



PUBLIC INTEREST ADVOCACY CENTRE  
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August 12, 2016

VIA 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-2016-0160 – Hydro One Networks Inc. - 2017-2018 Transmission Cost of Service  
Application  
Interrogatories of Vulnerable Energy Consumers Coalition (VECC)**

Please find enclosed the interrogatories of VECC in the above-noted proceeding.

Yours truly,

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

Michael Janigan  
Counsel for VECC

Erin Henderson, Senior Regulatory Co-ordinator  
[regulatory@hydroone.com](mailto:regulatory@hydroone.com)

<b>REQUESTOR NAME</b>	<b>VECC</b>
<b>TO:</b>	<b>Hydro One Networks Inc. (Hydro One or HON)</b>
<b>DATE:</b>	<b>August 12, 2016</b>
<b>CASE NO:</b>	<b>EB-2016-0160</b>
<b>APPLICATION NAME</b>	<b>TX 2017-2018 COS Application</b>

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## **1.0 EXHIBIT A - ADMINISTRATION**

### 1.0-VECC-1

Reference: A/T5/S3/Attachment 1 Schedule 'A' – no (PDF p.124)

- a) Please provide a breakdown of the “President/CEO/Chairman services for 2017 and 2018 into the components: a) salaries and benefits; b) facilities; c) other (please specify).
- b) Please provide the same for the Chief Financial Officer and General Counsel services.

### 1.0 -VECC - 2

Reference: A/T3/S1/pg.6

*At the noted reference it states “Reliability risk is a metric that is derived using a probabilistic calculation based on asset demographics and the historical relationship between asset age and the occurrence of failure or replacement.....The reliability risk model is not used to identify specific asset needs and investments. Instead, these are determined by condition assessments and other asset-specific information...”*

- a) How has this model been tested using past data?
- b) If the model does not inform specific investment then what is its purpose?

## 2.0 EXHIBIT B – TRANSMISSION SYSTEM PLAN, PERFORMANCE AND REPORTING

2.0 – VECC - 3

Reference: Exhibit B1/T2/S2/pg.5

- a) What are the incremental costs of the changed BES definitions?

2.0 – VECC - 4

Reference: B1/T1/S3/pgs.23-

- a) The Figures 8-13 show reliability figures in comparison to the CEA composite. Does this composite include Hydro One data?
- b) If yes please restate the figures showing the CEA composite excluding Hydro One data.

2.0 – VECC - 5

Reference: Exhibit B1/T1/S3/Attachment 1

- a) Please explain the rationale for different customer delivery point performance standards based on load size.
- b) Please explain why the standards are based on a 1991-2000 performance and not more recent data (e.g. 2006-2015).
- c) Please provide the standards if based on the most recent 10 year data set available.

2.0 – VECC - 6

Reference: Exhibit B1/T1/S3/Attachment 1

- a) Please clarify Table 1 by defining what is meant by “standard average performance” and “minimum standard of performance”. Specifically, is the former the actual average performance (and if so for what period) and is the latter the 1991-2000 performance?

2.0 – VECC - 7

Reference: Exhibit B1/T2/S4 & Attachment 1

- a) Please explain how “reliability risk” is related to “reliability performance”. Specifically, please show how Hydro One reviews actual performance to test past reliability risk forecasts (i.e. how is the accuracy of the model tested).
- b) If this is not available (for example, due to the newness of the approach) please explain how the other jurisdictions referenced (at page 6) have tested the relationship between reliability risk (i.e. forecast) and actual reliability.
- c) Please explain how Hydro One intends to test the accuracy of its reliability risk approach.

2.0 – VECC - 8

Reference: Exhibit B1/T1/S3/Attachment 1

- a) Please explain the relationship between “reliability risk” and the “hazard rate”. Specifically is the reliability risk the summation of asset hazard rates?

2.0 – VECC - 9

Reference: Exhibit B1/T2/S6/pg.54/Table 11

- a) Please clarify if Table 11 shows both steel structure replacement and recoating.
- b) Please provide separate tables for each activity (replacement and recoating/refurbishment).

2.0 – VECC - 10

Reference: Exhibit B1/T2/S6/pgs. 9-

- a) Please amend Tables 3,5,8,9,10,11 (as adjusted for question 9 above), 12 and 13 to show the actual and forecast capital expenditure for these activities.

- b) Please include the years 2019 through 2021 (as per Table 5/1 Summary of Transmission Capital Budget (A/T3/S1/pg.13/B1/T3/S1/Table 1) to the amended tables
- c) Please reconcile (if different) the capital budgets for Table 3 et al and the amounts shown in the Summary Table 5.

#### 2.0 – VECC - 11

Reference: Exhibit B1/T2/S/Table 2

- a) Please clarify whether the Global Insight cost escalator forecasts incorporate forecasts of the costs of Hydro One.

#### 2.0 – VECC - 12

Reference: Exhibit B2/T1/S1/

- a) Please explain what mechanisms (incentives) are in place which would incent the lowering of the implementation (actual vs forecast) costs of the proposed capital budget.

#### 2.0 – VECC - 13

Reference: Exhibit B2/T1/S1/

- a) Why has Hydro One not included the RCE as part of its new scorecard?

#### 2.0 – VECC -14

Reference: Exhibit B2-2-1 Attachment 1/Benchmarking Study/3.5 Staffing

- a) Please explain the meaning of “4-10s” schedule referred to in section 3.5 of the Report.

#### 2.0 – VECC - 15

Reference: Exhibit B1/T2/S7, pages 4-5

- a) With respect to Table 2, is there a more recent forecast from Global Insight regarding transmission cost escalation? If so, please provide.

## 2.0 – VECC - 16

Reference: Exhibit B1/T2/S3/pg.20

- a) Please provide the 5 year cost (by year) for each of the Regional Infrastructure Plans/Needs Assessment Reports shown at page 20.
- b) Are these costs integrated into the proposed capital budget? If yes please explain where.

## 3.0 EXHIBIT C – COST OF SERVICE

### 3.0 –VECC -17

Reference: C1/T3/S1/pg.2

- a) Please explain the cost increase trend in Common Corporate Functions Services from \$80.5 million in 2012 to the forecast \$98.4 million in 2018.
- b) Please explain the relationship between the CCFS costs shown at Table 1 at T3/S1/pg.2 and Table 1 shown at C1/T3/S3/pg. 2 entitled CCFS costs (i.e. why re the amounts not the same e.g. for 2012 Table 1/S1 = \$80.5 ; Table 1/S3 = \$152.0?)

### 3.0 –VECC -18

Reference: C1/T3/S2/pg.5

- a) Please explain what the “purchased services agreement with the Power Worker’s Union” refers to.
- b) Please outline any restrictions to outsourcing included in current labour agreements. If such restrictions do exist please explain when they expire.

### 3.0 –VECC - 19

Reference: C1/T3/S3

- a) Please explain the trend cost increase as between 2012 and 2018 for the total costs of:
  - People and Culture
  - Corporate Communications
  - Regulatory Affairs.

### 3.0 –VECC -20

Reference: C1/T4/S1

- a) What (if any) performance requirements are included in the share grant program.
- b) Please provide the terms of the share grant program.

### 3.0 –VECC -21

Reference: C1/T4/S1

- a) Please explain the increase in employees from 2015 (7,283) to 2018 (7,489). Please show how many positions related to overlapping due to forecast retirements and how many are new (long-term incremental) positions.

## **4.0 EXHIBIT D – RATE BASE AND COST OF CAPITAL**

### 4.0 -VECC -22

Reference: D1/T5/S1/Table 2.

- a) Please update the long-term debt calculation for any debt issuances made after the filing of the application.

### 4.0 -VECC -23

Reference: D1/T5/S1/pgs.3-

Hydro One was able to issue 5, 10 and 30 year debt in February 2016 at coupon rates of 1.84%, 2.77% and 3.91%. It forecasts the 2017 and 2018 coupon rates for these to be significantly higher (3.22% / 3.97-3.10% / 4.30-5.10% respectively). The basis for this forecast is shown in Table 4.

- a) Please provide the long-term forecast that was relied upon for Table 4.
- b) Please provide analysis which shows the accuracy of this forecast using the past forecasts and actuals.
- c) Please explain how the Hydro One spread is calculated (i.e. show the calculation).

## 5.0 EXHIBIT E – REVENUE REQUIREMENT & LOAD FORECAST

### 5.0-VECC-24

Reference: Exhibit E1/T2/S1, pages 2-5

- a) With reference to Table 1, please explain why the forecast 2016-2018 annual revenues from Secondary Land Use are materially less than the historic annual revenues for 2012-2014.
- b) Please provide a schedule that sets out:
  - The forecast Station Maintenance revenue for 2014-2016 as filed with HON's 2015-16 Cost of Service Application
  - The forecast Station Maintenance revenue for 2012-2014 as filed with HON's 2013-2014 Cost of Service Application.
- c) With reference to Table 1, please explain why the forecast 2016-2018 annual revenues from Other External Revenues is materially less than the historic annual revenues for 2013-2015.

### 5.0-VECC-25

Reference: Exhibit E1/T3/S1, pages 1 (Table 1) and 20 (Table 3)  
Exhibit H1/T2/S1, page 1 (Table 1) and pages 3-4

- a) Do the charge determinants for Line Connection and Transformation Connection set out in Table 1 of Exhibit E1 and Table 1 of Exhibit H1 include the demand for the generators as discussed in Exhibit H1 (pages 3-4)?
  - If yes, what is the amount included for generators for each year?
  - If no, what is the amount that needs to be added to account for these generators?
- b) With reference to Tables 1 and 3 of Exhibit E1, please explain how the forecasts for each of the three charge determinants are derived from the forecast for Ontario Demand.

### 5.0-VECC-26

Reference: Exhibit E1/T3/S1, pages 3-6

- a) What are the sources used for the forecasts for Commercial Floor Space (Section 3.4) and Industrial Production/GDP (Section 3.5)? If more recent



forecasts for either are now available, please provide.

#### 5.0-VECC-27

Reference: Exhibit E1/Tab 3/Schedule 1, pages 6-8 (Table 2)

- a) With reference to Table 2, please confirm that the values for 2006-2015 are actual values and those for 2016-2018 are forecast.
- b) Please provide the source and supporting documentation for the actual values reported.
- c) Please provide a breakdown of the actual values reported for each year as between the three CDM categories described on page 7 (lines 8-11).
- d) Please clarify whether the actual results reported for each year represent actual savings or annualized savings assuming all initiatives implemented during the year were in place as of January 1.
- e) Please confirm whether the demand response savings reported for each year (per the response to part c)) represent the actual load reductions achieved through the of activation demand response contracts or the MW of demand response under contract. In responding please provide the references/documentation supporting the response.

#### 5.0-VECC-28

Reference: Exhibit E1/Tab 3/Schedule 1, pages 6-8

- a) It is not clear what information was provided by the IESO in early 2016 (per lines 11-14) and if it included the IESO's latest province-wide conservation forecast (per lines 6-8). Please provide copies of both: i) the IESO's latest conservation forecast and ii) the information provided by the IESO in early 2016.
- b) In doing so, please clarify the point of measurement (e.g. at generation, transmission delivery or end use customer delivery point) that the IESO actual and forecast information is based on and, if different from the point of measurement used in Table 2, indicate what adjustments are required to make the two comparable.
- c) In order to provide context to the IESO CDM forecast, please also provide the IESO's pre-CDM load forecast that underpins its latest CDM forecast.
- d) Does Table 2 account for loss of persistence of previous years' CDM impacts?
- e) Please provide a schedule that sets out the first year impacts of CDM programs for each year (2006-2015) and the persisting values in subsequent years that result in the cumulative impacts shown in Table 2.
- f) Please provide a schedule that sets out: i) the OPA's CDM forecast per the 2013 LTEP and ii) the IESO's latest CDM forecast (with each broken down by CDM category) and demonstrate that Hydro One's forecast is consistent with both (per page 7, lines 16-18).

- g) Does the IESO's forecast of demand response, as included in its latest CDM forecast, represent forecasted contract amounts or forecast demand response activated under normal weather conditions?
- h) Please explain how the CDM impact on the 12-month Average Peak Demand is determined from the IESO CDM forecast.
- i) Please confirm that Hydro One Transmission is not proposing a LRAMVA for 2017-2018 and therefore no LRAMVA reference values are required.

#### 5.0-VECC-29

Reference: Exhibit E1/Tab 3/Schedule 1, page 8

- a) For the years 2014 - 2016 please contrast the level of CDM savings in the current Application with those used in EB-2014-0140 and explain the variance for each year.

#### 5.0-VECC-30

Reference: Exhibit E1/Tab 3/Schedule 1, pages 8-9

- a) Please provide a schedule indicating what the actual embedded generation for the years 2006-2015 assumed for purposes of the load forecast and indicate the source of values.

#### 5.0-VECC-31

Reference: Exhibit E1/Tab 3/Schedule 1, pages 11-14

- a) Please explain why it is appropriate to use a 31 year definition for weather normal when HON's weather correction methodology only uses four years' worth of data (per page 11, lines 9-13).
- b) Please explain more fully how Figures 3 and 4 indicate that the 20-year trend has been broken when: i) the comparator used appears to be the average for the 31 years and ii) the values for 2014 and 2015 are well within the historical range of results.

#### 5.0-VECC-32

Reference: Exhibit E1/Tab 3/Schedule 1, pages 12-20

- a) Please provide schedule that set out the actual 2012-2014 total transmission system load prior to deducting for CDM and embedded generation (consistent with Table 3)
- b) Please provide a schedule that for 2016-2018 sets out the total transmission system load forecast based on each of the three models discussed (prior to

the CDM adjustments) and Hydro One Networks' proposed forecast.

#### 5.0-VECC-33

Reference: Exhibit E1/Tab 3/Schedule 1, pages 29-39

- a) Please provide Hydro One Networks forecast of electricity prices in the residential, commercial and industrial sectors as used in the Annual Econometric Model and describe how they were established.
- b) For context please also include the actual prices for 2012-2015 used in the models' estimations.

#### 5.0-VECC-34

Reference: Exhibit E1/Tab 3/Schedule 1, pages 50-51

Preamble: The Application states that "no incremental demand response was assumed over the forecast 18-month horizon".

- a) Please clarify what is meant by "incremental demand response".
- b) Did Hydro One Networks subtract from its pre-CDM load forecast for 2016-2018 any impact due to demand response programs?
- c) If yes, please explain why this wouldn't contribute to the variance between the IESO's and Hydro One Networks' load forecasts.

### **6.0 EXHIBIT F – REGULATORY ACCOUNTS**

#### 6.0-VECC-35

Reference: Exhibit F1/T1/S1, page 3

Exhibit F2/T1/S3

- a) For each of the regulatory accounts for which Hydro One Networks is seeking disposition, please provide a schedule that details the annual debits and credits associated with the annual transactions (per F2/T1/S3) for each of the years 2014- 2016.
- b) For those accounts that were included in the EB-2014-0140 Application and for which there forecast balances for December 2014 (Exhibit F1/T1/S1, page 1) please explain the variance between the forecast balance per EB-2014-0140 and the actual December 2014 balance.

## 6.0-VECC-36

Reference: Exhibit F1/T1/S1, pages 3 and 9

- a) Please provide the detailed calculations supporting the annual additions to the LDC CDM and Demand Response Variance Account including:
- The annual forecast and actual CDM savings and Demand Response amounts (separately) used in the calculation, with supporting sources for the values used.
  - How the actual reported CDM and Demand Response results were translated into impact on the transmission billing determinants.
  - The rates used and resulting calculation of the dollar impacts due to difference between forecast and actual CDM and Demand Response results.

## 7.0 EXHIBIT G – COST ALLOCATION

### 7.0 – VECC –37

Reference: Exhibit G1/T1/S1, pages 1-2 /Exhibit G1/T2/S1, pages 9-10

- a) As of the end of 2015 how many customers used the Transformation Connection function and, of these, for how many did Hydro One Networks own and service a WRM installation?
- a) Out of the \$437.1 M Revenue Requirement in 2017 (per Table 1) for the Transformation Connection function how much is attributable to Wholesale Meters?

### 7.0 – VECC –38

Reference: Exhibit G1/T2/S1, page 2

Preamble: At lines 9-16 Hydro One Networks states that assets are functionalized based on the normal system operating conditions as of the end of 2015.

- a) Please explain how transmission assets that are in-service for the 2017 and/or 2018 test years but come into service on or after January 1, 2016 are functionalized.

#### 7.0 -VECC-39

Reference: Exhibit G2/T1/S1

- a) Please provide a schedule that lists the new Transmission Lines that were not included in EB-2014-0140. In each case, please indicate the relevant project reference number (from this Application or a previous Application if applicable) that describes the investment, note the functional category it has been assigned to and indicate why.
- b) Please provide a schedule that lists those Transmission Lines whose functional categorization has changed from that in EB-2014-0140 and provide an explanation as to the reason for the change.

#### 7.0 - VECC-40

Reference: Exhibit G2/T1/S2

- a) Please provide a schedule that lists the new Transmission Stations that were not included in EB-2014-0140. In each case, please indicate the relevant project reference number (from this Application or a previous Application if applicable) that describes the investment, note the functional category it has been assigned to and indicate why.
- b) Please provide a schedule that lists those Transmission Stations whose functional categorization has changed from that in EB-2014-0140 and provide an explanation as to the reason for the change.

### **8.0 EXHIBIT H – RATE DESIGN**

#### 8.0 –VECC - 41

Reference: Exhibit H1/T4/S1

- a) Please provide a schedule that sets out the annual volumes of electricity exported from, or wheeled through, Ontario over the period 2013-2015.
- b) Please provide volume of electricity exported from, or wheeled through, Ontario for the first six months of 2016 along with the volumes for the first six months of 2014 and 2015.

#### 8.0 –VECC - 42

Reference: Exhibit H1/T5/S1, page 2

- a) With respect to Table 2, please provide the derivation of the “% Impact of load forecast change” for 2017 (i.e., 2.1%).

End of document