Guelph Hydro
Electric Systems Inc.

August 7, 2015

Delivered by RESS, Email and Courier

Kirsten Walli
Board Secretary
Ontario Energy Board,
2300 Yonge St.
Suite 2700, P.O. Box 2319
Toronto, Ontario, M4P 1E4

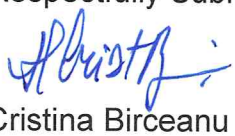
Dear Ms. Walli:

Re: Guelph Hydro Electric Systems Inc. ("Guelph Hydro")
Board File No. EB-2015-0073 – Technical Conference Topics Responses

Pursuant to Procedural Order No. 1, please find enclosed Guelph Hydro's responses to Technical Conference Topics from VECC in regard to the above noted matter.

Should there be any questions, please contact me at the number below.

Respectfully Submitted,



Cristina Birceanu

Director of Regulatory Affairs
Guelph Hydro Electric Systems Inc.

395 Southgate Drive,
Guelph, ON N1G 4Y1
Telephone- (519) 837-4735
Mobile- 226-218-2150
Fax: 519-636-1055
Email- cbirceanu@guelphhydro.com

CC: Kazi Marouf, Pankaj Sardana, Guelph Hydro
John Vellone, Bruce Bacon, BLG
Randy Aiken, David MacIntosh, Energy Probe
Wayne McNally, Jay Shepherd, Mark Rubenstein, Shelley Grice, SEC
Michael Janigan, Mark Garner, Bill Harper, VECC

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

AND IN THE MATTER OF an application by Guelph Hydro Electric Systems Inc. under Section 78 of the OEB Act to the Ontario Energy Board for an Order or Orders approving or fixing just and reasonable rates and other service charges for the distribution of electricity as of January 1, 2016.

TECHNICAL CONFERENCE RESPONSES OF GUELPH HYDRO ELECTRIC SYSTEMS INC. ("GUELPH HYDRO")

August 7, 2015

TABLE OF CONTENTS

EXHIBIT 3 – OPERATING REVENUE

3.0–VECC-65

Reference: 3-Energy Probe 21

a) Please outline Guelph Hydro's plans to address the customer refusal to have smart metering installed.

Response:

a) A very small quantity of Guelph Hydro's customers have resisted the installation of smart meters due to various concerns; for example, radio frequency radiation, or belief that TOU rates will result in higher electricity bills.

Upon receiving such a concern, Guelph Hydro provides the customer with a formal notice of their options under Ontario Regulation 95/05 made under Section 79.16(4) of the Ontario Energy Board Act, 1998. Eligible low volume consumers of electricity are permitted to opt out of the Regulated Price Plan and be charged the spot market price by filing a written statement with their local distribution company. The customer must have an interval meter installed at their expense to enable spot market pricing, and may also be responsible for the related ongoing cost of a dedicated phone line to communicate with the interval meter.

Guelph Hydro ensures the customer is aware of the one-time and ongoing costs involved in transferring to spot market pricing. To date, none of Guelph Hydro's low volume customers have chosen to have an interval meter installed to enable spot market pricing. Most have instead allowed the installation of a smart meter.

Guelph Hydro has only one circumstance, noted in IR-3-Energy Probe-21, where a customer has not chosen to proceed with the installation of an interval meter to enable spot market pricing, and has refused to allow for the installation of a smart meter. Guelph Hydro is not able to change the meter without the customer willingly providing access due to its location. Guelph Hydro intends to notify the customer by letter that access must be permitted or a disconnection will occur. Should the customer choose not to respond, two additional letters will be sent informing the customer of an imminent disconnection. If the customer still refuses Guelph Hydro access, Guelph Hydro has the right to disconnect the customer until such a time that the customer agrees to have the meter replaced, as set out in Guelph

Hydro's Conditions of Service section 2.2 Disconnections i) and j).

3.0–VECC-66

Reference: 3-Energy Probe 22

a) In the response Guelph Hydro states: "Guelph Hydro intends to continue to refine its load forecasting methodology to better predict turning points in the data". Please confirm whether or not Guelph Hydro intends to refine and update the load forecasting methodology used in this Application or whether the intent is that any such refinements would be reflected in future applications.

Response:

a) Guelph Hydro is satisfied with the functional form and statistical results of its current load forecast model. Guelph Hydro notes that the proposed functional form of the model provided better statistical results than all the alternatives tested and even those suggested by intervenors in IR-3-Staff-43b and IR-3-VECC-23c. Accordingly, Guelph Hydro intends to refine its current model in the future so that improvements can be suggested in future applications.

3.0–VECC-67

Reference: 3-Energy Probe-24 b)
3-Energy Probe 25 a)
Chapter 2 Filing Requirements, Appendix 2-H

a) Would adding the revenue and expenses shown in Energy Probe 24 b) to the amounts shown in Appendix 2-H for Accounts #4375 and #4380 respectively make the values comparable with those shown in Appendix 2-H for 2014-2016 for these two accounts? If not, please provide a schedule that sets out the 2012 and 2013 values for Accounts #4375 and #4380 on the same reporting basis as used for these accounts for 2014-2016 and explain the derivation of the reported 2012 and 2013 values.

b) The response to Energy Probe 25 a) suggests that the expenses shown in Energy Probe 24 b) for Intercompany Shared Services include: i) expenses incurred by GHESI in providing shared services to its Affiliates (the revenue for which are also shown in Energy Probe 24 b) and ii) the expenses incurred by GHESI in purchasing Intercompany Shared Services from its Affiliates.

- **Please confirm if this is the case and, if so, breakout the Intercompany Shared Services expenses paid to Affiliates for the years 2012-2016.**
- **If not, please reconcile the responses to Energy Probe 24 b) and 25 a).**

Response:

a) Guelph Hydro confirms that adding the revenue and expenses shown in Energy Probe 24 b) to the amounts shown in Appendix 2-H for Accounts #4375 and #4380 respectively makes the values comparable with those shown in Appendix 2-H for 2014-2016 for these two accounts.

b) The expenses shown in Energy Probe 24b) for Intercompany Shared Services relate only to the expenses incurred by GHESI in purchasing Intercompany Shared Services from its Affiliates. These costs have been recorded in account #4380 rather than OM&A commencing in 2014.
The revenue shown in Energy Probe 24b) for Intercompany Shared Services relates to the revenue GHESI earns by providing shared services to its Affiliates. These revenues have been recorded in account #4375 commencing in 2014.

The expenses incurred by GHESI in providing shared services to its Affiliates are recorded in OM&A for all years under review i.e. 2012 to 2016.

EXHIBIT 4 – OPERATING EXPENSES

4.0-VECC-68

Reference: 4-Energy Probe - 53
Preamble: Using the pre-CDM and post-CDM billed energy values extracted from the Rate Class Energy Model tabs of the data files noted in Ref 1 and Ref 2, VECC has created the following table which sets out the forecast billed energy by rate class pre and post-CDM and calculated difference based on the Board approved 2012 load forecast, i.e., the CDM included in the 2012 Load Forecast by Rate Class.

			2012 Board Approved Load Forecast						
	Total Billed	Residential	General Service < 50 kW	General Service > 50 to 999 kW	General Service > 1000 to 4999 kW	Large Use >5000 kW	Streetlights	Sentinel Lights	Unmetered Scattered Loads
2012 Pre-CDM	1,691,924,424	384,843,346	151,133,120	403,908,989	466,246,062	273,697,118	9,777,748	88,740	2,229,301
2012 Post-CDM	1,676,018,424	378,871,008	148,787,703	399,661,950	465,120,498	271,481,475	9,777,748	88,740	2,229,301
CDM	15,906,000	5,972,338	2,345,417	4,247,039	1,125,564	2,215,643	0	0	0

a) Please confirm that the 2012 Approved Load Forecast values – with and without CDM – used in the table set out in the Preamble are correct. If not, please provide a corrected version.

b) Please confirm that the calculation set out in the Preamble for determining the 2012 CDM energy adjustment by customer class mirrors the methodology used by Guelph Hydro to calculate the 2012 CDM adjustment for classes billed on kW for purposes of determining the LRAMVA balances.

c) Please explain why Guelph Hydro used the kWh values set out in Table 4-85A of the Application for purposes of determining the LRAMVA balances as opposed to those set out in the Preamble.

Response:

a) Guelph Hydro confirms that the 2012 Approved Load Forecast values –

with and without CDM – used in the table set out in the Preamble are correct.

b) Guelph Hydro confirms that the calculation set out in the Preamble for determining the 2012 CDM energy adjustment by customer class mirrors the methodology used by Guelph Hydro to calculate the 2012 CDM adjustment for classes billed on kW for purposes of determining the LRAMVA balances.

c) Guelph Hydro used the kWh values set out in Table 4-85A of the Application for the purposes of determining the LRAMVA balances because this methodology was approved by the Board in two proceedings: Bluewater Power Distribution Corporation (Board file number EB-2012-0107), and Lakeland power Distribution Ltd. (Board file number EB-2012-0145).

EXHIBIT 7 - COST ALLOCATION

7.0–VECC–69

Reference: 7-Energy Probe – 58
7- Staff -56 & 57

a) In using the new Board Cost Allocation model were any revisions/corrections to the data input made in apart from those described in Staff-56? If yes, please outline what they were.

b) The data correction outlined in Staff-56 b) helps to explain the increase in the SQ revenue to cost ratio for the GS 1,000-4,999 class as between the initial Application and Energy Probe-58. However, please explain the reasons for the large increases observed in the ratios for Large Use and USL.

c) In support of the response to part (b) please also provide a run of the initial Cost Allocation model (as used on the Application) that incorporates the revised data inputs.

Response:

a) Guelph Hydro corrected the LEAP amount allocation to reflect the LEAP amount recovery from all rate classes (please see the response to 7-Energy Probe-57). Guelph Hydro's updated Cost Allocation model reflects the updated rate base and revenue requirement resulted after responding to interrogatories, including the working capital allowance of 7.5% (please see Guelph_Updated_CA Model_Detailed_RUN1_20150731 file, Tab I5.2 Misc Data, cell D19).

b) c) In order to respond to 7-VECC-69 b) and c), Guelph Hydro run the original Cost Allocation model submitted on April 24, 215 to reflect all updates that followed the interrogatories (including the NCP correction stated in the response to 7-Staff-56), and compared the three version as shown below:

Table 7-VECC-69 – Cost Allocation models comparison

Status Quo %			
Class	Original CA submitted on April 24, 2015	New updated CA submitted on July 31, 2015	Original CA updated 7-VECC-69
Large Use	103.24%	86.23%	75.15%
USL	157.02%	152.85%	157.06%

Guelph Hydro is requested to explain the reasons for the large increase observed by VECC in the ratios for Large Use and USL.

As presented in the above table, the SQ ratios for Large Use and USL decreased slightly due to the data correction outlined in Staff-56 b) and the corrections which followed the interrogatories.

7.0-VECC-70

Reference: 7-VECC -53 c)
Preamble: The original question asked in what accounts the costs of connecting street lights were captured. However, the response addressed the treatment of street lighting maintenance.

a) Please respond to the original question and indicate if there are any costs which are incurred by Guelph Hydro when street lights are connected to its secondary buses which are capitalized and/or expensed and, if so, what are they and in what account(s) are they recorded. Furthermore, per the original question, what are the related 2016 forecast costs in each of these accounts?

b) With respect to the response provided to part (c), are maintenance cost referred to related to the maintenance of the Street Lights owned by the municipality or to the maintenance of Guelph Hydro assets required to service street lights?

c) With respect to the response provided to part (c), please explain why the costs are captured in a miscellaneous receivables account. Also, are these costs eventually recovered from the municipality and, if so, why aren't they and the associated revenues treated as part of Other Revenue?

Response:

a) Guelph Hydro does have costs when street lights are connected to the distribution system. Such costs typically include labour, materials, equipment, and contractor costs. These costs are not capitalized or expensed in Guelph Hydro's accounts. All costs incurred for the connection and maintenance of street lights are tracked in a work order which allocates these costs to "recovery street lighting" projects which are recorded in a clearing account. At the end of each month, the costs are reallocated from the clearing account to the miscellaneous receivable account, previously referred to in the response to VECC 53 c), also known as OEB Account #1104. These costs are then invoiced to the City of Guelph for reimbursement. In circumstances where GHESI does street lighting connection work for a developer, the costs would be invoiced directly to the developer. The amount forecasted for 2016 to be allocated to OEB Account #1104 for this street lighting activity is $464,530.

b) The maintenance cost referred to are related to the street lights owned by the municipality.

c) Please refer to response to VECC 70 a) above. The costs eventually

recovered from the municipality are not treated as part of Other Revenue, they are simply charged against the related costs which have been recorded in the miscellaneous receivable account (OEB Account #1104).

7.0–VECC-71

Reference: 7-VECC-53 d) & e)

a) Do USL customers perform all the work required to connect their devices to Guelph Hydro's distribution system? If so, what procedures are in place to ensure that Guelph Hydro has an accurate count of the USL devices connected to its system?

Response:

a) USL customers perform all work required to prepare for the connection of their devices to Guelph Hydro's distribution system with Guelph Hydro making the final connection to the distribution system. In order to ensure an accurate count of USL devices connected to the distribution system, Guelph Hydro requires the customer to submit a connection request application and once approved a work order will be established and entered into a database and geographical information system for billing and tracking purposes.

7.0–VECC-72

Reference: 8-VECC-55

a) Given that Guelph Hydro owns and operates the DG meter, Is the cost of the additional meter required for the DG project recorded in Guelph Hydro's accounts along with an offsetting capital contribution? If not, how is it treated for accounting purposes?

b) What are the annual costs incurred by Guelph Hydro associated with operating and maintaining the DG meter?

Response:

a) This confirms that the cost of the DG meter was allocated to the DG project, and will be invoiced to the customer. When the invoice is settled an offsetting capital contribution will be reflected.

b) The DG meter is added to Guelph Hydro's automated daily remote meter interrogation queue and processes, with the telephone line provided by the customer at the customer's expense. There are no incremental annual costs associated with operating and maintaining the DG meter until Measurement Canada meter reverification testing is required, in 10 years' time. The estimated cost for the Measurement Canada reverification is $200 plus nominal metering labour.

EXHIBIT 8 - RATE DESIGN

8.0–VECC-73

Reference: 8-Staff-58

a) With respect to part b)-iii), based on year to date 2015 actuals what percentage of the GS 50-999 billed load qualified for the TOA?

b) Please confirm that the proposed $64,558 value for the TOA in 2016 is consistent with assuming that 8.6% of the 2016 forecast billed kW for the class qualifies for the allowance. If not confirmed, what is the appropriate percentage?

Response:

a) Based on January 1 to June 30, 2015 actuals, 8.71% of the GS 50-999 kW billed load qualified for the TOA.

b) Guelph Hydro confirms that the proposed $64,558 value for the TOA in 2016 consistent with assuming that 8.6% of the 2016 forecast billed kW for the class qualifies for the allowance.

8.0–VECC-74

Reference: 8-Staff-61
Preamble: In the second last paragraph of the response Guelph Hydro states:
Considering all the above, Guelph Hydro is proposing to maintain the current monthly charges for the GS 50 to 999 kW, GS 1,000 to 4,999 kW, Large Use and Sentinel Lighting rate classes above the ceiling fixed charges.

a) Please clarify whether Guelph Hydro is now proposing to:

i. Maintain the current 2015 monthly service charge for these classes, or

ii. Maintain the currently proposed monthly service charge derivation for these classes as per the original Application.

Response:

a) i. and ii.: Guelph Hydro is proposing to maintain the currently proposed monthly service charge derivation for these classes as per the original Application, with other words, to maintain the current fixed/variable proportions for the GS 50 to 999 kW, GS 1,000 to 4,999 kW, Large Use and Sentinel Lighting rate classes above the ceiling fixed charges.

8.0–VECC-75

Reference: 8-Staff-62
8-VECC-55

a) The response to Staff 62 a) states that "the standby rate will be charged to generated demand when the maximum load and generation peaks coincide". This appears to suggest that standby rates only apply when the maximum delivered load and the generation peak coincide. However, in the second example provided in response to VECC-55, the customer pays distribution variable charges based 6,955 kW when the maximum delivered load is only 5,000 kW even though the maximum load and generation peaks do not coincide. Please reconcile.

b) Please explain why in VECC-55:

i. For the first example, the variable charge is applied only to 4,950 kW of delivered load even though the maximum load in the example is 5,000 kW, and

ii. For the second example, the variable charge is applied to only 4,455 kW of delivered load even though the maximum load recorded was 4,500 kW at the time.

c) With respect to VECC 55 c), please clarify whether the new DG Large Use customer referred to in the second paragraph is in addition to the one existing Large Use customer with DG referred to in the Application (Exhibit 8/Tab 1/Schedule 1, page 12).

d) With respect to the response to VECC 55 d), please clarify what is meant by the Standby Rates "keep(s) the distribution revenue neutral of any self-generation" and how this statement applies in the case of the examples set out in 8-VECC-55 b).

e) Please explain more fully why there would have been no additional revenue in 2014 if the existing Large Use customer had been billed under the proposed standby rates. Was there no month in 2014 when the maximum coincident demand of the delivered load plus the generation exceeded the maximum delivered load?

Response:

a) Guelph Hydro intends to charge the standby rate (equivalent to the distribution variable charge) only if the highest coincident peak demand for the month comprises peak hourly delivered load and peak hourly generator metered output. If the highest coincident peak demand for the month is due to only peak hourly delivered load, then the standby rate will not apply.

In the second example provided in response to VECC-55, the highest coincident peak is 7 MW - at which point in time the hourly delivered load is 4.5 MW and the generator metered output is 2.5 MW. The customer pays Large Use distribution variable charges for 4,455 kW (4,500 kW demand minus primary metering allowance of 45 kW) and Standby Rate charges (equivalent to Large Use distribution volumetric rate) for 2,500 kW of generation metered output.

b) For the responses in both i. and ii., the LDG customer is primary metered and receives a primary metering allowance of 1% applied to demand.

   i. For the first example, the maximum load is 5,000 kW, the primary metering allowance is 50 kW. The billed demand is 4,950 kW (5,000 kW – 50 kW).

   ii. For the second example, the maximum demand is 4,500 kW, the primary metering allowance is 45 kW. The billed demand is 4,455 kW (4,500 kW – 45 kW).

c) The new DG Large Use customer referenced in the second paragraph is the existing Large Use customer with DG referenced in the Application.

d) The statement regarding Standby Rates "keep(s) the distribution revenues neutral of any self-generation", suggests that indifferent of self-generation, the actual demand requested by the customer (i.e. load and generation) is billed with the corresponding rate class distribution volumetric rate. With other words, the distribution revenue will not be lost because the customer with LDG will be billed based on the monthly peak requested from the distribution system if the customer didn't have self-generation.

e) The existing customer did not have self-generation in 2014.
For a better illustration, Guelph Hydro presented below an example of billed demand without and with self-generation:

Table 8-VECC-75 – e-1

	Billed demand Without self-generation	**Billed Demand With self-generation**
Load	4,550	2,550
Generation	0	2,000
Total Biled demand	**4,550**	**4,550**

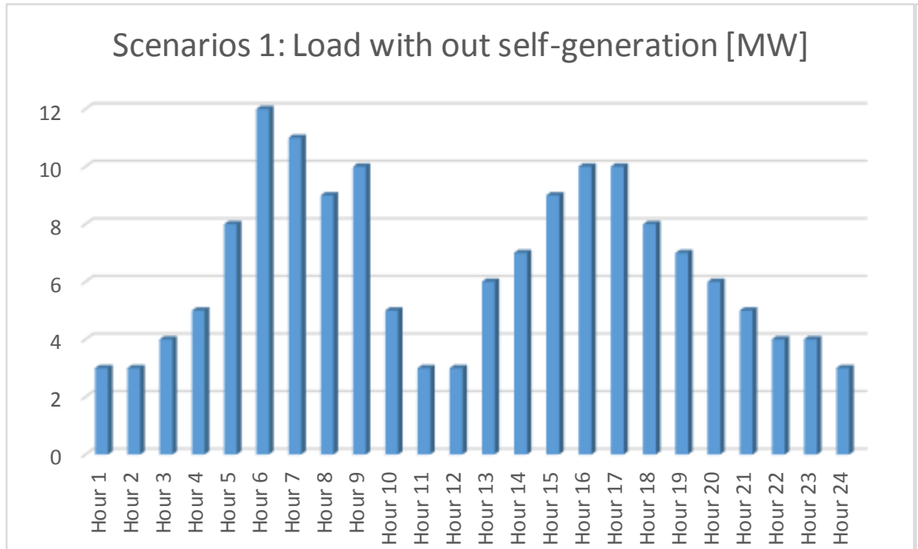
Because the billed demand would had been the same indifferent of self-generation, there would had been no additional distribution revenue.

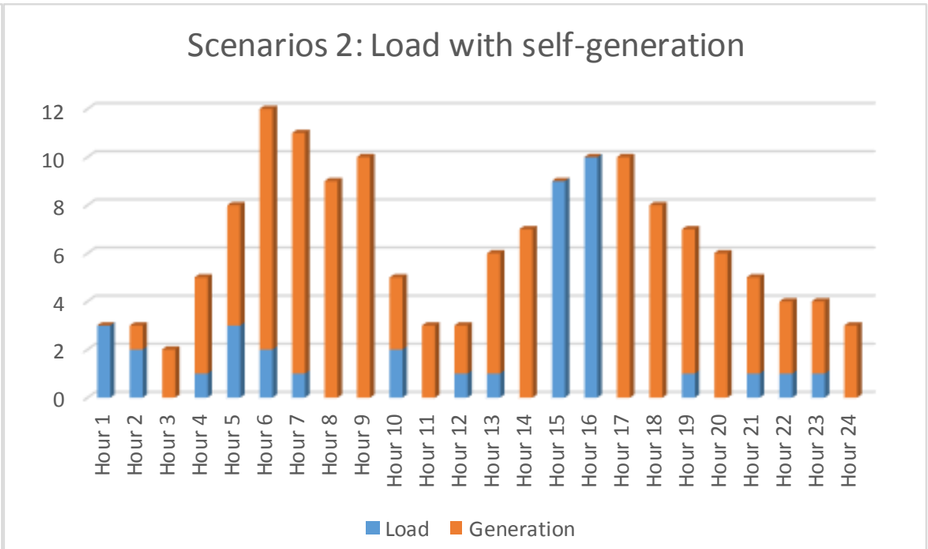
If the Standby rates were approved, Guelph Hydro would be able to sustain distribution revenues at a similar level to that if the DG generator was never installed.

The example showed above in Tale 8-VECC-75 illustrates the fact that the maximum coincident demand of the delivered load plus generation cannot exceed the maximum delivered load when the customer did not have self-generation.
In order to clarify more, Guelph Hydro presented below an example of load profile under the two scenarios: without and with self-generation.

Table 8-VECC-75 – e-2– Load Profile with and without self-generation

Scenarios	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Hour 7	Hour 8	Hour 9	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24
Load with out self-generation [MW	3	3	4	5	8	12	11	9	10	5	3	3	6	7	9	10	10	8	7	6	5	4	4	3
Load with self-generation [MW]	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Hour 7	Hour 8	Hour 9	Hour 10	Hour 11	Hour 12	Hour 13	Hour 14	Hour 15	Hour 16	Hour 17	Hour 18	Hour 19	Hour 20	Hour 21	Hour 22	Hour 23	Hour 24
Load	3	2	0	1	3	2	1	0	0	2	0	1	1	0	9	10	0	0	1	0	1	1	1	0
Generation	0	1	2	4	5	10	10	9	10	3	3	2	5	7	0	0	10	8	6	6	4	3	3	3





8.0–VECC-76

Reference: 8-VECC-58 a)
E8/T10/S1, pg. 10

a) The response states that Guelph Hydro currently charges a fixed rate of $73 for an overhead bond connection and $26 for an underground bond connection. However, the approved 2015 Specific Charges do not include these items. Please reconcile and indicate the basis/authority under which Guelph Hydro currently levies these charges.

Response:

a) Guelph Hydro currently does not have the basis/authority to levy these charges, and that is why the utility is seeking to remedy this in EB-2015-0073. Clearly, Guelph Hydro needs to recover its costs when customers request the utility to provide these services, and while the overall level of activity for these services is expected to remain low, Guelph Hydro recognized the need to apply Board-approved rates and charges for these services.