

Ontario Energy Board

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

AND IN THE MATTER OF an application by Toronto Hydro-Electric System Limited (“**Toronto Hydro**”) for an order approving just and reasonable rates and other charges for electricity distribution to be effective May 1, 2015 and for each following year effective January 1 through to December 31, 2019;

AND IN THE MATTER OF Decision and Procedural Order No. 7 Issued by the Ontario Energy Board on February 23, 2015 establishing a procedure for the review of Toronto Hydro’s proposed increase to its wireline pole attachment rate.

Interrogatories of Rogers Communications Partnership; Cogeco Cable Inc. on behalf of itself and its affiliates, including Cogeco Cable Canada LP and Cogeco Data Services Inc.; Allstream Inc.; and TELUS Communications Company and its affiliates (the “Carriers”)

March 5, 2015

NUMBER OF POLES, ATTACHERS AND POLE CHARACTERISTICS

Carriers-01

Ref: Exhibit 1A, Tab 2, Schedule 1, page 5

Preamble: Toronto Hydro states that its asset base includes approximately 175,000 poles.

- (a) Complete the table below to provide further information on the number of poles currently in use or available for use by Toronto Hydro and communications attachers. The number of poles should include those that have been fully depreciated, derecognized, retired or otherwise not recorded in the company's accounts for financial purposes where the poles continue to be in use or available for use.

	Number of Poles	Number of Poles available for communications wireline attachers	Number of Poles available for other attachers (eg. wireless)
Transmission poles			
Distribution poles			
Street lighting poles			
Other (specify)			
TOTAL			

For purposes of completing the above table, a pole available for communications wireline attachers is one on which there is communications space for wireline attachments.

- (b) With respect to the number of poles provided in the table in response to (a), provide the percentage of poles currently in use or available for use for communications attachments that are included in the company's accounts for financial purposes.
- (c) With respect to the number of poles provided in the table in response to (a), provide the percentage of poles in each column that are:
- i) Wood
 - ii) Concrete
 - iii) Steel
 - iv) Other (specify)
- (d) With respect to the number of poles provided in the table in response to (a), provide the percentage of poles that are more than 45 years old.

Carriers-02

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, pages 6 to 8

- (a) Using the table below, indicate whether there are attachments on poles owned by Toronto Hydro in one of the four spaces (excluding buried) on a typical pole that is used or available for use by wireline communications attachments: power space, separation space, communications, and clearance. Where there are attachments owned by Toronto Hydro or one of its affiliates, enter Toronto Hydro, as indicated in the sample entry provided. Where there are attachments owned by a third party, enter 3rd party, as indicated in the sample entry in the column labeled Communications.

	Power space	Separation Space	Communication	Clearance
Power-specific	<i>Toronto Hydro</i>			
Wireline communications attachment			<i>3rd party</i>	
Wireless communications attachment				
Lighting (street or other)				
Decorative				
Other (add rows for each specific type of attachment)				

- (b) For each type of attachment included in the table in response to (a), indicate whether the type of attachments was included in the calculation of the 2.61 total number of users of the pole employed in the allocation factor. Provide the supporting rationale for excluding a type of attachment.

Carriers-03

- (a) Provide a list of the companies with one or more wireline attachment in the communications space of poles owned by Toronto Hydro (e.g., communications wireline attachers).
- (b) Provide a list of the companies with one or more non-wireline communications attachments (e.g., wireless attachers) located anywhere on poles owned by Toronto Hydro that are used or available for use by wireline communications attachments.
- (c) Complete the table below to provide the number of poles currently in use or available for use for each of the years as of calendar year-end, using actuals for 2010 through 2014 and estimates for 2015. Exclude poles used for street lighting purposes or any other

poles on which wireline attachments cannot be accommodated, as per Toronto Hydro's letter of February 27, 2015.

# of poles with:	2010	2011	2012	2013	2014	2015 (est.)
0 communications attachers						
1 communications attacher						
2 communications attachers						
3 communications attachers						
4 communications attachers						
5 communications attachers						
6 communications attachers						
7 communications attachers						
8 or more communications attachers						
TOTAL number of poles (sum of the above rows)						

For purposes of completing the above table, a communications attacher refers to a company with one or more attachments in the communications space of poles owned by Toronto Hydro.

- (d) Complete the same table for wireless communications attachments located anywhere on Toronto Hydro poles that are used or available for use by wireline communications attachments (so excluding, for example, street lighting poles).

Carriers-04

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, page 8

Preamble: Toronto Hydro stated there are 1.61 communications attachers per pole, plus Toronto Hydro, for a total of 2.61 users per pole.

- (a) Provide all of the source data used to derive the value 1.61 and provide the calculation demonstrating the result. List all sources used to determine the number of attachments and attachers on each pole, and the date that the data was retrieved from those sources. Also state whether the source of the data is based on a census of all poles or

- based on a sample of poles. If a sample was used, provide details regarding the nature and scope of the sampling undertaken.
- (b) Confirm that the value of 1.61 is based on a count of poles excluding poles that cannot accommodate wireline attachments, e.g., street lighting poles, and provide the calculation demonstrating the result. List all sources used to determine the number of attachments and attachers on each pole exclusive of street lighting poles, and the date that the data was retrieved from those sources. Also state whether the source of the data is based on a census of all poles or based on a sample of poles. If a sample was used, provide details regarding the nature and scope of the sampling undertaken.
 - (c) If the value of 1.61 is based on a count of poles that includes street lighting poles or other poles that cannot accommodate wireline attachments, provide the average number of users per pole based on data that excludes such poles, the calculation, the sources used and the date that the data was retrieved from those sources. Also state whether the source of the data is based on a census of all poles or based on a sample of poles. If a sample was used, provide details regarding the nature and scope of the sampling undertaken.
 - (d) Does the value of 1.61 include wireless attachments and any other attachments, as identified in the table in response to Carriers-02? If not, provide the average number of users per pole based on data that includes wireless and any other attachments, the calculation, the sources used and the date that the data was retrieved from those sources. Also state whether the source of the data is based on a census of all poles or based on a sample of poles. If a sample was used, provide details regarding the nature and scope of the sampling undertaken.
 - (e) Provide a detailed explanation why the 1.61 communications attachers per pole remained unchanged following the revisions in the pole attachment fee calculation filed on February 27, 2015, which excluded street lighting poles.
 - (f) Provide a detailed description of the Pole Inspection Program that is stated as the source of data on the total number of poles with one or more communications attachers. Include in the description a list of all data elements captured in the Pole Inspection Program (e.g., location, class and size of the pole, year install, type and ownership of attachments).
 - (g) Using the data provided in the table in response to Carriers-03, calculate the average number of communications attachers per pole for each year shown, and provide the underlying calculations including source data. If the value for 2014 is different from 1.61, provide an explanation for the variance.

- (h) Using the data provided in the table in response to Carriers-03, calculate the average number of communications attachers per pole where the total number of poles used in the denominator includes only poles with one or more communications attachers.

Carriers-05

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, page 7

- (a) Provide a list of the different pole lengths, measured in feet, that are currently in use, or available for use, by Toronto Hydro as of December 31, 2014.
- (b) Provide a list of pole lengths, measured in feet, that are currently in use, or available for use, by communications attachers as of December 31, 2014. Confirm that a pole that is available for use by communications attachers has a designated communications space.
- (c) Complete the table below to provide the number of poles currently in use or available for use by Toronto Hydro and wireline communications attachers as of December 31, 2014.

Pole lengths	30 feet or less	35 feet	40 feet	45 feet	50 feet	55 feet or more
Poles with no communications attachers						
Poles with one or more communications attacher						
TOTAL number of poles						

EMBEDDED AND NET EMBEDDED COSTS AND DEPRECIATION

Carriers-06

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, page 4

- (a) Complete the table below for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars.

	Account	2010	2011	2012	2013	2014	2015 (est.)
Total embedded costs*	1830						
Total embedded costs used as input for pole attachment fee (poles only)**	1830						
	<i>(other if applicable)</i>						
	<i>(other if applicable)</i>						
Accumulated depreciation	1830						
Accumulated depreciation used as input for pole attachment fee (poles only)**	1830						
	<i>(other if applicable)</i>						
	<i>(other if applicable)</i>						
Net embedded value	1830						
Net embedded value used as input for pole attachment fee (poles only)**	1830						
	<i>(other if applicable)</i>						

* For purposes of completing the above table, include rows for each aggregate account from which amounts are taken as inputs for the pole attachment fee. For example, in addition to Poles, Towers & Fixtures (Account 1830), include other accounts in the 1800 series of accounts, as applicable.

** For purposes of completing the above table, the amounts for “poles only – input for pole attachment fee” corresponds to the elements used to calculate the pole attachment fee.

- (b) Provide a detailed description of the methodology and cost inputs used to determine the portion of the embedded, depreciation and net embedded values that are attributable to poles for purposes of calculating the pole attachment fee, including a detailed

description of the manner in which power-specific asset costs have been excluded. Include in the response the supporting evidence, assumptions and calculations employed.

- (c) Provide a detailed explanation of how the costs associated with street lighting poles were excluded, including the relevant accounts and all assumptions, methodology and supporting documentation relied upon.
- (d) Further to the information provided in the table in response to (a), provide a list of the assets included in the aggregated accounts (e.g., Account 1830) and all sub-accounts (e.g., Account 1830-5). For example, poles, guys, anchors, crossarms, foundations.
- (e) For each item listed in the response to (d), identify whether it is included as a relevant cost item for purposes of calculating the pole attachment fee.

Carriers-07

Ref: Exhibit 2A, Tab 1, Schedule 2, OEB Appendix 2-BA, Fixed Asset Continuity Schedule

- (a) Provide the percentage change year-over-year in the cost and accumulated depreciation values for each aggregate account (e.g., Account 1830, Poles, Towers & Fixtures) identified in the table in response to Carriers-06, for each of the years 2011 to 2015.
- (b) Further to the response to (a), provide a description of the reasons for each percentage change in excess of 5%.
- (c) Provide the information requested in parts (a) and (b) with respect to the cost components of each aggregate account that Toronto Hydro included in calculating the pole attachment fee.
- (d) Provide a detailed explanation of the impact of the column labeled "ICM Transfer" on pages 6 and 7 of the referenced document with respect to the responses to parts (a) through (c).
- (e) Provide a detailed explanation of the impact, if any, resulting from the adoption of MIFRS with respect to the responses to parts (a) through (c).

Carriers-08

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, page 1, Corrected: 2015 Feb 27

Toronto Hydro-Electric System Limited EB-2013-0234, Tab J, Schedule 2-16, updated 2014 April 9, page 2

Preamble: The referenced documents provide the inputs used to calculate the pole attachment fee. These are reproduced in the table below. The additional column presents the inputs included in a similar table filed by Toronto Hydro in the proceeding EB-2013-0234.

Item	Type of cost	Cost - 2015	Cost - 2013	Explanation
DIRECT COST				
A	Administration Costs	\$18.77	\$15.32	Estimate for 2015, 2013
B	Loss in Productivity	\$5.72	\$5.66	Estimate of \$9.19 in 2015 and \$9.10 in 2013, divided between 1.61 pole attachers
C	Total Direct Costs	\$24.49	\$20.98	A+B
INDIRECT COST				
D	Net Embedded Cost per pole	\$1,929.34	\$1,533.68	2015 MIFRS Forecast Data, 2013 Data
E	Depreciation Expense	\$58.71	\$48.88	2015 MIFRS Forecast Data, 2013 Data
F	Pole Maintenance Expense	\$6.09	\$5.26	2015 MIFRS Forecast Data, 2013 Data
G	Capital Carrying Cost	\$133.90	\$106.44	Pre-tax weighed average cost of capital 6.94% applied to net embedded cost per pole (D)
H	Total Indirect Cost per Pole	\$198.70	\$160.58	E+F+G
I	Allocation Factor	30.4%	30.4%	
J	Indirect Costs Allocated	\$60.49	\$48.89	H x I
K	Estimated Annual Cost	\$84.98	\$69.87	Total Direct + Indirect Costs (C+J)

- (a) Provide the embedded and net embedded costs in total, and per pole, associated with street lighting poles that were removed from the calculation of the pole attachment fee, as per Toronto Hydro's letter of February 27, 2015. Also state whether the amounts for 2013 are based on the same adjustments to exclude costs associated with street lighting poles.
- (b) Provide the detailed supporting evidence, including all calculations, assumptions and methodology used to derive the embedded and net embedded costs associated with street lighting poles that were removed from the calculation of the pole attachment fee.
- (c) Provide the number of poles used to derive each item shown on a cost per pole basis for 2015 and 2013, as noted in the table above. Also provide the number of street lighting poles that were removed from the calculation of the pole attachment fee, as per Toronto Hydro's letter of February 27, 2015.

- (d) Provide a detailed explanation for the increase in administration cost estimated for 2015 compared to the estimate for 2013.
- (e) Provide a detailed explanation for the increase in loss of productivity cost estimated for 2015 compared to the estimate for 2013.
- (f) Provide a detailed explanation for the increase in the pole maintenance expense estimated for 2015 compared to the estimate for 2013.
- (g) Provide a detailed explanation for the increase in net embedded costs in total (e.g., before derivation of the per pole amounts) estimated for 2015 compared to the estimate for 2013. Provide the calculation for net embedded costs in each year shown.
- (h) Why has Toronto Hydro used an estimate for net embedded costs in 2015 instead of actuals for 2014?
- (i) Provide a detailed explanation for the increase in depreciation expense estimated for 2015 compared to the estimate for 2013. Include in the response information on any changes in the expected asset lives of poles, and average life of poles between 2015 and 2013.

Carriers-09

Ref: Volume 6 of the Oral hearing transcript, February 25, 2015, page 86.

- (a) The study by ValuQuest, referenced at Volume 6 of the hearing transcript, February 25, 2015, page 86 (the "ValuQuest Study"), determined an average value of a new pole of \$2,340. Did the valuation include poles that have the same characteristics as poles that would be available for communications wireline attachments?
- (b) Provide a detailed description of all differences between the poles evaluated in the ValuQuest Study and poles that would be available for communications wireline attachments, including typical pole length, expected asset life, construction (e.g., wood, concrete).

Carriers-10

Ref: Exhibit 2B, Section E6.4, page 6

Preamble: Toronto Hydro stated that wood poles it uses have an expected life of 45 years.

- (a) Are all of the poles included in the calculation of the pole attachment fee wood poles?

- (b) If the response to (a) is no, provide the other type(s) of poles included, and the expected life of these poles.
- (c) If the response to (a) is no, provide the percentage of poles that are wood.
- (d) Complete the table below to indicate the average age of wood poles in use or available for use by wireline communications attachers. Exclude poles used for street lighting.

	2010	2011	2012	2013	2014	2015
Average Age						

- (e) If wood poles have an expected life of 45 years, explain why the depreciation expense per pole would differ substantially from the value obtained by multiplying $[1/45]$ by the average embedded cost per pole.

Carriers-11

Ref: Exhibit 2B, Section E6.4, pages 6 and 31

Preamble: Toronto Hydro states that approximately 31% of existing poles are at or near end-of-life and will require proactive replacement during the 2015-2019 period, and that 42,043 wood poles are past their useful life.

- (a) Provide the number of existing poles that are currently at or near end-of-life.
- (b) Provide the number of poles that have been, or will be replaced, in 2015 pursuant to: (i) the proactive replacement program; (ii) another capital program. Include in the response the nature of the capital program(s) for the pole replacements.
- (c) Provide the percentage of poles provided in response to (a) that are currently in use or available for use by wireline communications attachers.
- (d) Complete the table below with respect to poles replaced as part of a proactive replacement program.

	2010	2011	2012	2013	2014
Number of poles replaced					
Percentage of total poles in use that were replaced					
Percentage of poles replaced that were aged 45 years or more					

- (e) Table 2 at page 31 of the referenced document states that 11,214 poles will be replaced during the 2015 through 2019 period. Are these poles currently 45 years old or older, or will reach that age during the next four years? Complete the following table.

	2015	2016	2017	2018	2019
Number of poles to be replaced					
Number of poles to be replaced aged 45 years or more					

- (f) Is it Toronto Hydro's practice to automatically replace all poles that are older than 45 years?
- (g) Confirm that the source of the information on the health of wood poles provided in Figure 25 on page 31 of *Exhibit 2B, Section E6.4* is the same as for Figure 16-2 "Health Index Distribution Comparison" provided in *Exhibit 2B, Tab D4, Appendix A*, at page 58 of the report. Also confirm that this information is based on a sample of poles and not the entire pole population.

MAINTENANCE EXPENSE, ADMINISTRATION COST, LOSS IN PRODUCTIVITY AND CAPITAL CARRYING COST

Carriers-12

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, pages 1 and 4.

Preamble: Toronto Hydro described maintenance expenses included in the calculation of the pole attachment fee as capturing the “cost of various activities undertaken by Toronto Hydro for the purposes of maintaining the structural integrity of its distribution poles.” Two programs were noted: Wood Pole Inspection & Treatment, and Pole Inspection Program (Hydro Portion).

- (a) Complete the table below with respect to the costs associated with the maintenance expenses for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars, and also on a per pole basis.

	2010	2011	2012	2013	2014	2015 (estimate)
Wood Pole Inspection & Treatment – total costs						
Wood Pole Inspection & Treatment – number of poles inspected						
Pole Inspection Program (Hydro Portion) – total costs						
Pole Inspection Program (Hydro Portion) – number of poles inspected						
TOTAL maintenance expenses (aggregated for all poles)						
TOTAL maintenance expenses – per pole						\$6.09
Number of Poles used to derive maintenance expenses per pole (total poles in use)						

- (b) Provide the sources and supporting evidence for the values used to populate the table provided in response to (a).
- (c) Provide the methodology, assumptions and calculations used to exclude from the total costs of the two programs the costs of inspecting poles that cannot accommodate wireline communications attachments.

- (d) Provide a description of the *Wood Pole Inspection & Treatment Program*, including the tasks completed, the employee categories involved, the hourly wages, vehicle costs and time required to complete each task.
- (e) Provide a description of the *Pole Inspection Program*, including the tasks completed, the employee categories involved, the hourly wages, vehicle costs and time required to complete each task. Include in the response the different tasks involved for each of the “hydro portion” and the “communications portion”.
- (f) Toronto Hydro estimated pole maintenance expense per pole of \$5.26 in evidence it filed in the case EB-2013-0234. Describe and quantify the changes in the Wood Pole Inspection and Treatment program that contributed to increases in the per pole expense since 2013. For example, changes in input costs such as labour rates, frequency of inspections, vehicle costs.
- (g) Further to the response to (f), describe the changes in the *Pole Inspection Program* (Hydro Portion) that contributed to increases in the per pole expense since 2013. For example, changes in input costs such as labour rates, frequency of inspections, vehicle costs.

Carriers-13

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, pages 1 through 3.

Preamble: Toronto Hydro described administration costs as, “the estimated operation costs of managing and administering communications attachments and licensed occupancy on Toronto Hydro’s distribution plant.” Several inputs were listed: payroll costs, vehicle costs, inventory & direct purchases, invoicing/billing costs, support costs, and usage charges.

- (a) Complete the table below with respect to the administration costs associated with wireline communications attachments for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars.

	2010	2011	2012	2013	2014	2015 (estimate)
Payroll Costs						
Vehicle Costs						
Inventory & Direct Purchases						
Invoicing/Billing Costs						
Support Costs						
Usage Charges						
TOTAL administration costs (aggregated for all poles)						
TOTAL administration costs – per pole						\$18.77
Number of Poles used to derive administration costs per pole						

- (b) With respect to Payroll Costs, list all staff positions that are involved and for each staff position, provide the hourly wage and the number of hours spent on an annual basis that are dedicated to administering wireline communications attachments. Describe the functions and activities undertaken by these staff in support of administering wireline communications attachments.
- (c) With respect to Vehicle Costs, provide all the underlying supporting inputs, including the number of hours of vehicle support dedicated to to administering wireline communications attachments per day and annually, and the average cost per hour.
- (d) With respect to Vehicle Costs, provide a description of the purpose for using vehicles, for example, to inspect wireline communications attachments. Include in the response the actual or estimated proportion of time vehicles are used for purposes of processing requests to attach wireline facilities to poles.
- (e) With respect to Inventory & Direct Purchases, describe the materials involved, provide the unit cost of each item and the number of units used for each on an annual basis.
- (f) With respect to Invoicing/Billing Costs, provide the labour costs as a distinct cost element and explain why these costs are not included in the line item “payroll costs”. Also provide the hourly wage and the number of hours spent on an annual basis that are dedicated to administering invoices for wireline communications attachments.
- (g) With respect to Invoicing/Billing Costs, provide the mailing costs as a distinct cost element, as well as the cost per item mailed and the number of mailed items per year.

- (h) With respect to Support Costs, provide the underlying supporting inputs, including all assumptions and supporting evidence (e.g., mark-up or other adjustment factor for overhead).
- (i) With respect to Support Costs, and taking into account the various input elements of this category of costs listed in *Exhibit 8A, Tab 2, Schedule 1, Appendix B*, page 3, lines 20-26, explain how these elements are tracked separately from the other administration costs (e.g., payroll, vehicle costs, invoicing/billing, usage). Provide sufficient information to demonstrate that none of the elements in “Support Costs” are included in the other categories. For example, whether employee expenses may be included as part of “Payroll Costs”; postage and courier as part of “Invoicing/Billing”; transportation as part of “Vehicle Costs”; photocopy and stationary supplies as part of “Inventory & Direct Purchases”; and telecommunications, cellular phone and radio charges as part of “Usage Charges”.
- (j) With respect to Usage Charges, provide the underlying supporting inputs, including all assumptions and supporting evidence (e.g., mark-up or other adjustment factor for usage charges).

Carriers-14

Re: Exhibit 8A, Tab 2, Schedule 1, Appendix B, pages 1 and 3.

Preamble: Toronto Hydro described costs associated with loss in productivity as, “the additional expenditures that Toronto Hydro incurs in carrying out its regular activities, as a result of communications attachers’ presence on its poles.” Two inputs to the costs of loss in productivity were described: Pole Replacements and Pole Inspection Program (communications portion).

- (a) Complete the table below with respect to the costs for loss in productivity for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars.

	2010	2011	2012	2013	2014	2015 (estimate)
Pole replacement – total costs						
Pole Inspection Program (communications portion) – total costs						
Other costs included (if any)						
TOTAL loss in productivity – all costs						
TOTAL loss in productivity – per pole						\$5.72
Number of Poles used to derive loss in productivity per pole						

- (b) Complete the table below with respect to the pole replacement costs for loss in productivity for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015.

	2010	2011	2012	2013	2014	2015 (estimate)
Number of poles replaced – all distribution poles						
Number of poles replaced with communications wireline communications attachers						
Average cost per pole replaced – all distribution poles						
Average cost per pole replaced – poles with communications wireline communications attachers						

- (c) Are the costs for pole replacement and the number of poles replaced inclusive of poles replaced for which Toronto Hydro receives payment (e.g., customer requested replacements or relocations, make ready work to accommodate communications attachers)? If so, provide the amount of revenues received and the number of poles replaced for each of the years indicated in the table above.
- (d) Provide a detailed explanation of the “data inputs” captured in the Pole Inspection Program that were used to derive the percentage of the costs of the Pole Inspection Program attributed to communications attachments, and identify the data inputs that are

unique to communications attachments in total, and specifically wireline communications attachments and wireless communications attachments.

- (e) Provide the information in the table below with respect to the data inputs of the Pole Inspection Program for each of the years 2010 to 2015, using actuals for 2010 through 2014 and estimates for 2015, providing one table for all types of communications attachments, a second table with respect to on inputs related solely to wireline communications attachments, and a third table for inputs related solely to wireless communications attachments.

	2010	2011	2012	2013	2014	2015 (estimate)
Number of data inputs – hydro portion						
Number of data inputs – hydro portion per pole						
Number of data inputs – communications (total, wireline, wireless) attachments portion						
Number of data inputs – communications portion per pole with communications (total, wireline, wireless) attachment						
Total number of data inputs						

- (f) Further to the information requested in the table in (e), provide a detailed explanation of all inputs, assumptions, calculations used to derive the percentage of the costs of the Pole Inspection Program attributed to communications attachments and to wireline and wireless communications attachments respectively.
- (g) The process for replacing poles described at page 3 of *Exhibit 8A, Tab 2, Schedule 1, Appendix B*, stated that two site visits are required. Is the same crew employed for installing the new pole, and transferring the hydro attachments, and removing the old pole?
- (h) Provide a detailed description of the differences in crew, equipment, time and number of visits required to complete pole replacements that do not have communications attachments, as compared to poles that do have communications attachments.
- (i) With respect to pole replacements, provide the detailed cost elements for each crew visit, including the hourly wages, vehicle costs, and all other associated costs.

Carriers-15

Ref: Exhibit 3, Tab 2, Schedule 1, Table 2, line18.

Exhibit 8A, Tab 2, Schedule 1, Appendix B, pages 1 through 5.

Preamble: Toronto Hydro reported expenses for “Pole & Duct Rental” in aggregate at line 18 of Table 2 of Exhibit 3, Tab 2, Schedule 1. The following requests information to assist with correlating the aggregate amount with the expenses per pole indicated in the calculation of the pole attachment fee.

- (a) Complete the table below with respect to the expenses attributed to poles alone that were included in the amount shown for “Pole & Duct Rental”, for each of the years 2010 to 2015, using actuals for 2011 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars.

	2011	2012	2013	2014	2015 (estimate)
Pole & Duct Rental expenses	2,906.3	7,082.2	4,405.8	6,942.6	6,942.6
Pole Rental expenses					
Pole Rental expenses attributed to each of the following categories of expense					
(i) Maintenance expense					
(ii) Administration costs – payroll					
(iii) Administration costs – vehicle costs					
(iv) Administration costs – inventory & direct purchases					
(v) Administration costs – all other sub-categories					
(vi) Loss in productivity – pole replacements					
(vii) Loss in productivity – pole inspection program					

- (b) Further to the response to (a), provide a detailed explanation of all expenses listed under “Direct Cost” in the calculation of the pole attachment fee that are not included in the amount shown for Pole & Duct Rental expenses.
- (c) Further to the response to (a), provide a detailed explanation of all maintenance expenses listed under “Indirect Cost” in the calculation of the pole attachment fee that are not included in the amount shown for Pole & Duct Rental expenses.
- (d) Further to the response to (a), provide a description of the reasons for each percentage change year over year for each line item in the table in (a) that is in excess of 5%.

Carriers-16

Ref: Exhibit 8A, Tab 2, Schedule 1, Appendix B, page 5, lines 19-20.

Exhibit 9, Tab 2, Schedule 4, page 1 of 1.

Preamble: Toronto Hydro states that the capital carrying cost was calculated by applying the most recent OEB-approved (2011) weighted average cost of capital (WACC) rate of 6.94% to the net embedded cost per pole.

- (a) Does Toronto Hydro propose any changes to WACC of 6.94% that was approved in 2011 as part of its application in EB-2014-0116?
- (b) If changes to the proposed WACC have been proposed, provide the proposed value and explain why this was not used for calculating the pole attachment fee.
- (c) Explain why a WACC of 6.94% was used for calculating the pole attachment fee, instead of the 6.19% WACC shown in *Exhibit 9, Tab 2, Schedule 4*.

REVENUES

Carriers-17

Ref: Exhibit 3, Tab 2, Schedule 1, Table 2, line 8, Corrected: 2015 Feb 27.

Exhibit 3, Tab 2, Schedule 2, OEB Appendix 2-H, Corrected: 2015 Feb 27.

Preamble: Toronto Hydro reported revenues for "Pole & Duct Rental" in aggregated form at line 8 of Table 2 of Exhibit 3, Tab 2, Schedule 1, and reported revenues for each of Duct Rental and Pole Attachment Rental in OEB Appendix 2-H, filed in Exhibit 3, Tab 2, Schedule 2.

- (a) The sum of revenues reported in each of the line items labeled Duct Rental and Pole Attachment Rental in *OEB Appendix 2-H*, filed in *Exhibit 3, Tab 2, Schedule 2* is approximately \$15 million, which is less than the approximately \$18.8 million in revenues reported for "Pole & Duct Rental" at line 8 of Table 2 of *Exhibit 3, Tab 2, Schedule 1* for 2015. Similar differences are found for the years 2011 to 2014. Provide a detailed explanation for the differences in the amount of revenues between the two referenced documents for each of the years 2011 to 2015.
- (b) List all of the revenue sub-accounts included in the revenues reported for "Pole & Duct Rental" at line 8 of Table 2 of *Exhibit 3, Tab 2, Schedule 1*, and identify each account item that is included in the revenues reported that is not included in the revenues reported in *OEB Appendix 2-H*, filed in *Exhibit 3, Tab 2, Schedule 2* for Duct Rental and Pole Attachment Rental.
- (c) Provide the revenues from wireless communications attachments to poles for each of the years 2011 to 2015 and list the revenue sub-accounts associated with the reporting of these revenues.
- (d) Provide the revenues from all other third party (non-communications) attachments to poles for each of the years 2011 to 2015 and list the revenue sub-accounts associated with the reporting of these revenues.

Carriers-18

Ref: Exhibit 3, Tab 2, Schedule 1, page 5, lines 5 to 11, Corrected: 2015 Feb 27.

Exhibit 3, Tab 2, Schedule 2, OEB Appendix 2-H, Corrected: 2015 Feb 27.

Preamble: Toronto Hydro has proposed to increase its pole attachment rental fee, and expects revenue to increase from \$2.3 million to approximately \$6.0 million. The

following requests information regarding the revenues from Pole Attachment fees, as stated in Exhibit 3.

- (a) Confirm or correct all amounts shown in the table below, with respect to revenues for Pole Attachment Rental and pole attachment fee for each of the years 2011 to 2015.

	2011	2012	2013	2014	2015 (estimate)
(i) Pole Attachment Rental – revenues (\$ 000s)	1,987.6	2,256.4	2,133.4	2,304.6	8,273.8
(ii) Pole Attachment Fee per pole per year	\$22.35	\$22.35	\$22.35	\$22.35	\$84.98
(iii) Billable pole attachments = (i) / (ii)	88,931	100,944	95,454	103,114	95,309

- (b) Is the revenue from Pole Attachment Rentals for 2015 based on a pole attachment rate of \$84.98 in effect for 12 months? If not, provide the weighted average pole attachment fee per pole that will be in effect, assuming the proposed fee is approved.
- (c) Provide the underlying data inputs used to derive the estimated revenue from Pole Attachment Rentals for 2015; specifically, the number of attachers per pole, the number of poles with billable attachments and the billable pole attachments in total. Include in the response supporting evidence and assumptions employed.
- (d) Provide a detailed explanation for the variations in the calculated billable pole attachments in each of the years 2012 to 2015.
- (e) Provide a detailed explanation why Toronto Hydro stated that Pole Attachment revenue is expected to be \$6 million in 2015, in Exhibit 3, Tab 2, Schedule 1, at page 5, line 10, whereas the revenues from Pole Attachment Rental are indicated to exceed \$8.2 million for 2015, in Exhibit 3, Tab 2, Schedule 2, OEB Appendix 2-H.

Carriers-19

Ref: Exhibit 3, Tab 2, Schedule 1, Table 2, Corrected: 2015 Feb 27.

Exhibit 3, Tab 2, Schedule 2, OEB Appendix 2-H, Corrected: 2015 Feb 27.

- (a) Based on the information provided in the responses to **Carriers-15 (a)** and **Carriers-18 (a)**, provide the Net Revenue associated with Pole Attachment Rental for each of the years 2011 to 2015, using actuals for 2011 through 2014 and estimates for 2015. Provide the dollar amounts in total to the nearest thousands of dollars.

PROCESS FOR ATTACHING TO POLES (APPLICATIONS, PERMITS)

Carriers-20

- (a) Provide a detailed description of the process, including all steps involved, for a communications attacher to receive approval to place a first attachment on a pole owned by Toronto Hydro. Also identify in the response which steps, if any, in the process must be completed for each subsequent attachment placed on a pole by the same communications attacher.
- (b) Further to the response to (a), provide copies of all forms, permit applications or similar documents that Toronto Hydro requires communications attachers to complete.
- (c) Provide the fee associated with the process for obtaining approval for attachments (e.g., permit fee), if separate from the pole attachment fee for rental of the space.
- (d) Further to the response to (c), provide the total annual revenues received from communications attachers for permits for each of the years 2010 through 2014, and estimated for 2015.
- (e) Confirm that a request from a communications attacher to place facilities on poles owned by Toronto Hydro is subject to the pole having space available to accommodate the attachment (i.e., spare capacity).
- (f) If no spare capacity is available for a communications attacher, confirm that there is a process by which Toronto Hydro will modify or replace the pole to accommodate the attachment, subject to the communications paying for all costs associated with the work (i.e., make ready).
- (g) Further to the response to (f), provide the total annual revenues received from communications attachers for make ready work for each of the years 2010 through 2014, and estimated for 2015.
- (h) Has Toronto Hydro ever refused to grant a request from a communications attacher to place facilities on poles it owns? If so, provide the reasons why requests for attachments were not approved.

Carriers-21

Ref: Exhibit 8A, Tab 2, Schedule 1, page 5, lines 14:18.

- (a) Does Toronto Hydro currently have in place with Bell Canada any agreements or arrangements with respect to the use of poles owned by the other party?

- (b) Does Toronto Hydro provide any services to Bell Canada for work done on poles owned by the latter, for example, maintenance related to vegetation, storm, emergency repairs?
- (c) If the response to (b) is yes, are the expenditures for this work included in the amount of maintenance expenses reported in Toronto Hydro's accounts?
- (d) If the response to (b) is yes, does Toronto Hydro receive revenues from Bell Canada that fully recovers the expenditures for this work?
- (e) Does Toronto Hydro have a reciprocal agreement with respect to pole attachments with any other unaffiliated corporation? If yes, provide the same information with respect to all such agreements as requested in parts (b) through (d) above.