



Rene W. Gatien, P. Eng, MBA  
President & CEO

## WATERLOO NORTH HYDRO INC.

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March 1, 2011

Energy Probe Research Foundation  
225 Brunswick Avenue  
Toronto, Ontario  
M5S 2M6

### **VIA E-MAIL AND RESS**

**Attention: Mr. David McIntosh, Case Manager**

Dear Mr. McIntosh:

### **Re: May 1, 2011 Cost of Service Technical Conference Questions Responses / EB-2010-0144**

Pursuant to the Technical Conference of February 24, 2011, Waterloo North Hydro Inc. (WNH) is enclosing its Responses to Energy Probe's Outstanding Technical Conference Questions of February 11, 2011.

WNH has filed an electronic copy of this document via the Board's web portal RESS and will deliver to the Board Office two copies of this document.

If there are any questions, please contact Albert Singh at 519-888-5542, [asingh@wnhydro.com](mailto:asingh@wnhydro.com) or myself, Rene Gatien at 519-888-5544, [rgatien@wnhydro.com](mailto:rgatien@wnhydro.com).

Yours truly,

*Original Signed By*

Rene W. Gatien, P.Eng, MBA  
President & C.E.O.



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March 1, 2011

Aiken & Associates  
578 McNaughton Ave. W.  
Chatham, Ontario  
N7L 4J6

### **VIA E-MAIL AND RESS**

**Attention: Mr. Randy Aiken**

Dear Mr. Aiken:

### **Re: May 1, 2011 Cost of Service Technical Conference Questions Responses / EB-2010-0144**

Pursuant to the Technical Conference of February 24, 2011, Waterloo North Hydro Inc. (WNH) is enclosing its Responses to Energy Probe's Outstanding Technical Conference Questions of February 11, 2011.

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Yours truly,

*Original Signed By*

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Supplementary Questions for Technical Conference - Energy Probe

**ENERGY PROBE TECHNICAL CONFERENCE QUESTIONS**

**Question #19**

**Ref: Energy Probe Interrogatory #35**

- a) It is not clear why two of the entries in the table provided in the response to part (a) show negative values (accounts 1808 and 1845). In both cases, the number of years used for depreciation declines, which would imply that the depreciation expense should be higher, not lower. Please explain.***

WNH has provided a revised table (Table TCQ#19a) with updated number of years for depreciation.

Specifically, Account 1808 Municipal Substation showed in the previous table the number of years being decreased from 60 years to 50 years. Upon closer examination, we found that on average the assets in that category were depreciated using less than 50 years as the number of years for depreciation. The corrected table shows the number of years actually increased which would explain the negative value.

Similarly, for Account 1845, upon closer examination, the average years were previously under 25 and were increased to 25 years resulting in negative values.

Supplementary Questions for Technical Conference - Energy Probe

Table TCQ # 19 (a) – Years of Depreciation

Description	USoA	# Years Depreciation		WNH Depreciation less than Board Model					Total
		Previous	Current	2006	2007	2008	2009	2010	
Municipal Substations	1808	<50	50	(384)	(384)	(384)	(384)	(384)	(1,922)
Service Centre Building	1808	60	50	10,837	10,837	10,837	10,837	10,837	54,183
Transformer Stations Building	1808	60	50	479	479	479	479	479	2,394
Transformer Station Equipment	1815	50	40	16,038	16,038	16,038	16,038	16,038	80,189
Municipal Substation Equipment	1820	35	30	3,388	3,388	3,388	3,388	3,388	16,940
Underground Conductor & Device	1845	<25	25	(6,197)	(6,197)	(6,197)	(6,197)	(6,197)	(30,985)
Underground Conduit	1840	35	25	23,187	23,187	23,187	23,187	13,324	106,073
Overhead Transformer	1850	30	25	15,382	15,382	15,382	3,925	-	50,071
Underground Transformer	1850	30	25	1,279	1,279	1,279	1,279	1,279	6,395
Services Underground Commercial	1855	35	25	3,723	3,723	3,723	3,723	3,723	18,614
Services Underground Residential	1855	35	25	25,740	25,740	25,740	25,740	10,001	112,962
Meters - Residential	1860	35	25	10,259	10,259	10,259	10,259	10,259	51,293
Equipment - SCADA	1980	25	15	21,584	21,584	21,584	21,584	21,584	107,922
Total Depreciation difference due to Change in Depreciation Year				125,314	125,314	125,314	113,856	84,330	574,128

**b) Please explain why the adjustment for account 1820 is positive instead of negative since the number of years has increased, implying that the depreciation expense was higher than that using the Board years.**

The previous table showed Account 1820 being increased from 19 years to 30 years. Closer examination revealed that the number of years should have been reported as 35 years going down to 30 years. This would result in a positive difference.

**c) When did WNH make the changes in the number of years used for depreciation?**

Depreciation rates were changed in the mid 1980's.

**d) When rates were set for 2006, which set of depreciation years were used?**

Rates used for 2006 were based on a combination of previous and current number of years.

Supplementary Questions for Technical Conference - Energy Probe

**Question #27**

**Ref: All Interrogatory Responses**

- a) *Please update the Revenue Requirement Work Form to reflect any changes proposed by WNH as a result of the interrogatory responses provided, including any changes resulting from corrections to the original filing, updates, or adoption of changes resulting from the interrogatory responses.*

WNH has provided its updated Revenue Requirement Work Form below.

**Table TCQ # 27 (a) – Revenue Requirement Work Form**



**Revenue Requirement Work Form**

Name of LDC:  (1)  
File Number:   
Rate Year:  Version: 2.11

**Table of Content**

<u>Sheet</u>	<u>Name</u>
A	<a href="#">Data Input Sheet</a>
1	<a href="#">Rate Base</a>
2	<a href="#">Utility Income</a>
3	<a href="#">Taxes/PILS</a>
4	<a href="#">Capitalization/Cost of Capital</a>
5	<a href="#">Revenue Sufficiency/Deficiency</a>
6	<a href="#">Revenue Requirement</a>
7A	<a href="#">Bill Impacts -Residential</a>
7B	<a href="#">Bill Impacts - GS &lt; 50 kW</a>


**Notes:**

- (1) Pale green cells represent inputs  
(2) Pale yellow cells represent drop=down lists  
(3) *Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.*  
(4) *Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel format.*

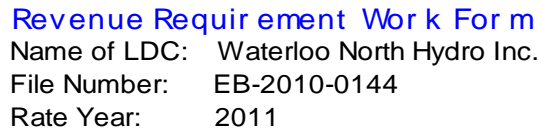
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*This Revenue Requirement Work Form Model is protected by copyright and is being made available to you solely for the purpose of preparing or reviewing your draft rate order. You may use and copy this model for that purpose, and provide a copy of this mo*

Supplementary Questions for Technical Conference - Energy Probe

 <b>Revenue Requirement Work Form</b>		Version: 2.11	
Name of LDC: Waterloo North Hydro Inc. File Number: EB-2010-0144 Rate Year: 2011			
<b>Data Input</b> (1)			
	<b>Initial Application</b>		<b>Per Board Decision</b>
<b>1 Rate Base</b>			
Gross Fixed Assets (average)	\$243,087,168	\$379,436	\$243,466,604
Accumulated Depreciation (average)	(\$109,118,578) (5)	(\$3,794)	(\$109,122,373)
<b>Allowance for Working Capital:</b>			
Controllable Expenses	\$10,183,838	\$126,250	\$10,310,088
Cost of Power	\$115,414,347	\$2,406,258	\$117,820,605
Working Capital Rate (%)	15.00%		15.00%
<b>2 Utility Income</b>			
Operating Revenues:			
Distribution Revenue at Current Rates	\$23,968,200	\$113,746	\$24,081,947
Distribution Revenue at Proposed Rates	\$28,980,640	\$454,318	\$29,434,958
<b>Other Revenue:</b>			
Specific Service Charges	\$245,845	\$0	\$245,845
Late Payment Charges	\$180,000	\$0	\$180,000
Other Distribution Revenue	\$278,819	\$0	\$278,819
Other Income and Deductions	\$351,299	(\$66,006)	\$285,293
<b>Operating Expenses:</b>			
OM+A Expenses	\$10,183,838	\$126,250	\$10,310,088
Depreciation/Amortization	\$7,816,331	\$7,589	\$7,823,920
Property taxes			
Capital taxes			
Other expenses			
<b>3 Taxes/PILs</b>			
Taxable Income:			
Adjustments required to arrive at taxable income	(\$2,724,063) (3)	(\$2,726,934)	
<b>Utility Income Taxes and Rates:</b>			
Income taxes (not grossed up)	\$886,355	\$807,742	
Income taxes (grossed up)	\$1,212,310	\$1,067,089	
Capital Taxes			
Federal tax (%)	16.50%	16.50%	(6)
Provincial tax (%)	10.39%	7.80%	
Income Tax Credits			
<b>4 Capitalization/Cost of Capital</b>			
<b>Capital Structure:</b>			
Long-term debt Capitalization Ratio (%)	56.0%	56.0%	
Short-term debt Capitalization Ratio (%)	4.0%	4.0%	(2)
Common Equity Capitalization Ratio (%)	40.0%	40.0%	
Preferred Shares Capitalization Ratio (%)			
	100.0%	100.0%	
<b>Cost of Capital</b>			
Long-term debt Cost Rate (%)	5.47%	5.87%	
Short-term debt Cost Rate (%)	2.07%	2.07%	
Common Equity Cost Rate (%)	9.85%	9.85%	
Preferred Shares Cost Rate (%)			
<b>Notes:</b> Data inputs are required on this Sheet A, Data Input Sheet, and on Sheets 7A and 7B, for Bill Impacts. Data on this input sheet complete sheets 1 through 6 (Rate Base through Revenue Requirement), except for Notes that the utility may wish to use to (1) All inputs are in dollars (\$) except where inputs are individually identified as percentages (%) (2) 4.0% unless an Applicant has proposed or been approved for another amount. (3) Net of addbacks and deductions to arrive at taxable income. (4) Average of Gross Fixed Assets at beginning and end of the Test Year (5) Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount. (6) Not applicable as of July 1, 2010 (7) Select option from drop-down list by clicking on cell M10. This column allows for the application update reflecting the end of discovery or Argument-in-Chief. Also, the outcome of any Settlement Process can be reflected. Note - Provincial tax rate reduced to reflect the fact that there are \$61,453 in tax credits			

## Supplementary Questions for Technical Conference - Energy Probe




Version: 2.11

			Rate Base							
Line No.	Particulars		Initial Application						Per Board Decision	
1	Gross Fixed Assets (average)	(3)	\$243,087,168		\$379,436		\$243,466,604		\$ -	\$243,466,604
2	Accumulated Depreciation (average)	(3)	(\$109,118,578)		(\$3,794)		(\$109,122,373)		\$ -	(\$109,122,373)
3	Net Fixed Assets (average)	(3)	\$133,968,589		\$375,642		\$134,344,231		\$ -	\$134,344,231
4	Allowance for Working Capital	(1)	\$18,839,728		\$379,876		\$19,219,604		\$ -	\$19,219,604
5	<b>Total Rate Base</b>		<b>\$152,808,317</b>		<b>\$755,518</b>		<b>\$153,563,835</b>		<b>\$ -</b>	<b>\$153,563,835</b>
<b>(1) Allowance for Working Capital - Derivation</b>										
6	Controllable Expenses		\$10,183,838		\$126,250		\$10,310,088		\$ -	\$10,310,088
7	Cost of Power		\$115,414,347		\$2,406,258		\$117,820,605		\$ -	\$117,820,605
8	Working Capital Base		\$125,598,185		\$2,532,508		\$128,130,693		\$ -	\$128,130,693
9	Working Capital Rate %	(2)	15.00%		0.00%		15.00%		0.00%	15.00%
10	Working Capital Allowance		\$18,839,728		\$379,876		\$19,219,604		\$ -	\$19,219,604

## Notes

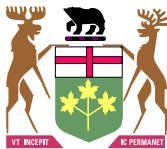
- (2) Generally 15%. Some distributors may have a unique rate due as a result of a lead-lag study.
- (3) Average of opening and closing balances for the year.

Supplementary Questions for Technical Conference - Energy Probe


		<b>Revenue Requirement Work Form</b>				Version: 2.11	
		Name of LDC: Waterloo North Hydro Inc. File Number: EB-2010-0144 Rate Year: 2011					
		<b>Utility income</b>					
Line No.	Particulars	Initial Application					Per Board Decision
<b>Operating Revenues:</b>							
1	Distribution Revenue (at Proposed Rates)	\$28,980,640	\$454,318	\$29,434,958	\$ -		\$29,434,958
2	Other Revenue (1)	\$1,055,963	(\$2,045,920)	\$989,957	\$ -		\$989,957
3	Total Operating Revenues	\$30,036,603	(\$1,591,601)	\$30,424,915	\$ -		\$30,424,915
<b>Operating Expenses:</b>							
4	OM+A Expenses	\$10,183,838	\$126,250	\$10,310,088	\$ -		\$10,310,088
5	Depreciation/Amortization	\$7,816,331	\$7,589	\$7,823,920	\$ -		\$7,823,920
6	Property taxes	\$ -	\$ -	\$ -	\$ -		\$ -
7	Capital taxes	\$ -	\$ -	\$ -	\$ -		\$ -
8	Other expense	\$ -	\$ -	\$ -	\$ -		\$ -
9	Subtotal (lines 4 to 8)	\$18,000,168	\$133,839	\$18,134,007	\$ -		\$18,134,007
10	Deemed Interest Expense	\$4,803,477	\$369,927	\$5,173,404	(\$346,178)		\$4,827,226
11	Total Expenses (lines 9 to 10)	\$22,803,645	\$503,766	\$23,307,411	(\$346,178)		\$22,961,233
12	Utility income before income taxes	\$7,232,958	(\$2,095,367)	\$7,117,504	\$346,178		\$7,463,682
13	Income taxes (grossed-up)	\$1,212,310	(\$145,221)	\$1,067,089	\$ -		\$1,067,089
14	Utility net income	\$6,020,648	(\$1,950,146)	\$6,050,415	\$346,178		\$6,396,593
<b>Notes</b>							
(1)	<b>Other Revenues / Revenue Offsets</b>						
	Specific Service Charges	\$245,845	\$ -	\$245,845			\$245,845
	Late Payment Charges	\$180,000	\$ -	\$180,000			\$180,000
	Other Distribution Revenue	\$278,819	\$ -	\$278,819			\$278,819
	Other Income and Deductions	\$351,299	(\$66,006)	\$285,293			\$285,293
	Total Revenue Offsets	\$1,055,963	(\$66,006)	\$989,957	\$ -		\$989,957



Supplementary Questions for Technical Conference - Energy Probe

		<h2 style="color: blue;">Revenue Requirement Work Form</h2>		Version: 2.11	
<p>Name of LDC: Waterloo North Hydro Inc. File Number: EB-2010-0144 Rate Year: 2011</p>					
Taxes/PILs					
Line No.	Particulars	Application		Per Board Decision	
<u>Determination of Taxable Income</u>					
1	Utility net income before taxes	\$6,020,648		\$6,050,415	\$6,050,415
2	Adjustments required to arrive at taxable utility income	(\$2,724,063)		(\$2,726,934)	(\$2,724,063)
3	Taxable income	\$3,296,585		\$3,323,481	\$3,326,352
<u>Calculation of Utility income Taxes</u>					
4	Income taxes	\$886,355		\$807,742	\$807,742
5	Capital taxes	\$ - (1)		\$ - (1)	\$ - (1)
6	Total taxes	\$886,355		\$807,742	\$807,742
7	Gross-up of Income Taxes	\$325,955		\$259,346	\$259,346
8	Grossed-up Income Taxes	\$1,212,310		\$1,067,089	\$1,067,089
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$1,212,310		\$1,067,089	\$1,067,089
10	Other tax Credits	\$ -		\$ -	\$ -
<u>Tax Rates</u>					
11	Federal tax (%)	16.50%		16.50%	16.50%
12	Provincial tax (%)	10.39%		7.80%	7.80%
13	Total tax rate (%)	26.89%		24.30%	24.30%
<u>Notes</u>					
(1)	Capital Taxes not applicable after July 1, 2010 (i.e. for 2011 and later test years)				

Supplementary Questions for Technical Conference - Energy Probe



Ontario

**Revenue Requirement Work Form**

Name of LDC: Waterloo North Hydro Inc.

File Number: EB-2010-0144

Rate Year: 2011

Version: 2.11

Capitalization/Cost of Capital					
Line No.	Particulars	Capitalization Ratio	Cost Rate	Return	
<b>Initial Application</b>					
		(%)	(\$)	(%)	(\$)
<b>Debt</b>					
1	Long-term Debt	56.00%	\$85,572,658	5.47%	\$4,676,951
2	Short-term Debt	4.00%	\$6,112,333	2.07%	\$126,525
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$91,684,990</b>	<b>5.24%</b>	<b>\$4,803,477</b>
<b>Equity</b>					
4	Common Equity	40.00%	\$61,123,327	9.85%	\$6,020,648
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$61,123,327</b>	<b>9.85%</b>	<b>\$6,020,648</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$152,808,317</b>	<b>7.08%</b>	<b>\$10,824,124</b>

		(%)	(\$)	(%)	(\$)
<b>Debt</b>					
1	Long-term Debt	56.00%	\$85,995,748	5.87%	\$5,046,253
2	Short-term Debt	4.00%	\$6,142,553	2.07%	\$127,151
3	<b>Total Debt</b>	<b>60.00%</b>	<b>\$92,138,301</b>	<b>5.61%</b>	<b>\$5,173,404</b>
<b>Equity</b>					
4	Common Equity	40.00%	\$61,425,534	9.85%	\$6,050,415
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	<b>Total Equity</b>	<b>40.00%</b>	<b>\$61,425,534</b>	<b>9.85%</b>	<b>\$6,050,415</b>
7	<b>Total</b>	<b>100.00%</b>	<b>\$153,563,835</b>	<b>7.31%</b>	<b>\$11,223,819</b>


Per Board Decision					
		(%)	(\$)	(%)	(\$)
<b>Debt</b>					
8	Long-term Debt	56.00%	\$85,995,748	5.47%	\$4,700,075
9	Short-term Debt	4.00%	\$6,142,553	2.07%	\$127,151
10	<b>Total Debt</b>	<b>60.00%</b>	<b>\$92,138,301</b>	<b>5.24%</b>	<b>\$4,827,226</b>
<b>Equity</b>					
11	Common Equity	40.00%	\$61,425,534	9.85%	\$6,050,415
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	<b>Total Equity</b>	<b>40.00%</b>	<b>\$61,425,534</b>	<b>9.85%</b>	<b>\$6,050,415</b>
14	<b>Total</b>	<b>100.00%</b>	<b>\$153,563,835</b>	<b>7.08%</b>	<b>\$10,877,641</b>

**Notes**

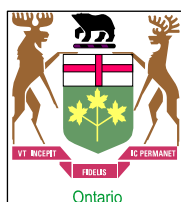
(1) 4.0% unless an Applicant has proposed or been approved for another amount.

Supplementary Questions for Technical Conference - Energy Probe

 <b>Revenue Requirement Work Form</b>		<b>Revenue Sufficiency/Deficiency</b>					
Name of LDC: Waterloo North Hydro Inc. File Number: EB-2010-0144 Rate Year: 2011		Version: 2.11					
Line No.	Particulars	Initial Application				Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$5,012,440		\$5,353,011		\$5,006,834
2	Distribution Revenue	\$23,968,200	\$23,968,201	\$24,081,947	\$24,081,947	\$24,081,947	\$24,428,125
3	Other Operating Revenue	\$1,055,963	\$1,055,963	\$989,957	\$989,957	\$989,957	\$989,957
	Offsets - net						
4	<b>Total Revenue</b>	<u>\$25,024,163</u>	<u>\$30,036,603</u>	<u>\$25,071,904</u>	<u>\$30,424,915</u>	<u>\$25,071,904</u>	<u>\$30,424,915</u>
5	Operating Expenses	\$18,000,168	\$18,000,168	\$18,134,007	\$18,134,007	\$18,134,007	\$18,134,007
6	Deemed Interest Expense	\$4,803,477	\$4,803,477	\$5,173,404	\$5,173,404	\$4,827,226	\$4,827,226
	<b>Total Cost and Expenses</b>	<u>\$22,803,645</u>	<u>\$22,803,645</u>	<u>\$23,307,411</u>	<u>\$23,307,411</u>	<u>\$22,961,233</u>	<u>\$22,961,233</u>
7	<b>Utility Income Before Income Taxes</b>	\$2,220,518	\$7,232,958	\$1,764,493	\$7,117,504	\$2,110,670	\$7,463,682
8		(\$2,724,063)	(\$2,724,063)	(\$2,726,934)	(\$2,726,934)	(\$2,726,934)	(\$2,726,934)
	Tax Adjustments to Accounting Income per 2009 PILs						
9	<b>Taxable Income</b>	(\$503,545)	\$4,508,895	(\$962,442)	\$4,390,570	(\$616,264)	\$4,736,748
10	Income Tax Rate	26.89%	26.89%	24.30%	24.30%	24.30%	24.30%
11		(\$135,388)	\$1,212,310	(\$233,913)	\$1,067,089	(\$149,777)	\$1,151,224
	<b>Income Tax on Taxable Income</b>						
12	<b>Income Tax Credits</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	<b>Utility Net Income</b>	<u>\$2,355,906</u>	<u>\$6,020,648</u>	<u>\$1,998,406</u>	<u>\$6,050,415</u>	<u>\$2,260,448</u>	<u>\$6,396,593</u>
14	<b>Utility Rate Base</b>	\$152,808,317	\$152,808,317	\$153,563,835	\$153,563,835	\$153,563,835	\$153,563,835
	Deemed Equity Portion of Rate Base	\$61,123,327	\$61,123,327	\$61,425,534	\$61,425,534	\$61,425,534	\$61,425,534
15	Income/Equity Rate Base (%)	3.85%	9.85%	3.25%	9.85%	3.68%	10.41%
16	Target Return - Equity on Rate Base	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%
17	Sufficiency/Deficiency in Return on Equity	-6.00%	0.00%	-6.60%	0.00%	-6.17%	0.56%
18	Indicated Rate of Return	4.69%	7.08%	4.67%	7.31%	4.62%	7.31%
19	Requested Rate of Return on Rate Base	7.08%	7.08%	7.31%	7.31%	7.08%	7.08%
20	Sufficiency/Deficiency in Rate of Return	-2.40%	0.00%	-2.64%	0.00%	-2.47%	0.23%
21	Target Return on Equity	\$6,020,648	\$6,020,648	\$6,050,415	\$6,050,415	\$6,050,415	\$6,050,415
22	Revenue Deficiency/(Sufficiency)	\$3,664,741	\$0	\$4,052,010	\$0	\$3,789,967	\$346,178
23	<b>Gross Revenue Deficiency/(Sufficiency)</b>	\$5,012,440 (1)		\$5,353,011 (1)		\$5,006,834 (1)	

**Notes:**  
(1) Revenue Sufficiency/Deficiency divided by (1 - Tax Rate)

Supplementary Questions for Technical Conference - Energy Probe



Revenue Requirement Work Form

Version: 2.11

Name of LDC: Waterloo North Hydro Inc.

File Number: EB-2010-0144

Rate Year: 2011


Revenue Requirement

Line No.	Particulars	Application		Per Board Decision	
1	OM&A Expenses	\$10,183,838		\$10,310,088	
2	Amortization/Depreciation	\$7,816,331		\$7,823,920	
3	Property Taxes	\$ -			
4	Capital Taxes	\$ -		\$ -	
5	Income Taxes (Grossed up)	\$1,212,310		\$1,067,089	
6	Other Expenses	\$ -			
7	Return				
	Deemed Interest Expense	\$4,803,477		\$5,173,404	
	Return on Deemed Equity	\$6,020,648		\$6,050,415	
8	Distribution Revenue Requirement before Revenues	\$30,036,603		\$30,424,915	
9	Distribution revenue	\$28,980,640		\$29,434,958	
10	Other revenue	\$1,055,963		\$989,957	
11	<b>Total revenue</b>	\$30,036,603		\$30,424,915	
12	<b>Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)</b>	\$0 (1)		\$0 (1)	\$346,178 (1)

Notes

(1) Line 11 - Line 8

Supplementary Questions for Technical Conference - Energy Probe



**Revenue Requirement Work Form**

Name of LDC: Waterloo North Hydro Inc.  
File Number: EB-2010-0144  
Rate Year: 2011

Version: 2.11

**Residential**


Consumption 800 kWh

	Charge Unit	Current Board-Approved			Proposed			Impact	
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
1 Monthly Service Charge	monthly	\$ 14.5600	1	\$ 14.56	\$ 14.5600	1	\$ 14.56	\$ -	0.00%
2 Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ 1.0000	1	\$ 1.00	\$ -	0.00%
3 Service Charge Rate Adder(s)			1	\$ -		1	\$ -	\$ -	
4 Service Charge Rate Rider(s)			1	\$ -		1	\$ -	\$ -	
5 Distribution Volumetric Rate	per kWh	\$ 0.0131	800	\$ 10.48	\$ 0.0206	800	\$ 16.48	\$ 6.00	57.25%
6 Low Voltage Rate Adder	per kWh	\$ 0.0001	800	\$ 0.08	\$ 0.0001	800	\$ 0.08	\$ -	0.00%
7 Volumetric Rate Adder(s)			800	\$ -		800	\$ -	\$ -	
8 Volumetric Rate Rider(s)			800	\$ -		800	\$ -	\$ -	
9 Smart Meter Disposition Rider			800	\$ -		800	\$ -	\$ -	
10 LRAM & SSM Rate Rider	per kWh	\$ -	800	\$ -	\$ 0.0002	800	\$ 0.16	\$ 0.16	
11 Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.0024	800	-\$ 1.92	-\$ 0.0023	800	-\$ 1.84	\$ 0.08	-4.17%
12 LPP Rate Rider	monthly			\$ -	\$ 0.1700	1	\$ 0.17	\$ 0.17	
13				\$ -			\$ -	\$ -	
14				\$ -			\$ -	\$ -	
15				\$ -			\$ -	\$ -	
16 <b>Sub-Total A - Distribution</b>				<b>\$ 24.20</b>			<b>\$ 30.61</b>	<b>\$ 6.41</b>	<b>26.49%</b>
17 RTSR - Network	per kWh	\$ 0.0058	840.4	\$ 4.87	\$ 0.0066	832.32	\$ 5.49	\$ 0.62	12.70%
18 RTSR - Line and Transformation Connection	per kWh	\$ 0.0020	840.4	\$ 1.68	\$ 0.0021	832.32	\$ 1.75	\$ 0.07	3.99%
19 <b>Sub-Total B - Delivery (including Sub-Total A)</b>				<b>\$ 30.76</b>			<b>\$ 37.85</b>	<b>\$ 7.10</b>	<b>23.07%</b>
20 Wholesale Market Service Charge (WMS)	per kWh	\$ 0.0052	840.4	\$ 4.37	\$ 0.0052	832.32	\$ 4.33	-\$ 0.04	-0.96%
21 Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	840.4	\$ 1.09	\$ 0.0013	832.32	\$ 1.08	-\$ 0.01	-0.96%
22 Special Purpose Charge	per kWh	\$ 0.0003725	840.4	\$ 0.31	\$ 0.0003725	832.32	\$ 0.31	-\$ 0.00	-0.96%
23 Standard Supply Service Charge	monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
24 Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	840.4	\$ 5.88	\$ 0.0070	832.32	\$ 5.83	-\$ 0.06	-0.96%
25 Energy	per kWh	\$ 0.0684	840.4	\$ 57.47	\$ 0.0684	832.32	\$ 56.91	-\$ 0.55	-0.96%
26				\$ -			\$ -	\$ -	
27				\$ -			\$ -	\$ -	
28 <b>Total Bill (before Taxes)</b>				<b>\$ 100.13</b>			<b>\$ 106.56</b>	<b>\$ 6.43</b>	<b>6.42%</b>
29 HST		13%		\$ 13.02	13%		\$ 13.85	\$ 0.84	6.42%
30 <b>Total Bill (including Sub-total B)</b>				<b>\$ 113.15</b>			<b>\$ 120.41</b>	<b>\$ 7.26</b>	<b>6.42%</b>
31 <b>Loss Factor (%)</b>	Note 1	<span style="border: 1px solid black; padding: 2px;">5.05%</span>		<span style="border: 1px solid black; padding: 2px;">4.04%</span>					

**Notes:**

**Note 1:** Enter existing and proposed total loss factor (Secondary Metered Customer < 5,000 kW) as a percentage.

Supplementary Questions for Technical Conference - Energy Probe



**Revenue Requirement Work Form**

Name of LDC: Waterloo North Hydro Inc.

File Number: EB-2010-0144

Rate Year: 2011

Version: 2.11

**General Service < 50 kW**

Consumption 2000 kWh

	Charge Unit	Current Board-Approved			Proposed			Impact	
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
1 Monthly Service Charge	monthly	\$ 30.6300	1	\$ 30.63	\$ 30.6300	1	\$ 30.63	\$ -	0.00%
2 Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ 1.0000	1	\$ 1.00	\$ -	0.00%
3 Service Charge Rate Adder(s)			1	\$ -		1	\$ -	\$ -	
4 Service Charge Rate Rider(s)			1	\$ -		1	\$ -	\$ -	
5 Distribution Volumetric Rate	per kWh	\$ 0.0104	2000	\$ 20.80	\$ 0.0151	2000	\$ 30.20	\$ 9.40	45.19%
6 Low Voltage Rate Adder	per kWh	\$ 0.0001	2000	\$ 0.20	\$ 0.0001	2000	\$ 0.20	\$ -	0.00%
7 Volumetric Rate Adder(s)			2000	\$ -		2000	\$ -	\$ -	
8 Volumetric Rate Rider(s)			2000	\$ -		2000	\$ -	\$ -	
9 Smart Meter Disposition Rider			2000	\$ -		2000	\$ -	\$ -	
10 LRAM & SSM Rider	per kWh	\$ -	2000	\$ -	\$ 0.0001	2000	\$ 0.20	\$ 0.20	
11 Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.0024	2000	-\$ 4.80	-\$ 0.0024	2000	-\$ 4.80	\$ -	0.00%
12 LPP Rate Rider	monthly			\$ -	\$ 0.4100	1	\$ 0.41	\$ 0.41	
13				\$ -			\$ -	\$ -	
14				\$ -			\$ -	\$ -	
15				\$ -			\$ -	\$ -	
16 <b>Sub-Total A - Distribution</b>				<b>\$ 47.83</b>			<b>\$ 57.84</b>	<b>\$ 10.01</b>	<b>20.93%</b>
17 RTSR - Network	per kWh	\$ 0.0053	2101	\$ 11.14	\$ 0.0060	2080.8	\$ 12.48	\$ 1.35	12.12%
18 RTSR - Line and Transformation Connection	per kWh	\$ 0.0018	2101	\$ 3.78	\$ 0.0019	2080.8	\$ 3.95	\$ 0.17	4.54%
19 <b>Sub-Total B - Delivery (including Sub-Total A)</b>				<b>\$ 62.75</b>			<b>\$ 74.28</b>	<b>\$ 11.53</b>	<b>18.38%</b>
20 Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	2101	\$ 10.93	\$ 0.0052	2080.8	\$ 10.82	-\$ 0.11	-0.96%
21 Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	2101	\$ 2.73	\$ 0.0013	2080.8	\$ 2.71	-\$ 0.03	-0.96%
22 Special Purpose Charge	per kWh	\$ 0.0003725	2101	\$ 0.78	\$ 0.0003725	2080.8	\$ 0.78	-\$ 0.01	-0.96%
23 Standard Supply Service Charge	monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
24 Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	2101	\$ 14.71	\$ 0.0070	2080.8	\$ 14.57	-\$ 0.14	-0.96%
25 Energy	per kWh	\$ 0.0714	2101	\$ 150.08	\$ 0.0714	2080.8	\$ 148.63	-\$ 1.44	-0.96%
26				\$ -			\$ -	\$ -	
27				\$ -			\$ -	\$ -	
28 <b>Total Bill (before Taxes)</b>				<b>\$ 242.22</b>			<b>\$ 252.03</b>	<b>\$ 9.81</b>	<b>4.05%</b>
29 HST		13%		\$ 31.49	13%		\$ 32.76	\$ 1.28	4.05%
30 <b>Total Bill (including Sub-total B)</b>				<b>\$ 273.71</b>			<b>\$ 284.79</b>	<b>\$ 11.08</b>	<b>4.05%</b>

31 **Loss Factor**      **Note 1**      5.05%      4.04%

**Notes:**

**Note 1:** See Note 1 from Sheet 1A. Bill Impacts - Residential

Energy Price October 15, 2010 Navigant Price - adjusted in both columns

**Supplementary Questions for Technical Conference - Energy Probe**

- b) Please provide a tracking sheet that shows the impact of each change proposed by WNH.***

Please see the table below.

Supplementary Questions for Technical Conference - Energy Probe

Table TCQ # 27 (b) – Summary of Proposed Changes

Summary of Proposed Changes												
Reference	Item	Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance	Amortization	PILs	OM&A	Service Revenue Requirement	Base Revenue Requirement	Gross Revenue Deficiency
Reference	Item	Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance	Amortization	PILs	OM&A	Service Revenue Requirement	Base Revenue Requirement	Gross Revenue Deficiency
	<b>Original Submission August 2010</b>	<b>\$10,824,124</b>	<b>7.08%</b>	<b>\$152,808,317</b>	<b>\$125,598,185</b>	<b>\$18,839,728</b>	<b>\$7,816,331</b>	<b>\$1,212,310</b>	<b>\$10,183,838</b>	<b>\$30,036,603</b>	<b>\$28,980,640</b>	<b>\$5,012,440</b>
OEB IR# 24 (a) & (b)	Adjust Infrastructure Ontario Debt to 1 Day Change	\$11,168,599 \$344,475	7.31% 0.23%	\$152,808,317 \$0	\$125,598,185 \$0	\$18,839,728 \$0	\$7,816,331 \$0	\$1,212,310 \$0	\$10,183,838 \$0	\$30,381,077 \$344,475	\$29,325,115 \$344,475	\$5,356,914 \$344,475
	PILs Correction - Input Error - Bldg amount in Class 1b Change	\$11,168,599 \$0	7.31% \$0	\$152,808,317 \$0	\$125,598,185 \$0	\$18,839,728 \$0	\$7,816,331 \$0	\$1,213,484 \$1,175	\$10,183,838 \$0	\$30,382,252 \$1,175	\$29,326,289 \$1,175	\$5,358,089 \$1,175
EP IR# 13 (e)	AFUDC Rate on Capitalized Interest Change	\$11,196,054 \$27,455	7.31% \$0	\$153,183,959 \$375,642	\$125,598,185 \$0	\$18,839,728 \$0	\$7,823,920 \$7,589	\$1,213,336 -\$148	\$10,183,838 \$0	\$30,417,147 \$34,896	\$29,361,185 \$34,896	\$5,392,984 \$34,896
EP TCQ # 9 & EP IR # 19 (a)	Adjust Purchase kWh for CDM Adjmts Change	\$11,196,054 \$0	7.31% \$0	\$153,183,959 \$0	\$125,598,185 \$0	\$18,839,728 \$0	\$7,823,920 \$0	\$1,213,336 \$0	\$10,183,838 \$0	\$30,417,147 \$0	\$29,361,185 \$0	\$5,279,238 -\$113,746
EP TCQ # 9 & VECC TCQ # 1 (b) & (c)	Adjust Purchase kWh for CDM Adjmts @ Application Power Rates Change	\$11,204,832 \$8,778	7.31% \$0	\$153,304,058 \$120,099	\$126,398,846 \$800,661	\$18,959,827 \$120,099	\$7,823,920 \$0	\$1,215,199 \$1,863	\$10,183,838 \$0	\$30,427,788 \$10,641	\$29,371,826 \$10,641	\$5,289,879 \$10,641
EP IR # 11 (b) & VECC TCQ # 1 (a)	Adjust Oct 15/10 Navigant Numbers, Power, GA & \$68.38 RPP Rates Change	\$11,202,097 -\$2,735	7.31% \$0	\$153,266,641 -\$37,417	\$126,149,397 -\$249,449	\$18,922,410 -\$37,417	\$7,823,920 \$0	\$1,214,619 -\$580	\$10,183,838 \$0	\$30,424,473 -\$3,315	\$29,368,510 -\$3,315	\$5,286,564 -\$3,315
VECC TCQ # 1 (b) & (c)	Adjust NW & CN kW for Purchase & CDM Adjmts Change	\$11,212,740 \$10,642	7.31% \$0	\$153,412,249 \$145,608	\$127,120,117 \$970,720	\$19,068,018 \$145,608	\$7,823,920 \$0	\$1,216,877 \$2,259	\$10,183,838 \$0	\$30,437,374 \$12,901	\$29,381,412 \$12,901	\$5,299,465 \$12,901
Decision EB-2010-0002	Adjust NW & CN kW for IESO & HONI January 1, 2011 Price Increases Change	\$11,221,588 \$8,848	7.31% \$0	\$153,533,306 \$121,057	\$127,927,161 \$807,044	\$19,189,074 \$121,057	\$7,823,920 \$0	\$1,218,755 \$1,878	\$10,183,838 \$0	\$30,448,100 \$10,726	\$29,392,137 \$10,726	\$5,310,191 \$10,726
OEB IR # 21	OMERS increase for 2012 & 2013 Change	\$11,222,972 \$1,384	7.31% \$0	\$153,552,243 \$18,938	\$128,053,411 \$126,250	\$19,208,012 \$18,938	\$7,823,920 \$0	\$1,219,049 \$294	\$10,310,088 \$126,250	\$30,576,028 \$127,928	\$29,520,065 \$127,928	\$5,438,118 \$127,928
EP IR 23 (c) / 29 (a) & (b) EP TCQ 14 (a)	Removal of Street Light Return & PILs Change	\$11,222,972 \$0	7.31% \$0	\$153,552,243 \$0	\$128,053,411 \$0	\$19,208,012 \$0	\$7,823,920 \$0	\$1,219,049 \$0	\$10,310,088 \$0	\$30,576,028 \$0	\$29,586,071 \$66,006	\$5,504,124 \$66,006
EP IR 40 & EP TCQ 21 (a)	PILs - Computer Hardware to Correct CCA Account Change	\$11,222,972 \$0	7.31% \$0	\$153,552,243 \$0	\$128,053,411 \$0	\$19,208,012 \$0	\$7,823,920 \$0	\$1,193,531 -\$25,518	\$10,310,088 \$0	\$30,550,510 -\$25,518	\$29,560,553 -\$25,518	\$5,478,606 -\$25,518
EP IR 41 / EP TCQ 21(b)	PILs - Land Rights CCA Change	\$11,222,972 \$0	7.31% \$0	\$153,552,243 \$0	\$128,053,411 \$0	\$19,208,012 \$0	\$7,823,920 \$0	\$1,192,976 -\$555	\$10,310,088 \$0	\$30,549,955 -\$555	\$29,559,998 -\$555	\$5,478,051 -\$555



Supplementary Questions for Technical Conference - Energy Probe

Summary of Proposed Changes

Reference	Item	Regulated Return on Capital	Regulated Rate of Return	Rate Base	Working Capital	Working Capital Allowance	Amortization	PILs	OM&A	Service Revenue Requirement	Base Revenue Requirement	Gross Revenue Deficiency
EP TCQ 17	PILs - Adjust Apprentice & Co-op Tax Credits	\$11,222,972	7.31%	\$153,552,243	\$128,053,411	\$19,208,012	\$7,823,920	\$1,117,432	\$10,310,088	\$30,474,411	\$29,484,454	\$5,402,507
EP TCQ 20 (b)	Change	\$0	\$0	\$0	\$0	\$0	\$0	-\$75,544	\$0	-\$75,544	-\$75,544	-\$75,544
EP IR 38 (b)	PILs - Reduction of Ontario Surtax Clawback	\$11,222,972	7.31%	\$153,552,243	\$128,053,411	\$19,208,012	\$7,823,920	\$1,066,909	\$10,310,088	\$30,423,888	\$29,433,931	\$5,351,984
	Change	\$0	\$0	\$0	\$0	\$0	\$0	-\$50,523	\$0	-\$50,523	-\$50,523	-\$50,523
EP TCQ # 9	Adjust Purchase kWh for WMS	\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011
	Change	\$847	\$0	\$11,592	\$77,282	\$11,592	\$0	\$180	\$0	\$1,027	\$1,027	\$1,027
OEB IR 29 (e)	Cost Allocation - Adjustment of Street Light Connections	\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011
	Change	\$847	\$0	\$11,592	\$77,282	\$11,592	\$0	\$180	\$0	\$1,027	\$1,027	\$1,027
BS IR 8 (b)	Adjustment of RTSR for Updated Quantity & Pricing Changes	\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011
	Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VECC IR 29	Adjustment of LRAM/SSM	\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011
	Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EB-2010-0295 Decision	Late Payment Penalty Rate Rider	\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011
	Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Proposed at March 1, 2011		\$11,223,819	7.31%	\$153,563,835	\$128,130,693	\$19,219,604	\$7,823,920	\$1,067,089	\$10,310,088	\$30,424,915	\$29,434,958	\$5,353,011