

**Ontario Energy Board**

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

**AND IN THE MATTER OF** an application by Hydro One Brampton Networks Inc. for an order approving just and reasonable rates and other charges for electricity distribution to be effective January 1, 2015.

---

**VULNERABLE ENERGY CONSUMERS COALITION  
("VECC")  
CROSS-EXAMINATION COMPENDIUM**

---

**OCTOBER 22, 2014**

**TAB 1**

## EXHIBIT 2: Rate Base

---

TAB 3 (of 8)

### **Allowance for Working Capital**

## INTRODUCTION

Section 2.5.1.4 of the Chapter 2 of the *Filing Requirements for Transmission and Distribution Applications* issued on June 22, 2011 provides two alternative approaches that the applicants may use for the calculation of the Allowance for Working Capital: (1) 15% allowance approach; or (2) the filing of a lead/lag study. The exception to this requirement is if the applicant has been previously directed by the Board to undertake a formal lead/lag study.

On April 12, 2012, Ontario Energy Board had issued a letter revising the section 2.5.1.4, specifically the 15% Allowance Approach, to establish a 13% Allowance Approach as the new default value, effective immediately for 2013 Cost of Service Application. In addition, distributors were still given the option of filing a distributor specific lead/lag study.

Using the 13% Allowance Approach, the Working Capital Allowance ("WCA") is calculated as 13% of the sum of Cost of Power and controllable expenses (operation, maintenance, billing, collecting, community relations, administrative and general).

Since HOBNI was not previously directed by the Board to conduct the lead/lag study the Company opted for the 13% WCA Approach in accordance with the *Filing Requirements*.

Therefore, the WCA for the 2015 Test Year is based on 13% of Cost of Power and controllable expenses.

Calculations of WCAs for 2011 to 2013 actual and for the 2014 Bridge Year are based on the Board's historical 15% Allowance Approach. Table 1 below provides the summary of Hydro One Brampton's Working Capital Allowance calculation.

**Table 1: Working Capital Allowance Calculation**

Description	2011 OEB Approved	2011 Actual	2012 Actual	2013 Actual	2014 Bridge	2015 Test
Controllable Expenses						
Operations	\$ 4,003,613	\$ 4,273,403	\$ 3,865,494	\$ 4,616,444	\$ 4,923,476	\$ 4,979,224
Maintenance	\$ 3,368,083	\$ 3,595,816	\$ 3,795,239	\$ 5,442,515	\$ 5,474,614	\$ 5,620,008
Billing and Collecting	\$ 5,264,363	\$ 5,315,737	\$ 5,379,690	\$ 5,341,096	\$ 5,912,167	\$ 6,142,599
Community Relations	\$ 530,100	\$ 452,800	\$ 559,645	\$ 670,717	\$ 901,180	\$ 900,903
Administrative & General Expenses	\$ 6,904,107	\$ 6,519,043	\$ 6,888,536	\$ 7,360,082	\$ 8,427,799	\$ 7,944,773
Total Controllable Expenses	\$ 20,070,266	\$ 20,156,799	\$ 20,488,604	\$ 23,430,854	\$ 25,639,236	\$ 25,587,507
Cost of Power	\$ 328,509,897	\$ 343,488,589	\$ 360,624,979	\$ 399,575,125	\$ 432,069,775	\$ 470,431,894
<b>Total Working Capital</b>	<b>\$ 348,580,163</b>	<b>\$ 363,645,388</b>	<b>\$ 381,113,583</b>	<b>\$ 423,005,979</b>	<b>\$ 457,709,011</b>	<b>\$ 496,019,401</b>
Working Capital Allowance Rate	15%	15%	15%	15%	15%	13%
<b>Working Capital Allowance</b>	<b>\$ 52,287,024</b>	<b>\$ 54,546,808</b>	<b>\$ 57,167,037</b>	<b>\$ 63,450,897</b>	<b>\$ 68,656,352</b>	<b>\$ 64,482,522</b>

**Table 2** shows that the 2015 WCA has increased by \$12,195,498 or 23.3% over 2011 Board Approved WCA. The change is the combined result of the increased cost of power and controllable expenses and the decrease in WCA rate from 15% to 13%.

**Table 2: Changes in Working Capital Allowance**

Description	2011 OEB Approved	2015 Test	Change (\$)	Change (%)
Cost of Power	\$ 328,509,897	\$ 470,431,894	\$ 141,921,997	43.2%
Controllable Expenses	\$ 20,070,266	\$ 25,587,507	\$ 5,517,241	27.5%
<b>Total Working Capital</b>	<b>\$ 348,580,163</b>	<b>\$ 496,019,401</b>	<b>\$ 147,439,238</b>	<b>42.3%</b>
Working Capital Allowance Rate	15%	13%		
<b>Working Capital Allowance</b>	<b>\$ 52,287,024</b>	<b>\$ 64,482,522</b>	<b>\$ 12,195,498</b>	<b>23.3%</b>

**TAB 2**

**4-Staff-56**

**Ref: Exhibit 4, Tab 2, Schedule 1, p.27**

- a) Please identify the billing frequency that the applicant is planning on using for the test period and beyond.

**RESPONSE**

Hydro One Brampton bills all classes of customers monthly and will continue to do so for the test year and beyond.

- b) If the applicant is planning to implement monthly billing, please refer to parts c) through g) below. If not, please explain why not.

**RESPONSE**

Not applicable.

- c) Please identify any impacts that the implementation of monthly billing has had on billing and collection expenses or any other OM&A category.

**RESPONSE**

Not applicable.

- d) Please identify the percentage of customers on e-billing as of December 31, 2013.

**RESPONSE**

Approximately 19% of the Company's customers were enrolled on e-billing as of December 31, 2013. Please see *Exhibit 4, Tab2, Schedule 1, Page 32 of 51*.

- e) Please describe the Applicant's efforts to promote e-billing to its customers.

**RESPONSE**

HOBNI continually promote e-billing through its web-site, billing inserts, bill messages and customer engagement sessions.

- f) Please describe other initiatives that the Applicant has undertaken, or intends to undertake, to manage the costs of monthly billing for all customers

**RESPONSE**

HOBNI will be implementing Canada Posts "E-post" electronic bill presentment and delivery by year-end 2014. Once the web-site has been refreshed Hydro One Brampton will also begin contest promotions through billing inserts and continue with bill messaging and advertising in local papers.

- g) As part of the decision making process, has the applicant determined the impact of the change to monthly billing on its working capital? If so, how is the working capital impacted by this change? If not, why not?

**RESPONSE**

Not applicable.



## EXHIBIT 2 – RATE BASE

### 2-Energy Probe-51TC

Ref: 2-Staff-10

- a) What is the impact on the collection lag of HOBNI beginning to collect active residential accounts at 60 days instead of 90 days?

#### RESPONSE

The move to collecting from over 90 to over 60 was to contain our final bill accounts receivable. The savings using 2013 as the benchmark could potentially be the reduction of bad debt expense by 100K. This savings has been factored in to our 2015 budget.



- b) Has HOBNI taken into account this change in the calculation of the working capital allowance? If not, why not?

#### RESPONSE

No. HOBNI is using the default working capital allowance of 13%.

#### 4-Staff-52

Ref: Exhibit 4, Tab 2, Schedule 1, p. 1

Ref: Exhibit 4, Tab 1, Schedule 1, pps. 4, 7

Hydro One Brampton has provided OM&A cost per customer and per FTE and the impact to OM&A from capitalization changes. Hydro One Brampton states that the inflation over the period has been approximately 2% per year. Restating the OM&A per customer and per FTE to remove the impacts from capitalization changes yields the following result:

	2011 Approved	2011 Actual	2012 Actual	2013 Restated	2014 Restated	2015 Restated	% Change from 2011 Actual	Average Annual Growth Rate
Number of Customers	134,539	136,119	139,740	143,970	147,788	151,708	11.45%	2.75%
Total Recoverable OM&A (restated)	20,070,266	20,156,799	20,488,607	21,641,400	24,053,507	23,883,649	18.49%	4.43%
OM&A Cost per Customer	149.18	148.08	146.62	150.32	162.76	157.43		
Number of FTEs	231.00	206.15	202.38	208.31	219.00	219.00	6.23%	1.56%
Customers/FTE	582.42	660.29	690.48	691.13	674.83	692.73		
OM&A Cost per FTE	86,884	97,777	101,238	103,890	109,833	109,058		
% Change in Customers			2.66%	3.03%	2.65%	2.65%		
% Change in OM&A			1.65%	5.63%	11.15%	-0.71%		
% Change in FTE's			-1.83%	2.93%	5.13%	0.00%		

a) Please confirm that the table calculations are correct.

#### RESPONSE

Yes – the restated calculation are correct;

b) Please confirm that both OM&A/customer and OM&A/FTE increase over the 2011-2015 period.

#### RESPONSE

Both the OM&A / Customer and the OM&A / FTE increase over the period.

c) Please confirm that OM&A has increased over the period at approximately the rate of customer growth + inflation.

#### RESPONSE

Yes, the statement that OM&A has increased over the period at approximately the rate of customer growth + inflation is correct. It should be noted that this not a general rule on how HOBNI's OM&A costs change year over year.

**E-billing:** HOBNI currently has an adoption rate of approximately 20% on its e-billing service. Increasing the adoption rate for e-billing by 5% would give Hydro One Brampton savings of approximately \$82,000 in postage costs and a further savings of \$7,600 in stationery, envelopes and processing. HOBNI is working to increase the E-billing adoption rate.

**IVAR / Customer Calls:** The introduction of the IVAR call system in 2013 has allowed HOBNI to increase its call handling capacity by approximately 30,000 calls a year. These savings are expected to be maintained in the future.

**WebForms:** HOBNI is currently developing self-serve options for its customers through its website. Residential and Commercial customers will have the ability to go on line to complete any one of the new web forms. HOBNI will offer several stand alone web forms as well as incorporating several sub forms within the Residential and Commercial New Account Registration web form. The self-serve web forms will include:

- Residential and Commercial New Account Registration forms – with sub forms
- Meter removal requests
- Equal Billing and Pre-Authorized Payment requests
- Payment error/duplicate payment notifications
- Multi-Unit Declaration form
- Multi-Tenanted property responsibility form
- Payments and credit card payments
- Letter of Reference request
- Consent to release account information
- OCEB Medical declaration
- 3<sup>rd</sup> Party Consent

The full implementation of these web forms will save Hydro One Brampton the equivalent of one FTE or \$72,000 a year with the reduced filing and data entry.

**Detailed Standards and Material Specifications:** HOBNI has developed a complete set of electronic construction standards and has a Bill of Materials allocation program that accompanies the construction standards. Any updates / changes or modifications to the standards are signed off and are then immediately electronically available to all internal users of the standards. In addition to the construction standards, HOBNI has a detailed library of Material Specifications.

## **TAB 3**

## EXHIBIT 2 - RATE BASE

### 2.0 – VECC - 3

Reference: E2/T3/S1

- a) Does HOBNI monthly or bi-monthly bill all customers classes?

#### RESPONSE

Please refer to Board Staff IR *4-Staff-56*.

- b) Has HOBNI reviewed the lead/lag studies of those utilities who do monthly billing?

#### RESPONSE

No, HOBNI has not reviewed any other utilities lead/lag studies.

#### 4-Energy Probe-26

Ref: Exhibit 4, Tab 2, Schedule 1

- a) When did HOBNI change its policy of collecting accounts at 60 days rather than 90 days (page 34)?

#### RESPONSE

HONBI changed its policy of collecting accounts after 60 days rather than 90 days arrears on October 1, 2013.

- b) Bad debt expenses are forecast to increase 16.5% between 2013 and 2015 and are driven by an increase in the number of customers and an increase in the cost of power. Please provide the percentage increase in the number of customers between 2013 and 2015 and the percentage increase in the average total bill between 2013 and 2015.

#### RESPONSE

The percentage increase in the number of customers from January 1, 2013 to December 31, 2015 is forecast to be 8.4% and the percentage increase in the average total bill between 2013 and 2015 is forecast to be 1.9%.

- c) Moving the collection to 60 days from 90 "helps lower the Company's bad debt exposure" (page 34). Please explain and quantify how this has reduced the bad debt forecast in 2015.

#### RESPONSE

By moving the collection process to 60 days from 90 days gives customers a better opportunity of being able to make payment arrangements and following through on those arrangements. Many customers after 90 days in arrears are having difficulty in keeping payment arrangements. The process keeps the final bill outstanding balances lower from tenants that skip once they receive notifications that they are in arrears and will be disconnected.

## 2-Energy Probe-6

Ref: Exhibit 2, Tab 3, Schedule 1

- a) Does HOBNI bill all rate classes on a monthly basis? If not, please provide a table that shows the billing frequency for each rate class.

### RESPONSE

Please refer to *4-Staff-56 (a)*.

- b) Has the billing frequency for any rate class changed since the last cost of service application? If yes, please provide details.

### RESPONSE

No, Hydro One Brampton has not changed the billing frequency for any rate class since last cost of service application.

# **TAB 4**





## Working Capital Requirements of Toronto Hydro Electric System Limited's Distribution Business

Prepared for:



Navigant Consulting Ltd.  
333 Bay Street  
Suite 1250  
Toronto, ON, M5H 2R2

[www.navigant.com](http://www.navigant.com)

June 27, 2014



## Section I: Executive Summary

### Summary

This report provides the results of the working capital requirements of THESL's distribution business.

Performing a lead-lag study requires two key undertakings:

1. Developing an understanding of how the regulated distribution business operates in terms of products and services sold to customers/purchased from vendors, and the policies and procedures that govern such transactions; and,
2. Modeling such operations using data from a relevant period of time and a representative data set. It is important to ascertain and factor into the study whether (or not) there are known changes to existing business policies and procedures going forward. Where such changes are known and material, they should be factored into the study.

Results from the lead-lag study using 2012 data identify the following working capital amount in Table 1, below.

**Table 1: Summary of Working Capital Requirements**

Year	2012
Percentage of OMA	7.91%
Working Capital Requirement	\$218,720,393

The results of the study indicate a lower working capital requirement compared to THESL's EB-2007-0680 distribution lead-lag study. A considerable amount of time has lapsed between the two studies. The primary reason for the difference is the decrease in retail revenue lag days due to the upgrade of THESL's Customer Information System since the prior study. The retail revenue lag days have decreased by approximately 20 percent. Table 2, below summarizes the detailed working capital requirements for 2012 calculated in the study.

**Table 2: THESL Distribution Working Capital Requirements (2012)**

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Expenses	Working Capital Requirements
Cost of Power	55.04	32.84	22.20	6.07%	\$ 2,450,597,565	\$ 148,654,316
OM&A Expenses	55.04	33.86	21.19	5.79%	\$ 312,961,220	\$ 18,115,434
PILS	55.04	(48.95)	103.99	28.41%	\$ 7,831,000	\$ 2,225,034
Interest Expense	55.04	46.17	8.87	2.42%	\$ 76,173,950	\$ 1,845,550
DRC	55.04	33.31	21.74	5.94%	\$ 162,416,324	\$ 9,645,577
<b>Total</b>					<b>\$ 3,009,980,059</b>	<b>\$ 180,485,912</b>
HST						\$ 38,234,481
<b>Total - Including HST</b>						<b>\$ 218,720,393</b>
<b>Working Capital as a Percent of OM&amp;A incl. Cost of Power</b>						<b>7.91%</b>

## Section II: Revenue Lags

A distribution utility providing service to its customers generally derives its revenue from bills paid for service by its customers. A revenue lag represents the number of days from the date service is rendered by THESL until the date payments are received from customers and funds are available to THESL.

Interviews with THESL personnel indicate that its distribution business receives funds from the following funding streams:

1. Retail Customers;
2. Other Sources (revenues from electricity retailers and revenues for miscellaneous services such as jobbing and contracting work performed by THESL); and,
3. The Ontario Clean Energy Benefit (OCEB).

The lag times associated with the funding streams above were weighted and combined to calculate an overall revenue lag time as shown below. Detailed data tables are provided in Appendix B.

**Table 3: Summary of Revenue Lag**

Description	Lag Days	Revenues	Weighting	Weighted Lag
Retail Revenue	54.78	\$ 3,265,502,197	94.18%	51.59
Other Revenue	33.93	\$ 25,540,425	0.74%	0.25
Ontario Clean Energy Benefit	62.98	\$ 176,156,432	5.08%	3.20
<b>Total</b>		<b>\$ 3,467,199,054</b>	<b>100.00%</b>	<b>55.04</b>

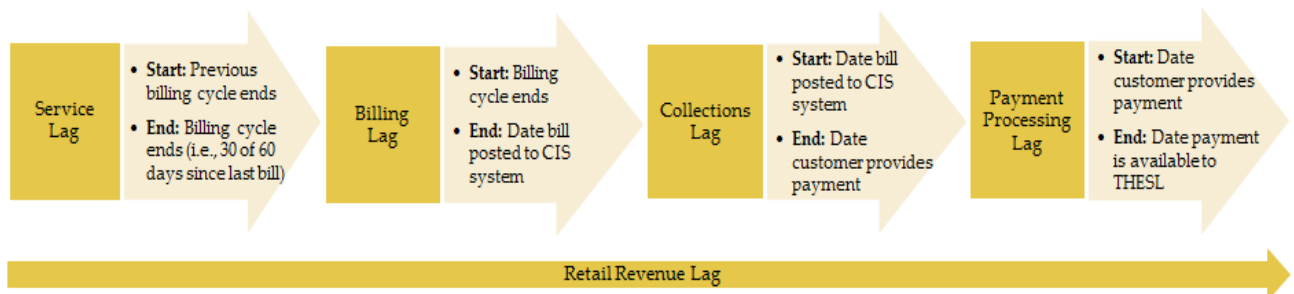
### *Retail Revenue Lag*

Retail Revenue lag consists of the following components:

1. Service Lag;
2. Billing Lag;
3. Collections Lag; and,
4. Payment Processing Lag.

The lag times for each of the above components, when added together, results in the Retail Revenue Lag for the purpose of calculating the working capital requirements for THESL's distribution business. The components are intended to represent a continuous process from the end date of the customer's previous billing cycle to the date in which the payment is available to THESL. Figure 1 illustrates the start and end point for each component of THESL's retail revenue lag.

**Figure 1: Retail Revenue Lag**



# **TAB 5**



## Working Capital Requirements of Hydro One Networks' Distribution Business

Prepared for:



Navigant Consulting Ltd.  
333 Bay Street  
Suite 1250  
Toronto, ON, M5H 2R2

[www.navigant.com](http://www.navigant.com)

December 3, 2013



**Table 13: HONI Distribution Working Capital Requirements (2019)**

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Expenses (\$M)	Working Capital Requirements (\$M)
Cost of Power	52.25	32.74	19.50	5%	\$2,582.55	\$137.99
OM&A Expenses	52.25	27.11	25.14	7%	\$600.00	\$41.33
PILS	52.25	128.37	-76.12	-21%	\$69.39	-\$14.47
Interest Expense	52.25	8.93	43.32	12%	\$238.25	\$28.27
Environmental Remediation	52.25	40.98	11.27	3%	\$21.62	\$0.67
Removals	52.25	16.51	35.73	10%	\$65.82	\$6.44
<b>Total</b>					\$3,577.62	\$200.23
HST						\$40.88
<b>Total - Including HST</b>						<b>\$241.11</b>
<b>Working Capital as a Percent of OM&amp;A incl. Cost of Power</b>						<b>7.58%</b>

## Section I: Executive Summary

### *Summary*

In preparation for a 2015-2019 distribution rate filing before the Ontario Energy Board (“OEB”), Hydro One Networks, Incorporated (“HONI”) retained Navigant Consulting Limited (“Navigant”) to prepare an update to its prior working capital study. This report provides the results of the update and the working capital requirements of HONI’s distribution business.

Listed below are key findings and conclusions from this study:

1. In terms of lead-lag days, the results from this study are generally comparable with HONI’s previous distribution working capital study (EB-2009-0096). Where there are differences, they have been identified, explained, and their impact on working capital requirements quantified;
2. The approach and methods used in this study are generally consistent with prior HONI studies as well as studies performed by other local distribution companies in Ontario; and,
3. Data from calendar year 2012 was used as a basis for this analysis. Results from the lead-lag study applied to HONI’s test years identify the following working capital amounts.

**Table 1: Summary of Working Capital Requirements**

Year	2015	2016	2017	2018	2019
<b>Percentage of OMA</b>	7.40%	7.39%	7.46%	7.52%	7.58%
<b>Working Capital Requirement \$(M)</b>	\$236.21	\$239.08	\$240.76	\$239.75	\$241.11

### *Organization of the Report*

Section II of this report discusses the lag times associated with HONI’s collections of revenues. This includes a description of the sources revenues and how an overall revenue lag is derived.

Section III presents the lead times associated with HONI’s expenses. This includes a description of the types of expenses incurred by HONI’s distribution operations and how expenses are treated for the purposes of deriving an overall expenses lead.

Section IV presents the working capital requirements of HONI’s distribution business including the working capital requirement associated with the Harmonized Sales Tax (“HST”).

Section V presents a summary comparison of the results from this study with results from EB-2009-0096 study. Differences between the two have been noted, explained, and their impacts on working capital quantified. The intent of presenting the discussion in Section V is to demonstrate that the approach used in this study is an accurate reflection of the current distribution operations of HONI and that the results are reasonable when compared with the prior distribution studies.

### Section III: Revenue Lags

A distribution utility providing service to its customers generally derives its revenue from bills paid for service by its customers. A revenue lag represents the number of days from the date service is rendered by HONI until the date payments are received from customers and funds are available to HONI.

Interviews with HONI personnel indicate that its distribution business receives funds from the following funding streams:

1. Retail Customers;
2. Rural Rate Assistant Customers;
3. The Ontario Ministry of Finance via the Independent Electricity System Operation (“IESO”);
4. Other Sources (revenues from municipalities, electricity retailers and revenues for miscellaneous services such as jobbing and contracting work performed by HONI); and,
5. The Ontario Clean Energy Benefit (“OCEB”).

The lag times associated with the funding streams above were weighted and combined to calculate an overall revenue lag time as shown below.

**Table 2: Summary of Revenue Lag**

Description	Lag Days	Revenues (\$M)	Weighting	Weighted Lag
Retail Revenue	52.87	\$5,283	83%	43.87
Rural Rate Assistance	32.74	\$164	3%	0.84
Other Revenue	38.09	\$392	6%	2.35
Ontario Clean Energy Benefit	62.58	\$528	8%	5.19
<b>Total</b>		<b>\$6,367</b>	<b>100%</b>	<b>52.25</b>

Retail Revenue lag consists of the following components<sup>3</sup>:

1. Service Lag;
2. Billing Lag; and,
3. Collections Lag.

The lag times for each of the above components, when added together, results in the Retail Revenue Lag for the purpose of calculating the working capital requirements for HONI’s distribution business. Table 3 below summarizes the total Retail Revenue Lag.

<sup>3</sup> There is no additional lag time for payment processing as funds are available to HONI immediately after funds are deposited



### *Comparison with Other Lead-Lag Studies*

Navigant has prepared a table comparing the components of lead-lag studies that have been filed and is public. The results are shown in Table 19 below. Note that the prior studies are based on data of an older vintage and are mostly based on the customer weighting method for revenue lags. This is an obsolete methodology and HONI's current study is based upon the revenue weighting method for revenue lags.

**Table 19: Comparison with Other Lead-Lag Studies**

Name of Utility	Working Capital Requirements (Filed )	Vintage For Base Year Data	Type of Service	Customer/Retail Revenues	IESO/ISO Revenues	Other Revenues	Payroll & Withholdings	Employee Benefits	Cost of Power	Other OM&A	Income & Related Taxes	GST/HST	Interest Expense
Hydro One Networks	11.70%	2009	Electric Distribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Toronto Hydro	12.45%	2005	Electric Distribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hydro Ottawa Ltd.	14.20%	2008	Electric Distribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Horizon's Utilities Corp.	14.20%	2009	Electric Distribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
London Hydro Inc.	11.42%	2010	Electric Distribution	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**TAB 6**

## **APPENDIX 2-3 HORIZON UTILITIES' LEAD/LAG STUDY**



# A Determination of the Working Capital Requirements of Horizon Utilities' Distribution Business

Prepared for:  
Horizon Utilities Corporation



Navigant Consulting, Inc.  
333 Bay Street  
Suite 1250  
Toronto, Ontario, M5H 2R2



[www.navigant.com](http://www.navigant.com)

March 31, 2014

## Section I: Executive Summary

### *Summary*

In preparation for HUC's 2014 Distribution Cost of Service Rate Application before the Ontario Energy Board ("OEB" or "Board"), Horizon Utilities Corporation ("HUC") retained Navigant Consulting Ltd. ("Navigant") to perform a lead-lag study using the most recent data available, and to derive HUC's WCA using historical 2012 data with known and measurable forward looking changes applied. This report provides the results of the study and the WCA of HUC's distribution business.

Results from the lead-lag study applied to HUC's 2012 distribution expenses identify that an average working capital percentage of 12.7% of the Cost of Power and OM&A Expenses for the 2014-2019 test years. This represents an average of 12.7% of HUC's distribution OM&A expenses for the 2014-2019 time periods. Inasmuch as slight variation exists from year-to-year in our analysis Navigant believes application of the 12.7% provides an accurate recovery of the cost of working capital for the time period 2014 through 2019. Based upon the working capital dollar amounts for each of the test years, the weighted average working capital was calculated to be 12.7%. Table 1 below provides the estimated working capital dollars and percentages for the test years 2014-2019.

**Table 1 – Estimated Working Capital Requirements**

	2014	2015	2016	2017	2018	2019	2014 to 2019
<b>Estimated Working Capital Requirements (\$)</b>	\$73,386,661	\$74,271,709	\$76,895,589	\$79,721,717	\$82,565,878	\$85,320,939	\$458,010,166
<b>Estimated Working Capital Requirements (%)</b>	12.7%	12.7%	12.6%	12.7%	12.6%	12.7%	12.7%

## Section V: HUC's Working Capital Allowance

Using the results described under the discussion of revenue lags and expense leads, and applying them to HUC's distribution expenses for 2014-2019, the weighted average WCA was determined to be 12.7% of HUC's distribution OM&A expenses (including Cost of Power) for each of the test years 2014-2019. A summary of HUC's WCA for individual 2014-2019 years is provided in the subsequent tables below. These tables include HST amounts which have been derived from Table 10 above.

**Table 11: Summary of Working Capital Allowance - 2014**

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Amounts (\$M)	Working Capital Allowance (\$M)
Cost of Power	69.34	32.86	36.48	10.0%	\$514,946,434	\$51,463,007
OM&A Expenses <sup>3</sup>	69.34	7.30	62.04	17.0%	\$64,986,015	\$11,046,321
PILs	69.34	14.50	54.84	15.0%	\$555,146	\$83,406
Debt Retirement Charge	69.34	25.59	43.74	12.0%	\$32,180,619	\$3,856,729
Interest Expense	69.34	(67.15)	136.49	37.4%	\$9,519,067	\$3,559,569
<b>Sub-Total</b>					<b>\$622,187,281</b>	<b>\$70,009,032</b>
HST						\$3,377,630
<b>Total</b>						<b>\$73,386,661</b>
<b>WCA as a % of OM&amp;A (incl. Cost of Power)</b>						<b>12.7%</b>

**Table 12 - Summary of Working Capital Allowance - 2015**

Description	Revenue Lag Days	Expense Lead Days	Net Lag Days	Working Capital Factor	Amounts (\$M)	Working Capital Allowance (\$M)
Cost of Power	69.34	32.86	36.48	10.0%	\$520,720,617	\$52,040,070
OM&A Expenses <sup>4</sup>	69.34	7.30	62.04	17.0%	\$64,479,807	\$10,960,275
PILs	69.34	14.50	54.84	15.0%	\$2,874,217	\$431,828
Debt Retirement Charge	69.34	25.59	43.74	12.0%	\$31,854,423	\$3,817,636
Interest Expense	69.34	(67.15)	136.49	37.4%	\$9,831,640	\$3,676,453
<b>Sub-Total</b>					<b>\$629,760,705</b>	<b>\$70,926,262</b>
HST						\$3,345,447
<b>Total</b>						<b>\$74,271,709</b>
<b>WCA as a % of OM&amp;A (incl. Cost of Power)</b>						<b>12.7%</b>

<sup>3</sup> Includes Payroll and Benefits

<sup>4</sup> Includes Payroll and Benefits

## **2-Staff-23      Working Capital Allowance**

### **Reference:**

#### **1.      Exhibit 2 Tab 4 Appendix 2-3 - A Determination of the Working Capital Requirements of Horizon Utilities' Distribution Business**

### **Preamble:**

**Horizon retained Navigant Consulting Inc. to perform a lead lag study to establish the working capital factor to be applied to controllable OM&A and the cost of power for setting the level of working capital to be included in rate base. The analysis resulted in a Billing Service Lag of 27.6 days.**

- a.      Please provide the details of the calculation of the Billing Service Lag of 27.6 days.**
- b.      Is Horizon planning to bill monthly at any time during the CIR period? If so, when?**

### **Response:**

- 1      a. Subsequent to the submission of its Application, Horizon Utilities reviewed the inputs
- 2      used to calculate the Billing Service Lag of 27.06. It determined that some of the
- 3      revenue allocations between monthly and bi-monthly billing were incorrect.
- 4      Navigant Consulting Inc. ("Navigant") recalculates the Billing Service Lag to be 25.02
- 5      days, based on the correct revenue allocations. The details of the calculation of the
- 6      Billing Service Lag of 25.02 days are filed as attachment 2-Staff-23a\_Attch 3\_Service
- 7      Lag Revised Table. Horizon Utilities has provided the revised Navigant Report, which
- 8      incorporates the revised Billing Service Lag as 2-Staff-23a\_Attch 1\_Revised Navigant
- 9      Working Capital Report. Horizon Utilities has also provided a marked-up (track
- 10     changes) version of the same report as 2-Staff-23a\_Attch 2\_Revised Navigant Working
- 11     Capital Report\_Track Changes. The revised Navigant Report was also updated for
- 12     minor typographical errors in the original report (Tables 5, 6 and 7 as well as the
- 13     expense lead time for Property Taxes on page 16 - revised Navigant Working Capital
- 14     Report and service, payment and expense lead times for Payments in Lieu of Taxes on
- 15     page 16 – revised Navigant Working Capital Report). None of the typographical errors
- 16     affected the Working Capital % calculation.

The revised Billing Service Lag of 25.02 has been used to calculate a revised Working Capital Allowance. This revision results in a reduction in the Working Capital Allowance of 0.7% from 12.7% to 12.0%.

The impact on revenue requirement due to the change in Working Capital Allowance is identified in the table below:

**Table 1: Impact on Revenue Requirement**

	2015	2016	2017	2018	2019
Submitted Base Revenue Requirement	\$ 112,956,026	\$ 118,628,501	\$ 121,743,444	\$ 123,920,317	\$ 127,881,899
Base Revenue Requirement (WC at 12%)	\$ 112,665,477	\$ 118,326,485	\$ 121,430,522	\$ 123,592,298	\$ 127,540,488
Variance in Revenue Requirement	\$ (290,549)	\$ (302,016)	\$ (312,922)	\$ (328,019)	\$ (341,411)

b. Horizon Utilities is not planning to transition customers to monthly billing at any time during the CIR period.

Horizon Utilities is aware of the recent policy review initiated by the Board on July 27, 2014 related to *Electricity and Natural Gas Distributors' Residential Customer Billing Practices and Performance* (EB-2014-0198). Changes to billing practices during the term of the rate plan may result from this policy review.

Please also see Horizon Utilities' response to Interrogatory 2-EP-11 b) for a discussion of the one-time and ongoing incremental costs for such a transition.



**TAB 7**



## Jay Shepherd

Professional Corporation  
2300 Yonge Street,  
Suite 806  
Toronto, Ontario M4P 1E4

### **BY EMAIL and RESS**

September 19, 2014  
Our File No. SEC-Gen.

Ontario Energy Board  
2300 Yonge Street  
27<sup>th</sup> Floor  
Toronto, Ontario  
M4P 1E4

### **Attn: Kirsten Walli, Board Secretary**

Dear Ms. Walli:

### **Re: Electricity Distributors – Working Capital Allowance**

We are counsel for the School Energy Coalition. We are writing on behalf of our client, SEC, and other intervenors to express our concern with respect to an ongoing error in the default working capital allowance for electricity distributors. The error appears to be artificially inflating electricity distribution rates by as much as \$100 million per year.

In a letter dated April 12, 2012, the Board adjusted the default working capital allowance for electricity distributors from 15% to 13%. The Board described the basis for the change as follows:

*“Based on the results of WCA studies filed with the Board in the past few years, the Board has determined that the default value going forward will be 13% of the sum of cost of power and controllable expenses.”*

The WCA studies the Board refers to were from four large distributors: Hydro One Networks, Toronto Hydro, Horizon Utilities, and Ottawa Hydro. Each of those studies contained a methodological error that is now being corrected in subsequent studies. In calculating the revenue lag, including in particular the service lag, the difference in bi-monthly vs. monthly billing is weighted by number of customers. The correct methodology is to weight the service lag by revenues, since the point of the calculation is to determine



*Jay Shepherd Professional Corporation*

the dollars needed in capital to cover the lag. It is typical for a distributor still using bi-monthly billing to bill 90-95% of their customers on a bi-monthly basis (usually residential and sometimes small general service), but to get 25-65% of their revenues from the bi-monthly billed customers.

The corrected methodology has been accepted by many of the experts in the field. In EB-2013-0416, Navigant, the author of many lead-lag studies relied on by the Board, explained why the new Hydro One figure is lower than the older studies, saying [Ex.D1/1/3, Attach. 1, p.23]:

*“Navigant has prepared a table comparing the components of lead-lag studies that have been filed and is public. The results are shown in Table 19 below. Note that the prior studies are based on data of an older vintage and are mostly based on the customer weighting method for revenue lags. This is an obsolete methodology and HONI’s current study is based upon the revenue weighting method for revenue lags.” [Emphasis added]*

Each of the four WCA studies the Board relied on in 2012 has been updated, and in each case, the effect of the methodological error has been removed. The following table shows the original results, and the most recent results removing the error.

Utility	Year	Rate	Year	Rate
Hydro One Networks	2009	11.9%	2013	7.4%
Toronto Hydro	2007	12.9%	2014	7.9%
Horizon Utilities	2010	14.1%	2014	8.8%
Hydro Ottawa	2009	14.2%	2011	9.6%

In the case of Ottawa and Horizon, the new figures remove the error by assuming monthly billing for all customers. Thus, the weighting is necessarily irrelevant. In the case of Hydro One and Toronto (the latter just filed recently in EB-2014-0116), bi-monthly billing is still assumed for many customers, but revenue weighting is used. It is the recent filing of the Toronto study that has demonstrated the fact that this impact relates primary to the methodology, and not to the shift to monthly billing. Thus, it is the genesis of this letter.

On average, removing the problem reduces the WCA percentage by 4 to 5 percent. The impact of that, on an industry with \$3.5 billion in annual distribution revenues, is \$94-\$118 million annually, and is increasing as distribution costs and cost of power are increasing.

SEC, on behalf of itself and other ratepayer groups, therefore requests that the Board remove the incorrect 13% default from the current Filing Requirements as an interim measure, and then institute a recalculation of the default figure based on the correct methodology.

Based on the weighted average results of the four studies that have been updated (listed above), a single new figure would be something slightly below 8%, reducing distribution rates by an average of about 3.3% for the customers of affected utilities.

**TAB 8**

#### 4-Energy Probe-36

**Ref: Exhibit 4, Tab 4, Schedule 4**

At page 3, the evidence appears to indicate that from 2015 and forward, while HOBNI has used the half year rule for additions to rate base for regulatory purposes, the financial accounting will use the monthly in-service date for actual depreciation expense.

- a) Please confirm that the above is accurate. If not, please explain when monthly in-service is or will be the methodology used to calculate depreciation.

#### **RESPONSE**

The half year rule is utilized for the forecasts of the bridge and test years and for the historical years (except for 2013 actual). HOBNI started the monthly in-service methodology in 2013 for its actual depreciation expense calculation and will continue as required under the IFRS accounting standard.

- b) Has HOBNI done any study that looks at the difference in depreciation expense using the half year rule relative the monthly in-service approach? If yes, please provide the results. If not, please provide a table that shows for each of 2011 through 2013 the difference in the depreciation expense assuming use of the half year rule versus the monthly in-service approach.

#### **RESPONSE**

HOBNI has not done a study that looks at the difference in depreciation methods. A table for 2013 is provided to show the estimated difference in the depreciation expense assuming use of the half year rule versus the month in-service approach at the USoA level consistent with Appendix 2-BA. HOBNI started using the month-in-service method in 2013 for in-service additions. We cannot provide this table for 2011 to 2012 as data for in-service additions by component is not readily available for those periods.

ACCT#	Description	Month in Service	1/2 year rule	Difference
1609	Capital contributions Paid	(369,946.77)	(369,946.77)	-
1611	Computer Software (Formally known as Account 1925)	(671,728.13)	(671,728.13)	-
1808	Buildings	(761,788.79)	(773,197.35)	11,408.56
1815	Transformer Station Equipment >50 kV	(794,396.52)	(815,963.49)	21,566.97
1820	Distribution Station Equipment <50 kV	(180,518.89)	(180,518.89)	-
1830	Poles, Towers & Fixtures	(1,353,599.51)	(1,376,240.34)	22,640.83
1835	Overhead Conductors & Devices	(577,531.52)	(598,360.27)	20,828.75
1840	Underground Conduit	(612,750.49)	(673,005.50)	60,255.01
1845	Underground Conductors & Devices	(6,100,413.13)	(6,201,194.52)	100,781.39
1850	Line Transformers	(1,824,326.74)	(1,871,800.87)	47,474.13
1855	Services (Overhead & Underground)	(365,105.65)	(367,304.08)	2,198.43
1860	Meters (Smart Meters)	(2,210,472.85)	(2,219,222.07)	8,749.22
1908	Buildings & Fixtures	(12,288.70)	(12,288.70)	-
1915	Office Furniture & Equipment (10 years)	(67,059.19)	(67,059.19)	-
1920	Computer Equipment - Hardware	(343,369.08)	(343,369.08)	-
1930	Transportation Equipment	(944,319.03)	(944,319.03)	-
1935	Stores Equipment	(36,472.59)	(36,472.59)	-
1940	Tools, Shop & Garage Equipment	(161,781.48)	(161,781.48)	-
1950	Power Operated Equipment	(115.52)	(115.52)	-
1955	Communications Equipment	(128,408.56)	(128,408.56)	-
1960	Miscellaneous Equipment	(14,853.03)	(14,853.03)	-
1980	System Supervisor Equipment	(209,404.32)	(209,404.32)	-
1995	Contributions & Grants	3,881,690.94	4,036,815.54	(155,124.60)
	<b>TOTAL</b>	<b>(13,858,959.55)</b>	<b>(13,999,738.24)</b>	<b>140,778.69</b>

c) Please provide a source that confirms that IFRS does not allow for use of the half year rule.

## RESPONSE

IFRS, under IAS 16“(Property Plant and Equipment” (IAS 16 para. 55) and as interpreted by the major accounting firms, does not allow for use of half year rule to record depreciation on actual in-service additions. A monthly in-service addition approach is required. IFRS is silent with respect to calculation of rate base for regulatory purposes, and the OEB has allowed use of the half year rule.

- d) Please provide a reference for the Board direction that the half year rule is to be used for regulatory purposes.

## RESPONSE

Use of the half year rule for rate base calculation is based on the OEB direction in the *"Filing Requirements for Electricity Distribution Rate Applications"*, which state that:

*"For rate base, the applicant must include the opening and closing balances, and the average of the opening and closing balances for gross assets and accumulated depreciation. Alternatively, if an applicant uses a similar method such as calculating the average in service based on the average of monthly values, it must document the methodology used."* Section 2.5.1.1 page 14

*"The Board's general policy for electricity distribution rate setting is that capital additions would normally attract six months of depreciation expense when they enter service in the test year. This is commonly referred to as the "half-year" rule. The applicant must identify its historical practice and its proposal for the test year. Variances from this "half-year" rule, such as calculating depreciation based on the month that an asset enters service, must be documented with explanation."* Section 2.7.4 pg. 32

- e) Has Board directed distributors to not use the in-service approach for regulatory purposes?

## RESPONSE

The Board has not directed distributors to not use the in-service approach for regulatory purposes. The Board has given options as referenced in (d) above.