity costs including global adjustment costs due to reductions to its overall load and consumption. As outlined in the Customer Engagement Meeting presentation on January 19, 2018 (Pg. 101 of 1145), the commodity costs, including global adjustment, make up a significant portion of TMMC's monthly bill. The implementation of CDM initiatives provides for overall energy savings that benefit the customer.

In a newspaper article in May 2014, The Record, a Kitchener based newspaper, indicated that TMMC estimated that the cogeneration project will reduce emissions and save enough energy to power more than 7,400 homes per year.

 CDM programs funded by the IESO provide actual cash incentives, including reimbursement of certain costs to implement CDM initiatives. In the case of TMMC, funding was available from the IESO under the CDM programs related to the load displacement generation, as well as other CDM initiatives. There may also be other environmental or other incentives, financial and non-financial, that may also be available to customers.

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and</u> <u>Energy+ response to TMMC Question 6, Sub-Question 4</u>

3. Did Energy+ inform TMMC that distribution cost savings associated with the displacement generation facility would, in effect, be clawed back under the LRAM mechanism?

RESPONSE

Yes Energy+ did inform TMMC with respect to the LRAMVA mechanism with respect to the load displacement generation facility.

At a Customer meeting held between TMMC and Energy+ (formerly Cambridge and North Dumfries Hydro Inc. ("CND")) on November 6, 2014, Energy+ provided a presentation to TMMC that included the following topics:

- 2014 Cost of Service Decision and the impact to TMMC on distribution rates;
- 2015 Incentive Rate Mechanism Proposed Rates, including the proposal to apply for Gross Load Billing for variable distribution revenue and RTSR Line and Transmission and Low Voltage charges related to the load displacement generation project;
- Rate and Bill Implications of Generation Project, including a statement on LRAM that included:

"Any reduction in distribution revenue as a result of conservation would be recovered by CND through a Lost Revenue Adjustment Mechanism. The LRAM adjustment is recovered in future distribution rates based on an allocation to the customer rate class. In the absence of gross load billing, 2 existing Large User Customers would be charged the LRAM. Toyota would receive an allocation of approximately 85%." TMMC's legal counsel, Helen Newland, was in attendance at this meeting via telephone conference. Following this meeting, Energy+ provided a copy of the 2015 IRM Application, Customer Meeting presentation and the Notice of Application for CND to TMMC's legal counsel.

A copy of the November 6, 2014 presentation is attached to this response. The presentation has been redacted to remove confidential information.

Attachment:

Toyota Canada Customer Meeting November 6, 2014 Presentation_Redacted.

INTERROGATORY

<u>Ref: Energy+ Application, Section 4.11.1, Lost Revenue Adjustment Mechanism and</u> <u>Energy+ response to TMMC Question 6, Sub-Question 4</u>

4. Will lost revenues in respect of TMMC load displacement generation be charged back to the Large User Class and, thus, TMMC, for the years 2018 and 2019? If so, please provide estimates of these amounts.

RESPONSE

Yes, Energy+ expects to apply for an LRAM claim for the year 2018 as part of its 2020 IRM Application with respect to lost revenues related to the load displacement generation attributable to 2018, in comparison to the load forecast underlying current rates (i.e. the 2014 load forecast). Energy+ estimates that the LRAM claim would be approximately \$170,000, excluding carrying charges. All things being equal, and assuming that the kW allocations within the Large User Class are similar to the 2019 forecast, the allocation to TMMC, based on would be approximately

As the 2019 load forecast incorporates the demand kW, including the Capacity, as part of the 2019 Cost of Service Application, and rates are reset on this basis, Energy+ would not expect to apply for an LRAM claim in 2019 specifically related to the load displacement generation. In the absence of the proposed standby rate, these costs would instead be socialized across other customer classes.

Energy+ notes, however, that it would be eligible for an LRAM claim on any further reductions in the load beyond what is included in the 2019 load forecast in future years. If the Large User Class contributes to those reductions, an allocation to TMMC would be applicable. Energy+ is not able to provide an estimate for any amount related to 2019.

INTERROGATORY

Ref: Energy+ Application, Exhibit 8, Section 8.2.1, Retail Transmission Service Rates

Issue: Gross Load Billing – Retail Transmission Rates

<u>Preamble</u>: Energy+ has proposed to bill for Retail Transmission Service (RTS) on a Gross Load basis.

1. Please provide benchmark data on which other local distribution companies charge for RTS on a gross load basis.

RESPONSE

The 2006 Electricity Distribution Rate Handbook, dated May 11, 2005, states that the guidance for retail transmission charges remains unchanged from the prior handbook.

Section 11.3.2.5 of the Ontario Energy Board Electricity Distribution Rate Handbook, dated March 9, 2000, identifies that for demand metered customers, the connection rate shall apply to the individual end-use customer's non-coincident peak demand in the month on a gross load basis for customers with new embedded generation for which required approvals were obtained on or after October 30, 1998. This is consistent with Energy+'s proposal.

For example, Hydro One Networks Inc. (HONI) charges RTS on a gross load basis. HONI's billing practices for distribution RTS are aligned with their transmission charges. They have ensured that rates are designed on the basis of cost, and have appropriately allocated costs to customers.

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Appendices

Appendix IR-TMMC-1	Distributor Specific Load Displacement Generation
	Information – Distributors that do have a Standby Rate Class
	for Load Displacement Generation
Appendix IR-TMMC-14	Toyota Motor Manufacturing Company Customer Meeting

Appendix IR-TMMC-1

Distributor Specific Load Displacement Generation Information – Distributors that do have a Standby Rate Class for Load Displacement Generation 1

Distributor	Approved Rates	Rate Class(es) for Customers with LDG	(a) Billing Determinant And (b) Threshold for Inclusion in Standby Rate Class ¹	Standby Rate	Rate Rider(s) Applied to Customers with LDG? (Yes or No)	Monthly Service Charge	Distribution Revenue (associated with LDG)	Distribution Revenue (associated with LDG) as a percentage of Total Annual Dx Revenue (%)	 (a) # of LDG Cust. who meet threshold for inclusion in Standby Rate Class And (b) # of LDG Cust. who do not meet threshold for inclusion in Standby Rate Class² 	Annual Billed kW (associated with LDG)	Annual Billed kW (associated with LDG) as a percentage of Total Annual Billed kW (%)	R-C Ratio	EB# of Cost Allocation Methodology Approval	Cost Allocation Methodology and Basis For Cost Allocation / Rate Design ³
Brantford Power	2012	Standby Power	(a) Contracted Amount (Nameplate rating of generation facility) (b) No Firm Threshold	\$/kW 1.6729 (2012)	Yes	No	\$59,203 (2012)	0.4% (2012)	(a) 1 (2012) (b) 0	38,712 (2012)	2.68% (2012)	115.73% (2008)	EB-2007-0698	Costs were allocated as per the methodology in the Board's 2007 CA Informational Filing
Canadian Niagara Power – Port Co borne	2012	Standby Power	(a) Contracted Amount (Nameplate rating of generation facility) (b) No Firm Threshold	\$/kW 1.1676 (2012)	Yes	No	\$97,862 (2012)	0.2% (2012)	(a) 2 (b) 0	84,000 (2012)	0.2% (2012)	No Costs Allocated (Not included in cost allocation study)	EB-2002-0107	2001 RUD Model
Chatham Kent Hydro (Now known as Entegrus Powerlines)	2012	Standby Power + Intermediate with Self-Generation	(a) Contracted Amount (Nameplate rating of generation facility) (b) 500 kW	\$/kW 1.6906 (2012)	Yes	No Standby Service Related Monthly Charge But Yes Monthly Charge in ISG class	\$46,573 (2012)	0.39% (2012)	(a) 1 (b) 0	29,034 (2012)	2.24% (2012)	90.2% (2012)	EB-2009-0261	See Response for full description.
EnWin Utilities Additional Info included in No Standby Rates Applied Table	2012	Standby Power	 (a) Contracted Amount (Nameplate rating of generation facility) (b) N/A – does not charge standby rates 	\$/kW 0.5589 (2012)	No	No	\$0 (2012)	0% (2012)	May have some LDG customers - but as EnWin does not charge standby rates they do not know how many or their volumes.	0 (2012)	0% (2012)	No Costs Allocated (Not included in cost allocation study)	Does not charge standby rates	Does not charge standby rates
Horizon Utilities	2012	Standby Power	(a) Contracted Reserved load transfer capacity Or Monthly peak load displaced by the generating facility (b)	\$/kW 2.4952 (2012)	Yes	No	\$493,704 (2011)	0.51% (2011)	(a) 4 (b) Not available	199,012 (2011)	2.63% (2011)	80% (2011)	No Reply	No Reply
Hydro One Brampton Additional Info included in No Standby Rates Applied Table	2012	Standby Power	 (a) Monthly Peak Load Displaced by generating facility. Brampton has not applied standby charges since 2010. (b) No firm threshold 	\$/kW 1.5164	No	No	\$0 (2012) Currently Under Review	0% (2012) Currently Under Review	(a) 1 (b) 0	0 (2012) Currently Under Review	0% (2012) Currently Under Review	No Costs Allocated (Not included in cost allocation study)	Approved in EB- 2005-0377	Costs were not allocated to rate class. There are no historical billing quantities.

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¹ Some distributors have a threshold that they use to determine which customers are included in the Standby Power rate class. If applicable, please provide the threshold that is used. ² If available, please provide the number of customers with LDG that are not in the Standby Power rate class. ³ If costs were allocated to the rate class, please explain how and on what basis the costs were allocated. If costs were not allocated to the rate class, please explain how the standby rate was designed / developed.

Distributor	Approved Rates	Rate Class(es) for Customers with LDG	(a) Billing Determinant And (b) Threshold for Inclusion in Standby Rate Class ¹	Standby Rate	Rate Rider(s) Applied to Customers with LDG? (Yes or No)	Monthly Service Charge	Distribution Revenue (associated with LDG)	Distribution Revenue (associated with LDG) as a percentage of Total Annual Dx Revenue (%)	(a) # of LDG Cust. who meet threshold for inclusion in Standby Rate Class And (b) # of LDG Cust. who do not meet threshold for inclusion in Standby Rate Class ²	Annual Billed kW (associated with LDG)	Annual Billed kW (associated with LDG) as a percentage of Total Annual Billed kW (%)	R-C Ratio	EB# of Cost Allocation Methodology Approval	Cost Allocation Methodology and Basis For Cost Allocation / Rate Design ³
Hydro Ottawa	2012	Standby Power GS 50 to 1,499 kW Standby Power GS 1,500 to 4,999 kW Standby Power Large Use	(a) Specific Methodology (see filing) (b) LDG > 500kW	\$/kW 1.5734 \$/kW 1.4433 \$/kW 1.6016	Yes	\$117.90	\$13,954 (2012)	0.01% (2012)	(a) 2 (Both GS 1,500 to 4,999) (2012) (b) Not available	86,400 (2012)	0.82% (2012)	147%	EB-2011-0054	Exhibit G1-1-1 EB-2011-0054
London Hydro	2012	Standby Power	 (a) Contracted Amount (Nameplate rating of generation facility) (b) LDG > 1000 kW 	\$/kW 2.3942	Yes	No	\$274,507 (2010)	0.44% (2010)	(a) 3 (b) 2	154,800 (2010)	3.26% (2010)	80% (2010)	EB-2007-0002 and filed with rate application EB- 2005-0389	London applies a forecasted contracted amount of kW for allocation using OEB CA Model Sheet I6.1 Revenue Worksheet. The kWs represent the reserve amount of kWs three customers have contracted with London Hydro. Also populated on same Worksheet is the weather normalized kWhs. Sheet I8 is populated with forecasted demand data. No other factors such as meter, meter reads, billing/ collecting, services are applied.
Orillia Power	2012	Standby Power	(a) Contracted Amount (Nameplate rating of generation facility) (b) No	\$/kW 1.0217	No	No	\$12,918 (2012)	0.2% (2012)	(a) 1 (b) 0	27,288 (2012)	7% (2012)	No Costs Allocated (Not included in cost allocation study)	N/A	Orillia's standby rate was developed pre- market opening in conjunction with former Ontario Hydro.
PowerStream Additional Info included in No Standby Rates Applied Table	2012	Standby Power	 (a) Contracted Amount (Nameplate rating of generation facility) (b) Only applied to full displacement customers. 	\$/kW 2.6854	No	No	\$0 (2010-2013)	0% (2010-2013)	 (a) No customers being charged standby rates as no LDG customers are fully displacing their load. (b) 12 LDG customers (4 Residential and 8 GS>50 kW) 7 Net Metering Customers (5 Residential and 2 GS>50 kW) 	\$0 (2010-2013)	0% (2010-2013)	No Costs Allocated (Not included in cost allocation study)	Barrie Hydro: EB-2007-0746 Powerstream: EB-2012-0161	The Standby Power Service Class was not included in Cost Allocation. Information on Rate design for the Standby Power Service Class is not available.

¹ Some distributors have a threshold that they use to determine which customers are included in the Standby Power rate class. If applicable, please provide the threshold that is used.
 ² If available, please provide the number of customers with LDG that are not in the Standby Power rate class.
 ³ If costs were allocated to the rate class, please explain how and on what basis the costs were allocated. If costs were not allocated to the rate class, please explain why not and explain how the standby rate was designed / developed.

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Distributor	Approved Rates	Rate Class(es) for Customers with LDG	(a) Billing Determinant And (b) Threshold for Inclusion in Standby Rate Class ¹	Standby Rate	Rate Rider(s) Applied to Customers with LDG? (Yes or No)	Monthly Service Charge	Distribution Revenue (associated with LDG)	Distribution Revenue (associated with LDG) as a percentage of Total Annual Dx Revenue (%)	 (a) # of LDG Cust. who meet threshold for inclusion in Standby Rate Class And (b) # of LDG Cust. who do not meet threshold for inclusion in Standby Rate Class² 	Annual Billed kW (associated with LDG)	Annual Billed kW (associated with LDG) as a percentage of Total Annual Billed kW (%)	R-C Ratio	EB# of Cost Allocation Methodology Approval	Cost Allocation Methodology and Basis For Cost Allocation / Rate Design ³
Toronto Hydro	2011	Standby Power GS 50 to 999 kW Standby Power GS 1,000 to 4,999 kW Standby Power Large Use	 (a) Contracted Amount (Nameplate rating of generation facility) Toronto does not actually apply standby charges to the contracted amount related to the LDG facility. Therefore, LDG customers are effectively billed on a net demand basis + the monthly standby charge (b) 500 kVa 	\$/kVA 5.5956 \$/kVA 4.4497 \$/kVA 4.7406	No	\$197.91 (per 30 days)	\$9,733 (2012)	0.33% (2012)	(a) 4 (b) 5	0 kVA (2012)	0% (2012)	No Costs Allocated (Not included in cost allocation study)		The Standby Rates in each rate class are the same values as the rate class variable distribution rate.

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Appendix IR-TMMC-19

Toyota Motor Manufacturing Company

Customer Meeting

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Customer Meeting Toyota Motor Manufacturing Canada

November 6, 2014





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AGENDA

- 1. Introductions
- 2. New Distribution Rates
 - i. 2014 Cost of Service Decision
 - ii. 2015 Incentive Rate Mechanism Proposed Rates
- 3. Generation Project
 - i. Overview and Status Update
 - ii. Contracts and Costing
 - iii. Rate Implications Generation Project
- 4. Other Business



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NEW DISTRIBUTION RATES

2014 Cost of Service Application (Approved)

- New rates effective May 1, 2014 and implemented August, 2014
 - Fixed Rate \$8,490.71 per month
 - Volumetric \$2.3578 per kW
- Retroactive adjustment for months of May, June, and July
- Disposition of regulatory variance accounts contributing to reduction in monthly bills
 - Temporary in nature (9 months)
 - Monthly refund of approx. \$5.23 per kW vs. charge of \$1.86 per kW

2015 Incentive Rate Mechanism (Proposed)

- Proposed rates effective May 1, 2015
 - Fixed Rate \$8,609.58 per month
 - Volumetric \$2.3908 per kW
- Based upon Incentive Rate Mechanism increase of 1.3% (Inflation 1.6% less stretch factor of 0.3%)
- Includes disposition/recovery of regulatory variance accounts, including: Z-Factor Claim; LRAM Claim, and other deferral variance accounts.
 - Monthly refund of approx. \$0.82 per kW.
- Rates and disposition of regulatory accounts subject to change based on OEB review and approval.



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ESTIMATED BILL IMPACT (MONTHLY BILL)







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GENERATION PROJECT

- Status Update
- Contracts and Costing
- Rate Implications Generation Project



- LDC Embedded Generation Facility Connection and Cost Recovery Agreement (CCRA) between Hydro One and CND Hydro was received November 3, 2014 for execution and payment by November 17, 2014.
- CND Hydro's draft Connection Agreement and draft Connection Cost Agreement between CND Hydro and Toyota is being finalized now with CND's law firm for presentation to Toyota.
- Deposit amounts for Hydro One costs and CND Hydro costs are now final.
- Further engineering studies are required to reflect final generator parameters, connection of generation to



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CONTRACTS AND COSTING



CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

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CONTRACTS AND COSTING

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CONTRACTS AND COSTING





RATE AND BILL IMPLICATIONS OF GENERATION PROJECT

Distribution Rates

- No change to fixed distribution rates
- Request to the OEB to utilize Gross Load Billing for variable distribution revenue
 - > CND currently does not have the ability to charge a Standby Fee
 - Outstanding initiative by the OEB on Load Generation and Standby Rates
- Request to the OEB based on the following considerations:
 - CND's operating costs are not expected to materially change due to load generation;
 - Any reduction in distribution revenue as a result of conservation would be recovered by CND through a Lost Revenue Adjustment Mechanism ("LRAM");
 - LRAM Adjustment is recovered in future distribution rates based on an allocation to the customer rate class
 - In the absence of Gross Load Billing,



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RATE IMPLICATIONS OF GENERATION PROJECT





RATE IMPLICATIONS OF GENERATION PROJECT

Debt Retirement Charge ("DRC"):

DRC is a charge payable on <u>electricity consumed</u> in Ontario.

- Self-Generating Users are entities that generate electricity for their own use.
- Self-Generating Users are required to meter their consumption of self-generated electricity.
- Self-Generating Users are to calculate and remit DRC on their consumption of selfgenerated electricity.

