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September 25, 2012

VIA MAIL and E-MAIL

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

Dear Ms. Walli:

**Re: EB 2012-0136 - Hydro ONE Networks Inc.
2013 Incentive Regulation Mechanism (IRM)**

As per Procedural Order No. 2, please find enclosed the interrogatories of the Vulnerable Energy Consumers Coalition (VECC). We have also forward a copy to the applicant and their counsel as well as all intervenors via email.

Thank you.

Yours truly,

A handwritten signature in black ink, appearing to be 'Michael Janigan', written in a cursive style.

Michael Janigan
Counsel for VECC

cc Hydro One – Anne-Marie Reilly – regulatory@hydroone.com
Counsel – Donald Rogers – don.rogers@rogerspartners.com
All Intervenors

HYDRO ONE NETWORKS INC. (HON)
2013 IRM DISTRIBUTION RATE APPLICATION
EB-2012-0136

VECC INTERROGATORIES

IRM Methodology

1. Has Hydro One appropriately applied the IRM mechanism as specified by the Board?

1-VECC #1

Reference: Exhibit A, Tab 2, Schedule 1, page 3

Preamble: The Application states -"the Applicant may seek meetings with Board staff in an attempt to identify and reach agreements to settle issues arising out of this Application".

- a) To date has HON held any meetings with Board staff to discuss its Application? If yes, please indicate how these informed the preparation of the Application.
- b) Now that HON has filed its Application, what does HON consider to be role of Board staff in settling issues arising from the Application that meetings would be required?

1-VECC #2

Reference: Exhibit A, Tab 3, Schedule 1, page 2

Preamble: HON states that its Application is substantially consistent with the requirements of the 2006 Electricity Distribution Rate Handbook and the Board's 2012 Filing Guidelines.

- a) Where, in HON's view, does the Application diverge from the requirements of the 2006 Rate Handbook and the 2012 Filing Guidelines?
- b) Is the Application fully consistent with the Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors dated July 14, 2008 and the related Supplementary Reports and Addendums?
- c) If not, please indicate those specific areas where HON does not consider its Application to be consistent and explain why.

1-VECC #3

Reference: Exhibit A, Tab 5, Schedule 1

- a) Please provide a schedule that sets out the derivation of HON Distribution's actual 2011 rate base, return on rate base and return on equity.

Incremental Capital Module/Rate Rider

2. Should the proposed capital projects be approved for ICM treatment?

2-VECC #4

Reference: Exhibit B, Tab 1, Schedule 1, page 1

Preamble: HON states that its approach to ICM is consistent with Hydro One's submission in the Renewed Regulatory Framework proceeding.

- a) Please indicate where HON's ICM approach is consistent and where it is inconsistent with the Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors dated July 14, 2008 and the related Supplementary Reports and Addendums.

2-VECC #5

Reference: Exhibit B, Tab 1, Schedule 1, page 1

- a) Please provide a schedule setting out the derivation of the \$1,161 M for 2010 revenue at 2011 rates.
- b) What was HON's actual 2011 distribution revenue (comparable to the approved value of \$1,149 M)?
- c) Please provide a schedule that compares HON's actual 2011 billing quantities by rate class with the approved values.
- d) If practical, please also include in the foregoing schedule the weather normalized billing quantities as well as actual quantities by rate class for 2011.

2-VECC #6

Reference: Exhibit B, Tab 1, Schedule 1, page 2, lines 9-11

- a) Does exceeding the Threshold Test in itself provide "access" to the ICM or are there additional requirements that must be met under the Board's ICM module guidelines?

2-VECC #7

Reference: Exhibit B, Tab 1, Schedule 1, page 2, (lines 25-26)

- a) Please explain more fully why "typical capital spending" based on historically approved levels of spending does not require "further detailed review during the period of IRM".
- b) In principle, couldn't historically approved levels of spending for sustainment, development and shared services & other spending include projects that were specific to the approval period and for which funding is not required during the IRM period?

2-VECC #8

Reference: Exhibit B, Tab 1, Schedule 1, pages 4 & 8

- a) Please explain how the \$414 M value for in-service capital additions was established.
- b) Please confirm that Table 2 sets out the approved capital spending for each year net of that associated with renewable generation and smart grid investments.
- c) If the response to (b) is yes, please provide a schedule that sets out how each year's value was established and provide references/sources for the data used in the calculations.
- d) Also, if the response to part (b) is yes, please clarify if the capital spending includes that associated with the implementation/installation of smart meters. If it does, please re-do Table #2 so as to exclude such spending.
- e) If the response to part (b) is no, please provide a table that sets out these values and indicate how each year's value was established, providing references/sources for the data used in the calculations. In doing the calculations please exclude spending on smart grid, renewable generation and smart meters.
- f) What were the (same year) capital additions associated with the approved capital spending for each year 2008-2011?

2-VECC #9

Reference: Exhibit B, Tab 1, Schedule 1, page 8

- a) Please provide a schedule that breaks down the typical spending approved for each year (2008-2011) as between Sustainment, Development, Operating, and Shared Services & Other. In the case of Sustainment please provide a further breakdown between stations, lines and meters. Similarly, for Development spending please provide the breakdown between the various categories used in EB-2009-0096, D1/T3/S1, Table 1 and for Shared Service capital please provide a breakdown between the various categories used in EB-2009-0096, D1/T3/S5, Table 1.
- b) Does the 2011 capital spending shown in Table 2 (\$437.6 M) include the spending in same year for the CIS as shown in Table 2 of Exhibit B, Tab 3, Schedule 1, page 5. If yes, why is this appropriate?

2-VECC #10

Reference: Exhibit B, Tab 1, Schedule 1, pages 4 - 5

- a) Does HON agree that one of the objectives of IRM is to provide electricity distributors with increased incentives to improve efficiency in the use of resources? If not, why not?
- b) Please confirm that, under a price-capped based IRM approach (as adopted by the OEB), distribution rates for the test year are not based on the test year's costs as is the case under a cost of service approach. If not confirmed, why not?
- c) Please confirm that any additional resources (e.g. funds) freed up through increased efficiencies (over and above those reflected in PCI) would be available to help fund new investments. If not, why not?
- d) If IRM rates are not cost-based, please explain the basis for HON's contention that in 2013 \$11 M in rate base is not funded due to a decrease in revenues.

2-VECC #11

Reference: Exhibit B, Tab 1, Schedule 1, pages 4 - 5

- a) Is the recovery of "typical capital spending no longer funded" provided for under the Board's current ICM guidelines?

- b) If HON's response is yes, please reconcile this view with each of the following:
- Board's Supplemental Report EB-2007-0673, September 2008, pages 30-31 – particularly the Board's stated view that the capital module is intended to be reserved for unusual circumstances that are not captured as a Z-factor
 - Board Decision, EB-2008-0205 (Part II), pages 10-11
 - Board Decision, EB-2008-0187, pages 7-8.

2-VECC #12

Reference: Exhibit B, Tab 1, Schedule 1, pages 6 - 8

- a) Is the recovery of type of capital spending that HON characterizes as "Escalated Issue" spending provided for under the Board's current ICM guidelines?
- b) If HON's response is yes, please reconcile this view with each of the following:
- Board's Supplemental Report EB-2007-0673, September 2008, pages 30-31, particularly the Board's stated view that the capital module is intended to be reserved for unusual circumstances that are not captured as a Z-factor
 - Board Decision, EB-2008-0205 (Part II), pages 10-11
 - Board Decision, EB-2008-0187, pages 7-8.

2-VECC #13

**Reference: Exhibit B, Tab 1, Schedule 1, pages 2, 4 & 9
Exhibit B, Tab 1, Schedule 2, page 5**

- a) Please confirm that under the Board's ICM module only capital spending in excess of the Threshold Test is subject to recovery through the ICM rate rider. If HON disagrees please provide references to Board Reports/Decisions that support this (alternate) view of how the ICM module works.
- b) Please confirm that HON has not applied the Threshold (calculated by HON to be \$332) in determining the amount of capital spending to be recovered through the ICM.
- c) Please re-do Table 3 (B/1/1) and Table 1 (B/1/2) so as calculate the ICM revenue associated with capital expenditures in excess of the Threshold Test.

2-VECC #14

Reference: Exhibit B, Tab 2, Schedule 2, page 1 (lines 14 – 23) and Figure 2

- a) Please provide the demographics for HON's distribution and regulating stations at the time of HON's Application for 2010/2011 rates (EB-2009-0096). If available, please provide references as to where in that Application the demographics of these assets were described.

2-VECC #15

Reference: Exhibit B, Tab 2, Schedule 2, page 1 (lines 26-28) & 3 (lines 11-13)

- a) Does the existing refurbishment rate of 4 stations per year include any transformer replacements? If yes, how many on average and is this number included or excluded from the 6 existing transformer replacements that occur each year?
- b) What is the current (e.g. 2011) maintenance expense associated with the 32 stations that HON plans on refurbishing in 2013 and what will be the annual maintenance expense associated with these stations afterwards?
- c) What is the current (e.g. 2011) maintenance expense associated with the 36 transformers that HON plans on replacing in 2013 and what will be the annual maintenance expense associated with these transformers afterwards?
- d) Did the 2010/2011 Rate Application indicate the number of Station Refurbishments planned for each of the test years? If yes, what are numbers and what are the relevant references?
- e) Did the 2010/2011 Rate Application indicate the number of planned transformer replacements for each of the test years? If yes, what are the numbers and what are the relevant references?

2-VECC #16

Reference: Exhibit B, Tab 2, Schedule 2, page 3

- a) Please provide the actual 2011 capital spending for each of the four categories of station capital shown in Table 1.
- b) Please provide the approved level of 2010 capital spending for each of the four categories of station capita shown in Table 1.

2-VECC #17

Reference: Exhibit B, Tab 2, Schedule 2, pages 12 - 13

- a) Please provide a schedule that compares the percentage of each of the following categories of assets that had "poor" or "very poor" condition ratings in the Asset Condition assessments underpinning the 2010/2011 Distribution Rate Application with the recent Asset Condition assessment results (per page 13, lines 10-12):
 - Transformers
 - Metal Clad Breakers
 - Batteries and Chargers.
- b) Please provide schedules or graphs that indicate the annual failures associated with metal-clad breakers over the 2008-2011 period (e.g. similar to Figure 10 for Battery and Charger failures and Figure 16 for Transformer failures).
- c) Please provide a schedule that sets out HON's values for SAIDI, SAIFI and CAIDI for each of the years 2008 – 2011. In each case please indicate the contribution that failures of either the stations or transformers have made to the overall annual values.

2-VECC #18

Reference: Exhibit B, Tab 2, Schedule 2, page 14 (lines 10-16)

- a) Please provide a listing of 70 Distribution Stations with the highest risk of failure based on poor asset health and provide the asset health index/rating for each.
- b) Please indicate which Stations are currently undergoing refurbishment in 2012. Please reconcile the choice of these stations with the health indexes/ratings reported in response to part (a) - i.e. are these the most critical health stations and, if not, why not?
- c) Please provide a schedule setting out the stations slated for refurbishment in 2013. Again, reconcile the choice of these stations with the health indexes/ratings reported in response to part (a).

2-VECC #19

Reference: Exhibit B, Tab 2, Schedule 2, pages 7 (Figure 3), 13 (lines 12-15) and 16 (lines 15-20)

- a) The Application claims that without the proposed \$29.0 M in 2013 for station refurbishment various risks will increase. Please explain why a short-term increase in such risks (through either a delay of 1-2 years in the start of this refurbishment activity or a phasing-in of the spending required) is unacceptable such that the proposed level of spending is "non-discretionary" as required by the Board's ICM criteria.

2-VECC #20

Reference: Exhibit B, Tab 2, Schedule 2, page 18

- a) Please confirm that the 35 transformers to be purchased under the Transformer Spares and Replacement program include 6 for planned replacements and 6 for demand replacements. Please further confirm that (per page 3) 6 planned replacements are consistent with existing practice.
- b) Please explain why the 6 planned replacements and the 6 demand replacements are not considered to be included as part of the Typical Sustainment spending.
- c) Are the 23 transformers to be purchased in 2013 as "Operating Spares" effectively an increase in the inventory of spare/replacement transformers? If not, please explain why.

2-VECC #21

Reference: Exhibit B, Tab 2, Schedule 2, pages 17, 18 and 20

- a) The text on page 17 indicates that the Transformer Spares and Replacement program does not include transformers purchases under the Station Refurbishment program. Page 20 indicates that the Spares and Replacement program will increase the replacement to 36 transformers per year. However, Table 2 (page 18) shows that the planned replacement of transformers is 36 in total (including those replaced under the Refurbishment program) and that only 12 (not 36) will be replaced outside the Refurbishment program. Furthermore, these twelve seem to reflect the typical level of past replacement. Please reconcile.

2-VECC #22

Reference: Exhibit B, Tab 2, Schedule 2, pages 18-21

- a) The discussion on pages 18-19 suggests that the purpose of the increase in transformers purchased under the Spares and Replacement program is to increase the number of new (as opposed to refurbished) transformers in the spare pool. However, the discussion on page 20-21 suggests that the

purpose of the increase in transformer purchases under this program is to increase the number of transformers actually replaced each year. Please reconcile and clarify the purpose of the increase in transformer purchases under this program.

2-VECC #23

Reference: Exhibit B, Tab 2, Schedule 2, page 18

- a) What was the approved OM&A budget in 2010 and 2011 for transformer refurbishments and how many transformers was this meant to address in each of these years?
- b) How many were actually refurbished in each of 2010 and 2011 and at what overall cost for each year?
- c) Does increasing the number of "new" spare transformers in 2013 by 23 mean that there will be reduction of 23 in the number of used transformers that need to be refurbished in 2013? If not, please explain why and indicate what the reduction in numbers will be.

2-VECC #24

Reference: Exhibit B, Tab 2, Schedule 2, page 19

- a) Please provide the analysis showing that the use of new as opposed to refurbished transformers is more cost effective.
- b) Please confirm that such analysis would only demonstrate that the use of new transformers is prudent and does not demonstrate that the use of new as opposed to refurbished transformers is "non-discretionary". If this cannot be confirmed, please explain why.

2-VECC #25

Reference: Exhibit B, Tab 2, Schedule 2, pages 21-22 and 25

- a) As opposed to discussing the impact of maintaining the Status Quo (page 25), please explain why the concerns about transformer reliability are not being adequately addressed through the increased transformer replacements that are funded as part of the Station Refurbishment program.
- b) Please re-do Figure 12 including in the "Proposed Replacement" line only those transformers that would be replaced under the Station Refurbishment program.

2-VECC #26

Reference: Exhibit B, Tab 2, Schedule 3, page 1

- a) Please demonstrate that if the replacement rate increase for wood poles was delayed until 2014 then "the backlog of end of life ("EOL") poles in the system will become unmanageable".

2-VECC #27

Reference: Exhibit B, Tab 2, Schedule 3, pages 1 (line 9) and 2 (line 7)

- a) The Application states (page 1) that over the next 10 years 340,000 poles are expected to require replacement. Please confirm that this includes the poles that were not treated to CSA standards as discussed on page 2.

2-VECC #28

Reference: Exhibit B, Tab 2, Schedule 3, page 9

- a) What was the approved level of spending for Wood Pole Replacement in 2010 and how many poles was this expected to address?
- b) How many wood poles were actually replaced in 2010?
- c) What was the actual spending on the Wood Pole Replacement Program in 2011 and how many poles were replaced?

2-VECC #29

Reference: Exhibit B, Tab 2, Schedule 3, page 13

- a) For 2013, how much of increase in pole replacement (11,000 versus 7,200) is to specifically address the poles that were not treated to CSA standards?
- b) If the poles were not treated to standard, what recourse does HON have to obtain compensation from the manufacturer? If none, please explain why.
- c) If recourse to compensation is an option, please explain what actions HON has taken to date, the current status and the anticipated outcome.

3. Is Hydro One's proposal with respect to the capital contribution allocated to Hydro One Transmission appropriate?

3-VECC #30

Reference: Exhibit B, Tab 2, Schedule 1, pages 1 – 2

- a) Was Woodstock Hydro permitted to recover all of its \$4.4 M capital contribution to HON Transmission through the ICM module? If not, why not?

4. Is Hydro One's proposal with respect to the treatment of the CIS project for 2013 and 2014 appropriate?

4-VECC #31

**Reference: Exhibit B, Tab 3, Schedule 1, pages 3 - 4
EB-2009-0096, Exhibit D1, Tab 3, Schedule 7**

- a) Please confirm that the CIS project is Phase 4 of HON's overall Cornerstone initiative.
- b) Please provide a schedule that sets out HON's distribution business' share of the annual Cornerstone capital spending for the years 2008 – 2011 (both approved and actual).
- c) Please clarify whether this spending (per response to part (b)) was included in the Typical Capital spending for 2008 – 2011 as shown in Table 2 of Exhibit B, Tab 1, Schedule 1, page 8. If it was, please explain why.

4-VECC #32

**Reference: Exhibit B, Tab 3, Schedule 1, page 16
EB-2009-0096, Exhibit D1, Tab 3, Schedule 7**

- a) Please provide a schedule that breaks down the \$172 M in total savings over seven years and shows the savings by year and by OM&A versus Capital (per B/3/1, page 16).
- b) With respect to the Exhibit D1, Tab 3, Schedule 7 from EB-2009-0096, please provide a schedule that extends Table 2 for the full seven years and shows the annual breakdown of the total anticipated savings of \$200 M from Phase 1 of the Cornerstone project.
- c) With respect to the Exhibit D1, Tab 3, Schedule 7 from EB-2009-0096, please provide a schedule that extends Table 3 for the full seven years

and shows the annual breakdown of the total anticipated savings of \$50 M from Phase 2 of the Cornerstone project.

- d) With respect to the Exhibit D1, Tab 3, Schedule 7 from EB-2009-0096, please provide a schedule that extends Table 4 for the full seven years and shows the breakdown of the total anticipated savings of \$130 M from Phase 3 of the Cornerstone project.

5. Is Hydro One's proposal to calculate revenue requirement for all of the proposed ICM projects, except CIS, based on full year depreciation, appropriate? In the event that Hydro One files on a cost of service basis for 2014, is an adjustment required, and if so should a deferral account be set up at this time to capture any such adjustment?

5-VECC #33

Reference: Exhibit B, Tab 1, Schedule 2, pages 1 - 2

- a) Is HON committing to filing for 2014 distribution rates based on IRM (as opposed to cost of service)? If not, why is the application of the full year rule for the ICM capital appropriate?

5-VECC #34

Reference: Exhibit B, Tab 1, Schedule 2, pages 1 - 2

- a) Assuming HON's 2014 distribution rate application is based on IRM (as opposed to cost of service), what adjustments would be required in order to "account for" the fact that the ½ rule was used for the CIS system for 2013 rates?
- b) If not, why is the application of the full year rule for the ICM capital appropriate?

5-VECC #35

Reference: Exhibit B, Tab 1, Schedule 2, page 5

- a) Please re-do Table 1 based on the ½ year rule for both depreciation and rate base for all projects.

6. Is the proposed rate implementation for projects approved under the ICM, if any, appropriate?

7. Is the proposed calculation of the ICM rate rider, including the cost of capital parameters used in the calculation, appropriate?

7-VECC #36

Reference: Exhibit B, Tab 1, Schedule 2, pages 3 – 4

- a) Please provide a schedule that contrasts the short term debt and long term debt rates and ROE values as approved for HON's 2011 rates with those used in the current Application.
- b) Please provide a schedule that sets out the derivation of the 4.94% long-term debt rate for 2013. In the schedule please clearly distinguish between those debt issues/debt rates that are based on currently issued debt versus forecasted debt issues/rates.
- c) Please provide the basis for the interest rates assumed to be associated with any new debt issues underlying the calculation of the 4.94%.
- d) The Application states (page 4, lines 3-5) forecast interest rates will be updated. Will this include an update of HON's forecast long term debt cost for 2013? If so, when will the update be done?

7-VECC #37

Reference: Exhibit B, Tab 1, Schedule 2, pages 3 – 4

- a) Do the Board's ICM module and associated work forms require input of the approved cost of capital (per the last cost of service application) or the current cost of capital parameters in calculating the revenue requirement impacts of approved ICM spending?
- b) If the Board's ICM module and associated work forms require use of the (last) approved cost of capital parameters for the utility, please explain why HON considers it appropriate to use the current cost of capital parameters. In doing so, please clarify whether the rationale is unique to HON's current circumstances.

7-VECC #38

**Reference: Exhibit B, Tab 1, Schedule 2, page 1
Exhibit E1, Tab 3, Schedule 1, page 1
Board Decision EB-2011-0207, page 19**

- a) Please outline the allocation approach to customer classes approved by the Board for Woodstock's contribution towards the Commerce Way TS. Why hasn't HON adopted a similar approach for its capital contribution?

Other Rate Riders and Adders

8. Is Hydro One's proposed disposition of Group 1 Deferral and Variance Accounts appropriate?

8-VECC #39

Reference: Exhibit A, Tab 3, Schedule 1, page 4
Exhibit E1, Tab 2 Schedule 1, page 5

Preamble: HON is proposing to refund the Group 1 balance over two years "in order to mitigate rate volatility".

- a) Please demonstrate how the two-year disposition mitigates rate volatility as opposed to a one year disposition period, in the context of the overall rate increases anticipated over the next two years.

8-VECC #40

Reference: Exhibit E1, Tab 2, Schedule 1, page 6 and Attachment 4
Exhibit E2, Tab 1, Schedule 1, Sheets 9 and 11

- a) The balances shown for Accounts 1590 and 1595 in E1/T2/S1, page 6 don't match those in Sheets 9 and 11. For example, the balance for Account 1590 in Table 1 is \$2,461,463 whereas in Sheets 9 and 11 it is \$11,444,981. Please reconcile.

9. Is Hydro One's proposed rate rider to share the impact of the income tax decrease with customers appropriate?

9-VECC #41

Reference: Exhibit A, Tab 3, Schedule 1, page 4

Preamble: HON has not updated its Application for the reduction in the tax savings amount from \$1.7 M to \$1.1 M

- a) How material is this reduction in terms of the overall bill impacts customers will experience from HON's Application as set out in Exhibit E1, Tab 3, Schedule 1 and Exhibit E2, Tab 3, Schedule 1?

10. Is Hydro One's proposed Smart Grid rate adder appropriate?

10-VECC #42

Reference: Exhibit C, Tab 1, Schedule 1, page 5

- a) Please provide a breakdown of the \$7.0 M as between:
- Licensing Fees
 - Computer Infrastructure Maintenance and
 - Staff to maintain the DMS system and other equipment.
- Please also explain the source of additional Computer Infrastructure maintenance costs there are over above the cost of staff to maintain the system.
- b) Were the ongoing costs associated with Release 1 of the ADS provided/flagged during the EB-2009-0096 proceeding? If so, please provide the references.

10-VECC #43

Reference: Exhibit C, Tab 1, Schedule 1, page 7 (lines 13-14)

- a) Please indicate precisely what investments (equipment/software and dollars) HON is planning on making in order to provide each of the additional capabilities set out in Table 3 and what the currently planned timing is for such investments.

10-VECC #44

Reference: Exhibit C, Tab 1, Schedule 1, pages 7 and 8

- a) Please provide a breakdown of the \$8.6 M OM&A expense as between the various initiatives set out on page 8, Table 3.

10-VECC #45

Reference: Exhibit C, Tab 1, Schedule 1, page 8

- a) Apart from the energy storage initiative and the trial use of voltage regulating devices, are any of the other planned capabilities "pilots/trials" or are they all being introduced for use across HON's entire system?
- b) Why is the Demand Response for Consumers a "Smart Grid Initiative" as opposed to a CDM program?
- c) Did HON consult at all with the OPA regarding its "Demand Response for Consumers" initiative? If not, why not? If yes, did the OPA provide any indication that this initiative overlapped with any trials or programs the OPA will be or is considering implementing?
- d) Please discuss the extent to which HON has attempted to and/or is collaborating with other electricity distributors in the province in pursuing each of the initiatives set out in Table 3.
- e) What are the annual savings (kWh) from theft reduction anticipated as a result of the "Catch and Reduce Energy Theft" initiative?
- f) Based on the 2011 approved revenue requirement and rates what is the cost of a purchased kWh?
- g) Will cost savings from loss reductions be captured in HON's RSVA accounts and eventually refunded to customers? If not, why not?

11. Are the proposed adjustments to the Retail Transmission Service rates appropriate?

11-VECC #46

Reference: Exhibit C, Tab 2, Schedule 1, page 1

- a) Did the Board not also approve 2011 loads at each of the transmission connections as part of EB-2009-0096? If yes, why weren't these used in the calculation and what would be the results if they were?

11-VECC #47

Reference: Exhibit C, Tab 2, Schedule 1, page 2 (lines 12-14)

- a) Please confirm that the billing parameters used were those approved for 2010. If not, please recalculate using the 2010 billing parameters.

11-VECC #48

Reference: Exhibit C, Tab 1, Schedule 1, page 3

- a) Please provide a schedule that compares the UTRs used to set the "current rates" with those used to calculate the "proposed rates".

Final Step of Harmonization Plan

12. Is Hydro One's proposal to implement the final adjustments of the Harmonization Plan in accordance with the Board's directions?

Density Study

13. Is Hydro One's proposal for the implementation of the Density Study findings appropriate?

13 – VECC #49

Reference: Exhibit A, Tab 3, Schedule 1, page 1

- a) What is HON's understanding as to the direction it received from the Board in EB-2009-0096 in terms of the task(s) to be completed regarding "density" and when?
- b) Please confirm that "density" was not the only cost allocation-related issue that the Board's EB-2009-0096 Decision directed HON to address in its next cost of service application (e.g. per pages 63-64).
- c) Please indicate what the current status is of these remaining issues and why they too were not included in the current Application.

13 – VECC #50

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page iii, 35 and 37

Preamble: The Study concludes that "three density differentiated rate classes appears justified". The Study also states "there does not appear to be an immediate or pressing need to change the number of existing density-based rate classes"

- a) As this conclusion is based the fact that the Study showed there were statistically significant differences between the mean costs assigned to high-, medium-, and low-density sample areas, is it not reasonable to conclude that the use of at least three density differentiated rate classes appears justified (i.e., it is not known if the use of four, five or even more

density differentiated sample areas would have yielded statistically significant differences in costs between all of them as well)? If not, why not?

13 – VECC #51

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages vi-vii and 21

- a) For each of the sample areas, please provide a breakdown of the customer numbers by customer class, including DG, Street Lights, Sentinel Lights and ST.
- b) Please explain what is meant by the statement – “the density of HONI’s service territory containing seasonal customers is expected to fall somewhere between that of service territory containing R2 and R1 customers”. Are there not seasonal customers in all three service territories (i.e., those containing UR, R1 and R2 customers)?

13 – VECC #52

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 8–10 and 25

- a) Please confirm that asset vintage will impact the value for NBV and thus the capital proxy value as determined by Equation #1.
- b) Please confirm that asset vintage is likely to have an impact on OM&A costs.
- c) Did the Study authors assess at all the extent to which the vintage of the assets in-service varied across the 48 service areas? If yes, what were the findings?
- d) Did the Study authors test the inclusion in the regression model (i.e., Equation #2) of any variables that indicated asset vintage? If not, why not? If yes, what were the results?
- e) Please provide more details regarding the analysis done of correlation between customer density and age referenced on page 25.
- f) In the view of the Study authors what level of R-squared value is required in order for one to conclude that the overall model satisfactorily explains variations in the “dependent variable”?
- g) What customer classes were included in the determination of the customer count for purposes of establishing “Customer Density” and “Energy

Density"? If some classes of customers were excluded, please explain why.

13 – VECC #53

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 12 - 13

- a) Please confirm that the econometric analysis found that the effect of customer size on OM&A was statistically significant.
- b) Were any regression equations estimated using only the capital proxy as the "dependent" variable? If yes, please provide the results.

13 – VECC #54

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 19 - 21

- a) What "types" of customers are included in the determination of the "Number of Customers" for each sample area? If certain customer classes were excluded, please explain why.
- b) Please provide a schedule that is similar to Figure 10 but also includes the total energy for each sample area along with the "Number of Customers" (as defined by the Study) and the total number of customers (from all classes if different). Note: As well as hard copy, please provide the data in a live excel spreadsheet.
- c) Please provide a schedule that is similar to the upper part of Figure 11 but also includes the total energy for each density class along with the "Number of Customers" (as defined by the Study) and the total number of customers (from all classes if different).

13 – VECC #55

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 22 - 24

- a) Please confirm that the value for CDR is based on the distance to customers as determined by the distance between each customer and HON's operating centre. If not, what is the basis?
- b) Please confirm that the value for CDR for a particular sample area will depend entirely upon where HON has located its operating centre(s) within the operating area.
- c) How would Figure 16 and the results in Figure 19 change if costs allocated on the basis of CDR were excluded from the analysis?

- d) With respect to Figure 13, please provide a listing of the USOA accounts whose costs were mapped/assigned to the sample areas for purposes of the analysis.

13 – VECC #56

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 25 - 26

- a) Why were all HVDSs assigned the same replacement cost? Wouldn't the cost vary depending upon the capacity (i.e. MVA) of the associated transformers?
- b) Why were all LVDSs assigned the same replacement cost? Wouldn't the cost vary depending upon the capacity (i.e. MVA) of the associated transformers?
- c) Why were smart meter-related costs included?
- d) Why was number of customers used to determine the proportion of a distribution station's cost to be allocated to the service area as opposed to energy or some other measure of the load/capacity requirements of the sample area vs. the total supplied by the station?
- e) If the distribution station supplying the sample area's customers was located outside the sample area was a portion of the station's costs still assigned to the sample area?

13 – VECC #57

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 25 - 26

- a) Did the asset intensity determination include secondary, primary and sub-transmission conductor?
- b) Why was the same cost for overhead conductor used regardless of the voltage? Does the cost of conductor vary materially by voltage?
- c) If a feeder was used 100% to supply customers in the sample area was its total (replacement) cost included in the asset intensity determination? If not, what costs were included?
- d) If a feeder supplied customers outside as well as inside the sample area was a portion of the feeder's cost included in the asset intensity determination? If yes, please explain how this portion was determined. If not, why not?

13 – VECC #58

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 32 - 33

- a) Please fully describe the “density” treatment of HON’s other customer classes.
- b) Please provide a schedule that sets out the number of customers in each of the 12 customer rate classes.

13 – VECC #59

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 35

Preamble: The Study concludes that three density based classes are warranted in the case of Residential as there are over 1,000,000 customers but not warranted in the case of GS<50 (i.e. GSe) as there are just over 100,000 customers. However, the Study also determined that two rate classes are reasonable for the GS<50 class.

Note: In responding please include the views of the Study authors for parts (a) and (b).

- a) It is noted (D/1/1, page 3) that the GS>50 class has less than 10,000 customers. Are two density classes also reasonable in this case as well? If yes, please explain why.
- b) It is noted that there are over 150,000 seasonal customers. If two density classes are reasonable in the case of >100,000 and also in the case of <10,000 customers, would it be reasonable to have two density-based seasonal classes? If not, why not?
- c) If the response to part (b) is yes, why is HON proposing to maintain only one Seasonal class?

13 – VECC #60

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 35

Preamble: The Study concludes that maintaining two density-based rate classes is reasonable for the GS<50 class.

Note: In responding please include the views of the Study authors for parts (a) and (b).

- a) If there are to be only two GS<50 density-based rate classes why is it appropriate to combine the medium and low density areas for purposes of creating one rate class as is HON's current practice (as opposed to combining the high and medium density classes)?
- b) Why wouldn't combining the high and medium density areas be more reasonable given (D/1/1, page 3) that the relative cost differences between these two areas is much less than in the case of the medium and low density areas.
- c) If the current GS<50 classes were restructured into a "Normal Density Class" that included GS<50 customers from both the Urban and Medium density areas (as currently defined by HON) and a "Low Density Class" based on HON's low density definition what would be the number of customers in each class? (Note: Please use the customer count base set out in D/1/1, Table 2)

13 – VECC #61

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 35

Note: In responding please include the views of the Study authors for parts (a) and (b).

- a) If there are to be only two GS>50 density-based rate classes why is it appropriate to combine the medium and low density areas for purposes of creating one rate class as is HON's current practice (as opposed to combining the high and medium density classes)?
- b) Why wouldn't combining the high and medium density areas be more reasonable given (D/1/1, page 3) that the relative cost differences between these two areas is much less than in the case of the medium and low density areas.
- c) If the current GS>50 classes were restructured into a "Normal Density Class" that included GS>50 customers from both the Urban and Medium density areas (as currently defined by HON) and a "Low Density Class" based on HON's low density definition what would be the number of customers in each class? (Note: Please use the customer count base set out in D/1/1, Table 2)

13 – VECC #62

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 37

- a) What additional data and analysis would be required in order to determine the cut-off points between the density-based rate classes?

13 – VECC #63

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 37

Preamble: The Study states that it “did not provide strong evidence to support changing the existing demarcation points”.

- a) Does the Study provide strong evidence (or indeed any evidence) that supports the existing demarcation points?
- b) What types of results from the current Study would have supported a change in the existing demarcation points?

13 – VECC #64

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 37 - 38

Preamble: The Study judged the reasonableness of the existing density factors by comparing the results of HON's CAM to the results of the direct cost assignment analysis.

- a) Please confirm that the results of HON's CAM (Figure 26) reflect not only the application of HON's density factors but also but also the relative loads (i.e. CP and NCP factors) of the different classes as well as each class' use of primary and secondary voltage facilities in allocating costs.
- b) Since the costs allocated to each class by the CAM also reflect these other factors (e.g., the relative loads of each class and the use of primary vs. secondary facilities) as well as HON's density factors, why is it appropriate to look at the results of the CAM on a per customer basis to test the appropriateness of HON's current density factors?
- c) Please provide a live excel version of the CAM used for Figure 26 and confirm it was the CAM underlying the Draft Rate Order from EB-2009-0096.
- d) Please provide a schedule that sets out the USOA account numbers for the shared services and customer care activities that were excluded.
- e) Did the OM&A accounts excluded include those associated with: i) cable locates, ii) field meter reading and ancillary services, iii) sentinel light maintenance, or iv) field collections and special investigations? If yes,

please reconcile this with the fact that costs for these activities were included in OM&A costs assigned to the sample areas (per page 24).

13 – VECC #65

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 39 - 40

- a) Are all of the low density sample areas located in areas where Residential customers would be classified as R2? If not, how many of these sample areas represent service territory where Residential customers would be classified as R1?
- b) Please break the medium density sample areas down and indicate how many of them represent areas where Residential customers would be classified as UR, R1 and R2. If any of the sample areas do not fall entirely into one of these groupings please list them separately and indicate which two or three Residential classifications could be found in the sample area.
- c) Please confirm that the ratios shown in Figure 27 for OM&A costs and Asset Intensity are derived by taking the relevant ratios from the costs shown in Figure 16.
- d) Please explain more fully how the uniform adjustment for shared services and customer care OM&A was done in order to obtain Figure 28.

13 – VECC #66

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 40-41

- a) Please provide a schedule that sets out the density weights used for each class in the CAM underpinning HON's currently approved rates.
- b) Based on the values provided in part (a) please indicate the relative relationship between the values for each class with the UR values set at 1.0.
- c) Please provide a schedule (similar to Figure 29) that compares the results from part (b) with the relative values established through the Study's analysis of low-, medium- and high-density sample areas.

13 – VECC #67

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, pages 40-41

- a) Please provide graphs similar to Figure 65 for: i) the Street Light class, ii) the Sentinel Light class, iii) the DG class, and iv) the ST class.

- b) Based on the results from part (a), please provide comments (similar to those provided for the Seasonal class) as to where the average density for each of these four classes falls relative to the UR, R1 and R2 classes.
- c) Why are UGe and UGd combined in Figure 66? Please reproduce Figure 66 showing each class separately.
- d) Why are GSe and GSd combined in Figure 67? Please reproduce Figure 67 showing each class separately.
- e) Please re-do Figure 62 with just the "cumulative line" also include the cumulative lines for UGe and UGd.
- f) Please comment separately on the relative density of the UGe and UGd classes as compared to the UR.
- g) Please re-do Figure 63 with just the "cumulative line" also include the cumulative lines for GSe, GSd and R2.
- h) Please comment separately on the relative density of GSe and GSd as compared to R1 and R2.

13 – VECC #68

Reference: Exhibit D, Tab 1, Schedule 1, Attachment 1, page 48

Preamble: The Study's conclusions state that "adjustments to the weighting factors used in HONI's CAM could be justified to better capture the differences between the costs to serve high-, medium- and low-density customers"

- a) Based on the results of the Study how would the Study's authors suggest the weighting factors currently used in the CAM for the various customer classes (see response to 13-VECC #66 a)) be changed relative to the weighting factor used for UR?

13 – VECC #69

Reference: Exhibit D, Tab 1, Schedule 1, page 3

- a) Please confirm that in determining the relative costs for low-, medium- and high-density areas, the Study did not take into account differences in load density in assigning OM&A or Asset costs to sample areas. If the Study did so, please indicate how this was done.

- b) Please provide a schedule that compares: i) the USOA accounts currently subject to density weightings in HON's CAM with ii) the USOA accounts used to determine the relative costs of low-, medium- and high-density sample areas in the Consultant's Study.
- c) Please provide an expanded version of Table 2 that includes all of HON's customer classes.
- d) Please confirm that part of the reason for the difference seen in the cost per customer in Table 2 for the different customer classes is due to the fact that load intensity (e.g., NCP/customer) varies across the customer classes and load by customer class is also used to allocate a portion of the costs to customer classes.
- e) Please provide a schedule that sets out the CAM allocation to all customer classes of only the customer-related portion of the costs associated with the USOA accounts considered by the Consultants in their assessment of the costs per customer for serving the 48 different sample areas. In the same schedule please provide the total of such costs by customer class, the number of customers by class and the resulting costs per customer for these costs.
- f) Please comment on whether the results from part (e) are or are not a better basis for determining if the costs allocated by the CAM over/understate the relative costs of serving density-based rates classes as determined by the Density Study.

13 – VECC #70

Reference: Exhibit D, Tab 1, Schedule 1, page 4
Exhibit D, Tab 1, Schedule 1, Attachment 1, page 41

- a) Please confirm that one of the purposes of the Consultant's Study was to determine if the density weighting used and the resulting relative cost ratios produced by the CAM for the different customer classes were appropriate (per Section 5.2 of the Consultant's Study)? If not, what were the specific purposes of the Study?
- b) Why is it appropriate to use the results of the CAM (in terms of the relative costs for the Seasonal and R1 classes) to set the target ratio for the Seasonal class?
- c) The Consultant's Study concluded (page 41) that the average customer density for the Seasonal class was between R1 and R2. Given this conclusion why isn't it appropriate to set the target ratio for the Seasonal

class somewhere between R1 and R2 as opposed to at the same value as for the R1 class?

- d) Please provide a schedule that clearly sets out the principles and methodology used in Footnote #1 to determine the target ratio for the GSe class.
- e) Per footnotes 1 and 2 on page 4, please provide a schedule that sets out the relative density of each of the customer classes (UR, R1, R2, UGe, UGd, GSe, GSd, Seasonal, ST, Street Lights, Sentinel Lights and DG) based on an assessment of number of customers per km. In reporting the relative values please use UR=1.0 as the base.
- f) Based on the preceding results (part (e)), the results of the Density Study and the principles used in Footnote #1 what would be an appropriate target ratio for the Seasonal class?

13 – VECC #71

**Reference: Exhibit D, Tab 1, Schedule 1, page 4
Exhibit D, Tab 1, Schedule 1, Attachment 1, page 41**

- a) The Consultant's Study (page 41) concluded that the average density for both the GSe and GSd classes was between that of R1 and R2. HON has adopted this finding in the determination of the target ratio for GSe but not for GSd (which has been set equivalent to that of R1). Why were the findings of the Study not adopted for purposes of setting the target ratio for the GSd class?
- b) Please confirm that (per Footnote #2) HON has used its previous measure of customer density (number of customers per km of line) to set the target ratio for GSd relative to UGd, as opposed to the results of the Consultant's Study. If not, please explain how the results of the Consultant's Study were used to set the target ratio for GSd relative to that for UGd.
- c) Using the same principles and methodology as were employed for the GSe class (per Footnote #1), what would be an appropriate target ratio for the GSd class?
- d) Using a similar approach and the results from VECC #67 e), what would be the appropriate target ratios for UGe and UGd relative to UR?
- e) Using a similar approach and the results from VECC #67 a), what would be the appropriate target ratios for the Street Lighting, Sentinel Lighting, ST and DG classes?

13 – VECC #72

Reference: Exhibit D, Tab 1, Schedule 1, page 5

- a) Please confirm whether the R/C ratios set out in the last row of Table 3 and the last row of Table 4 are: i) the approved ratios for 2010 after inter-class revenue adjustments or ii) the ratios actually produced by the initial CAM.
- b) Please provide expanded versions of Tables 3 and 4 that include all customer classes.

13 – VECC #73

Reference: Exhibit D, Tab 1, Schedule 1, page 5, Tables 3 and 4

- a) Please confirm that:
 - The target ratios for R1, R2 and Seasonal are relative to the ratio for UR,
 - The target ratio for GSe is relative to that for UGe, and
 - The target ratio for GSd is relative to that for UGd.If not, please explain the relationships between the various values.
- b) Please confirm that in implementing the results of the Density Study the total costs to be recovered from the Residential class (i.e., UR, R1, R2 and Seasonal) was held constant and equivalent to the results of the CAM. If not, please explain.
- c) Please confirm that in implementing the results of the Density Study the total costs to be recovered from the UGe and GSe classes was held constant and equivalent to the results of the CAM. If not, please explain.
- d) Please confirm that in implementing the results of the Density Study the total costs to be recovered from the UGd and GSd classes was held constant and equivalent to the results of the CAM. If not, please explain.
- e) If parts (b) – (d) are confirmed, please confirm that this means the allocation of cost to these three broad customer classes still based entirely on HON's previous density weightings.
- f) If yes, please explain why the results of the Density Study were not/could not be used to determine the appropriateness of the current allocation between these broad customer classes.

13 – VECC #74

Reference: Exhibit D, Tab 1, Schedule 1, pages 5-6

- a) Based on the results of the Density Study and the responses to VECC #70 and #71 what would be the target cost ratios for HON's remaining 11 customer classes (relative to UR)?
- b) Please re-run HON's CAM using these target ratios to weight the allocation of the customer-related costs associated with the USOA accounts for those OM&A and Capital-related costs that were allocated to sample areas in the Study (per Attachment 1, pages 22-26) and provide both the actual CAM model run and a summary of the Sheet O1 results. Note: These would be the only costs subject to any "density weighting".
- c) Please re-run HON's CAM using these target ratios to weight the allocation of the customer- and demand-related costs associated with the USOA accounts for those OM&A and Capital-related costs that were allocated to sample areas in the Study (per Attachment 1, pages 22-26) and provide both the actual CAM model run and a summary of the Sheet O1 results. Note: These would be the only costs subject to any "density weighting".
- d) Please explain why the approach set out in parts (b) and/or (c) aren't a more appropriate way of implementing the findings of the Density Study.

13 – VECC #74

Reference: Exhibit D, Tab 1, Schedule 1, pages 6-9

- a) Please confirm that Option #1 (i.e., move the ratios to limits of the Board's approved ranges) is consistent with the Board's Decisions regarding 2011 Rates for Horizon (EB-2010-0131, Toronto Hydro (EB-2010-0142) and Brant County (EB-2010-0219).
- b) Please re-do Table 5 to include HON's other customer classes (i.e. DG and ST) and apply the adjustment process as proposed by HON.
- c) Please provide an alternative version of Table 5 (expanded to include all customer classes) where revenue shortfall is made up from the class with the lowest R/C ratio, until that class' ratio is equivalent to that of the class with the next lowest ratio and then both of these ratios are increased to the next lowest ratio, etc. – until the revenue shortfall has been addressed.
- d) Using the results from part (c), please provide revised versions of Tables 7 and 8.

Implementation Issues

14. What is the appropriate effective date for new rates under this Application? If the effective date is prior to the date of actual implementation, what methods should be used to ensure that the amounts collected are consistent with the approved effective date?

15. If new rates cannot be implemented by January 1, 2013, should Hydro One's rates be declared interim, and if so, from and after what date?

16. What are the terms, if any, of any true-up between the amounts collected under the ICM rate rider and the actual revenue requirement associated with approved ICM projects, and how should any difference between the proposed effective date of January 1, 2013 and the actual effective date approved by the Board be reflected in that true-up calculation?

Rate Design

17. Is the proposed Tariff of Rates and Charges for 2013 appropriate?

*****End of Document*****