



74 Commerce Crescent  
North Bay, Ontario  
P1A 0B4

Tel. (705) 474-8100  
Fax: (705) 495-2756 Administration  
Fax: (705) 474-3138 Engineering/Purchasing  
Fax: (705) 474-8579 Customer Services/Accounting  
Fax: (705) 474-4634 Operations

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Monday, August 31, 2015

Ontario Energy Board  
P.O. Box 2319, 27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, ON  
M4P 1E4

Attention: Kirsten Walli, Board Secretary

Dear Ms. Walli:

**Re: North Bay Distribution Ltd. ("NBHDL")  
Board File No. EB-2014-0099  
Working Capital Allowance ("WCA") Interrogatory Responses**

Pursuant to Procedural Order No. 3, please find enclosed NBHDL's Interrogatory Responses in regards to the above noted WCA matter.

Yours truly,

*Original signed by*

Melissa Casson, CPA, CGA  
Regulatory Manager  
North Bay Hydro Distribution Limited  
(705) 474-8100 (300)  
mcasson@northbayhydro.com

EB-2014-0099

North Bay Hydro Distribution Ltd. (“North Bay Hydro”)

Interrogatory Responses – Working Capital Allowance  
 (“WCA”)

August 31, 2015

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**North Bay Hydro Interrogatory Responses - WCA**

**STAFF-1 – TERMS OF REFERENCE**

**Interrogatory:**

North Bay Hydro retained Navigant Consulting Ltd. (Navigant) to prepare a lead-lag study to calculate the working capital requirements for North Bay Hydro's distribution business.

a) Please provide the terms of reference for retaining Navigant.

b) Please provide any additional instructions related to the study that may have transpired after the terms were set.

**Response:**

a) A redacted copy of the terms of reference for retaining Navigant are attached in Appendix "A". On behalf of Navigant, NBHDL requests confidential treatment of the redacted information, which is strictly limited to Navigant's hourly rates and fees for this retainer. If disclosed this information would reveal sensitive commercial and financial information that was supplied in confidence the disclosure of which could reasonably be expected to prejudice Navigant's financial and competitive position and/or interfere with future negotiations for similar services with other groups or organizations. A letter from Navigant supporting this request for confidential treatment is enclosed with this interrogatory response as Appendix "B".

b) No additional instructions related to the study transpired after the terms were determined between NBHDL and Navigant as set out in the response to part (a) above.

**North Bay Hydro Interrogatory Responses - WCA**

**STAFF-2 – BILLING LAG**

Reference: Page 8

**Interrogatory:**

The Navigant study determined that the time from the meter reading to the issuing of a bill is 23.97 days. OEB staff note that other distributors take less time to bill. The following table was developed by OEB staff:

<b>Billing Period</b>		
		<b>Days</b>
EB-2011-0033	Enersource	13.0
EB-2011-0146	London Hydro	18.0
EB-2010-0131	Horizon	17.4
EB-2010-0133	Hydro Ottawa	18.1
EB-2014-0116	THESL	12.5
EB-2013-0416	HONI	7.7
EB-2013-0174	Veridian	17.6
EB-2014-0002	Horizon	19.0
Max		19.0
Min		7.7
Average		15.4
Median		17.5

a) Please explain the steps taken to determine the billing lag. If a sample of bills was used, please provide the statistical parameters indicating significance?

b) Please explain why North Bay Hydro's billing period is significantly longer than those in OEB staff's Billing Period table.

- 1 c) What steps is North Bay Hydro taking to reduce the billing lag?
- 2 d) If North Bay Hydro is not currently planning to reduce the billing lag, what could North  
3 Bay Hydro do to reduce the lag?
- 4 e) When would North Bay Hydro be able to reduce the billing lag?
- 5 f) By how many days would the billing lag be reduced?
- 6 g) Please state the problems North Bay Hydro would have if the median 17.5 days in OEB  
7 staff's Billing Lag table was deemed to be North Bay Hydro's billing lag?

8 **Response:**

9 a) NBHDL provided Navigant with the average time taken from meter read to bill (in days)  
10 by rate class. NBHDL did not rely on a sampling of bills. Rather, NBHDL determined the  
11 average time from meter read to bill by using transactional billing data from the CIS system for  
12 bills issued utilizing 15 months of billing data from January 2014 forward. The data file  
13 contained the customer account, customer location, customer class, meter read date, bill date, due  
14 date and e-bill flag. The data was sorted by customer class and the number of days for the billing  
15 lag was calculated for each bill by subtracting the date the bill was created in the CIS system  
16 from the meter read date. In addition, three days were then added to the calculated bill lag for  
17 bills that were sent to customers via mail and zero days for customers receiving them  
18 electronically. An average billing lag was then calculated for each rate class. The average billing  
19 lag time by rate class was then weighted by the revenues associated with each rate class  
20 (revenues billed over a 15 month period from January 2014 forward) to derive a revenue-  
21 weighted billing lag.

NBHDL notes that a wider timeframe was used for the calculation of the revenue lag. The working capital allowance would increase to 10.62% if the calculation was based on 2014 data only (12 months vs. 15 months) for the revenue lags.

Please also reference Energy Probe-1 a).

b) It is unclear to NBHDL on what basis Board staff arrived at the conclusion that the LDCs listed in staff's billing period table are comparable to NBHDL. See the table below:

	Enersource EB-2012-0033	London Hydro EB-2012-0146	Horizon EB-2010-0131	HONI EB-2013-0416	Veridian EB-2013-0174	Horizon EB-2014-0002	NBHDL EB-2014-0099
Revenue Requirement	\$ 122,824,870	\$ 66,326,032	\$ 102,144,047	\$ 1,375,300,000	\$ 53,857,000	\$ 114,327,440	\$ 12,807,897
# of Customers/Connection	251,917	188,876	290,997	1,329,580	148,811	297,034	29,878
OM&A	\$ 51,364,731	\$ 32,978,000	\$ 42,418,472	\$ 543,100,000	\$ 26,283,692	\$ 59,653,062	\$ 6,422,379
WCA %	13.50%	11.42%	13.50%	7.40%	13.40%	12.00%	10.43%

*Please note NBHDL was unable to obtain similar data for THESL or Hydro Ottawa from the webdrawer*

Several factors contribute to NBHDL's billing period including IESO dates for preliminary net system load shape (NSLS), calendar month billing, and cycle billing dates. NBHDL bills customers using the preliminary NSLS from the IESO (available after the 15th of each month) and bills are typically based on a calendar month meter read with exceptions such as finals/disconnects/moves/etc. As NBHDL waits for the preliminary rates from the IESO, bills are then primarily generated between the 15th and 30th of the month based on staggered cycle billing and are typically for the prior month's consumption (for example, a residential customer will have the bill for July 1<sup>st</sup>-31<sup>st</sup> consumption issued between August 18<sup>th</sup> and 30<sup>th</sup> as the IESO released preliminary July 31<sup>st</sup> data on August 17<sup>th</sup>).

NBHDL's decision to wait for preliminary IESO rates and base billing on prior calendar month consumption results in more accurate bills to customers that are reflective of a more current and easily referenced time period. In addition, this process allows NBHDL to have a more accurate accounting process for financial statement reporting, including revenue and cost of power

1 accruals, as well as a more accurate process for monthly Regulated Price Plan settlement with the  
2 IESO that also impacts deferral accounts and subsequent disposition.

3 It is important to note that utilities and Customer Information Systems (CIS) used are not  
4 homogeneous nor are billing practices; these should be based on customer preference and driven  
5 by efficient processes within the utility.

6 c) In 2012-13 there was an external review of meter to cash processes (the 3rd party report  
7 can be found in Appendix 4-A of Exhibit 4 of the rate application) and a review of billing  
8 processes and procedures was completed. Changes to processes and procedures were made as a  
9 result of this study and NBHDL undertook to review and incorporate efficiencies where possible.  
10 However, this study was not limited to or focused directly on billing lag.

11 d) Option 1: As explained in Staff 2 b), NBHDL issues bills based on prior calendar month  
12 consumption and does not calculate the bill until preliminary NSLS IESO data is available,  
13 typically around the 15th of the month. NBHDL has explained the benefits of utilizing this data  
14 from both a billing and accounting perspective in response to part (b) above. NBHDL could  
15 explore utilizing internal calculations to estimate NSLS and push billing forward, however this  
16 change would result in a reduction in the accuracy of customer billing, accounting accruals, RPP  
17 settlement with the IESO and would require additional resources as a result of changes to current  
18 practices which would impact workload and could increase OM&A costs. Without further  
19 analysis, including a complete cost-benefit assessment, it is impossible to determine whether  
20 these are the only negative impacts of a potential decision to move forward with changing the  
21 process of waiting for preliminary IESO data. NBHDL would need to review in detail all billing  
22 processes before determining what steps can be taken to reduce the lag. For the test year,  
23 NBHDL believes that its current process meets both customer and management needs for an  
24 efficient and timely process within current resources and OM&A costs.

25 Option 2: NBHDL currently bills customers based on cycle billing which allows for a staggered  
26 release of bills by cycle typically over the last two weeks of each month. Current resourcing



1 allocations and OM&A costs rely on this structure as do several of NBHDL's core objectives  
2 included in the rate application. NBHDL could shorten its cycle billing period from two weeks  
3 and push all billing into a one week period immediately following the release of the preliminary  
4 NSLS from the IESO for the last day of the prior month. NBHDL does not currently have the  
5 resourcing to handle such a significant shift in the billing process which would result in a larger  
6 volume of invoices in a shorter time period. The implications on the collections process would  
7 include an inability to meet the required 48 hour call ahead for disconnection, the inability to  
8 meet the timeline on required disconnections in the field and phone stats would not be met due to  
9 a significant surge in calls over a specific period. Without further analysis, including a complete  
10 cost-benefit assessment, it is impossible to determine whether these are the only negative  
11 impacts. NBHDL would suspect that while the Billing Lag may decrease there may be a  
12 corresponding increase in the Collections Lag and an in OM&A costs to handle increased  
13 resources and equipment requirements.

14 e) Decisions to reduce billing lag should not be made in isolation. As described in the  
15 response to part (d) above attempts to reduce the billing lag will trigger reductions in data  
16 quality, increases in OM&A costs, cause resource constraints, and may increase collections lag.  
17 Without a comprehensive cost-benefit analysis, NBHDL is not in a position to say when, if ever,  
18 it would be able to reduce billing lag.

19 f) See the response to part (e) above. Without a comprehensive cost-benefit analysis,  
20 NBHDL is not in a position to say when, if ever, it would be able to reduce billing lag or  
21 quantify the impact.

22 g) The result would be that NBDHL would collect in rates an inappropriate amount of cash  
23 working capital based on its actual billing practices and systems. From NBHDL's perspective,  
24 17.5 days is arbitrary and is not reflective of the evidence of North Bay Hydro's actual billing  
25 lag. Management takes into account a variety of considerations when designing and  
26 implementing a billing process. Billing lag is one, however it cannot be considered in isolation.  
27 Management must also consider accuracy of the billing information, the capabilities of current IT

- 1 systems, and personnel limitations. NBHDL is not comparable to the other LDC's included in
- 2 OEB staff's Billing Lag table in each of these regards.

**North Bay Hydro Interrogatory Responses - WCA**

**STAFF-3 – SUMMARY OF OTHER REVENUE**

Reference: Page 9 Table 5: Summary of Other Revenues

**Interrogatory:**

The results of the analysis of Other Revenues are shown in Table 5.

a) Are the headings for columns labeled Weighting and Revenue Lag Time interchanged?

b) Please explain the steps taken to determine the revenue lags. If samples of bills were used, please provide the statistical parameters indicating significance.

**Response:**

a) Yes, the headings for columns labeled Weighting and Revenue Lag Time are interchanged.

b) NBDHL provided Navigant with monthly data for each category of Other Revenues with the monthly amounts, a description of the service and a description of payment terms (for example, net 30 days). Navigant conducted interviews with NBDHL staff to understand the service period and the relationship between the service period and the payment date for each category. Navigant then dollar weighted each category to arrive at a revenue weighted Other Revenue Lag. Statistical sampling was not utilized, NBHDL provided all 2014 Other Revenues for use in the calculations. Please also refer to Energy Probe-3.

**North Bay Hydro Interrogatory Responses - WCA**

**STAFF-4 – PAYROLL AND BENEFITS**

Reference: Page 14 Table 10: Payroll and Benefits

**Interrogatory:**

The results of the analysis of payroll and benefits are shown in Table 10.

a) Please explain the steps taken to determine the expense lags and leads.

b) Please explain the rational for any leads.

c) If samples of bills were used, please provide the statistical parameters indicating significance.

**Response:**

a) NBHDL provided Navigant with data (service period, actual payment date, and amounts) for each category of Payroll and Benefits (for example, payroll data contained each pay period, the payroll to employees, the date employees receive their pay). Navigant conducted interviews with NBDHL staff to clarify certain details, for example, is a payroll administrator used, when are funds remitted to the payroll administrator. Navigant then dollar-weighted each component by the expense amounts. Please also refer to Energy Probe-5.

b) Group Life Insurance, Group Health and Dental, Short-Term and Long-Term Disability, and Spending Account are all expense leads. Each category has a monthly service period with an average service lead time of 15.21 days and is paid at the beginning of the month (in advance of service) with an average payment lead time of negative 29.42 days. Therefore, the total lead time (service lead time + payment lead time) is a negative number (an expense lead).

- 1 c) NBHDL provided a complete data set for Payroll and Benefits paid in 2014 for which
- 2 calculations were then derived; statistical sampling was not utilized.

1                    **North Bay Hydro Interrogatory Responses - WCA**

2    **STAFF-5 – PROPERTY TAX EXPENSE**

3    Reference: Page 14 Table 11: Property Tax Expense

4    **Interrogatory:**

5    North Bay Hydro has extensive lead times related to paying property taxes. In one instance, the  
6    taxes were paid almost a year in advance.

7    a)      Please explain why taxes are paid early.

8    b)      Are there legal or contractual terms to pay early?

9    c)      If early payment is incented by a discount, please show the business analysis that  
10    indicates benefits to the rate payers.

11   **Response:**

12   a)      The City of North Bay bills customers twice a year for property taxes due for that year. In  
13   2014 the interim bill was billed on February 3 with a due date of February 28 and the final bill  
14   was billed on June 4 with a due date of June 30. NBHDL pays the bills within the required  
15   timelines to avoid interest and penalties. The Ministry of Finance requires NBHDL to make  
16   payments in lieu of property taxes as per their calculation. An interim payment was required by  
17   April 16, 2014 and a final payment by October 16, 2014. In 2014, NBHDL's Interim payment  
18   covered the taxes for the year and a final payment was not required.

19   b)      There are legal requirements to pay in accordance with the property tax invoice due  
20   dates. Failure to meet those due dates will result in interest and penalties owing. There are no

1 legal or contractual requirements to pay earlier than the required due dates specified on the  
2 property tax bills.

3 c) Early payment (earlier than the due dates specified on the property tax bills) is not  
4 incited. To avoid late payment penalties and interest charges, NBHDL paid the bill to account  
5 for delays in sending the payments (such as delivery time for payments made by cheque).

1                    **North Bay Hydro Interrogatory Responses - WCA**

2            **STAFF-6 – MISCELLANEOUS OM&A**

3            Reference: Page 15 Table 12: Miscellaneous OM&A

4            **Interrogatory:**

5            The results of the analysis of Miscellaneous OM&A expenses are shown in Table 12.

6            a)        Please explain the steps taken to determine the expense lags and leads.

7            b)        Please explain the rational for any leads.

8            c)        If samples of bills were used, please provide the statistical parameters indicating  
9            significance.

10          **Response:**

11          a)        NBHDL provided Navigant with all transaction-level data for each category of Misc.  
12          OM&A (approximately 3,100 transactions). The data specified the vendor, category, invoice  
13          date, actual payment date, payment method, and amounts. NBDHL provided qualitative details  
14          on the service period (for example, monthly, ad hoc, quarterly, etc.) and the relationship between  
15          the service period and payment date (for example, in arrears or in advance) for greater than 95  
16          percent of Other Misc. OM&A expenses (or all invoices greater than two-thousand dollars).  
17          Navigant conducted interviews with NBDHL staff to confirm modeling approach and discuss  
18          reasonable assumptions for the remaining dollars. The remaining dollars were modeled with a  
19          monthly service period, paid in arrears. Navigant dollar-weighted each component by the  
20          expense amounts.



1     b)     The Other Misc. OM&A component reports a negative expense lead time of 0.84 days  
2     due to the high proportion of pre-payments. For example, NBHDL's highest Other Misc. OM&A  
3     expense is a payment in November 2014 to the Electricity Distributors Association (EDA,  
4     formerly Municipal Electric Association) for annual dues related to calendar year 2015. The  
5     service period is one year, therefore the service lag is 182.5 days and the payment lag is negative  
6     394 days. The total lead days is negative 211.5 and this payment is 8.1% of the total OM&A  
7     expenses.

8     c)     NBHDL provided a complete data set for Misc. OM&A in 2014 for which calculations  
9     were then derived; statistical sampling was not utilized.

**North Bay Hydro Interrogatory Responses - WCA**

**STAFF-7 – SUMMARY OF PILS EXPENSE**

Reference: Page 17 Summary of PILs Expenses

**Interrogatory:**

North Bay Hydro has lead times related to PILs.

a) Please explain why PILs are paid early.

b) Are there legal terms to pay early?

c) If North Bay Hydro must pay in installments, please explain the high early installments.

**Response:**

a) As part of the 2013 tax return, NBHDL's tax specialist provided the required Federal Tax Instalments for the following fiscal year (2014) which included the dollar amount required and due date. These amounts are required to be paid as per the schedule to avoid non-deductible interest charges. Typically and in historical years NBHDL has made the installments, however in 2014 NBHDL fell behind in making the installments and decided to make a lump sum payment to catch-up and avoid or otherwise offset interest charges. An interest charge of \$1,194 was assessed due to the installments not being made as per the schedule. In July 2014 NBHDL, as part of the budgeting process, revised the estimated taxes for 2014 to be approximately \$500,000. Because of the problems with earlier installments, NBHDL made payment in full. The final tax amount payable for NBHDL for 2014 was \$471,143; therefore NBHDL has a \$27,662.70 credit that will be applied to 2015. Please see Appendix "C" for both the 2013 tax

- 1 return page that provides the 2014 installment schedule and the Notice of Assessment for the  
2 period ending December 31, 2014 from Revenue Canada.
- 3 b) There is a legal requirement to make installments as non-deductible interest charges are  
4 assessed if the company does not make the scheduled installments if taxes are owed.
- 5 c) Please refer to the response in part (a) above.

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-1**

Reference: Page 8

**Interrogatory:**

a) Please provide all the data and assumptions used to calculate a billing lag of 23.97 days.

b) Please explain why the billing lag has been increased by 3 days for bills sent to customers using mail.

c) What proportion of NBHDL customers receive their bills by mail, based on revenues? Please show how this has been taken into account in the calculation requested in part (a) above.

d) Does NBHDL have any plans to increase the number of customers on e-billing? If yes, please provide details and targets.

e) Please confirm that the 3 days reference for those customers that receive their bills by mail has not been included in both the billing lag and collection lag.

f) Please provide all the data and assumptions used to calculate the collection lag of 24.56 days.

g) Please provide all the data and assumptions used to calculate the payment processing lag of 1.80 days.

**Response:**

a) Data and assumptions used to calculate a billing lag of 23.97 is provided in the table below:

Line No.	Class	Revenues by Tariff Class	Revenue Weights (Line X / Line 9)	No. of Days From Meter Read Until the Bill is Sent	Dollar Weighted Meter Read to Bill Sent ( ( c ) x ( d ) )
	(a)	(b)	(c)	(d)	(e)
1	Residential	\$ 35,817,011	38%	24.49	9.20
2	GS<50	\$ 13,961,080	15%	23.33	3.42
3	GS>50	\$ 29,396,968	31%	22.92	7.07
4	Intermediate	\$ 2,549,200	3%	27.08	0.72
5	Street Light	\$ 833,232	1%	23.73	0.21
6	Sentinel Lights	\$ 98,154	0%	23.68	0.02
7	USL	\$ 8,149	0%	26.61	0.00
8	Unsegregated	\$ 12,696,429	13%	25.02	3.33
9	Total	\$ 95,360,223	100%		23.97

The revenues provided in column (b) were provided to Navigant from NBHDL by class and by component (e.g., commodity, distribution, DRC, etc.) and were based on revenues billed over a 15 month period from January 2014 forward. Navigant adjusted revenues for the known and measurable policy changes expected (DRC for residential customers and OCEB).

Please refer to Staff-2 a) for an explanation of how NBHDL determined average days for column (d) and additional comments on the wider timeframe used for the calculation of the revenue lag.

b) The billing lag has been increased by 3 days for bills sent to customers using mail to reflect the time between when a bill is created in the CIS system and when the bill is actually received by a customer. In this regard, NBHDL notes that pursuant to Section 2.6.4(a) of the Distribution System Code, a bill is deemed to have been issued to a customer (for the purposes of triggering a 16 day minimum timeline to make payment under 2.6.3) on the third day after the date on which the bill is printed. This is consistent with NBHDL's use of 3 days for bills sent by mail. Pursuant to Section 2.6.4(c) of the Distribution System Code, a bill is deemed to have been

1 issued on the date on which an email is sent. This is consistent with NBHDL's use of 0 days for  
2 bills sent by email.

3 c) NBHDL is not able to provide the proportion of NBHDL customers that receive their  
4 bills by mail, based on revenues; NBHDL is only able to obtain information by amount billed for  
5 each customer and this include amounts such as taxes, late payment, collections, affiliate  
6 charges, etc. Typically, when revenue-specific metrics are not available, customer account data is  
7 used as a proxy. An explanation of the steps taken to determine the billing lag is provided in  
8 response to Staff-2 a).

9 d) Please refer to NBHDL's response to 1-NBTA-6 in the original interrogatory responses  
10 filed on April 24, 2015. Since these plans are at exploratory stages only, NBHDL expects to see  
11 no actual increases in uptake during the test year.

12 e) The 3 days for bills sent by mail is included only in the Billing Lag calculation. The  
13 Collections Lag is the time period from when the bill is deemed received by the customer (i.e.  
14 including three days for bills that are sent by mail), until the time when the customer provides a  
15 payment to NBHDL.

16 f) Please see response to NBTA-2 a).

17 g) The data and assumptions used to calculate the payment processing lag of 1.80 days are  
18 provided below:

Line No.	Payment Type	Number of Payments	% of Accounts (Line X / Line 7)	Avg. Days to Process	Payment Processing Lag - Days ( (b) x (c) )
	(a)	(b)	(c)	(d)	
1	Credit Card	152	0.0%	1.50	0.001
2	Office excl Debit	41,463	11.5%	4.21	0.484
3	Telephone/Internet	183,726	50.9%	1.50	0.763
4	Pre-Authorized	122,899	34.0%	1.50	0.511
5	Paid Bank	7,795	2.2%	1.50	0.032
6	Debit	5,006	1.4%	1.00	0.014
7	<b>Avg. Payment Lag</b>	<b>361,041</b>	<b>100.0%</b>		<b>1.80</b>

A data file of all payments made by customers by type (over a 15 month period beginning January 2014 forward) was utilized in column (b) in the table above. The Average Days to Process (d) was determined by specific payment type; 1.5 was used for credit cards, telephone/internet banking, pre-authorized and bank payments as this accounts for the processing time by banks. Processing at NBHDL's office for debit payments is one day. Payments made in cash at NBHDL's office have a longer average number of days to process as NBHDL only has two scheduled pick-ups by an armoured car service each week. This schedule causes delays in deposits to NBHDL's bank account depending upon the day the customer made the payment in relation to the pick-up schedule. The number of days from deposit at NBHDL's office to the date deposited at the bank was determined for each business day and an average time was determined. Please refer NBTA-3 b) for a further explanation.

As explained in Staff-2 a) above, NBHDL notes that a wider timeframe was used for the calculation of the revenue lag, which includes the Payment Processing Lag. The working capital allowance would increase to 10.62% if the calculation is based on 2014 data only (12 months vs. 15 months).

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-2**

Reference: Page 8

**Interrogatory:**

a) Did NBHDL conduct any analysis to support the combined billing and collection lag calculations to validate the time between meter reading and receiving payment of 48.53 days (23.97 billing + 24.56 collection)? If yes, please provide the analysis including all data, dates and revenues.

b) If the response to part (a) is no, please conduct such an analysis based on a statistically significant number of accounts that shows the meter read date, the date payment was received and the amount of revenue associated with the account. Please provide the data in a live Excel spreadsheet. To ensure no confidential information is involved, only the meter read date, payment receipt date and revenue amount is required. If NBHDL does not record the payment receipt date for individual accounts, please provide the date payment was processed for each of the accounts.

**Response:**

a) Navigant performs these studies and separates the revenue lag into the following components: (1) Service Lag; (2) Billing Lag; (3) Collections Lag; and (4) Payment Processing Lag (see Figure 1 of the Lead-Lag Study). Combining or separating any of the components will not have an impact on the final estimated Revenue Lag.

NBHDL conducted an analysis to determine the average meter read to bill date sent for each rate class which was provided to Navigant and used in the Lead-Lag Study. Based upon actual 2014



- 1 collections aging data the collections lag was quantified and used in the study. Please refer to  
2 Energy Probe-1 a) and Energy Probe-1 f) for data regarding the average meter read to bill sent  
3 time and collections aging time and refer to Staff-2 a) for a further explanation on how the  
4 billing lag was determined.
- 5 b) Please refer to the response in part (a) above.

1                    **North Bay Hydro Interrogatory Responses - WCA**

2            **ENERGY PROBE-3**

3            Reference: Page 9

4            **Interrogatory:**

5            Please explain why the revenue lag for microFIT customers and late payment charges are  
6            significantly lower than the total retail revenue lag. In the explanation, please explain when  
7            microFIT bills are sent relative to retail bills. Please also explain if NBHDL sends separate bills  
8            for late payment charges and if not, please explain why this revenue is, on average, received 24  
9            days earlier than revenue from normal invoices.

10          **Response:**

11          Payments to microFIT and/or FIT customers are captured in Cost of Power as an expense and  
12          have no impact to revenue lag. However, a revenue component “MicroFIT Monthly Charge” is  
13          charged to microFIT customers. This component was calculated assuming a monthly service  
14          period with a payment date one month following the end of the service period. NBHDL provided  
15          a billing lag (time from meter read to bill sent to customer) associated with microFIT customers  
16          of 31.66 days. There is no impact to working capital if the retail revenue lag is used as MicroFIT  
17          Monthly Charge represents approximately 0.02% of total revenues.

18          The revenue lag associated with late payment charges was calculated assuming a monthly  
19          service period with a payment date estimated using the collections lag and the payment  
20          processing lag. The difference between the retail revenue lag and the revenue lag used for late  
21          payment charges is the billing lag. There is no impact to working capital if the full retail revenue  
22          lag is used as late payment charges represent approximately 0.14% of total revenues.

- 1 MicroFIT bills are sent to customers in the same manner as retail bills and Late Payment Charges
- 2 are issued on the next regular retail bill to the customer if late charges are applicable.

3

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-4**

Reference: Page 8

**Interrogatory:**

The evidence states that NBHDL bills customers using the preliminary net system load shape available from the IESO after the 15th of each month and that based on this all bills are generated between the 15th and 30th of the month.

a) Please indicate if NBHDL reads meters each day of the month, each working day of the month, or some other frequency. For example, does NBHDL read all meters over the course of a full month or does it read all meters by the 15th of the month or some other date? Please explain fully.

b) For each of the following meter read dates (if applicable), please indicate when the bill is generated:

i) 1st of the month;

ii) 14th of the month;

iii) 15th of the month;

iv) 16th of the month; and

v) 30th of the month.

1 **Response:**

2 a) For billing purposes, NBHDL acquires the meter data for the full calendar month on the  
3 last date of each month for typical Residential and General Service <50 kW customers with  
4 smart meters and General Service >50 kW interval customers. For non-interval meters, NBHDL  
5 manually reads the meters, typically over a 5 day period that begins and ends +/- 5 days of the  
6 last day of the month. Exceptions to this process would include finals, disconnects, meter issues,  
7 meter communication issues, etc.

8 b) This type of schedule is not applicable to the meter read / billing schedule that is used for  
9 NBHDL. As explained in Energy Probe-4 a) above, NBHDL typically acquires meter data on the  
10 last day of each month and billing begins once preliminary IESO NSLS is available on or after  
11 the 15<sup>th</sup> of each month. NBHDL's billing schedule is based on cycles, which are established  
12 according to the service territory, and the schedule is staggered from the 15<sup>th</sup> to 30<sup>th</sup> of each  
13 month. Examples of exceptions to this process are provided above and if a bill is in this  
14 exception status and all information is available and validated, a bill can be generated outside of  
15 the typical cycle billing once preliminary IESO NSLS data is available.

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-5**

Reference: Page 14

**Interrogatory:**

a) Please provide all the data, assumptions and calculations used to calculate the expense lead times shown in Table 10 for Payroll, Withholdings and Pensions.

b) What is the frequency and pay period for NBHDL employees?

**Response:**

a) Please find below detailed data for each component of Table 10. Please note that all tables include payroll and benefits associated with the regulated business only.

*Payroll: please note the payment date in the table below represents the date in which employees receive funds. Payroll funds are transferred to a payroll administrator two days prior.*

Pay Period	Payment Date	Payment Amount (Net, Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
23/12/2013 to 05/01/2014	1/9/2014	\$ 92,819	9.00	3.80%	0.34
06/01/2014 to 19/01/2014	1/23/2014	\$ 82,598	9.00	3.38%	0.30
20/01/2014 to 02/02/2014	2/6/2014	\$ 86,429	9.00	3.54%	0.32
03/02/2014 to 16/02/2014	2/20/2014	\$ 89,561	9.00	3.67%	0.33
17/02/2014 to 03/02/2014	3/6/2014	\$ 82,325	22.50	3.37%	0.76
03/03/2014 to 16/03/2014	3/20/2014	\$ 82,155	9.00	3.37%	0.30
17/03/2014 to 30/03/2014	3/4/2014	\$ 82,926	(21.00)	3.40%	(0.71)
31/03/2014 to 13/04/2014	4/3/2014	\$ 85,118	(5.00)	3.49%	(0.17)
1/1/2013 to 12/31/2013	4/3/2014	\$ 23,780	275.50	0.97%	2.68
14/04/2014 to 27/04/2014	5/1/2014	\$ 90,046	9.00	3.69%	0.33
28/04/2014 to 11/05/2014	5/15/2014	\$ 117,570	9.00	4.82%	0.43

12/05/2014 to 25/05/2014	5/29/2014	\$ 88,380	9.00	3.62%	0.33
26/05/2014 to 08/06/2014	6/12/2014	\$ 88,765	9.00	3.64%	0.33
09/06/2014 to 22/06/2014	6/26/2014	\$ 92,228	9.00	3.78%	0.34
23/06/2014 to 06/07/2014	7/10/2014	\$ 92,142	9.00	3.77%	0.34
07/08/2014 to 20/07/2014	7/24/2014	\$ 93,742	(6.50)	3.84%	(0.25)
21/08/2014 to 03/08/2014	8/7/2014	\$ 92,361	(6.50)	3.78%	(0.25)
04/08/2014 to 17/08/2014	8/21/2014	\$ 95,268	9.00	3.90%	0.35
18/08/2014 to 31/08/2014	9/4/2014	\$ 99,478	9.00	4.08%	0.37
01/09/2014 to 14/09/2014	9/18/2014	\$ 95,099	9.00	3.90%	0.35
15/09/2014 to 28/09/2014	10/2/2014	\$ 97,340	9.00	3.99%	0.36
29/09/2014 to 12/10/2014	10/16/2014	\$ 93,270	9.00	3.82%	0.34
13/10/2014 to 26/10/2014	10/30/2014	\$ 99,280	9.00	4.07%	0.37
27/10/2014 to 09/11/2014	11/13/2014	\$ 96,973	9.00	3.97%	0.36
10/11/2014 to 23/11/2014	11/27/2014	\$ 98,470	9.00	4.03%	0.36
24/11/2014 to 07/12/2014	12/11/2014	\$ 102,998	9.00	4.22%	0.38
08/12/2014 to 21/12/2014	12/25/2014	\$ 99,768	9.00	4.09%	0.37
<b>Total</b>		<b>\$ 2,440,892</b>		<b>100.00%</b>	<b>9.36</b>

1

2 Withholdings:

Pay Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
23/12/2013 to 05/01/2014	2/15/2014	\$ 57,898	48.00	5.09%	2.44
06/01/2014 to 19/01/2014	2/15/2014	\$ 46,604	34.00	4.09%	1.39
20/01/2014 to 02/02/2014	3/15/2014	\$ 51,095	48.00	4.49%	2.15
03/02/2014 to 16/02/2014	3/15/2014	\$ 53,002	34.00	4.66%	1.58
17/02/2014 to 03/02/2014	4/15/2014	\$ 46,938	64.50	4.12%	2.66
03/03/2014 to 16/03/2014	4/15/2014	\$ 45,945	37.00	4.04%	1.49
17/03/2014 to 30/03/2014	5/15/2014	\$ 46,734	53.00	4.11%	2.18
31/03/2014 to 13/04/2014	5/15/2014	\$ 54,124	39.00	4.75%	1.85
1/1/2013 to 12/31/2013	5/15/2014	\$ 14,046	317.50	1.23%	3.92
14/04/2014 to 27/04/2014	6/15/2014	\$ 51,068	56.00	4.49%	2.51
28/04/2014 to 11/05/2014	6/15/2014	\$ 71,630	42.00	6.29%	2.64
12/05/2014 to 25/05/2014	6/15/2014	\$ 45,504	28.00	4.00%	1.12
26/05/2014 to 08/06/2014	7/15/2014	\$ 44,169	44.00	3.88%	1.71
09/06/2014 to 22/06/2014	7/15/2014	\$ 43,402	30.00	3.81%	1.14
23/06/2014 to 06/07/2014	8/15/2014	\$ 41,609	47.00	3.65%	1.72
07/08/2014 to 20/07/2014	8/15/2014	\$ 39,456	17.50	3.47%	0.61
21/08/2014 to 03/08/2014	9/15/2014	\$ 36,165	34.50	3.18%	1.10

04/08/2014 to 17/08/2014	9/15/2014	\$ 35,537	36.00	3.12%	1.12
18/08/2014 to 31/08/2014	10/15/2014	\$ 37,404	52.00	3.29%	1.71
01/09/2014 to 14/09/2014	10/15/2014	\$ 33,968	38.00	2.98%	1.13
15/09/2014 to 28/09/2014	11/15/2014	\$ 34,716	55.00	3.05%	1.68
29/09/2014 to 12/10/2014	11/15/2014	\$ 31,378	41.00	2.76%	1.13
13/10/2014 to 26/10/2014	11/15/2014	\$ 34,605	27.00	3.04%	0.82
27/10/2014 to 09/11/2014	12/15/2014	\$ 33,080	43.00	2.91%	1.25
10/11/2014 to 23/11/2014	12/15/2014	\$ 32,956	29.00	2.89%	0.84
24/11/2014 to 07/12/2014	1/15/2015	\$ 36,013	46.00	3.16%	1.46
08/12/2014 to 21/12/2014	1/15/2015	\$ 39,367	32.00	3.46%	1.11
<b>Total</b>		<b>\$ 1,138,412</b>		<b>100.00%</b>	<b>44.46</b>

1

2 Pensions:

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	2/19/2014	\$ 50,332	34.50	7%	2.49
Feb-14	3/20/2014	\$ 50,475	34.00	7%	2.46
Mar-14	4/22/2014	\$ 50,197	37.50	7%	2.70
Apr-14	5/16/2014	\$ 53,544	31.00	8%	2.38
May-14	6/13/2014	\$ 88,510	28.50	13%	3.62
Jun-14	7/16/2014	\$ 52,465	31.00	8%	2.33
Jul-14	8/18/2014	\$ 54,885	33.50	8%	2.64
Aug-14	9/4/2014	\$ 52,569	19.50	8%	1.47
Sep-14	10/1/2014	\$ 52,394	16.00	8%	1.20
Oct-14	11/4/2014	\$ 78,596	19.50	11%	2.20
Nov-14	12/8/2014	\$ 52,420	23.00	8%	1.73
Dec-14	1/9/2015	\$ 61,370	24.50	9%	2.15
<b>Total</b>		<b>\$ 697,756</b>		<b>100%</b>	<b>27.36</b>

3

4



1 Group Life Insurance:

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	1/1/2014	\$ 3,361	(14.50)	7.78%	(1.13)
Feb-14	2/1/2014	\$ 3,402	(13.00)	7.87%	(1.02)
Mar-14	3/1/2014	\$ 3,397	(14.50)	7.86%	(1.14)
Apr-14	4/1/2014	\$ 3,394	(14.00)	7.85%	(1.10)
May-14	5/1/2014	\$ 3,388	(14.50)	7.84%	(1.14)
Jun-14	6/1/2014	\$ 3,758	(14.00)	8.69%	(1.22)
Jul-14	7/1/2014	\$ 3,412	(14.50)	7.89%	(1.14)
Aug-14	8/1/2014	\$ 3,282	(14.50)	7.59%	(1.10)
Sep-14	9/1/2014	\$ 3,370	(14.00)	7.80%	(1.09)
Oct-14	10/1/2014	\$ 3,370	(14.50)	7.80%	(1.13)
Nov-14	11/1/2014	\$ 4,547	(14.00)	10.52%	(1.47)
Dec-14	12/1/2014	\$ 4,547	(14.50)	10.52%	(1.53)
<b>Total</b>		<b>\$ 43,227</b>		<b>100.00%</b>	<b>(14.21)</b>

2

3 Group Health and Dental:

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	1/1/2014	\$ 30,321	(14.50)	8.57%	(1.24)
Feb-14	2/1/2014	\$ 29,943	(13.00)	8.47%	(1.10)
Mar-14	3/1/2014	\$ 28,380	(14.50)	8.02%	(1.16)
Apr-14	4/1/2014	\$ 29,577	(14.00)	8.36%	(1.17)
May-14	5/1/2014	\$ 29,177	(14.50)	8.25%	(1.20)
Jun-14	6/1/2014	\$ 30,022	(14.00)	8.49%	(1.19)
Jul-14	7/1/2014	\$ 29,720	(14.50)	8.40%	(1.22)
Aug-14	8/1/2014	\$ 27,776	(14.50)	7.85%	(1.14)
Sep-14	9/1/2014	\$ 29,339	(14.00)	8.29%	(1.16)
Oct-14	10/1/2014	\$ 29,942	(14.50)	8.46%	(1.23)
Nov-14	11/1/2014	\$ 29,003	(14.00)	8.20%	(1.15)
Dec-14	12/1/2014	\$ 30,524	(14.50)	8.63%	(1.25)
<b>Total</b>		<b>\$ 353,725</b>		<b>100.00%</b>	<b>(14.21)</b>

4

5

1 Short-Term and Long-Term Disability:

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	1/1/2014	\$ 4,278	(14.50)	8.43%	(1.22)
Feb-14	2/1/2014	\$ 4,126	(13.00)	8.13%	(1.06)
Mar-14	3/1/2014	\$ 4,116	(14.50)	8.11%	(1.18)
Apr-14	4/1/2014	\$ 4,117	(14.00)	8.11%	(1.14)
May-14	5/1/2014	\$ 4,116	(14.50)	8.11%	(1.18)
Jun-14	6/1/2014	\$ 4,378	(14.00)	8.62%	(1.21)
Jul-14	7/1/2014	\$ 4,223	(14.50)	8.32%	(1.21)
Aug-14	8/1/2014	\$ 4,330	(14.50)	8.53%	(1.24)
Sep-14	9/1/2014	\$ 4,217	(14.00)	8.31%	(1.16)
Oct-14	10/1/2014	\$ 4,324	(14.50)	8.52%	(1.24)
Nov-14	11/1/2014	\$ 4,271	(14.00)	8.41%	(1.18)
Dec-14	12/1/2014	\$ 4,271	(14.50)	8.41%	(1.22)
<b>Total</b>		<b>\$ 50,767</b>		<b>100.00%</b>	<b>(14.21)</b>

2

3 Spending Account:

Service Period	Payment Date	Payment Amount (Net, Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	1/1/2014	\$ -	(14.50)	0.00%	-
Feb-14	2/1/2014	\$ -	(13.00)	0.00%	-
Mar-14	3/1/2014	\$ 389	(14.50)	8.78%	(1.27)
Apr-14	4/1/2014	\$ 438	(14.00)	9.90%	(1.39)
May-14	5/1/2014	\$ 534	(14.50)	12.05%	(1.75)
Jun-14	6/1/2014	\$ -	(14.00)	0.00%	-
Jul-14	7/1/2014	\$ 1,214	(14.50)	27.40%	(3.97)
Aug-14	8/1/2014	\$ 360	(14.50)	8.12%	(1.18)
Sep-14	9/1/2014	\$ 82	(14.00)	1.84%	(0.26)
Oct-14	10/1/2014	\$ 400	(14.50)	9.02%	(1.31)
Nov-14	11/1/2014	\$ 866	(14.00)	19.56%	(2.74)
Dec-14	12/1/2014	\$ 147	(14.50)	3.33%	(0.48)
<b>Total</b>		<b>\$ 4,429</b>		<b>100.00%</b>	<b>(14.34)</b>

1 Employee Assistance Program had a total expense (regulated only) of \$2,495 in 2014. An  
2 average service period of two days was assumed and an average payment lag of 10 days was  
3 assumed.

4 EHT (Employee Health Tax):

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
23/12/2013 to 05/01/2014	1/9/2014	\$ 2,879	11.00	4.01%	0.44
06/01/2014 to 19/01/2014	1/23/2014	\$ 2,514	11.00	3.51%	0.39
20/01/2014 to 02/02/2014	2/6/2014	\$ 2,659	11.00	3.71%	0.41
03/02/2014 to 16/02/2014	2/20/2014	\$ 2,744	11.00	3.83%	0.42
17/02/2014 to 03/02/2014	3/6/2014	\$ 2,515	24.50	3.51%	0.86
03/03/2014 to 16/03/2014	3/20/2014	\$ 2,499	11.00	3.48%	0.38
17/03/2014 to 30/03/2014	3/4/2014	\$ 2,539	(19.00)	3.54%	(0.67)
31/03/2014 to 13/04/2014	4/3/2014	\$ 3,382	(3.00)	4.71%	(0.14)
14/04/2014 to 27/04/2014	5/1/2014	\$ 2,736	11.00	3.81%	0.42
28/04/2014 to 11/05/2014	5/15/2014	\$ 3,695	11.00	5.15%	0.57
12/05/2014 to 25/05/2014	5/29/2014	\$ 2,628	11.00	3.66%	0.40
26/05/2014 to 08/06/2014	6/12/2014	\$ 2,622	11.00	3.65%	0.40
09/06/2014 to 22/06/2014	6/26/2014	\$ 2,697	11.00	3.76%	0.41
23/06/2014 to 06/07/2014	7/10/2014	\$ 2,677	11.00	3.73%	0.41
07/08/2014 to 20/07/2014	7/24/2014	\$ 2,689	(4.50)	3.75%	(0.17)
21/08/2014 to 03/08/2014	8/7/2014	\$ 2,624	(4.50)	3.66%	(0.16)
04/08/2014 to 17/08/2014	8/21/2014	\$ 2,676	11.00	3.73%	0.41
18/08/2014 to 31/08/2014	9/4/2014	\$ 2,798	11.00	3.90%	0.43
01/09/2014 to 14/09/2014	9/18/2014	\$ 2,669	11.00	3.72%	0.41
15/09/2014 to 28/09/2014	10/2/2014	\$ 2,723	11.00	3.80%	0.42
29/09/2014 to 12/10/2014	10/16/2014	\$ 2,592	11.00	3.61%	0.40
13/10/2014 to 26/10/2014	10/30/2014	\$ 2,773	11.00	3.87%	0.43
27/10/2014 to 09/11/2014	11/13/2014	\$ 2,711	11.00	3.78%	0.42
10/11/2014 to 23/11/2014	11/27/2014	\$ 2,737	11.00	3.82%	0.42
24/11/2014 to 07/12/2014	12/11/2014	\$ 2,883	11.00	4.02%	0.44
08/12/2014 to 21/12/2014	12/25/2014	\$ 3,075	11.00	4.29%	0.47
<b>Total</b>		<b>\$ 71,734</b>		<b>100.00%</b>	<b>8.60</b>

5

6

1 **WSIB (Workplace Safety Insurance Board):**

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	2/19/2014	\$ 2,964	34.50	7.54%	2.60
Feb-14	3/20/2014	\$ 2,965	34.00	7.54%	2.56
Mar-14	4/22/2014	\$ 2,752	37.50	7.00%	2.63
Apr-14	5/13/2014	\$ 3,250	28.00	8.27%	2.32
May-14	6/13/2014	\$ 4,978	28.50	12.66%	3.61
Jun-14	7/31/2014	\$ 2,921	46.00	7.43%	3.42
Jul-14	8/18/2014	\$ 2,947	33.50	7.50%	2.51
Aug-14	9/4/2014	\$ 2,910	19.50	7.40%	1.44
Sep-14	10/1/2014	\$ 3,004	16.00	7.64%	1.22
Oct-14	11/4/2014	\$ 4,447	19.50	11.31%	2.21
Nov-14	12/8/2014	\$ 2,992	23.00	7.61%	1.75
Dec-14	1/9/2015	\$ 3,178	24.50	8.08%	1.98
<b>Total</b>		<b>\$ 39,309</b>		<b>100.00%</b>	<b>28.25</b>

2

3 **CUPE (Union Fees):**

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	2/22/2014	\$ 2,216	37.50	7.44%	2.79
Feb-14	4/2/2014	\$ 2,187	47.00	7.35%	3.45
Mar-14	4/25/2014	\$ 2,187	40.50	7.35%	2.97
Apr-14	6/12/2014	\$ 2,214	58.00	7.44%	4.31
May-14	6/19/2014	\$ 3,434	34.50	11.53%	3.98
Jun-14	7/17/2014	\$ 2,318	32.00	7.79%	2.49
Jul-14	8/21/2014	\$ 2,345	36.50	7.88%	2.87
Aug-14	9/4/2014	\$ 2,345	19.50	7.88%	1.54
Sep-14	10/2/2014	\$ 2,340	17.00	7.86%	1.34
Oct-14	11/6/2014	\$ 3,510	21.50	11.79%	2.53
Nov-14	12/11/2014	\$ 2,340	26.00	7.86%	2.04
Dec-14	1/21/2015	\$ 2,340	36.50	7.86%	2.87
<b>Total</b>		<b>\$ 29,778</b>		<b>100.00%</b>	<b>33.19</b>

4

5

1 Social Club:

Service Period	Payment Date	Payment Amount (Regulated Only)	Expense Lead Time	Weighting Factor	Weighted Expense Lead Time
Jan-14	2/22/2014	\$ 158	37.50	7.34%	2.75
Feb-14	4/2/2014	\$ 162	47.00	7.50%	3.53
Mar-14	4/25/2014	\$ 162	40.50	7.50%	3.04
Apr-14	6/12/2014	\$ 162	58.00	7.50%	4.35
May-14	6/19/2014	\$ 248	34.50	11.50%	3.97
Jun-14	7/17/2014	\$ 167	32.00	7.75%	2.48
Jul-14	8/21/2014	\$ 169	36.50	7.83%	2.86
Aug-14	9/4/2014	\$ 169	19.50	7.83%	1.53
Sep-14	10/2/2014	\$ 169	17.00	7.83%	1.33
Oct-14	11/6/2014	\$ 253	21.50	11.75%	2.53
Nov-14	12/11/2014	\$ 169	26.00	7.83%	2.04
Dec-14	1/21/2015	\$ 169	36.50	7.83%	2.86
<b>Total</b>		<b>\$ 2,158</b>		<b>100.00%</b>	<b>33.25</b>

2

3 b) NBHDL employees are paid bi-weekly based on a two week pay period.

1                    **North Bay Hydro Interrogatory Responses - WCA**

2    **ENERGY PROBE-6**

3    Reference: Page 14

4    **Interrogatory:**

5    Please confirm that the payment dates shown in Table 11 are the required payment dates  
6    associated with property taxes. If this cannot be confirmed, please provide the required payment  
7    dates.

8    **Response:**

9    The City of North Bay bills customers twice a year for property taxes due for that year. In 2014  
10   the interim bill was billed on February 3 with a due date of February 28 and the final bill was  
11   billed on June 4 with a due date of June 30. NBHDL pays the bills within the required timelines  
12   to avoid interest and penalties.

13

1                    **North Bay Hydro Interrogatory Responses - WCA**

2            **ENERGY PROBE-7**

3            Reference: Page 15

4            **Interrogatory:**

5            a)        Please provide all the data, assumptions and calculations used to calculate each of the  
6            expense lead times shown in Table 12.

7            b)        Do the expense lead times reflect the time from receiving an invoice to the time the  
8            money is removed from the NBHDL account?

9            c)        How has NBHDL calculated the time from the mid-point or time when service was  
10           provided to the date that an invoice is received from the service provider?

11           **Response:**

12           a)        Please refer to response to Staff-6 a) for a description of the methodology and  
13           assumptions used to calculate each of the expense lead times shown in Table 12. Calculations  
14           were completed at the individual transaction level for 3,101 transactions.

15           b)        Yes, the expense lead times reflect the time between the payment date (as identified  
16           within NBHDL's accounting system) and the time the money was removed from the NBHDL  
17           account. Where payment type was available by transaction, Navigant included a 5 day expense  
18           lead for payments issued by cheque and a 2 day lead for those payments made via electronic  
19           funds transfer (EFT). Please also see the response to NBTA-3 d).

20           c)        Navigant has calculated the total lead time for each expense item based upon the service  
21           lead time and the payment lead time. The service lead time is based upon the mid-point method

1 (please see Appendix A: Key Concepts within the Navigant report for details regarding the mid-  
2 point method), whereas the payment lead time is based upon the time between the payment date  
3 (as identified within NBHDL's accounting system) and the end of the service period. Where  
4 payment type was available by transaction, Navigant included a 5 day expense lead for payment  
5 methods that were not made via electronic funds transfer (ie. cheque).



1                    **North Bay Hydro Interrogatory Responses - WCA**

2            **ENERGY PROBE-8**

3            Reference: Page 17

4            **Interrogatory:**

5            a)        Please provide a copy of the 2014 PILs tax form that shows the installment dates when  
6            payments and amounts were made.

7            b)        Was there any payment made in 2015 as part of the 2014 PILs payable? If yes, please  
8            provide the amount and the date of the payment(s). Please provide the total PILs paid for 2014.

9            c)        Was NBHDL required to make the payments (both amounts and dates) as shown in Table  
10          15?

11          d)        Please explain the difference in the schedule of installment payments made in 2014 as  
12          compared to that shown for 2011, 2012 and 2013 in Appendix 4-K 4-L and 4-M of the evidence.

13          e)        If yes, please explain the difference between the payment schedule shown in the Navigant  
14          report and the 2014 payment schedule for Federal Tax Installments shown in the 2013 PILs  
15          filing in Appendix 2-M.

16          **Response:**

17          a)        A copy of the 2014 PILs Schedule of Instalment Remittances is attached as Appendix  
18          “D”.

1     b)     No, a payment was not made in 2015 as part of the 2014 PILs payable. The total amount  
2     paid for 2014 was \$500,000 and the total assessed was \$471,143 plus interest of \$1,194.30  
3     leaving an overall credit balance on the account of \$27,662.70. Please refer to Staff-7.a).

4     c)     Please refer to Staff-7.

5     d)     Please refer to Staff-7.

6     e)     Please refer to Staff-7.

7

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-9**

Reference: Page 18

**Interrogatory:**

a) Please confirm that the cost of power figure shown in Table 16 of \$1,094,751 is based on 13% applied to the cost of power of \$70,516,783 shown in Table 6.

b) Please confirm that the OM&A expense figure of \$136,164 shown in Table 16 is based on 13% applied to the OM&A expense of \$8,704,414 shown in Table 9.

c) Please conform that the revenue figure shown in Table 16 of \$(853,252) is based on 13% applied only to the retail revenue of \$97,138,801 shown in Table 3.

d) Please list of the line items in Table 5 that the HST is charged on.

**Response:**

a) The cost of power figure of \$1,094,751 is based upon the working capital factor multiplied by the HST amounts. The working capital factor is based upon the weighted HST time divided by the number of days in the year, whereas the HST amounts are based upon 13% multiplied by the expenses eligible for HST.

The following tables are provided for further reference and explanation of the HST amounts:

1 Information from Table 16 (Lead/Lag Study)

Description	Weighted HST Time	Working Capital Factor	2014
A	B	C	D
Revenues	(24.66)	-6.76%	\$ (853,252)
Cost_of_Power	43.59	11.94%	\$ 1,094,751
Aggregate_OM_A	43.92	12.03%	\$ 136,164
<b>Total</b>			\$ 377,663

2

3 Detailed Calculation of HST Amounts and Working Capital Requirements

Description	Weighted HST Time	Working Capital Factor	Expenses Eligible	HST Amounts (13%)	Working Capital Requirement
A	B	C	D	E	F
Revenues	-24.66	-6.76%	\$ 97,138,801	\$ 12,628,044	\$ (853,252)
Cost_of_Power	43.59	11.94%	\$ 70,516,783	\$ 9,167,182	\$ 1,094,751
Aggregate_OM_A	43.92	12.03%	\$ 8,704,414	\$ 1,131,574	\$ 136,164
<b>Total</b>			\$ 176,359,997	\$ 22,926,800	\$ 377,663

4

5

1 Determination of HST Remittance and Collection Dates

Period Begin	Period End	Invoice Date	HST Remittance Date	HST Collection Date	HST Benefit Days
A	B	C	D	E	F
1/1/2014	1/31/2014	2/9/2014	3/31/2014	3/7/2014	-23.41
2/1/2014	2/28/2014	3/12/2014	4/30/2014	4/7/2014	-22.41
3/1/2014	3/31/2014	4/9/2014	5/31/2014	5/5/2014	-25.41
4/1/2014	4/30/2014	5/10/2014	6/30/2014	6/5/2014	-24.41
5/1/2014	5/31/2014	6/9/2014	7/31/2014	7/5/2014	-25.41
6/1/2014	6/30/2014	7/10/2014	8/31/2014	8/5/2014	-25.41
7/1/2014	7/31/2014	8/9/2014	9/30/2014	9/4/2014	-25.41
8/1/2014	8/31/2014	9/9/2014	10/31/2014	10/5/2014	-25.41
9/1/2014	9/30/2014	10/10/2014	11/30/2014	11/5/2014	-24.41
10/1/2014	10/31/2014	11/9/2014	12/31/2014	12/5/2014	-25.41
11/1/2014	11/30/2014	12/10/2014	1/31/2015	1/5/2015	-25.41
12/1/2014	12/31/2014	1/9/2015	2/28/2015	2/4/2015	-23.41
<b>Average</b>					<b>-24.66</b>

2

3 b) The OM&A figure is calculated in the same manner as in 9 a), explained above.

4 c) The revenue figure is calculated in the same manner as in 9 a), explained above.

5 d) HST was not a component calculated for Other Revenues. Considering HST for Other

6 Revenues has an immaterial impact on the cash working capital percentage.

**North Bay Hydro Interrogatory Responses - WCA**

**ENERGY PROBE-10**

Reference: Page 18

**Interrogatory:**

Please provide all the data, assumptions and calculations used to calculate each of the HST lead times shown in Table 16.

**Response:**

HST lead time is the interval between the HST collection date and the payment date. The HST collection date was calculated based upon an assumption that HST is collected at the end of the month after the payment date. For example, if the payment date was February 19, 2014, the HST collection date would be March 31, 2014. All expenses that attracted HST had the HST expense lead time weighted by dollar amount, which is the HST lead time identified in the second column of Table 16 of the report. The working capital factor identified in the third column of Table 16 is calculated based upon the HST lead time divided by the number of days in the year. Consequently the HST working capital requirements identified in the fourth column of Table 16 is equal the working capital factor multiplied by the HST amounts within each category that attract HST. Tables are provided in Energy Probe-9 a) above.

1                    **North Bay Hydro Interrogatory Responses - WCA**

2    **NBTA-1**

3    Reference: Page 5 – Table 2

4    **Interrogatory:**

5    Please reconcile the total 2014 expenses of \$82,589,492 shown in this table with the 2014  
6    expenses of \$64,196,390 shown on page 5 of 103 in the Rate Base Overview section of North  
7    Bay\_APPL EX2\_Rate Base\_20141212.pdf filed with the EB-2014-0099 COS application.

8    **Response:**

9    The original rate application calculated the working capital component of rate base using the  
10    specified methodology and a deemed working capital allowance of 15%.

1                    **North Bay Hydro Interrogatory Responses - WCA**

2    **NBTA-2**

3    Reference: Page 8

4    **Interrogatory: (please note NBTA referenced NBTA 2 (1) and (2), NBHDL has referenced**  
5        **as (a) and (b)**

6    The Collections lag of 24.56 days posits the average payment receipt time. Since NBHDL  
7    allows approximately 21 days from the billing date for payment before penalties apply, this  
8    would seem to indicate that most customers are late with their monthly payments.

9    a)      Please detail the calculations used to determine the 24.56 lag days used in the WAC final  
10   estimate.

11   b)      Please indicate the methodology used in analysing the receivable aging data to calculate  
12   the Collection lag. Does that methodology include staff time to record payments received?

13   **Response:**

14   a)      The following tables provide the details of the calculation of 24.56 collection lag days.

15



Filed: August 31, 2015

Revenue per AR Bucket:

\$	0 to 30 Days		30 to 60 Days		60 to 119 Days		119 + Days		Monthly Total		
	Active	Final ("Stopped")	Active	Final ("Stopped")	Active	Final ("Stopped")	Active	Final ("Stopped")	Active	Final ("Stopped")	Total
Jan-14	\$ 7,699,489	\$ 40,551	\$ 283,087	\$ 19,730	\$ 20,250	\$ 26,462	\$ 7,477	\$ 148,770	\$ 8,010,303	\$ 235,512	\$ 8,245,815
Feb-14	\$ 8,622,410	\$ 41,503	\$ 455,945	\$ 28,429	\$ 28,826	\$ 32,704	\$ 8,907	\$ 137,130	\$ 9,116,088	\$ 239,765	\$ 9,355,854
Mar-14	\$ 7,549,874	\$ 47,073	\$ 595,755	\$ 32,712	\$ 38,656	\$ 49,174	\$ 8,278	\$ 123,767	\$ 8,192,563	\$ 252,726	\$ 8,445,289
Apr-14	\$ 7,424,285	\$ 47,230	\$ 745,816	\$ 31,511	\$ 66,548	\$ 59,150	\$ 6,864	\$ 120,512	\$ 8,243,512	\$ 258,404	\$ 8,501,916
May-14	\$ 4,572,165	\$ 57,479	\$ 623,101	\$ 43,037	\$ 98,460	\$ 69,106	\$ 5,574	\$ 121,369	\$ 5,299,300	\$ 290,991	\$ 5,590,291
Jun-14	\$ 5,036,726	\$ 54,936	\$ 464,965	\$ 30,219	\$ 134,303	\$ 77,170	\$ 12,565	\$ 134,277	\$ 5,648,560	\$ 296,602	\$ 5,945,162
Jul-14	\$ 5,272,584	\$ 46,864	\$ 295,108	\$ 36,020	\$ 79,113	\$ 63,200	\$ 20,383	\$ 158,901	\$ 5,667,189	\$ 304,985	\$ 5,972,174
Aug-14	\$ 5,697,207	\$ 42,863	\$ 242,253	\$ 32,794	\$ 30,342	\$ 51,130	\$ 14,294	\$ 172,016	\$ 5,984,096	\$ 298,804	\$ 6,282,900
Sep-14	\$ 5,398,026	\$ 47,189	\$ 310,532	\$ 21,809	\$ 23,586	\$ 49,259	\$ 14,246	\$ 180,617	\$ 5,746,390	\$ 298,873	\$ 6,045,263
Oct-14	\$ 5,160,747	\$ 46,391	\$ 250,300	\$ 22,105	\$ 18,079	\$ 42,557	\$ 14,171	\$ 189,867	\$ 5,443,298	\$ 300,920	\$ 5,744,218
Nov-14	\$ 5,446,984	\$ 35,069	\$ 255,877	\$ 18,837	\$ 21,305	\$ 35,624	\$ 10,490	\$ 182,414	\$ 5,734,657	\$ 271,944	\$ 6,006,601
Dec-14	\$ 6,589,728	\$ 26,503	\$ 287,845	\$ 16,335	\$ 22,728	\$ 34,928	\$ 10,954	\$ 176,928	\$ 6,911,254	\$ 254,693	\$ 7,165,947

Percentage of Revenue per Bucket:

%	0 to 30 Days		30 to 60 Days		60 to 119 Days		119 + Days		Monthly Total		
	Active	Final	Active	Final	Active	Final	Active	Final	Active	Final	Total
Jan-14	93%	0%	3%	0%	0%	0%	0%	2%	97%	3%	100%
Feb-14	92%	0%	5%	0%	0%	0%	0%	1%	97%	3%	100%
Mar-14	89%	1%	7%	0%	0%	1%	0%	1%	97%	3%	100%
Apr-14	87%	1%	9%	0%	1%	1%	0%	1%	97%	3%	100%
May-14	82%	1%	11%	1%	2%	1%	0%	2%	95%	5%	100%
Jun-14	85%	1%	8%	1%	2%	1%	0%	2%	95%	5%	100%
Jul-14	88%	1%	5%	1%	1%	1%	0%	3%	95%	5%	100%
Aug-14	91%	1%	4%	1%	0%	1%	0%	3%	95%	5%	100%
Sep-14	89%	1%	5%	0%	0%	1%	0%	3%	95%	5%	100%
Oct-14	90%	1%	4%	0%	0%	1%	0%	3%	95%	5%	100%
Nov-14	91%	1%	4%	0%	0%	1%	0%	3%	95%	5%	100%
Dec-14	92%	0%	4%	0%	0%	0%	0%	2%	96%	4%	100%
Average	89%	1%	6%	0%	1%	1%	0%	2%	96%	4%	100%

Filed: August 31, 2015

**Determination of Weighted Average Number of Collections Lag**

%	0 to 30 Days		30 to 60 Days		60 to 119 Days		119 + Days		Monthly Total
	Active	Final	Active	Final	Active	Final	Active	Final	
<b>Average</b>	14.26	0.11	2.64	0.19	0.67	0.67	0.41	5.60	<b>24.56</b>

1     b)     The methodology used to calculate collection lag is based upon the average time to  
2     collect a bill from customers. As shown above, the outstanding bills were classified into time  
3     periods (i.e. 0-30 days, 30-60 days, etc.) and the midpoint of the time period was used based  
4     upon the average revenue for each time period. This is a standard method used to calculate  
5     collection lag. Staff time is not included.

**North Bay Hydro Interrogatory Responses - WCA**

**NBTA-3**

Reference: Page 8

**Interrogatory: (please note NBTA referenced NBTA 3 (1), (2), (3) and (4) and NBHDL has referenced as (a), (b), (c) and (d)**

Regardless of the payment method used by customers, the question is; “When do the funds become available for use by NBHDL?”

a) In light of this, please explain the reasoning behind attempting to properly estimate the Payment Processing lag time independently from the Collection lag time?

b) Is the Payment Processing lag time a result of internal processing time required by NBHDL staff?

c) If so please describe the processes that cause this lag?

d) If the Payment Processing lag time is an estimate of processing time by external factors, please confirm that a similar offsetting estimate has been made and included in the Expense lead time calculations.

**Response:**

a) Separation of Payment Processing from Collections lags are a common convention in preparing Lead-Lag studies. It provides an additional degree of granularity in understanding of the different causes of the lags that are involved. However, given the processes and information available from one utility versus another the blending of these functions sometimes occurs. The reasoning behind attempting to estimate the Payment Processing independently from the

1 Collections lag is that it results in a better understanding of the operations of a particular utility.  
2 As long as the definitions do not allow “double-counting” or “under-counting” it will not impact  
3 the final result of the study.

4 b) The Payment Processing lag time is a result of internal and external processing time  
5 depending on the method the customer uses to pay their bill. The table below details the payment  
6 processing timelines by payment type. NBHDL does not have control over the external timelines  
7 which mainly account for the banking system processes. The payments made in the office,  
8 excluding debit card transactions, have a longer processing timeline due to NBHDL processes  
9 and only transferring deposits to the bank twice a week. Shortening these timelines would  
10 require higher OM&A costs (more resources, or more frequent scheduled pick-ups of deposits).  
11 Management has determined the current approach strikes the right balance between increased  
12 costs and reduced Payment Processing lag time. Please also refer to Energy Probe-1 g).

<b>Payment Type</b>	<b>Number of Payments</b>	<b>Avg. Days to Process</b>
Credit Card	152	1.50
Office excl Debit	41,463	4.21
Telephone/Internet	183,726	1.50
Pre-Authorized	122,899	1.50
Paid Bank	7,795	1.50
Debit	5,006	1.00
<b>Avg. Payment Lag</b>	<b>361,041</b>	

14 c) Please refer to NBTA-3 b) above.

15 d) Included in the OM&A expense leads calculation is an estimate of 2 days for those  
16 payments NBHDL issued to vendors via Electronic Funds Transfer (EFT) and 5 days for those  
17 payments issued via cheque. 5 days for payment made by cheque was based on 3 days to account  
18 for mailing, which is consistent with the same guidelines in the DSC for bill issuance as

1   referenced is Sections 2.6.4, plus 2 days to account for vendor deposit which is generally aligned  
2   with the DSC for bill payment as referenced in Section 2.6.5.

3

1                                **North Bay Hydro Interrogatory Responses - WCA**

2    **NBTA-4**

3    Reference: Page 9 – Table 5

4    **Interrogatory:**

5    Please explain the reasons for the 182.5 day lag for Rent from Electric Property and the 15.21  
6    day lag for Interest on Monthly Bank Balances.

7    **Response:**

8    Rents from Electric Property are only paid annually and therefore have a lag of ½ year (i.e. 365  
9    days / 2). In contrast, Interest on Monthly Bank Balances is paid monthly and therefore has a lag  
10   of ½ month (365/12/2).

**North Bay Hydro Interrogatory Responses - WCA**

**NBTA-5**

**Interrogatory:**

This request to change the working capital allowance percentage will result in NBHDL taking more money from its customers. This additional charge is not required to deliver electricity. This will deprive customers of funds that could be used by them to cover other living expenses and will increase NBHDL's PILS liability which will be detrimental to its customers.

Based on the following statement included on page 14 in Schedule "A" of the Board's Decision and Order EB-2014-0099,

*"NBHDL has included an amount for ROE equal to \$2,187,380 or 9.30%. This is allowed in accordance with Board policy but it is not a legal requirement of the Board. This results in an increase in taxable income and the amount of taxes included in rates. This increases customer delivery charges on a yearly basis by the amount mentioned above."*

It is clear that NBHDL has already included in rates amounts that are not required to carry out the main purpose of the company being the delivery of electricity.

The net effect of this application will be to increase NBHDL's rate base and increase rates by further increasing the rate of return on equity and deemed interest expense.

Please explain to NBTA and your customer base, who are owners of NBHDL, the reason that NBHDL is going forward with this request to the Board which will result in NBHDL collecting more money than is required to deliver electricity and will result in the payment of higher amounts of PIL's.



1    **Response:**

2    This interrogatory is not relevant to the study filed on July 28, 2015 by NBHDL titled “Working  
3    Capital Requirements of North Bay Hydro Distribution Ltd.’s Distribution Business” in response  
4    to the OEB’s Decision and Order, July 16, 2015.

5    In Procedural Order No. 3, the Board limited the scope of interrogatories to "relevant  
6    information and documentation from North Bay Hydro that is in addition to the evidence already  
7    filed on working capital requirements."

8    The North Bay Taxpayers’ Association is a party to and itself approved of the Settlement  
9    Agreement attached as Schedule “A” of the Board’s Decision and Order EB-2014-0099. Putting  
10   an even finer point on it - the North Bay Taxpayers’ Association approved NBHDL’s inclusion  
11   of an amount for ROE equal to \$2,187,380 or 9.30%.

12   At page 8, the North Bay Taxpayers’ Association, as party to the settlement, indicated its  
13   agreement that the settlement was “appropriate and recommended its acceptance by the Board.”

14   Please refer also to the response to 1-NBTA-2 and 2-NBTA-21, both filed on April 24, 2015.

1                   **North Bay Hydro Interrogatory Responses - WCA**

2           **NBTA-6**

3           **Interrogatory:**

4       NBHDL, its owners and customers are not dealing at arm's length. Since this arrangement is a  
5       closed system, no new money is being introduced and it is impossible for NBHDL to generate a  
6       rate of return in the real world sense of the term. Any funds collected not required for the  
7       delivery of electricity are simply making a round-trip while costing ratepayers PILS during the  
8       journey.

9       Please explain to NBTA, for the benefit of NBHDL customers, the business case for and the  
10      financial benefit to them of this application.

11          **Response:**

12       This interrogatory is not relevant to the study filed on July 28, 2015 by NBHDL titled "Working  
13       Capital Requirements of North Bay Hydro Distribution Ltd.'s Distribution Business" in response  
14       to the OEB's Decision and Order, July 16, 2015.

15       In Procedural Order No. 3, the Board limited the scope of interrogatories to "relevant  
16       information and documentation from North Bay Hydro that is in addition to the evidence already  
17       filed on working capital requirements."

18       The importance, benefit to customers, business cases have been explained in considerable detail  
19       for this application in the original Application, the interrogatory responses, the technical  
20       conference transcript and in the Settlement Agreement accepted by the Board's Decision and  
21       Order EB-2014-0099.

1 The North Bay Taxpayers' Association is a party to and itself approved of the Settlement  
2 Agreement attached as Schedule "A" of the Board's Decision and Order EB-2014-0099. At page  
3 8, the North Bay Taxpayers' Association, as party to the settlement, indicated its agreement that  
4 the settlement was "appropriate and recommended its acceptance by the Board."

**APPENDIX A – NAVIGANT CONSULTING LTD. – REDACTED TERMS OF  
REFERENCE**



Todd Williams, Managing Director  
Navigant Consulting Ltd  
333 Bay Street, Suite 1250  
Toronto ON M5H 2R2  
Direct: (647) 288-5204  
TWilliams@Navigant.com

June 6, 2015

Ms. Cindy Tennant  
Manager, Finance  
North Bay Hydro Distribution Limited  
PO Box 3240  
North Bay, ON P1B 8Y5

Via email: [CTennant@northbayhydro.com](mailto:CTennant@northbayhydro.com)

Dear Ms. Tennant:

## **Proposal for Lead-Lag Study**

Navigant Consulting Ltd. ("Navigant") is pleased to provide North Bay Hydro Distribution Limited ("North Bay Hydro") with this proposal to perform a Lead-Lag study. It is our understanding that you require a study to be performed in an expedited manner to support your negotiations in a settlement agreement. Navigant is prepared to start work on this study immediately and provide a preliminary study within 1-2 weeks of delivery of data from North Bay Hydro.

### **About Navigant**

Navigant is uniquely qualified to undertake this study for North Bay Hydro. We have previously undertaken or supported numerous other lead-lag studies for several of Ontario's electricity local distribution companies (LDCs) including Hydro One, Toronto Hydro, Horizon Utilities, Hydro Ottawa, London Hydro and others. Navigant lead-lag reports have been submitted by many of these other clients as evidence to support their rate submissions, and our approach and findings have been accepted, in large part, by the OEB and interveners.

Navigant offers North Bay Hydro our in-depth experience with the technical and analytical methods that are generally accepted within the industry, as well as our specific knowledge of the relevant principles and precedents that have been established for Ontario utilities. Further, given our depth of experience and knowledge of lead-lag studies in Ontario as well as elsewhere we can prepare this study rapidly and accurately.

We regularly work closely with senior utility management to: (1) develop an overall rate case strategy; (2) develop the evidentiary support for the case, including demand forecasts, accounting statements and overall revenue requirements, pro-forma plant and expense adjustments, costing and ratemaking; (3) prepare and support expert testimony (our experts have testified in more than 400 regulatory proceedings, including several OEB hearings); (4) have prepared a number of studies on behalf of the OEB, and (5) support all aspects of the utility's post-filing activities, including

responding to data requests, preparing cross-examination, developing rebuttal testimony, participating in settlement negotiations, and assisting counsel with legal briefs.

## **Approach and Methodology**

As with our previous lead-lag studies for other Ontario LDCs, our study will be comprehensive, consistent with regulatory principles, precedents and good practice, and responsive to your firm's specific situation and requirements.

We will undertake an independent analysis of the time elapsed between the date customers receive service and the date on which customer payments or revenues are received ("lag") as well the time frame during which North Bay Hydro receives goods/services and payment at a later date ("lead"). All leads and lags will be measured in days and, to the extent appropriate, will be dollar-weighted. Upon this determination, we will work with North Bay Hydro to translate a "Net lag", i.e., lags minus leads, into a working capital requirement using revenues and expenses, including the cost of power, and other items that drive the working capital requirements of North Bay Hydro.

### ***Task 1: Kick-off Meeting / Teleconference***

The kick-off meeting will occur in two parts. A questionnaire and data request form will be provided. North Bay Hydro staff will have the opportunity to ask questions about the information required by Navigant discuss data availability and potentially identify substitute data for information which is unavailable.

The first meeting will be a teleconference where Navigant and staff from North Bay Hydro focused will discuss Navigant's information request. After the questionnaire is completed either an in-person meeting or teleconference will be scheduled with North Bay Hydro staff to review and discuss the requested data. The focus of the in-person meeting will be to ensure the data is interpreted correctly by Navigant and any nuances and/or risks can be identified during the earliest stages of the study. Navigant will work with North Bay Hydro staff during the in-person meeting to identify "known and measurable" changes that will impact the results of the study.

### ***Task 2: Development of Working Capital Percentage***

Based upon information provided by North Bay Hydro, Navigant will prepare the initial estimates of working capital based on the lead lag study. As discussed, during the interview process Navigant will identify "known and measurable" changes to the practices of North Bay Hydro which may impact the level of working capital required by utility operations.

When completed Navigant will schedule either a conference call or in-person meeting will be scheduled to review our analyses. After the meeting or call Navigant will incorporate any comments and finalize our analyses.

**Task 3: Phase 2 – Final Lead-Lag Study and Report**

Upon approval of the final reports from North Bay Hydro, Navigant will commence with the final Lead-Lag Report which will be filed with the OEB. Our report, in the form of evidence that will be suitable for filing with the OEB, will detail:

- The methodology and procedures followed;
- The assumptions made (if any);
- The analytical methods utilized;
- The resulting computations of the working capital requirements; and,
- Include a statement regarding the consistency of the approach with that of other regulated electricity distributors, particularly comparably sized distributors, in Ontario.

**Project Team**

Todd Williams, Managing Director in Navigant's Toronto office who leads Navigant's support to Ontario LDCs and gas utilities, the OEB, the OPA and other market players, will have overall accountability for the study. Ralph Zarumba, Jodi Amy and Andy Tam, serving as Subject Matter Experts, will each lead a component of the study.

- **Ralph Zarumba** is a Director in Navigant's Chicago office. Mr. Zarumba has more than 30 years of experience performing economic, regulatory, and financial analysis. Mr. Zarumba specializes in theoretical and applied techniques of electricity cost and pricing analysis, market analysis, and asset valuation. Mr. Zarumba led Navigant's recent lead-lag studies for London Hydro, Hydro One, Toronto Hydro, another large Ontario LDC as well as El Paso Electric's Lead-Lag Studies filed in New Mexico and Texas. Mr. Zarumba has also performed a variety of cost of service, cost allocation and transfer pricing analyses for utilities. He has appeared as an expert witness before the OEB, the Nova Scotia Utility Review Board, the Massachusetts Department of Public Utilities, the Rhode Island Public Utilities Commission, the Illinois Commerce Commission, the Wisconsin Public Service Commission, the Federal Energy Regulatory Commission, the Kansas Corporation Commission and the New Mexico Public Service Commission as well as various other legal venues. Mr. Zarumba holds a B.S. in Economics from Illinois State University and an M.A. in Economics from DePaul University.
- **Andy Tam** is a Managing Consultant in Navigant's Toronto office. Mr. Tam's engagements at Navigant include work for electricity and natural gas utilities across Canada, regulating bodies such as the OEB and the Ontario Electricity Financial Corporation, and various other energy industry entities. Prior to joining Navigant, Mr. Tam worked at Hydro One Networks Inc. as a business/financial analyst, completing a two year leadership rotation program where he worked on utility financial modeling, business planning, regulatory analysis and business process optimization. Throughout his career, Andy has developed a strong quantitative skill set and also brings forth software design experience from R&D at Nortel

Networks. Mr. Tam received both his Bachelor of Science in Computer Engineering, and Bachelor of Arts in Economics degrees from Queen's University.

- *Jodi Amy is a Managing Consultant in the Energy Practice in Navigant's Toronto Office. At Navigant, Ms. Amy has worked with utilities to complete studies for regulatory filings, including an assessment of avoided natural gas distribution costs for Enbridge Gas Distribution, a line loss study for Hydro One Networks Inc., and lead lag studies for both Toronto Hydro Electric System Limited and El Paso Electric Company. Ms. Amy has performed analysis, completed research, and developed Tools to convey market dynamics for generators in Ontario and provincial agencies including the OEB, IESO, and former OPA. Prior to joining Navigant, Ms. Amy worked with the OPA in the Conservation division as a Senior Business Analyst. Ms. Amy also gained broad experience across the industry through several co-op terms across the electricity industry at the IESO, OPG, and Bruce Power while studying economics at the University of Waterloo.*

## Fees

Our professional fees for developing the study and attendant evidence will be at the hourly rates detailed in the table below, but will not exceed [REDACTED] to develop a report to be provided to the OEB in your rebasing proceeding.

While it is Navigant policy to bill expenses at cost and we recognize that expenses cannot be accurately quantified at this time, we would suggest that North Bay Hydro budget [REDACTED] of our professional fees as estimated expenses for planning purposes which will be the costs for one onsite visit from Mr. Zarumba and staff from the Toronto Office. In addition, Navigant's monthly invoice will include HST on professional fees and expenses as applicable.

Fees beyond that for activities such as (and not limited to) updating for known and measurable events after submission of the final report, responding to interrogatories, participating in evidentiary hearings, and responding to hearing related undertakings will be billed on a time and materials basis at the following billing rates:

Role Description	Hourly Rate
Managing Director	[REDACTED]
Director	[REDACTED]
Associate Director	[REDACTED]
Managing Consultant	[REDACTED]
Senior Consultant	[REDACTED]
Consultant	[REDACTED]

## Schedule

Once we receive the go-ahead to proceed, we expect to commence work on this project with delivery of the draft report for final management review in 2-3 weeks.



Navigant will work closely with North Bay Hydro staff on this effort and, at its conclusion, will be prepared to defend our study before the OEB if required.

Our standard Terms and Conditions are attached. We can begin work immediately upon receiving these Terms and Conditions duly executed by you.

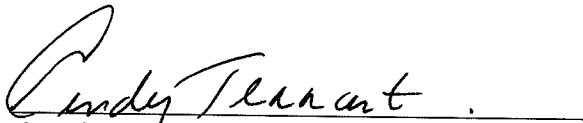
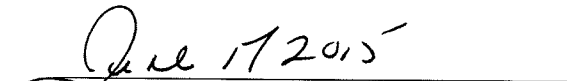
We look forward to working with North Bay Hydro on this important matter. Please do not hesitate to contact me if you have questions on our proposal. I can be reached at 647 288 5204.

Best Regards,



Todd Williams  
Managing Director

This is to confirm that we have retained Navigant Consulting on the above-described basis.

  
Ms. Cindy Tennant  
Date

## **Attachment A: Navigant Consulting Ltd. Terms and Conditions**

Date: May 19, 2015

Unless otherwise stated, "you" and "your" refers to Client and "we", "us" and "our" refers to Navigant Consulting Ltd.

1. **Scope** – We will perform the services set forth in the Letter or Proposal of which these Terms and Conditions ("Terms") are a part. The provisions of these Terms shall control in the case of conflict with any provisions of the Letter or Proposal.
2. **Fees and Expenses** – The fees for our services shall be those fees provided in the Letter or Proposal attached with these Terms.
3. **Payment** –
  - (i) Unless otherwise agreed, we will submit monthly invoices reflecting actual work performed and expenses incurred. A retainer payment shall be due at the time of signing or when work is begun whichever occurs earlier. Payment of our invoices shall be due in 30 days after the date of an invoice. Amounts past due more than 30 days shall bear interest at an annual rate of 12% from the due date until payment is received.
  - (ii) We will not have any obligation to issue a report or other document, or communicate our research, analyses, or conclusions, and will not have any obligation to appear for or provide written or oral testimony or evidence at trial, deposition or elsewhere, until our accounts are paid in full, or alternative arrangements have been mutually agreed to in writing. We will have no liability to you, or any other party, by reason of not issuing a report, appearing for, and/or providing testimony or other evidence because of your failure to pay all amounts due to us, and you agree to indemnify us against any such liability.
4. **Sales Tax** - You are responsible for paying any local, provincial or federal sales, use or ad valorem tax, which may be assessed on our services.
5. **Independent Contractor** - It is understood and agreed that we shall for all purposes be an independent contractor and we shall have no authority to bind you to any contract or in any other manner.
6. **Termination** - You have the right to terminate this engagement upon written notice to us. We have the right to terminate if we determine that completing the engagement would involve a breach of our ethical or professional standards or a material breach of these Terms. Upon termination, you shall pay the full amount due for services rendered and costs and expenses incurred and not paid for up to that time, and the costs of returning consultant personnel to home base and other reasonable costs and expenses incurred in effecting termination and returning documents.
7. **Confidentiality** - All communications between us and you (including external counsel), either oral or written, as well as any materials or information developed or received by us pursuant to this arrangement, are intended to be confidential and/or privileged. Accordingly, we agree, subject to applicable law or court order, not to disclose any of our communications, or any of the

information we receive or develop in the course of our work for you, to any person or entity apart from your office or such other persons or entities as your office may designate. If access to any of the materials in our possession relating to this engagement is sought by a third party, we will promptly notify you of such action and cooperate with you concerning our response thereto. In the event that we are subpoenaed as the result of any work performed for you in connection with this engagement, you will compensate us for our time and expenses involved in responding to such subpoena(s).

**8. Work Product -**

- (i) You agree that reports and information received from us are provided solely for your use in connection with the matter noted in the Letter or Proposal (this use may include the public release of reports prepared by us for you). Our reports are not to be reproduced or used for any other purpose without our prior written consent in each specific instance. We do not assume any responsibility or liability for losses to any party as a result of the circulation, publication, reproduction or use of our reports contrary to the provisions of this paragraph.
- (ii) No external distribution shall be made of and no reliance shall be placed on draft version of our reports, conclusions or advice, whether oral or written.
- (iii) Our performance of the assignment is dependent upon you providing us with such information and assistance as we may reasonably require.
- (iv) Our conclusions will represent our professional unbiased opinion based on the data we are able to obtain within a reasonable time, using our best efforts. We attempt to collect data from reliable sources, including from you, but do not warrant the accuracy, completeness, or reliability of the data obtained. We will present in our report the information upon which our analyses, findings, and opinions are based.
- (v) We do not assume obligation to revise our report to reflect events or conditions or other information, which occur subsequent to the effective date of our analyses.
- (vi) The fee paid to us for the formulation and reporting of our findings and conclusions are not contingent upon the findings and conclusions presented.
- (vii) It is understood and agreed that our use of our proprietary computer software, methodology, procedures or other proprietary information in connection with an engagement shall not give you any rights with respect to such proprietary computer software, methodology, procedures or other proprietary information. We may retain and further use the technical content of our work hereunder.

**9. Indemnification -** You agree to hold harmless and indemnify us (including our officers, employees and agents) against all claims, damages and costs (including reasonable lawyer's fees and disbursements) arising out of this engagement, except for such claims, damages and costs resulting from any actions by us constituting gross negligence, fraud or unlawful conduct.

**10. Limitation of Liability -** In any action, claim, loss or damage (whether in tort, contract or otherwise) arising out of the provision of our services, the parties agree that:

- (i) Our liability to you, subject to the limits set out in subsections 10(ii) and 10(iii) will be several and not joint and several, and you may only claim payment from us of our proportionate share of the total liability based on degree of fault;
  - (ii) Under no circumstances will we be liable to you for damages in respect of any incidental, punitive, special, indirect or consequential loss, even if we have been advised of the possibility of such damages including, but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind; and
  - (iii) Our total liability to you for any claim arising out of the performance of our services, regardless of the form of claim, will in no event exceed total fees paid to us.
- 11. Excused Performance** – We shall not be deemed in default of any provision hereof or be liable for any delay, failure in performance, or interruption of service resulting directly or indirectly from acts of God, civil or military authority, civil disturbance, war, strikes or other labor disputes, fires, other catastrophes, or other forces beyond our reasonable control.
- 12. Future Assignments** - You agree that our engagement in the current matter does not prevent us from providing future services to clients adverse to you on matters not substantially related to this current matter.
- 13. Non-Solicitation** -- Each party agrees that, during the period that we are providing services hereunder and for a period of twelve (12) months following the termination of such work, neither party will, except with the other party's prior written approval, directly or indirectly through a third party, solicit any employee or staff member of such other party. Nothing contained herein shall prohibit any party from employing (i) an employee who initiates discussions with the other party without direct or indirect solicitation from the other party, or (ii) an employee who responds to a general advertisement for employment (whether or not made by a professional search firm).
- 14. Notices** - All notices given under or pursuant to the Terms shall be sent by Registered Mail, Return Receipt Requested, and shall be deemed to have been delivered when physically delivered if to Navigant Consulting Ltd., 333 Bay Street, Suite 1250, Toronto, Ontario M5H 2R2, Attention: Todd Williams, Managing Director, and if to you at the address shown on the Letter or Proposal of which these Terms are a part or such other address as you may designate by written notice to us.
- 15. Complete Agreement** –
- (i) It is understood and agreed that these Terms and the Letter or Proposal of which they are a part embody the complete understanding of the parties and that any and all provisions, negotiations and representations not included herein are hereby abrogated and that these Terms cannot be changed, modified or varied except by written instrument signed by both parties. In the event you issue a purchase order or memorandum or other instrument covering the services herein provided, it is hereby specifically agreed and understood that such purchase order, memorandum, or instrument is for your internal purposes only, and any and all terms and conditions contained therein, whether printed or written, shall be of no force or effect unless agreed to in writing by us. No waiver by either party of a breach

hereof or a default hereunder shall be deemed a waiver by such party of a subsequent breach or default of like or similar nature.

- (ii) This Agreement is a legally binding contract and will be binding upon, and inure to the benefit of, yours and our respective assigns, successors-in-interest, and legal representatives (as applicable). It may not be amended without prior written consent.

**16. Governing Law** - This Agreement (consisting of the Letter or Proposal and these Terms) shall be construed and otherwise governed pursuant to the laws of the Province of Ontario.

The attached Letter or Proposal, of which these Terms form a part, constitutes an agreement of the parties hereto, and supersedes any previous agreement or understanding. It may not be modified except in writing, and only if executed by both parties.

**APPENDIX B – NAVIGANT CONSULTING LTD. – CONFIDENTIAL TREATMENT  
REQUEST**

August 28, 2015

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

Dear Ms. Walli:

Re: Information Request – North Bay Hydro Distribution EB-2014-0099

Dear Ms. Walli:

Navigant Consulting, Ltd (“Navigant”) is in receipt of your notice regarding a request for information. The request is for Ontario Energy Board Staff (“Board Staff”) Information Request 1:

Staff 1. Terms of Reference

North Bay Hydro retained Navigant Consulting Ltd. (Navigant) to prepare a lead-lag study to calculate the working capital requirements for North Bay Hydro’s distribution business.

- a. Please provide the terms of reference for retaining Navigant.
- b. Please provide any additional instructions related to the study that may have transpired after the terms were set.

Navigant is providing copies of the Contract along with all tasks under the contract.

Navigant has designated information relating to hourly rates charged by Navigant and the names of individuals to be redacted on page 4.

The proposed redacted information is clearly marked by red brackets.

Navigant respectfully requests that the information be excepted from public disclosure and subject to confidentiality. The requested information contains confidential and proprietary information of Navigant creating a compelling interest to withhold the information.

Navigant considers this information subject to protection as: (1) trade secrets, and (2) commercial or financial information, the disclosure of which would cause substantial competitive harm to the person from whom the information was obtained.

Commercial or financial matter is "confidential" if disclosure of the information is likely to cause substantial harm to the competitive position of the person from whom the information was obtained. For the reasons set forth below, Navigant is of the opinion that its hourly rates under the Contract and staffing information meet the definition of a trade secret and that releasing the information would cause substantial competitive harm to Navigant by making such information available to the public.

Hourly rates and staffing information are proprietary to Navigant since the pricing information, hours and assumptions are based on proprietary formulas developed by Navigant. In addition:

- 1) The rates and staffing information is not known outside the business.
- 2) Navigant employees are required to keep such information confidential during their employment and after termination of their employment relationship with Navigant.
- 3) Navigant does not share this information outside the practice group that oversees and performs the type of services outlined in the Contract. It is shared internally on a "need to know" basis.
- 4) Navigant, in its standard terms and conditions with clients, requires its clients to keep Navigant information confidential and places certain restrictions on clients' ability to disseminate Navigant information.

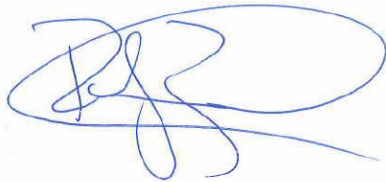


- 5) The information is valuable to the business as it allows the business to fairly and competitively price its services while still maintaining the ability to cover all business expenses and make a profit related to the services provided. This information is valuable to Navigant competitors, as it would allow Navigant competitors to undercut Navigant's price and staff projects in the marketplace thereby undermining Navigant's competitive advantage.

Obtaining access to the confidential information requested would be of great but unfair benefit to Navigant's competitors, and its disclosure to such competitors would substantially harm Navigant's competitive position in the consulting profession related to the energy industry. In addition, obtaining access to the confidential information would be of great but unfair benefit to Navigant's other customers, which could use the information in unrelated pricing negotiations on other matters. In addition to this information not being known outside of Navigant's business, Navigant takes great care in maintaining the confidentiality of the information within the company itself. Access to competitive formulas for setting rates is strictly limited on a need-to-know basis. Further, Navigant expends significant resources to maintain the confidentiality of its trade secrets and other confidential information. As noted, Navigant releases such information to third parties only where necessary and only subject to non-disclosure agreements. In addition, all Navigant employees are required to enter into a nondisclosure agreement with Navigant upon commencement of their employment. Such agreement prohibits the employees from using or copying confidential information and Navigant trade secrets, except as necessary in connection with their employment.

For the above-stated reasons, Navigant respectfully requests that requested information be excepted from public disclosure. Please do not hesitate to contact me if you have any questions related to this request, I can be reached at 647-288-5204.

Kind Regards,

A handwritten signature in blue ink, appearing to be 'RZ' followed by a large, sweeping loop and a horizontal line extending to the right.

Ralph Zarumba  
Director

c.c. John A.D. Vellone, LL.B., M.B.A., B.A.Sc. (Electrical Engineering)  
North Bay Hydro  
Todd. D. Williams, Navigant

**APPENDIX C – 2014 FEDERAL TAX INSTALMENTS SCHEDULE & 2014 NOTICE OF  
ASSESSMENT**

# Federal Tax Instalments

## Federal tax instalments

For the taxation year ended 2014-12-31

Business number 88246 3128 RC0001

The following is a list of federal instalments payable for the current taxation year. The last column indicates the instalments payable to Revenue Canada. The instalments are due no later than on the dates indicated, otherwise non-deductible interest will be charged. A cheque or money order should be made payable to the Receiver General. Payment may be made by cheque or money order payable to the Receiver General either to an authorized financial institution or filed with the appropriate remittance voucher to the following address:

**Canada Revenue Agency**  
875 Heron Road  
Ottawa ON K1A 1B1

Note that you may also be able to pay by telephone or Internet banking. For more information, consult the *Corporation Instalment Guide*.

## Monthly instalment workchart

Date	Monthly tax instalments	Refund transferred to instalments	Instalments paid	Cumulative difference	Instalments payable
2014-01-31	44,146				44,146
2014-02-28	44,146				44,146
2014-03-31	57,123				57,123
2014-04-30	57,123				57,123
2014-05-31	57,123				57,123
2014-06-30	57,123				57,123
2014-07-31	57,123				57,123
2014-08-31	57,123				57,123
2014-09-30	57,123				57,123
2014-10-31	57,123				57,123
2014-11-30	57,123				57,123
2014-12-31	57,120				57,120
2015-01-31					54,960
2015-02-28					54,960
<b>Totals</b>	<b>659,519</b>				<b>769,439</b>



Ministry of Finance  
33 King St W  
PO Box 622  
Oshawa ON L1H 8H6



00000003

NORTH BAY HYDRO DISTRIBUTION LIMITED  
ATTENTION: C/O CINDY TENNANT  
74 COMMERCE COURT  
PO BOX 3240 STN MAIN  
NORTH BAY ON P1B 8Y5

HPL - tL059

Issue Date 02-Jun-2015

Business No. 882463128TW0001

Reference No. L1979053632

## Notice of Assessment - Hydro Payment in Lieu

*Electricity Act, 1998, Corporations Tax Act*

Your account has been assessed resulting in a balance as indicated below.

Period Ending: 31-Dec-2014	Return As Filed
Total Federal Tax	\$269,849.00
Total Ontario Tax	\$208,417.00
Total Credits	(\$7,123.00)
Loss Carry-back	\$0.00
Total Tax Payable	\$471,143.00
Interest	\$1,194.30
Current Penalty	\$0.00
Credits/Payments	(\$472,337.30)
<b>Total Assessment</b>	<b><u>\$0.00</u></b>

As of 02-Jun-2015, including the amount assessed above, you have an overall credit balance on your account of (\$27,662.70).

If you have any questions concerning this Notice of Assessment, please call the number listed below. After discussion with a ministry representative, if you still do not agree with this assessment you have the right to file a Notice of Objection with the Objections and Appeals Branch within 180 days of the issue date of this form. Any taxes, interest and penalties that are outstanding as a result of the assessment are due and payable even if you have filed, or intend to file, a Notice of Objection.

If you have any questions or require additional information, please visit our website or call the Ministry of Finance at the number listed below.

*Ministry use only*

### Enquiries

1 866 ONT-TAXS  
1 866 668-8297

Fax 1 866 888-3850

Teletypewriter (TTY)  
Internet

1 800 263-7776  
[ontario.ca/finance](http://ontario.ca/finance)

## **APPENDIX D – 2014 SCHEDULE OF INSTALMENT REMITTANCES**

# Schedule of Instalment Remittances

Name of corporation contact North Bay Hydro Distribution  
Telephone number \_\_\_\_\_

Effective interest date	Description (instalment remittance, split payment, assessed credit)	Amount of credit
2014-05-16	Instalment	300,000
2014-06-19	Instalment	100,000
2014-07-10	Instalment	100,000
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
	Instalment	
Total amount of instalments claimed (carry the result to line 840 of the T2 Return)		<u>500,000</u> A
Total instalments credited to the taxation year per T9		<u>500,000</u> B

## Transfer

Account number	Taxation year end	Amount	Effective interest date	Description
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				