David I. Poch Barrister

13 June 2014

Ontario Energy Board 2300 Yonge St., 27th Floor Toronto, ON M4P 1E4

Attn: Ms Kirsten Walli Board Secretary

By electronic filing and e-mail

Dear Ms Walli:

Re: EB-2013-0416 HONI 2015-19 DX rates - GEC IRs

Attached please find our interrogatories in this matter.

Sincerely,

David Poch Cc: HONI

EB-2013-0416

GEC Interrogatories to HONI

1. Regarding Issue 7.7: Is an increase in the fixed charges revenue appropriate?

Ref.Cost Allocation Model Tab E2 (Allocators)

a) Please provide the class peak loads used by HONI to calculate distribution demand costs as forecast in each of the upcoming years. Also provide coincident peak (CP) load and class non-coincident peak (NCP) and distribution peak loads as used by HONI load in each month of the five previous years and as forecast over the next five year period.

b) Provide the date and time of the monthly CP, NCP, and HONI peak load for distribution cost allocation (by class if different) in the five previous years and identify any peak loads that occurred on Saturdays, Sundays, or holidays. Provide the load by rate class, including wholesale for both generation and transmission.Regarding Issue 7.7

2. Ref.Minimum System Discussion, Exhibit G1, Tab 3 generally and Schedule 2.

a) What is the definition of a secondary line (by voltage)

b) Please provide workpapers showing the number of miles and cost of primary and secondary lines. Divide each into overhead and underground.

c) Please provide workpapers showing the number of miles and cost of single-phase and three-phase primary lines. Divide each into overhead and underground.

d) Please identify the number of miles of primary and secondary lines strung on the same poles.

e) Please provide an estimate of the number of poles in HONI's service area serving (i) primary distribution lines only; (ii) secondary distribution lines only; (iii) primary distribution lines and secondary distribution lines simultaneously; (iv) serving only streetlights.

f) How are power poles used exclusively by streetlights assigned in the cost of service study?

Ref. Exhibit G1, Tab 3, Schedule 2

Please provide a copy of the Black and Veatch "Minimum System Report" of August 20, 2007.

4. Regarding Issue 7.7

Ref. Exhibit G1, Tab 3, Schedule 2, page 2

Please explain why poles, unlike wires, are assumed to carry no demand in the minimum system study, given that a pole is necessary to string the minimum-sized conductor.

5. Regarding Issue 7.7

Ref. Exhibit G1, Tab 3, Schedule 2, page 3.

Please explain the basis for an 80% power factor assumption.

6. Regarding Issue 7.7

Ref. Exhibit G1, Tab 3, Schedule 2, page 3.

Please provide or identify where in the cost of service study the calculations are made that either subtract the 1.341 kW per customer from all customers' demand or where demand costs of this amount are subtracted from the customer-related cost.

- 7. Regarding Issue 7.7
- 8. Please explain how the minimum system calculations for overhead wires are used for underground conduit and conductor.
- 9. Regarding Issue 7.7

Ref. Exhibit G1, Tab 3, Schedule 2, page 2.

- a. What is the assumption as to the number of customers per transformer on the minimum system?
- b. Provide calculations supporting the basis for the amount of demand per customer carried by a minimum transformer.
- 10. Regarding Issue 7.7

Please identify each type of conductor used by HONI at secondary voltage; the number of kilometers of that conductor, its current cost per foot and the amount of ampacity for that conductor. Provide separate information for overhead and underground conductor.

Please identify each type of conductor used by HONI at primary voltage; the number of kilometers of that conductor, its current cost per foot and the amount of ampacity for that conductor. Provide separate information for overhead and underground conductor and for single-phase and three-phase applications.

12. Regarding Issue 7.7

Please provide the number of poles by height and Class and the current cost of a pole of each height and Class.

13. Regarding Issue 7.7

Please identify the heaviest type of overhead conductor and largest size of polemounted transformer that can be installed on (a) the minimum sized pole and (b) the smallest size pole in common use for primary distribution if different from the minimum sized pole.

14. Regarding Issue 7.7

Ref. Cost Allocation Model, Sheet 15.2,

Please explain why services are not part of the costs for all non-residential customers. Identify any tariffs or rules requiring all non-residential customers to own or contribute 100% of the cost of their services.

Regarding the service weighting factors, please include available information on service length and type of conductor and differences in cost between single-phase and three-phase service.

15. Regarding Issue 7.7

Ref. Cost Allocation Model, Sheet 17.1,

For each of the meter costs identified on this sheet, please provide meter size, whether the meter is single-phase or three-phase, the customer's voltage of interconnection, the percentage of customers assumed to use Current Transformers (CTs) and Potential Transformers (PTs) included in each rate class and the cost of CTs and PTs.

If CTs and PTs are not included in the cost of meters in the cost allocation study, please identify the number of customers actually having CTs and PTs installed by rate class

16. Regarding Issue 7.7

Related to number of customers per transformer and transformer sizing in calculation of fixed charges:

- a. Please provide excerpts from HONI's design manuals or other engineering specifications regarding the calculation of loads and the diversity among loads assumed for installation and sizing of transformers.
- b. What is the average number of residential and small commercial customers per transformer? Divide by density zones and into single-family and multi-family and into basic and electric heating if available for residential. Divide by density zones and into single-phase and three-phase for small commercial customers.
- c. Please provide the total number of line transformers by kVA size; divide into polemount, padmount, and other underground if available. Provide the current cost (new) for each type of transformer.
- d. Please provide the number of transformers serving 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 customers, and 21 or more customers. Divide by density and into residential and non-residential if available.
- e. Please provide all studies which HONI has conducted regarding the diversity of customer loads at the line transformer for (a) single-family residential; (b) multi-family residential; and (c) small commercial customers.
- 17. Regarding Issue 7.7

Related to transformer and capacitor cost allocation and fixed charges:

- a. Please provide excerpts from design manuals, other engineering specifications, purchasing manuals, or other documentation explaining how HONI trades off capital costs and no-load and load-varying losses when purchasing transformers.
- b. Please state the value of energy and capacity used when making economic comparisons among bidders when purchasing transformers; provide the source of those figures; and provide the date when the figures were developed.
- c. Please estimate the average price premium that HONI currently pays over the transformer with the lowest capital costs in each size range in order to avoid losses.
- d. Please identify gross and net plant for capacitors and indicate in which account costs are included.
- 18. Regarding Issue 7.7

Ref. Trial Balance Tab I13

Please identify the number of customers and total number of dollars of uncollectible accounts (a) between \$10,000 and \$99,999 and (b) \$100,000 or more in the test year and the five calendar years from 2009-2013 by rate class and the total amount of those uncollectible accounts in each year.

Ref. Trial Balance Tab I13

- a. Please identify all costs of "Major Account Representatives" (defined as company employees assigned specifically to serve large customers) in 2012 and 2013 by Account. Include non-labor expenses of these staffers. Identify forecast costs by account in 2015-2019.
- b. Please identify the customer classes that are served by "Major Account Representatives" and estimate the approximate percentage of time spent on each class.
- c. Please identify all costs of "Economic Development" or similar programs in the test year by Account.
- d. Please identify all advertising expenses by account charged to ratepayers in 2012 and 2013 and forecast in each year from 2015-2019. Identify and provide the cost and a brief description of any individual advertising programs costing in excess of \$25,000. For any individual programs in excess of \$100,000, please provide samples of print advertisements and/or transcripts of radio or TV advertisements.
- e. Are the energy efficiency costs shown on Tab I13 included as customer-related costs in HONI's cost of service study.
- 20. Ref. Issue 7.7

Please provide the number of dollars of customer deposits held by HONI (by customer class if available) and identify and explain the current ratemaking treatment for customer deposits.

21. Regarding Issue 7.7

Please identify the number of HONI residential customers served in single-family and multi-family dwellings (providing the definition used by the Company).

22. Regarding Issue 7.7

Please estimate the total number of HONI residential customers (divided into single-family and multi-family if available) who have residential electric space heating.

23. Regarding Issue 7.7

Please provide any studies that the Company has conducted in the past 10 years regarding the average and incremental saturation and unit energy consumption of electric appliances (e.g., space heating, water heating, air conditioning, refrigeration, stoves, washers, dryers, other) in its service area.

24. Regarding Issue 7.7

Please provide all studies that HONI has conducted in the last 10 years regarding the relationship of income, housing size and type (e.g., single and multi-family), and/or number of persons per household to residential electric usage, divided by winter heating fuel if available.

25. Regarding Issue 7.7

Please provide all studies in HONI's possession undertaken in the last 10 years (regardless of who conducted the study) regarding the relationship of income, housing size and type (e.g., single and multi-family), and/or number of persons per household to residential electric usage, divided by winter heating fuel if available.

26. Regarding Issue 7.7

Please provide load research data from HONI for each available residential customer in its load research sample showing each customer's load by season and time of use, each customer's contribution to the system peak in June-August and December-February, and each customer's contribution to the class NCP demand in June-August and December-February, together with customer weighting factors and an identifier for each customer.

27. Regarding Issue 7.7

Please provide all load studies that HONI has conducted in the last 10 years regarding the relationship of residential usage (either annual or seasonal) by size of customer to summer and winter coincident peak usage, usage by time of use, and class non-coincident peak usage. Provide all available sample data.

28. Regarding Issue 7.7

Please provide all studies in HONI's possession undertaken in the last 10 years (regardless of who conducted the study) regarding the relationship of residential usage (either annual or seasonal) by size of customer to summer and winter coincident peak usage, usage by time of use, and class non-coincident peak usage in the province of Ontario

29. Regarding Issue 7.7

Please provide all studies that HONI has conducted in the last 10 years regarding the impact of changes to the customer charge on (a) cost-effectiveness of energy efficiency programs and measures to customers, and (b) total consumption of electricity in HONI's service area.

30. Regarding Issue 7.7

Please provide all studies in HONI's possession undertaken in the last 10 years (regardless of who conducted the study) regarding the impact of changes to the customer charges in Ontario on (a) cost-effectiveness of energy efficiency programs and measures to customers, and (b) total consumption of electricity.

Please provide all studies that HONI has conducted in the last 10 years regarding the elasticity of demand of its system or any of its customer classes.

32. Regarding Issue 7.7

Please provide all studies in HONI's possession undertaken in the last 10 years (regardless of who conducted the study) regarding the elasticity of demand in Ontario of any customer classes.

33. Regarding Issue 7.7

Ref. Hydro One Annual Report 2012 page 15, which states under the heading "Our Strategy": *Protecting and sustaining the environment for future generations*. Consistent with our value of stewardship, we play a central role in reducing Ontario's carbon footprint through the delivery of clean and renewable energy and through measures that allow our customers to manage and reduce their energy use. We will engage our customers further regarding how we manage our sustainability obligations and activities on their behalf."

Please explain in detail how reducing customers' incentives to conserve energy by raising fixed charges is consistent with this environmental element of Hydro One's "strategy."