EB-2017-0049

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

AND IN THE MATTER OF an Application by **Hydro One Networks Inc. ("HONI")**, pursuant to the *Ontario Energy Board Act* for an Order or Orders approving electricity distribution rates and charges commencing January 1, 2018;

NOTICE OF MOTION OF
ROGERS COMMUNICATIONS CANADA INC

Rogers Communications Canada Inc ("**Rogers**") will make a motion to the OEB on a date to be determined by the Board at the Board's office located at 2300 Yonge Street, Toronto, Ontario.

PROPOSED METHOD OF HEARING: The Carriers propose that this motion be heard orally.

THIS MOTION IS FOR:

1. An Order that the technical conference to be held March 1-2, 2018, pursuant to Procedural Order No. 3 dated January 10, 2018, be adjourned with respect to any matters arising from the answers of HONI dated February 12, 2018 (the "**HONI Answers**") to the interrogatories of Rogers dated January 24, 2018 (the "**Rogers Interrogatories**"), with those matters to be addressed on a date to be set by the OEB, following the release of OEB's decision in respect of the within motion and the receipt of answers from HONI with respect to any interrogatories ordered answered;

2. An Order that HONI serve and file full and complete responses to the following Rogers Interrogatories which HONI has refused to answer:

   (a) Rogers-09 1, 2, 3(a), 3(b), 3(c), 3(d), 3(e), 3(f), 3(g), 4(a), 4(b), 5, and 6; and

   (b) Rogers-10 1, 2(a), 2(b), 2(c), and 3.

3. An Order that HONI produce its agreement or agreements with Bell Canada ("**Bell**") in respect of joint use and pole attachments (the "**Bell Joint Use Agreement**").

GROUNDS FOR THIS MOTION:

(a) Order Compelling Answers to Interrogatories

4. The Rogers Interrogatories were made to HONI in order to seek information relevant to issues defined in this proceeding as they relate to the Pole Attachment Rate, specifically:

(a) Issue 49: "Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?"

(b) Issue 54: "Are the proposed specific service charges for miscellaneous service over the 2018-2022 period reasonable?"

5. Specifically, Rogers seeks information respecting the number of poles and attachers per pole, including the basis for Bell and other utility attachments, and costs associated with the poles and attachments, including any cost recovery or cost sharing arising out of HONI's agreements with Bell or others.

6. HONI has declined to respond to proper questions respecting the particulars of HONI's pole and cost sharing arrangement with Bell, set out in the Bell Joint Use Agreement, including Rogers-09(1), (2), (3)(a)-(g), 4(a)-(b), 5, and Rogers-10(1), (2)(a)-(c), and (3) (the "**Reciprocal Agreement Interrogatories**") on the basis that "the OEB in its EB-2015-0141 Decision found that 'HONI's reciprocal arrangement with Bell [the Bell Joint Use Agreement] has no impact on the pole attachment charge'."

7. As a matter of law, the decision of the Board in EB-2015-0141 on a question of relevance with respect to that hearing is not binding on the Board in this hearing. The Board is under a duty to evaluate the relevance of the evidence sought in the interrogatories afresh and without regard to the previous ruling.

8. Furthermore, Rogers now submits evidence by way of the expert report of Andrew Briggs, who explains why a reciprocal pole sharing agreement such as the Bell Joint Use Agreement is relevant to the determination of the costs and revenues associated with the HONI poles subject to that agreement. As such, the submission of this new evidence, which was not before the OEB in EB-2015-0141, requires a fresh consideration of the relevance and producibility of the Bell Joint Use Agreement.

9. In his report, Mr. Briggs asserts that, for the HONI poles subject to the Bell Joint Use Agreement, the indirect common poles costs (i.e., depreciation, capital carrying charges and maintenance) are effectively covered by HONI's reciprocal access to the 40% of poles owned and maintained by Bell. As these indirect common costs are already being covered under the Bell Joint Use Agreement, it is inappropriate to require non-Bell telecom attachers to also contribute to the recovery of these indirect common costs through the Pole Attachment Rate. To do so would allow HONI to over-recover its indirect common costs.

10. Mr. Briggs points to the reasoning of the *Canadian Radio-television and Telecommunications Commission* (the "**CRTC**") in a recent decision as an instructive precedent. The CRTC determined that joint use agreements between telephone companies and electrical utilities, including Bell's Joint Use Agreement with HONI, are relevant to establishing the pole attachment rates that incumbent local exchange carriers ("**ILECs**") such as Bell, may charge.

11. In CRTC Telecom Decision 2010-900, the CRTC noted that it:

> "… considers that joint-use agreements effectively reduce an ILEC's cost for joint-use poles. The Commission therefore considers that the approach proposed by Bell Canada et al. and TCC reflects the ILEC's true average cost per joint-use pole for all joint-use poles to which the ILEC has access." (emphasis added)[1]

12. Mr. Briggs suggests that a similar approach to the one implemented by the CRTC should be incorporated into HONI's Pole Attachment Rate to reflect its effective average cost per Joint Use Agreement pole. If HONI is responsible for installing and

[1] CRTC Telecom Decision, 1010-900, para. 33.

maintaining approximately 60% of the poles under the Bell Joint Use Agreement, with Bell responsible for installing and maintaining 40% of the poles, the factor ought to be calculated as follows:

Joint Use Agreement Factor =
100% x Proportion of non Joint Use Agreement poles in installed base
+ 60% x Proportion of Joint Use Agreement poles in installed base

13. Ultimately, Rogers' objective is to ensure that the record in this proceeding contains sufficient evidence for the OEB to answer the following questions regarding the number of attachers per pole, if indeed the issue of attachers per pole is determined to be in issue in the hearing:

(a) whether all of the poles that are part of a pool of joint use poles HONI shares with Bell (and other utilities) should be included in the total number of joint use poles for the purpose of calculating the average number of attachers per pole (regardless of whether Bell and the other utilities actually have an attachment on a pole);

(b) whether any or all of the poles for which Rogers pays the Pole Attachment Rate but do not use should be removed from the number of joint use poles; and

(c) whether any contribution, financial or otherwise, by Bell or other utilities to the joint-use poles shared by HONI and Bell and/or the other utilities should be deducted from the cost of those poles, thereby reducing the common costs of the poles that would be allocated among the remaining attachers.

14. The basis upon which Bell and HONI share costs with respect to joint use poles is therefore relevant to both costs and the true number of attachers that might be responsible to share those costs. These numbers are used to calculate the Pole Attachment Rate. If they are incomplete or inaccurate, there will be considerable doubt as to the whether a just and reasonable Pole Attachment Rate will be established.

15. HONI's failure to produce or disclose the Bell Joint Use Agreement or to explain the nature of the Bell Joint Use Agreement prevents the participants in this proceeding, and the OEB, from assessing its impact on amounts which are absolutely relevant to, and in fact determinative in, establishing a proper Pole Attachment Rate.

(b) Adjournment of Technical Conference

16. Rogers submits that the Technical Conference as it pertains to the Pole Attachment Rate should be adjourned for a short period of time to allow the Board to rule on the within motion to compel, and for any answers to be delivered. This would be a much more efficient approach to this issue, as most parties to this hearing and the Technical Conference will have no interest in the issues relating to the Pole Attachment Rate.

17. In the event that this request is denied, Rogers will be seeing to question extensively about the answers which have been provided and the questions which have been refused. A list of areas for questioning is attached to Rogers' letter dated February 26, 2018. Questioning in respect of the questions not fully or completely answered will take a significant amount of the time alotted. Interrogatories regarding the Pole Attachment Rate can be dealt with more efficiently after the within motion is determined.

18. Rogers submits that, as a result of HONI refusing to respond to, or providing insufficient or deficient responses to, the Rogers Interrogatories, the evidentiary record in this proceeding is insufficient for the OEB to set a Pole Attachment Rate which is "just and reasonable". Accordingly, Rogers seeks the relief set out in paragraphs 1 through 3.

MATERIALS TO BE RELIED UPON:

19. The Carriers will rely on the following materials on this motion:

(a) Rogers' letter to the OEB dated February 26, 2019 and the Technical Conference questions attached thereto (**Tab 1**);

(b) The expert report of Andrew Briggs and attachments (**Tab 2**);

(c) The Rogers Interrogatories (**Tab 3**);

(d) The HONI answers to the Rogers Interrogatories (**Tab 4**);

(e) CRTC Telecom Decision 2010-900, "Review of the large incumbent local exchange carriers' support structure service rates" (**Tab 5**);

(f) The *Ontario Energy Board Rules of Practice and Procedure*; and

(g) Such other materials may be advised and the Board may permit.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

February 27, 2018

CASSELS BROCK & BLACKWELL LLP
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40 King Street West
Toronto, ON M5H 3C2

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cselby@casselsbrock.com

Lawyers for Rogers Communications Inc.

TO: **Service List (EB-2017-0049)**

TAB 1

CASSELS BROCK
LAWYERS

February 26, 2018

By Email

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

Attention: Kirsten Walli, Board Secretary
Harold Thiessen, Case Manager
James Sidlofsky, Board Counsel

TIMOTHY PINOS
Certified as a Specialist in Civil Litigation

tpinos@casselsbrock.com
tel: 416.869.5784
fax: 416.350.6903

Dear Sir/Madam:

Re: Hydro One Distribution Rate Application (EB-2017-0049)

Effective immediately, this firm will be assuming the representation of the intervenor, Rogers Communications Canada Inc. ("**Rogers**"), in this proceeding. Please add myself (tpinos@casselsbrock.com) and Chris Selby (cselby@casselsbrock.com) to the service list.

I am also writing with respect to Procedural Order No. 3 and the Technical Conference scheduled for March 1, 2018.

The Hydro One Networks Inc. responses to the Rogers interrogatories in this matter refuse to provide any answers at all to a significant number of interrogatories. Accordingly, Rogers will be serving a motion very shortly seeking an order from the Board compelling answers to those interrogatories.

Rogers submits that the Technical Conference as it pertains to the pole attachment rate should be adjourned for a short period of time to allow the Board to rule on the motion to compel, and for any answers to be delivered. This would be a much more efficient approach to this issue, as most parties to this hearing and the Technical Conference will have no interest in the issues relating to the pole attachment rate.

In the event that this request is denied, Rogers will be seeing to question extensively about the answers which have been provided and the questions which have been refused. A list of areas for questioning is attached. As you can see by this list, questioning in respect of the questions not fully or completely answered will take a significant amount of the time alotted. We reiterate our view that it would be much more efficient to deal with the pole attachment rate separately after the determination of our motion.

With respect to point 5 of Procedural Order No. 3, Rogers is not a cost eligible intervenor, and therefore assumes that this requirement does not apply to Rogers. I can advise, out of an abundance of caution, that Rogers will be filing expert evidence relating to the pole attachment rate and will comply with point 6 of the Procedural Order in that regard.

Yours very truly,

Timothy Pinos
TP/CS/gmc

cc: All parties (EB-2017-0049)

EB-2017-0049

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

AND IN THE MATTER OF an Application by **Hydro One Networks Inc.**, pursuant to the *Ontario Energy Board Act* for an Order or Orders approving electricity distribution rates and charges commencing January 1, 2018;

AREAS OF TECHNICAL CONFERENCE QUESTIONS

FROM ROGERS COMMUNICATIONS CANADA INC.

TO HYDRO ONE NETWORKS INC.

Introduction

The interrogatories submitted by Rogers Communications Canada Inc. ("**Rogers**") to Hydro One Networks Inc. ("**HONI**") were intended to examine the methodology used, assumptions made, and the financial basis for, the calculation of the Pole Attachment Rate proposed by HONI in this hearing. Unfortunately, HONI has inappropriately and improperly refused to answer relevant questions outright, and failed to fully and completely answer other relevant questions.

Rogers is bringing a motion to compel further and better answers to interrogatories, and has proposed that the Technical Conference as it relates to the Pole Attachment Rate be adjourned to a date after Rogers' motion has been disposed of and any further and better answers ordered have been delivered. Therefore, its submission, now, of these areas for questions at the Technical Conference as made without prejudice to Rogers' proposal and its position that the Pole Attachment Rate not be dealt with at the Technical Conference.

Rogers-02

1. The question "Please explain why Hydro One chose the use of a productivity factor" is not answered in the response provided. A proper answer will be sought.

Rogers-03

1. Questions will be asked about what group or subsets of poles Hydro One tracks and calculates NBV, apart from the global NBV in USoA 1830, and average costs per poles of different length.

We also note that for a 50' pole with third party LDC/Generator equipment, Hydro One pays 38.6% and the third party pays 38.6%, leaving 22.8% for the telecom attachers.

This does not align with the allocation of 34.3% that has been assigned to each telecom attacher. An explanation for this will be sought.

4. Questions will be asked about the rationale for charging for poles longer than required by a telecom attached for its purposes.

Rogers-04

1. Questions will be asked about the level of granularity information is tracked about poles and pole replacements, and what that information is. Further this question: "Please describe the nature and purpose of the programs that were adopted for these pole replacements" was not answered. A proper answer will be sought.

2. Questions will be asked about the level of granularity information is tracked about poles and premature pole replacements, and what that information is.

Rogers-05

1. Questions will be asked about the absence of reciprocal pole-sharing for persons other than Bell, and the absence of Bell (Clearance) reciprocal poles.

Further in respect of "No pole-sharing arrangement", questions will be asked about the reasons for "N/A" for Bell (Clearance or Service).

Further in respect of "Bell antennas and wireless equip." and "Antennas and wireless equipment", questions will be asked about the reasons for "N/A" and the entry of "Do Not Track" for "Other"

2. This question has not been answered. Questions will be asked about the basis for the "risk" relating to streetlight rates and the failure to charge municipalities a proper cost recovery rate for streetlight attachments, as well as what the rate for such attachments would be if Hydro One approached charging for those attachments in the same manner as other pole attachments.

3. This question has not been answered. Questions will be asked about the basis for the "risk" relating to streetlight rates and the failure to charge municipalities a proper cost recovery rate for streetlight attachments, as well as what the rate for such attachments would be if Hydro One approached charging for those attachments in the same manner as other pole attachments.

5. Questions will be asked about the scenarios for "Space allocated or dedicated", and what "N/A" means for the last row.

6. Questions will be asked regarding the rate for antennas or other wireless attachers.

7. Questions will be asked with respect to the revenues from wireless attachers and the rationale for position that they are not taken into account in defraying pole costs otherwise charged to other attachers.

8.(a) Questions will be asked with respect to the calculation of the number of attachers, the correction to the number of attachers, and the calculation of the allocation factor.

8.(b) and (c) This question has not been answered. Questions will be asked about the basis for the “risk” relating to streetlight rates and the failure to charge municipalities a proper cost recovery rate for streetlight attachments, as well as what the rate for such attachments would be if Hydro One approached charging for those attachments in the same manner as other pole attachments.

8(d). Questions will be asked about the application of the equal sharing methodology.

Rogers-06

1. (b) Questions will be asked with respect to the nature of “driven programs or projects” and breakdown between those and poles “replaced at the request of a third party”, and their impact on capital costs. Please provide a sample transaction of how a third party’s contribution is factored into USoA 1830 as a negative value.

1.(d) Questions will be asked about what information Hydro One does have about pole replacement costs, and what Hydro One’s best estimate of those costs is.

2. (c) Questions will be asked about what information Hydro One does have about power asset costs, and what Hydro One’s best estimate of those costs is.

3 (a) Questions will be asked about to what level of granularity information is tracked about make ready costs, and what that information is.

3 (b) Please provide a sample transaction of how a third party’s contribution is factored into USoA 1830 as a negative value.

4. Questions will be asked about the extent to which anchor and guying costs not attributable to a telecom attachment is included in Account 1830, and what information is available is about those amounts.

Rogers-07

1.(b) Please provide an sample transaction of how a third party’s contribution is factored into USoA 1830 as a negative value.

Rogers-08

1. Questions will be asked with respect to the rationale for and appropriateness of the inclusion of Accounts 5125 and 5020, as well as the allocation of costs within those accounts, including the basis for and the calculation of, those allocations.

TAB 2

Impact of Hydro One / Bell Canada Joint Use Agreement on Pole Attachment Charge

February 27, 2018

1.0 Introduction

1. My name is Andrew Briggs. I have over 25 years of experience in the communications industry in Canada. For the past 17 years, I have provided financial, economic and regulatory advisory services to leading private and public sector clients in the communications, broadcasting and content production industries.[1]

2. I have been asked by Rogers Communications Canada Inc. ("Rogers") to provide my views on whether Hydro One's Joint Use Agreement with Bell Canada is relevant to and has an impact on, the pole attachment charge.

2.0 Joint Use Agreement Covers Indirect Common Costs

3. It is my understanding that under the Joint Use Agreement, Hydro One is responsible for installing and maintaining approximately 60% of the poles under the Agreement, with Bell Canada responsible for installing and maintaining 40% of the poles. The poles owned and maintained by Hydro One under the Joint Use Agreement are included in Hydro One's financial accounts for capital costs and maintenance expenses.

4. As the Ontario Energy Board (the "OEB") has previously indicated, Bell Canada and other LDCs such as Hydro One have reached reciprocal arrangements such as the Joint Use Agreement that are reflective of parties' costs: "The OEB assumes that the 60/40 ownership ratio selected represents the differences in space, costs and other requirements essential for each of the parties to share a pole."[2]

5. This implies that, for the Hydro One poles subject to the Joint Use Agreement, the indirect common poles costs (i.e. depreciation, capital carrying charges and maintenance)

[1] Curriculum Vitae provided in Appendix 2.
[2] Ontario Energy Board Draft Report of the Board "Framework for Determining Wireline Pole Attachment Charges", December 2017, page 45.

are effectively covered by the Hydro One's reciprocal access to the 40% of poles owned and maintained by Bell Canada. As these indirect common costs are already being covered by the Joint Use Agreement, it is inappropriate to require non-Bell Canada telecom attachers to **also** contribute to the recovery of these indirect common costs through the pole attachment rate. To do so would allow Hydro One to effectively over-recover its indirect common costs.

6. As a result, an adjustment should be made in the development of the pole attachment rate to account for the impact of the Joint Use Agreement.

3.0 Average Pole Cost Effectively Reduced Under Joint Use Pole Agreement

7. The Canadian Radio-television and Telecommunications Commission (the "CRTC") has taken into account the impact of these reciprocal joint use agreements between telephone companies and electrical utilities, including Bell Canada's Joint Use Agreement with Hydro One, in establishing the pole attachment rates that incumbent local exchange carriers ("ILECs") may charge.[3]

8. In the proceeding leading to CRTC Telecom Decision 2010-900, Bell Canada and other ILECs proposed an approach to developing and applying an adjustment factor for joint-use poles. The factor adjustment is based on the percentage of joint-use poles owned by an ILEC relative to the number of joint-use poles owned by both the ILEC and the electrical utility. The ILECs submitted that the proposed approach would reflect "the ILEC's real cost based on its joint-use agreement with the hydro company."[4] In its Decision, the CRTC noted that it:

> "… considers that joint-use agreements effectively reduce an ILEC's cost for joint-use poles. The Commission therefore considers that the approach proposed by Bell Canada et al. and TCC reflects the ILEC's true average cost per joint-use pole for all joint-use poles to which the ILEC has access."[5] (emphasis added)

[3] CRTC Telecom Decision 2010-900, Review of the large incumbent local exchange carriers' support structure service rates, December 2, 2010, paras. 28 – 34.
[4] Ibid., para. 30.
[5] Ibid., para. 33.

9. In the context of Hydro One, the following example illustrates how its average cost per pole is effectively reduced under its Joint Use Agreement with Bell Canada. As an example, if under the Joint Use Agreement, Hydro One installed 60 poles for a cost of $60,000 and Bell Canada installed 40 poles for $40,000, Hydro Ones' effective average cost per pole would be $600 per pole ($60,000 divided by the 100 poles to which it has access). However, the embedded costs and pole counts reflected in its financial accounts and records would be $1,000 per pole ($60,000 divided by 60 poles). Hydro One's lower true or effective average cost per pole should be reflected in the pole attachment rate.

4.0 Application of Joint Use Agreement Factor

10. A similar approach to the one implemented by the CRTC should be incorporated into Hydro One's pole attachment rate calculation to reflect its effective average cost per Joint Use Agreement pole. For a 60/40 sharing Joint Use Agreement with Bell Canada, the factor would be calculated as follows:

Joint Use Agreement Factor =
100% x Proportion of non Joint Use Agreement poles in installed base
+ 60% x Proportion of Joint Use Agreement poles in installed base

11. In the pole attachment rate determination, Hydro One's indirect costs would be multiplied by the Joint Use Agreement factor prior to applying the allocation factor. All the information required to determine this Joint Use Agreement factor is readily available.

12. A detailed illustration of how this approach could be applied to the determination of Hydro One's pole attachment rate, based on information provided in the EB-2015-0141 proceeding, is provided in Appendix 1.

5.0 Conclusion

13. In my view, the nature and structure of the Hydro One/Bell Canada Joint Use Agreement is relevant to Hydro One's pole attachment charge. The Joint Use Agreement has an

impact on Hydro One's indirect common costs for poles that should be included in any pole attachment charge and the cost that telecom attachers pay.

14. The Joint Use Agreement reduces Hydro One's effective average cost per pole for all poles that Hydro One has access to under the Joint Use Agreement. This lower average cost should be reflected in the pole attachment charge. The CRTC (and Bell Canada) has recognized that these type of joint use agreements do have an impact the cost of joint use poles and have incorporated the impact into the pole attachment charge for ILECs.

TAB A

ILLUSTRATION OF ADJUSTMENT FACTOR TO ACCOUNT FOR
HYDRO ONE/BELL CANADA JOINT USE AGREEMENT

(based on data from OEB Decision and Rate Order EB-2015-0141 for illustrative purposes)

Number of Attachers:	Reference	Number		Source / Comments
Bell attachments	A	331,238		EB-2015-0141, Exhibit I, Tab 2, Schedule 2.10 (c) (Filed 2016-04-15). Bell attachments on Hydro One/Bell joint use agreement poles
Telecom and other wireline	B	297,728		EB-2015-0141, Exhibit I, Tab 2, Schedule 2.10 (c) (Filed 2016-04-15).
	C = A + B	628,966		
Streetlights and other (non wireline)	D	117,468		EB-2015-0141, Exhibit I, Tab 4, Schedule 1 (d) (Filed 2015-09-08).
Total number of attachments	E = C + D	746,434		EB-2015-0141, Exhibit I, Tab 2, Schedule 2.10 (e) (Filed 2016-04-15)

Joint Use Poles:	Reference	Number	% Proportion	Source / Comments
Joint use poles with telecom & other attachments	H	573,780	100.0%	EB-2015-0141, Exhibit I, Tab 2, Schedule 2.10 (e) (Filed 2016-04-15)
Joint use poles with Bell attachments (subject to the Joint Use Agreement)	I = -A	(331,238)	57.7%	
Joint use poles with telecom & other attachments (not subject to Joint Use Agreement)	J = H + I	242,542	42.3%	

Hydro One/Bell Joint Use Agreement Poles	Reference	Number	% Proportion	Source / Comments
Hydro One Owned	K = A	331,238	62.4%	Proportion of 62.39% from EB-2015-0141, Motion Hearing Transcript, May 19, 2016, page 38, lines 2-3
Bell Owned	L	199,677	37.6%	Proportion of 37.61% from EB-2015-0141, Motion Hearing Transcript, May 19, 2016, page 38, lines 2-3
Total Joint Use Agreement Poles	M = K + L	530,915	100%	

Pole Attachment Charge Calculation to Account for Hydro One/Bell Joint Use Agreement	Reference	EB-2015-0141 Decision	CRTC-based Joint Use Agreement Factor	Source / Comments
Indirect Cost per Pole	N	$108.71	$108.71	EB-2015-0141 Decision, Line H
Total number of poles	O = H	573,780	573,780	
Total Indirect costs	P = N x O	$62,375,624	$62,375,624	
Joint Use Agreement Factor	Q = (100% x J%) + (K% x I%)	n/a	78.3%	Factor = 100% x Proprotion of Non Joint Use Agreement Poles (42.3%) + 62.4% (Hydro One proportion of Joint Use Agreement Poles) x Proportion of Joint Use Agreement Poles (57.7%)
Allocation Factor (Equal Sharing) to Telecom (gross up by Number of attachers)	R = 34.3% x Z	44.6%	44.6%	EB-2015-0141 Decision, Line I Allocation Factor of 34.3% x average # of Attachers per Pole
Total Indirect Costs Allocated to 3rd Parties	**S = P x Q x R**	**$27,813,291**	**$21,789,673**	Total indirect costs x JU Agreement Factor x Allocation Factor (Telecom)
Indirect Costs Allocated to 3rd Parties per Attachers	= S / U	$37.26	$29.19	
Direct Cost per Attacher	T	$3.99	$3.99	EB-2015-0141 Decision, Line C
Number of Attachers	U = E	746,434	746,434	
Total Direct Costs	**V = T x U**	**$2,978,272**	**$2,978,272**	
Total Costs	**W = S + V**	**$30,791,562**	**$24,767,945**	
Number of Attachers	U = E	746,434	746,434	
Annual Pole Rental Charge	**X = W / U**	**$41.25**	**$33.18**	
Number of attachers per pole	Z = E / H	1.30	1.30	

TAB B

ANDREW BRIGGS MBA CPA,CMA CBV
AGBriggs Consulting Inc.

PROFESSIONAL EXPERIENCE:

Independent Consultant 2000 - Present
AGBRIGGS CONSULTING INC.
Oakville, ON

Provide financial, economic and regulatory advisory services to private and public sector clients in the communications, broadcasting and content production industries. Deliver financial and business analysis services including financial modelling, business planning, business valuations, cost analysis, competitive assessment and research services. Provide advice and support services on various regulatory matters (economic, financial and costing/accounting issues), including preparation of written submissions (evidence, comments, reports, interrogatories).

Senior Associate 2007 - 2009
VINE VALUATIONS INC.
Hamilton, ON

Provided business valuations and litigation support services to clients in family law matters, shareholder disputes, tax planning and the potential sale and purchase of businesses. Prepared draft calculation and estimate business valuation reports, undertook industry and economic research, and developed valuation models.

Assistant Vice President, Business Planning 1999 - 2000
STAR CHOICE / CANCOM
Mississauga, ON

Senior member of finance team responsible for business planning and modelling, competitive assessments, and analysis of business opportunities. Supported CFO with investor relations activities and development of long-term business plan to secure $415 M bank credit facility to finance the growth of the DTH business. Provided analysis and advice regarding business and operational synergies from the merger between Cancom and Star Choice.

Director, Economics 1995 - 1999
CANADIAN CABLE TELEVISION ASSOCIATION
Toronto, ON

Developed regulatory positions, prepared and assessed submissions on a variety of telecommunications and broadcasting issues including terms of entry by cable companies into the local telephone market. Undertook various ad hoc economic analyses and performed on-going competitive analysis of the Canadian and U.S. broadcasting industries, telecommunications and broadband industries including monitoring industry developments and publishing assessment reports for senior cable industry executives.

Manager, Regulatory Costing 1994 - 1995
UNITEL COMMUNICATIONS
Toronto, ON

Responsible for developing and defending Unitel's regulatory positions before the CRTC on various costing issues including long distance contribution rates and other telco interconnection charges. Analyzed regulatory filings and prepared written/oral submissions to the CRTC for a number of major telecommunications proceedings including Split Rate Base proceeding and Phase III costing review.

Senior Tariff Specialist 1991 - 1994
UNITEL COMMUNICATIONS
Toronto, ON

Determined pricing structure and positioning for residential and business long distance service offerings in conjunction with Product Managers. Undertook competitive pricing and revenue impact analyses of proposed pricing initiatives for senior management review.

Senior Financial Analyst 1988 - 1991
CIBC – Information Technology Division
Toronto, ON

Project team member responsible for developing a costing and inventory system for the bank's voice and data telecommunications services. Reviewed and assessed monthly operating results and variance reports, prepared operating budgets, capital plans and business cases.

EDUCATION:

Chartered Business Valuator, Canadian Institute of Chartered Business Valuators, 2009

Certified Management Accountant, Society of Management Accountants of Ontario, 1991

Masters of Business Administration, McMaster University, Hamilton, ON, 1988

Bachelor of Arts, Hons., Economics, York University, Toronto, ON, 1985

Bachelor of Arts, Economics, University of Western Ontario, London, ON, 1984

Telecommunications Management studies (part-time)**,** Ryerson University, ON 1992-1995

PROFESSIONAL AFFILIATIONS:

Member, Chartered Professional Accountants of Ontario

Member, Canadian Institute of Chartered Business Valuators

Overview of Telecommunications-related Engagements

- Prepared report for Rogers reviewing the OEB Draft Report (December 2017) regarding wireline pole attachment charges (EB-2015-0304)
- Developed and maintained detailed cost models and completed costing studies to support the determination of regulated prices for Third Party Internet Access (TPIA) services for several cable companies; supported companies during the regulatory proceedings regarding the provision of aggregated and disaggregated TPIA services.
- Provide ongoing advisory services to a cable company regarding TELUS support structure tariff and cost study filings to the CRTC
- Advised a number of cable companies on the CRTC's approach to developing cost-based rates for TPIA services, including the impact of determinations in TRP 2016-117 *Review of Costing Inputs and the application process for wholesale high-speed access services*.
- Advised and supported a wireless carrier's development of cost-based rates for regulated wholesale roaming services in response to TRP 2015-177 *Regulatory Framework for Wholesale Mobile Services.*
- Co-ordinated filing of client's application for project funding from Industry Canada's Broadband Canada: Connecting Rural Canadians program
- Provided analysis and advisory services to cable companies on ILEC support structure costing as part of the CRTC's *Review of ILEC Support Structure Service rates and costs* (TNC 2009-432)
- Authored report on International Broadband Services Comparison for Consumer Groups as part of TNC 2009-261 Wholesale High-speed Access Services
- Conducted cost studies for wireless carrier to determine the carrier's internal costs associated with wireless tower access
- Provided research and analytic support as an advisor to the federal government's *Telecommunications Policy Review* (TPR) Panel Secretariat leading to the issuance of a report by the Panel in March 2006
- Co-authored report for PIAC on the residential experience with telecommunications competition from 1992 to 2002. Analyzed rate plans and prepared pricing comparisons over time.
- Provided analysis and advisory services to a cable company on Nova Scotia Power Inc.'s Pole Attachment Charge proceeding (Nova Scotia Utility and Review Board, 2002)
- Provided financial and regulatory support to clients for numerous CRTC proceedings including:
  - *Review of Basic Telecommunications Services* (TNC 2015-134)
  - *Review of Costing Inputs for Wholesale High-Speed Services* (TNC 2015-225)
  - *Feasibility of Establishing a Video Relay Service* (TNC 2013-155)
  - *Review of NWTel Regulatory Framework and Modernization Plan* (TNC 2012-669)
  - *Confidentiality of Cost Information* (TNC 2012-168)
  - *Review of Price Cap Regulatory Framework for NWTel* (TNC 2011-302)
  - *Review of regulatory requirements pertaining to imputation test for retail services and to costing methodologies for wholesale services* (PN 2008-5)
  - *Review of Certain Phase II Costing Issues* (PN 2007-4)
  - *Review of regulatory framework for wholesale services and definition of essential service* (PN 2006-14)
  - *Local Market Forbearance* (PN 2005-2)

TAB 3

EB-2017-0049

Ontario Energy Board

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

AND IN THE MATTER OF an Application by **Hydro One Networks Inc.**, pursuant to the *Ontario Energy Board Act* for an Order or Orders approving electricity distribution rates and charges commencing January 1, 2018;

Interrogatories of Rogers Communications Canada Inc. to Hydro One Networks Inc.

January 24, 2018

Note: in providing your responses, please do not simply make reference to another document from this or another proceeding. Please reproduce the response in full. Thank you. Your efforts are appreciated.

Proposed Pole Attachment Rate

Rogers-01

Ref: *Exhibit H1, Tab 2, Schedule 3, p.102*

*EB-2015-0141 – Decision and Rate Order (4 August 2016) (the "**EB-2015-0141 Decision**")*

1. In its Application, Hydro One proposes pole attachment charges using the methodology approved in the *EB-2015-0141 Decision*. Please confirm that Hydro One is still proposing the rates set out in its Application based on this methodology.

2. If Hydro One is no longer proposing the rates set out in its Application, please:

   (a) explain what rates are being proposed and describe in detail the methodology used to derive the proposed rates.

   (b) provide all of the data used to derive the proposed rates. Where Hydro One is relying on assumptions, please identify and explain those assumptions.

   (c) explain in detail the reasons for any differences between the rates proposed in its Application and the rates that are now being proposed.

Ref: *Exhibit Q, Tab 1, Schedule 1*

3. Please confirm that the updated information filed by Hydro One on December 21, 2017 as Exhibit Q has no impact on any of the assumptions or data used by Hydro One to derive its proposed pole attachment charges in its Application.

Rogers-02

Ref: *Exhibit H1, Tab 2, Schedule 3, p.102*

*EB-2015-0304 – Framework for Determining Wireline Pole Attachment Charges (the "**PAWG Proceeding**")*

*EB-2015-0304 – Draft Report of the Board, 18 December 2017 (the "**PAWG Draft Report**")*

1. In its Application, Hydro One states that it has calculated Joint Use Telecom charges from 2018 to 2022 using the methodology approved in the *EB-2015-0141 Decision* and proposes adopting these charges until the OEB issues its decision in the *PAWG Proceeding*. Once that decision has been issued, Hydro One states that it will revisit its charges to comply with it prospectively.

   In the interim, Hydro One has taken the $41.28 rate approved in the EB-2015-0141 Decision and adjusted it for the years 2016 to 2022 using inflation rates and Hydro One's productivity factor. Yet, in the *PAWG Draft Report*, Board staff recommend that the proposed universal rate of $52 be adjusted for inflation but no productivity factor. Please explain why Hydro One chose the use of a productivity factor.

2. Your general rate application includes new proposed electricity rates for Norfolk Power, Haldimand County Hydro and Woodstock Hydro. Please complete the following table.

	Date acquisition closed	# of joint use poles owned	Current pole attachment rate
Norfolk Power			
Haldimand County Hydro			
Woodstock Hydro			

   (a) Are you proposing to apply the proposed pole attachment rates for Hydro One to these three LDCs?

   (b) Have you done any kind of analysis to demonstrate that these three LDCs share substantially similar pole costs and number or telecom attachers as Hydro One has used in the EB-2015-0141 proceeding and as updated in this hearing?

   (c) Do any of these three LDCs have pole-sharing arrangements with Bell Canada similar to the one Hydro One has with Bell?

Number of Poles

Rogers-03

1. In respect of Hydro One's joint use poles (*i.e.*, those poles with telecom or other third party attachers), provide the following information for the sizes of poles shown as at the end of 2017. If 2017 values are not available, use 2016 values.

Pole Height	Total no. of joint use poles	Total Net Book Value	Average NBV/pole	Average Current Installed Cost
30				
35				
40				
45				
50				
55				
60				
65				
Above 65				
TOTAL				

2. In respect of Hydro One's non-joint use poles (*i.e.*, those poles with no telecom or other third party attachers), provide the following information for the sizes of poles shown as at the end of 2017. If 2017 values are not available, use 2016 values.

Pole Height	Total no. of non-joint use poles	Total Net Book Value	Average NBV/pole	Average Current Installed Cost
30				
35				
40				
45				
50				
55				
60				
65				
Above 65				
TOTAL				

3. If a standard joint use pole that is designed to accommodate telecom attachments is 40 feet in height, under what circumstances would a pole need to be either less than 40 feet or more than 40 feet (e.g., to accommodate generator facilities)? Please provide your answer using the table below.

Pole Height	When pole is used	Types of attachers
30		
35		
40		
45		
50		
55		
60		
65		
Above 65		

4. If a telecom attacher only requires a 40 foot pole for its purposes, please explain, using suitable economic and regulatory principles, why it is reasonable to include in the pole attachment rate for telecom attachers, the costs of larger and more expensive poles that are required by other parties and not the telecom attachers. In other words, why should telecom attachers contribute to the costs of larger poles in circumstances where they do not require the additional height?

Rogers-04

Ref: *Depreciation rate of 1.7%*

1. We understand that, based on a depreciation rate of 1.7%, Hydro One employs an average useful pole life of approximately 59 years. Using the table below, please provide the number of joint use poles that were replaced pursuant to a proactive pole replacement or other capital program (as opposed to replacement as part of ongoing maintenance), including poles that were replaced prior to the end of their useful life. Please describe the nature and purpose of the programs that were adopted for these pole replacements.

	2014	2015	2016	2017
No. of joint use poles replaced				
%age of joint use poles replaced				
No. of joint use poles replaced prematurely (i.e., prior to end of their useful life)				
%age of joint use poles replaced prematurely				

2. In each of the years 2014 to 2017, how many poles were replaced prematurely due to the requirements of Hydro One, other LDCs or third party generators?

Attachers and Attachments

Rogers-05

1. Please complete the following table using the most current information available (2017 or 2016). Reference to "telecom" means *wireline* attachments.

Attacher or Attachment	No. of Units	Current Rate	Annual Revenues	Proposed Rate	Annual Revenues
Reciprocal pole-sharing arrangements					
Bell (Full)					
Bell (Clearance or Service)					
Other Telecom (Full)					
Other Telecom (Clearance or Service)					
LDC or Generator Telecom					
TOTAL					
No pole-sharing arrangement					
Bell (Full)					
Bell (Clearance or Service)					
Other Telecom (Full)					
Other Telecom (Clearance or Service)					
LDC or Generator Telecom					
TOTAL					
Other attachments					
Generator power facilities					
LDC power facilities (excl Hydro One)					
Streetlights					
Bell antennas and other wireless equip.					
Antennas and other wireless equipment					
Other (signs, banners, traffic lights)					
TOTAL					
GRAND TOTAL					

2. For <u>each</u> attacher above that does not pay the OEB-approved pole attachment rate for telecom attachers, provide the pole attachment rate that is charged to the attacher, explain how the applicable rate was determined and why it is different from the OEB-approved pole attachment rate for telecom attachers.

3. For each attacher above that does not pay the OEB-approved pole attachment rate for telecom attachers, provide the pole attachment rate that Hydro One has proposed for each of the years 2018-2022. Explain how the proposed rate for each attacher was determined and why it is different from what Hydro One has proposed for telecom attachers.

4. If circumstances permit Hydro One to apply the findings of the Board in its future decision from the *PAWG Proceeding* to its telecom pole attachment rate, will Hydro One change or otherwise revisit the different rates it proposes to charge the other attachers described in Question 3?

5. For the "other attachers" listed below, please describe where on the joint use pole the attachment would typically be located, and how much space has been allocated for or dedicated to such attachment.

Attacher or Attachment	Location on pole	Space allocated or dedicated
Generator power facilities		
LDC power facilities		
Streetlights		
Antennas and other wireless equipment		

6. Has Hydro One entered into any agreements with telecommunications or other companies that will allow these companies to attach antennas or other wireless equipment to the poles of Hydro One, now or in the future? What is the pole attachment rate under these agreements?

7. If wireless attachment rates to hydro poles are, for the most part, unregulated and Hydro One is allowed to charge "market" rates for wireless attachments to its joint use poles, how does Hydro One intend to adjust the pole attachment rate for wireline telecom attachments to reflect the additional revenues it will receive from wireless attachments? If you do not intend to adjust the wireline attachment rate, please provide a rationale for this decision and explain why it would still be reasonable from a rate-making perspective.

8. In the EB 2015-0141 proceeding, you calculated the "actual" average number of attachers per pole of 1.3 by dividing the total number of attachers (746,204) by the total "poles that contain joint use" (576,068).

   (a) Please confirm that the total number of attachers used in this calculation included all of the attachers listed in the table in Rogers-05(1). If not, please advise which attachers are not included and explain why they were not included.

Does the calculation include any attachers that are not listed in the table shown in Rogers-05(1)? If so, please describe the type and quantity of attachers.

(b) Please explain, from a rate-making perspective, how a single pole attachment rate for telecom attachers can be calculated based on a mix of different attachers that do not all pay that rate. For example, if a pole attachment rate is calculated based on the number of telecom attachers and streetlights, but the streetlights do not pay an attachment fee, doesn't that mean that Hydro One is not recovering all of its costs and therefore the ratepayers are subsidizing them? Please explain this discrepancy and support your explanation with calculations.

(c) If we accept the equal sharing methodology (as Hydro One and the OEB have done) and that methodology allocates the *common costs* of a pole across the users of the pole equally, regardless of the nature of configuration of the attachment, do you believe that it is reasonable that streetlights should pay an attachment rate of only $2.04? Please provide an explanation for your answer. If you answer is "no", how would you recommend that this disparity be corrected?

(d) The equal sharing methodology also requires an attacher to be responsible for 100% of the costs of the dedicated space it uses on a joint use pole. Yet, attachers such as generators that require at least 10 feet of dedicated space pay an attachment rate of only $28.61. Please reconcile this anomaly with the mechanics of the equal sharing methodology. How would you correct it?

Net Embedded Cost

Rogers-06

Ref: *Net Embedded Cost (NEC) per pole of $944.59 (based on 2014 year-end value)*

Pole Maintenance Expense of $5.52 per pole (Response to Board Staff Interrogatory #2.1(10))

1. We need to understand exactly how the costs associated with pole replacement costs have been included in the pole attachment rate to ensure that there has been no double-counting. It is possible that they have been included in *Pole Maintenance Expenses*, as well as been capitalized in *Account 1830*.

   (a) Does your calculation of $5.52 per pole for *Pole Maintenance Expenses* include all or a portion of the costs of ongoing pole replacement? If so, provide a value for such expenses, with supporting detail.

   (b) Are the capitalized costs associated with the replacement of your joint use poles included in *Account 1830* and hence your calculation for the Net Embedded Cost per pole?

   (c) If your assertion is that these costs are not included in *Account 1830*, then demonstrate, with specific supporting evidence, how these costs have been accounted for.

   (d) If such costs have been included in *Account 1830*, provide a value for these costs (or your best estimate) for each of the 10 years from 2006 to 2017. If you are providing an estimate, explain the rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

   (e) Please show the necessary adjustment to the NEC of $944.59 to ensure that there is no double-counting of pole replacement costs. Provide all supporting assumptions and calculations.

   (f) If it is not reasonably possible to adjust the NEC, then show what adjustments must be made to *Pole Maintenance Expense* to ensure that there is no double-counting. Provide all supporting assumptions and calculations.

2. The following questions have to do with Hydro One's assets that are situated on the poles owned or operated by others (*e.g.*, Bell Canada).

   (a) Confirm that power assets and other equipment owned or operated by Hydro One that are located on poles owned by Bell or other third parties are included in *Account 1830* and hence your calculation for NEC per pole.

   (b) If your assertion is that these assets are not included in *Account 1830*, then demonstrate, with specific supporting evidence, which account such assets have been included.

   (c) If such costs have been included in *Account 1830*, provide a value for them (or your best estimate) for the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate. Please show how the number was obtained with supporting calculations and documents.

   (d) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

3. The following questions have to do with make-ready costs paid by telecom attachers.

   (a) Provide the value of make-ready costs paid by telecom attachers to Hydro One in respect of their attachments in each of the years 2015-2017 and the accounts in which these amounts were recorded.

   (b) Confirm that third party telecom make-ready costs and other third party contributions to the capitalized installed costs of joint use poles are included in *Account 1830* and hence your calculation for NEC per pole.

   (c) If your assertion is that these costs are not included in *Account 1830*, then demonstrate, with specific supporting evidence, which account such costs have been included.

   (d) If such costs have been included in *Account 1830*, provide a value for them (or your best estimate) for each of the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

   (e) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

4. The following questions have to do with guying and anchoring provided on joint use poles.

   (a) Confirm that, when the addition of a telecom attachment requires additional guying and anchors for a joint use pole, the telecom attacher is responsible for the costs of such guying and anchors.

   (b) Confirm that the costs of guying and anchoring required for a joint use pole that has no telecom attachments are included in *Account 1830* and hence your calculation for NEC per pole.

   (c) If your assertion is that these costs described in paragraph (b) are not included in *Account 1830*, then demonstrate, with specific supporting evidence, in which account such costs have been included.

   (d) If the costs described in paragraph (b) are included in *Account 1830*, provide a value for them (or your best estimate) for each of the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

   (e) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

Rogers-07

1. We understand that, over the last several years, Hydro One has replaced several pole lines with significantly larger (60-70 feet) poles to accommodate the facilities of generators.

   We also understand that, in some cases, the generator constructed the pole lines and then assigned them to Hydro One, while in other cases, it paid for the cost of the new poles less the depreciated value of the existing poles.

   (a) For the last 10 years, how many poles were replaced with new poles to accommodate these generators?

   (b) Please describe in detail the accounting reconciliation that was conducted in respect of these replacement poles and confirm that such assets were included in *Account 1830*. If the costs of these assets are not included in *Account 1830*, then demonstrate, with specific supporting evidence, in which account such costs were included.

Pole Maintenance

Ref: *Pole Maintenance Expense of $5.52 per pole (Response to Board Staff Interrogatory#2.1(10))*

Rogers-08

1. In the EB-2015-0141 proceeding, the Board accepted a value of $5.52 per pole for *Pole Maintenance Expenses* (prior to the 15% deduction for power-only assets). According to your evidence, this number is based on the total of *Line Patrol* costs of $5.4M and *Defect Correction* costs of $3.3M, divided by the total number of all of Hydro One's poles (1,575,195).

   (a) Please describe in detail all of the activities that are conducted for each of *Line Patrol* and *Defect Correction*. Provide the recorded costs for each activity.

   (b) Describe how the costs were determined for each activity listed in (a) above (*e.g.*, time studies, invoices, time-keeping records).

   (c) From which Account Codes to these expenses originate (e.g., 5120, 5135)? Please show the amounts used from each Account Code in the above expenses and how such amounts were determined, including all assumptions, methodologies and calculations.

   (d) Do the costs claimed in *Pole Maintenance Expenses* include any costs from Account Codes 5125 and 5020? If yes, provide the amounts and an explanation as to why costs from these Account Codes should be included in *Pole Maintenance Expenses*.

   (e) In the *PAWG Proceeding*, Hydro One proposed that 5% of *Account 5120 - Maintenance of Poles, Towers and Fixtures* should be allocated to pole maintenance. Please reconcile the costs claimed above with your proposal in the *PAWG Proceeding*. If it is indeed different, please explain why and which one is the more appropriate methodology for this current proceeding.

   (f) Do any of the amounts claimed in *Pole Maintenance Expenses* include expenses for activities related to pole replacement? If yes, what is the amount? If not, where do such expenses occur?

Pole-sharing Arrangement with Bell

Ref: *EB-2015-0141 – Hydro One Reply (17 June 2016)*

Rogers-09

1. In the Reply Argument for the EB-2015-0141 proceeding, Hydro One states as follows:

> Hydro One has explained how the Bell agreement factors into the calculation of the average number of attachers. Hydro One uses all third party permitted attachments, divided by the number of Hydro One owned poles that contain attachments, to arrive at its number of attachers per joint use pole. *Removing Bell attachments from the calculation will decrease the number of attachers per pole, thereby increasing the pole attachment rate*. *[Emphasis added.]*

We still have difficulty understanding the last statement. In our view, removing Bell attachments from the calculation is only part of the correction. One must also remove the poles with the Bell-only attachments, as demonstrated by the example below.

		Include Bell-only attachments	**Exclude Bell-only attachments**
Attachers	**# of joint use poles**	**# of attachers**	**# of attachers**
Both Bell and Rogers	30	60	60
Bell only	60	60	-
Rogers only	10	10	10
Total	**100**	**130**	**70**
Total # of poles		100	40
Calculation		130/100 = **1.3**	70/40 = **1.75**

Based on the above illustration, do you still hold the view that removing Bell attachments from the calculation will decrease the number of attachers per pole, thereby increasing the pole attachment rate? If your answer is "yes", please explain why you do not agree with the other calculation shown above and where its logic falls apart. In particular, please explain why it would make sense to deduct the Bell-only attachments without deducting the corresponding Bell-only poles.

2. Your calculation for average number of attachers per pole includes poles on which Bell is the only attacher. Please explain, using suitable economic and regulatory principles, why it is acceptable for telecom attachers to contribute to the costs of poles they do not occupy (*i.e.*, the Bell-only poles).

3. At page 45 of the *PAWG Draft Report*, the Board addresses the relationship between LDCs and Bell as follows:

> The OEB is of the view that Bell and LDCs both have equal bargaining power, and access is not an issue as both own poles that have the possibility of accommodating the other party. *Presumably, Bell Canada and LDCs have reached agreements that are reflective of parties' costs. The OEB assumes that the 60/40 ownership ratio selected represents the differences in space, costs, and other requirements essential for each of the parties to share a pole.* The OEB also notes that LDCs and Bell are actively maintaining these balances – a recent OEB Decision and Order, for example, granted Hydro One approval to sell seven poles to Bell for the purpose of maintaining the ownership balance between Bell and Hydro One, as per the Joint Use Agreement. *The OEB is of the view that Bell is effectively paying the rate "in kind" where there are these reciprocal agreements*. Where there is no reciprocal agreement, Bell pays the OEB approved pole attachment charge. *[Emphasis added.]*

Further, at p.10 of the *EB-2015-0141 Decision*, the Board states as follows:

> The OEB finds that Hydro One's reciprocal arrangement with Bell has no impact on the pole attachment charge. Bell "pays" for its attachments to Hydro One's poles by allowing free access for Hydro One to Bell's poles. No money changes hands. *Contrary to the Carriers' repeated statements, Bell does not pay for 40% of Hydro One's pole costs*. *[Emphasis added.]*

Let's look at each of the statements emphasized in italics above.

"Presumably, Bell Canada and LDCs have reached agreements that are reflective of parties' costs."

(a) Is this a correct presumption? If so, please explain how Bell and Hydro One have reached an agreement that is reflective of their costs. If this presumption is not correct, explain why. If the agreement is not reflective of the parties' costs, what does it reflect or purport to reflect?

"The OEB assumes that the 60/40 ownership ratio selected represents the differences in space, costs, and other requirements essential for each of the parties to share a pole."

(b) Is the above assumption correct? If so, please explain how and why the 60/40 split was derived.

(c) Do you believe this arrangement with a 60/40 split and zero reciprocal attachment rates ensures that Hydro One is recovering an appropriate share of its costs from Bell and there is no subsidy from the ratepayers to Bell? Please demonstrate that this is so. (Please do not respond with the assertion that whatever Hydro One charges Bell, Bell would charge Hydro One even more and therefore it is revenue neutral to the ratepayers. We understand that premise. What we are concerned here is with the recovery of costs, which is a separate concept from revenue neutrality.)

(d) Have you performed any kind of analysis to demonstrate that the value to Hydro One of having access to Bell-owned poles for no additional charge, including not having to install (capital avoidance) and maintain the poles, is equivalent to the pole attachment revenues Hydro One would otherwise collect from Bell?

Regardless of whether you have or have not performed this analysis, please provide the analysis described above.

"The OEB is of the view that Bell is effectively paying the rate "in kind" where there are these reciprocal agreements."

(e) Do you agree with the above statement? Why or why not?

Have you performed any kind of analysis to demonstrate that the value Bell has provided to Hydro One by installing 40% of the poles Hydro One has access to is equivalent to the annual pole attachment fees it would otherwise pay to Hydro One?

Regardless of whether you have or haven't performed this analysis, please provide the analysis described above.

(f) As we understand the above statement, which we believe is shared by Hydro One, the value of the poles Bell installs for Hydro One's use (*e.g.*, the CAPEX to build the poles plus the present value of 59 years of OPEX) is equivalent to 59 years of the pole attachment fees Bell would otherwise pay to use Hydro One's poles. Please explain how this value is <u>always</u> equivalent to the forgone revenues from Bell regardless of what telecom

pole attachment rate is used. In other words, is it Hydro One's assertion that Bell's contribution to the poles to which Hydro One has access is equal to what Bell would pay in pole attachment fees if that fee was $22.35? $37.60? $41.28? $52.00? Please demonstrate how this calculation works, showing all assumptions and historical data.

"Contrary to the Carriers' repeated statements, Bell does not pay for 40% of Hydro One's pole costs."

(g) Say that Bell and Hydro One determine and agree that they require a 1000 poles between them and decide to build them under the 60/40 pole-sharing arrangement. With an installed cost of, say, $1000 per pole, Bell goes ahead and builds 400 poles at a cost of $400,000 and Hydro One builds 600 at a cost of $600,000. Hydro One has access to all 1000 poles at a cost of $600,000.

Under a different scenario, Bell agrees to contribute to 40% of Hydro One's costs in building 1000 poles in exchange for a right to access these poles at no cost. Therefore, similar to the above scenario, Hydro One has access to all 1000 poles at a cost of $600,000.

Please explain how these two scenarios are different.

4. Imagine a world where Bell is the only telecom attacher and Hydro One and Bell have entered into their current 60/40 pole-sharing agreement.

(a) Do the contractual arrangements and financial obligations of the parties ensure that the ratepayers are not in any way subsidizing the costs of the poles that are allocated to Bell? Why or why not?

(b) Do the contractual arrangements and financial obligations of the parties ensure that Hydro One is recovering the common costs of the poles associated with the telecom attacher (Bell)? Why or why not?

5. If all of the telecom attachers other than Bell were to remove their attachments from Hydro One's poles and build their own poles or go buried, would the ratepayers now be required to subsidize the costs of the poles that are attributable to Bell? Why or why not?

Rogers-10

1. In the *PAWG Proceeding*, you proposed that 33% of vegetation management costs embedded in *Account 5135* should be allocated to telecom attachers. The Board has since endorsed this approach in its *PAWG Draft Report*. Yet, as we understand it, under its pole-sharing arrangement with Hydro One, Bell is only responsible for 10% of the vegetation management costs for the joint use poles it shares with Hydro One. Please explain why Hydro One proposed 33% in the *PAWG Draft Report* but only requires Bell to pay 10%. How was the 10% determined?

2. Please demonstrate exactly how the 33% allocation of vegetation management costs to telecom attachers was determined, showing all calculations, assumptions and drawings.

   (a) In theory, would the 33% allocation be applied to all of the costs Hydro One deems part of vegetation management (*e.g.*, line clearing and brush control) taken over its entire pole population?

   (b) Does the 33% allocation take into account the differences and diversity in vegetation among in Hydro One's three forestry zones: (1) Eastern, (2) Northern and (3) Southern?

   (c) Does the 33% allocation take into account the fact that there are significantly more telecom attachments located in the Eastern and Southern zones, as well as in more heavily populated urban areas, all of which require less vegetation management than in the Northern zone?

3. Please confirm that if pole must be replaced to accommodate the equipment of a telecom attacher, the telecom attacher is responsible for the full cost of replacing that pole and that ownership of the new pole will reside with Hydro One.

   We understand that, under its pole-sharing arrangement with Hydro One, Bell is only required to pay the residual value of the replaced pole as opposed to the full value. Please explain why this discrepancy exists and, from a cost recovery point of view, which practice you believe is correct.

4. Please provide copies of all agreements with any party (including without limitation Bell Canada, other telecom attachers, other LDCs, and municipalities) that relate to:

   (a) the right of that party to attach to Hydro One poles;

   (b) the right of Hydro One to attach to the other party's poles; or

   (c) the right of both Hydro One and the other party to attach to jointly-owned poles.

TAB 4

Rogers Communications Interrogatory # 1

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Reference:

H1-02-03 Page: 102
EB-2015-0141 — Decision and Rate Order (4 August 2016) (the "EB-2015-0141 Decision')
For Interrogatory part 3 – Q-01-01

Interrogatory:

1. In its Application, Hydro One proposes pole attachment charges using the methodology approved in the EB-2015-0141 Decision. Please confirm that Hydro One is still proposing the rates set out in its Application based on this methodology.

2. If Hydro One is no longer proposing the rates set out in its Application, please:

    a) explain what rates are being proposed and describe in detail the methodology used to derive the proposed rates.

    b) provide all of the data used to derive the proposed rates. Where Hydro One is relying on assumptions, please identify and explain those assumptions.

    c) explain in detail the reasons for any differences between the rates

    d) proposed in its Application and the rates that are now being proposed.

3. Please confirm that the updated information filed by Hydro One on December 21, 2017 as Exhibit Q has no impact on any of the assumptions or data used by Hydro One to derive its proposed pole attachment charges in its Application.

Response:

1. Yes, Hydro One is still proposing the rates set out in this current application. Hydro One is using the current approved methodology, as found in EB-2015-0141.

2. N/A

3. Yes, confirmed. The updated information filed in Exhibit Q has no impact on the assumptions made by Hydro One in deriving its pole attachment charges. In EB-2015-0141, the Decision and Order stipulated that Vegetation Management costs were not to be included in the calculation of the rate. Furthermore, Hydro One will not be performing or charging for vegetation management activities for any telecom attachers (including Bell Canada) during the 2018-2022 period, as referenced in Exhibit I-45-SEC-87.

Rogers Communications Interrogatory # 2

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Reference:

H1-02-03 Page: 102
EB-2015-0304 – Framework for Determining Wireline Pole Attachment Charges (the "PAWG Proceeding")
EB-2015-0304 – Draft Report of the Board, 18 December 2017 (the "PAWG Draft Report")

Interrogatory:

1. In its Application, Hydro One states that it has calculated Joint Use Telecom charges from 2018 to 2022 using the methodology approved in the EB-2015-0141 Decision and proposes adopting these charges until the OEB issues its decision in the PAWG Proceeding. Once that decision has been issued, Hydro One states that it will revisit its charges to comply with it prospectively.

   In the interim, Hydro One has taken the $41.28 rate approved in the EB-2015-0141 Decision and adjusted it for the years 2016 to 2022 using inflation rates and Hydro One's productivity factor. Yet, in the PAWG Draft Report, Board staff recommend that the proposed universal rate of $52 be adjusted for inflation but no productivity factor. Please explain why Hydro One chose the use of a productivity factor.

2. Your general rate application includes new proposed electricity rates for Norfolk Power, Haldimand County Hydro and Woodstock Hydro. Please complete the following table.

	Date acquisition closed	# of joint use poles owned	Current pole attachment rate
Norfolk Power			
Haldimand County Hydro			
Woodstock Hydro			

a) Are you proposing to apply the proposed pole attachment rates for Hydro One to these three LDCs?

b) Have you done any kind of analysis to demonstrate that these three LDCs share substantially similar pole costs and number or telecom attachers as Hydro One has used in the EB-2015-0141 proceeding and as updated in this hearing?

c) Do any of these three LDCs have pole-sharing arrangements with Bell Canada similar to the one Hydro One has with Bell?

Response:

1. Please refer to I-51-VECC-117 c).

2.

	Integration Date	# of joint use poles owned (YE 2016)	Current pole attachment rate
Norfolk Power	September 1, 2015.	3,072	$22.35
Haldimand Hydro	September 1, 2016.	1,347	$22.35
Woodstock Hydro	September 1, 2016.	1,392	$22.35
TOTAL		5,811	

a) Norfolk Power, Haldimand County Hydro and Woodstock Hydro currently have 2017 distribution rates approved and are currently awaiting OEB approval of 2018 rates per the EB-2017-0050 application. Each utility is currently charging third party attachers the OEB approved rate of $22.35. In 2021, Hydro One will charge third party attachers in these utilities the then current Hydro One approved telecom rate, unless there is a final OEB decision on the wireline rate prior to 2021.

b) No.

c) No.

Rogers Communications Interrogatory # 3

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Interrogatory:

1. In respect of Hydro One's joint use poles (i.e., those poles with telecom or other third party attachers), provide the following information for the sizes of poles shown as at the end of 2017. If 2017 values are not available, use 2016 values.

Pole Height	Total no. of joint use poles	Total Net Book Value	Average NBV/pole	Average Current Installed Cost
30				
35				
40				
45				
50				
55				
60				
65				
Above 65				
TOTAL				

2. In respect of Hydro One's non-joint use poles (i.e., those poles with no telecom or other third party attachers), provide the following information for the sizes of poles shown as at the end of 2017. If 2017 values are not available, use 2016 values.

Pole Height	Total no. of non-joint use poles	Total Net Book Value	Average NBV/pole	Average Current Installed Cost
30				
35				
40				
45				
50				
55				
60				
65				
Above 65				
TOTAL				

3. If a standard joint use pole that is designed to accommodate telecom attachments is 40 feet in height, under what circumstances would a pole need to be either less than 40 feet or more than 40 feet (e.g., to accommodate generator facilities)? Please provide your answer using the table below.

Pole Height	When pole is used	Types of attachers
30		
35		
40		
45		
50		
55		
60		
65		
Above 65		

4. If a telecom attacher only requires a 40 foot pole for its purposes, please explain, using suitable economic and regulatory principles, why it is reasonable to include in the pole attachment rate for telecom attachers, the costs of larger and more expensive poles that are required by other parties and not the telecom attachers. In other words, why should telecom attachers contribute to the costs of larger poles in circumstances where they do not require the additional height?

Response:

1.

Pole Height	Total No. of Joint Use Poles (YE 2016)	Total Net Book Value	Average NBV/Pole	Average Current Installed Cost
<=25	162	*	*	**
30	48,455	*	*	**
35	140,983	*	*	**
40	146,824	*	*	**
45	105,231	*	*	**
>=50	70,721	*	*	**
Unknown	889	*	*	**
TOTAL	**513,265**	*	*	**

2.

Pole Height	Total No. of Non-Joint Use Poles (YE 2016)	Total Net Book Value	Average NBV/Pole	Average Current Installed Cost
<=25	507	*	*	**
30	178,911	*	*	**
35	362,424	*	*	**
40	281,053	*	*	**
45	124,800	*	*	**
>=50	91,558	*	*	**
Unknown	10,466	*	*	**
TOTAL	**1,049,719**	*	*	**

*Hydro One does not track total net book value, or average net book value per pole based on pole length. Hydro One uses all poles in the calculation of its Net Book Value (in USoA 1830).

**Hydro One does not track installed value per pole length and whether Joint Use, or non-Joint Use.

Note: Hydro One's average pole cost in all types of situations, and setting conditions, for the yearly pole replacement program for 2016 is $8,350 (B1-1-1, DSP Section 1.4, Table 8 (Page 3 of 43).

Witness: BOLDT John

3.

Pole Height	When pole is used	Types of Attachers
<=25	Secondary power and telecom service poles, usually backlot construction (no vehicle access)	Telecom
30	Secondary power and telecom service poles, usually backlot construction (no vehicle access)	Telecom
35	Secondary power and telecom service poles for road crossing.	Telecom
35	Guying poles for road crossings (stub pole)	Telecom, LDC, Generator
40	Standard Primary Power and Telecom Joint Use Pole (main feeder/main line attachments along the side of a road, no deep ditches/ravines)	Telecom, Streetlights
45	Standard Primary Power and Telecom Joint Use Pole (main feeder/main line attachments crossing highways/roads, no deep ditches/ravines)	Telecom, Streetlights
50	Standard LDC/Generator Joint Use Pole with HONI + one power circuit (main feeder/main line attachments along the side of a road, no deep ditches/ravines)	Telecom, LDC, Generator, Streetlights
55 - 60	Standard LDC/Generator Joint Use Pole with HONI + one power circuit (main feeder/main line attachments crossing highways/roads, no deep ditches/ravines)	Telecom, LDC, Generator, Streetlights
65 and above	LDC/Generator Joint Use with HONI + multiple circuits. Sometimes, poles 65’ or greater are used in areas with deep ditches, and ravines for clearances.	Telecom, LDC, Generator, Streetlights

4. The average pole height for a carrier to attach on a power pole is 40 feet, for their main line attachments. Where main line attachments are crossing roads, carriers do need to attach at a higher point from the ground to be able to safely get across the road, or highway, at the maximum sag of their attached wire. As span lengths, or distances between poles increase, so do the maximum sags of wire. Therefore, stating that all that the carrier needs is a 40 ft. pole is not correct. For long road crossings, and in designing at maximum sag, poles above 40 ft. need to be used to allow the carrier to be able to stay a safe distance above the ground. This is also the case when crossing a road that has deep ditches, as well as when running parallel to a highway to cross driveways, or obstacles along the way.

As seen in the table, in I-54-Rogers-3-3, there are multiple types of attachers for different lengths of poles, and when Hydro One initially installs larger poles in locations where there are multiple electrical circuits, separation space, as well as telecom space, is built into the pole to allow for future telecom attachers.

Rogers Communications Interrogatory # 4

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Depreciation rate of 1.7%

Interrogatory:

1. We understand that, based on a depreciation rate of 1.7%, Hydro One employs an average useful pole life of approximately 59 years. Using the table below, please provide the number of joint use poles that were replaced pursuant to a proactive pole replacement or other capital program (as opposed to replacement as part of ongoing maintenance), including poles that were replaced prior to the end of their useful life. Please describe the nature and purpose of the programs that were adopted for these pole replacements.

	2014	2015	2016	2017
No. of joint use poles replaced				
%age of joint use poles replaced				
No. of joint use poles replaced prematurely (i.e., prior to end of their useful life)				
%age of joint use poles replaced prematurely				

2. In each of the years 2014 to 2017, how many poles were replaced prematurely due to the requirements of Hydro One, other LDCs or third party generators?

Response:

1. Hydro One is unable to supply this information because we do not track to this level of granularity.

Witness: BOLDT John

2. Hydro One is unable to supply this information because we do not track to this level of granularity.

Rogers Communications Interrogatory # 5

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Interrogatory:

1. Please complete the following table using the most current information available (2017 or 2016). Reference to "telecom" means wireline attachments.

Attacher or Attachment	No. of Units	Current Rate	Annual Revenues	Proposed Rate	Annual Revenues
Reciprocal pole-sharing arrangements					
Bell (Full)					
Bell (Clearance or Service)					
Other Telecom (Full)					
Other Telecom (Clearance or Service)					
LDC or Generator Telecom					
TOTAL					
No pole-sharing arrangement					
Bell (Full)					
Bell (Clearance or Service)					
Other Telecom (Full)					
Other Telecom (Clearance or Service)					
LDC or Generator Telecom					
TOTAL					
Other attachments					
Generator power facilities					
LDC power facilities (excl Hydro One)					

Streetlights					
Bell antennas and other wireless equip.					
Antennas and other wireless equipment					
Other (signs, banners, traffic lights)					
TOTAL					
GRAND TOTAL					

2. For each attacher above that does not pay the OEB-approved pole attachment rate for telecom attachers, provide the pole attachment rate that is charged to the attacher, explain how the applicable rate was determined and why it is different from the OEB-approved pole attachment rate for telecom attachers.

3. For each attacher above that does not pay the OEB-approved pole attachment rate for telecom attachers, provide the pole attachment rate that Hydro One has proposed for each of the years 2018-2022. Explain how the proposed rate for each attacher was determined and why it is different from what Hydro One has proposed for telecom attachers.

4. If circumstances permit Hydro One to apply the findings of the Board in its future decision from the PAWG Proceeding to its telecom pole attachment rate, will Hydro One change or otherwise revisit the different rates it proposes to charge the other attachers described in Question 3?

5. For the "other attachers" listed below, please describe where on the joint use pole the attachment would typically be located, and how much space has been allocated for or dedicated to such attachment.

Attacher or Attachment	Location on pole	Space allocated or dedicated
Generator power facilities		
LDC power facilities		
Streetlights		
Antennas and other wireless equipment		

6. Has Hydro One entered into any agreements with telecommunications or other companies that will allow these companies to attach antennas or other wireless equipment to the poles of Hydro One, now or in the future? What is the pole attachment rate under these agreements?

7. If wireless attachment rates to hydro poles are, for the most part, unregulated and Hydro One is allowed to charge "market" rates for wireless attachments to its joint use poles, how does Hydro One intend to adjust the pole attachment rate for wireline telecom attachments to reflect the additional revenues it will receive from wireless attachments? If you do not intend to adjust the wireline attachment rate, please provide a rationale for this decision and explain why it would still be reasonable from a rate-making perspective.

8. In the EB 2015-0141 proceeding, you calculated the "actual" average number of attachers per pole of 1.3 by dividing the total number of attachers (746,204) by the total "poles that contain joint use" (576,068).

    a) Please confirm that the total number of attachers used in this calculation included all of the attachers listed in the table in Rogers-05(1). If not, please advise which attachers are not included and explain why they were not included. Does the calculation include any attachers that are not listed in the table shown in Rogers-05(1)? If so, please describe the type and quantity of attachers.

    b) Please explain, from a rate-making perspective, how a single pole attachment rate for telecom attachers can be calculated based on a mix of different attachers that do not all pay that rate. For example, if a pole attachment rate is calculated based on the number of telecom attachers and streetlights, but the streetlights do not pay an attachment fee, doesn't that mean that Hydro One is not recovering all of its costs and therefore the ratepayers are subsidizing them? Please explain this discrepancy and support your explanation with calculations.

    c) If we accept the equal sharing methodology (as Hydro One and the OEB have done) and that methodology allocates the common costs of a pole across the users of the pole equally, regardless of the nature of configuration of the attachment, do you believe that it is reasonable that streetlights should pay an attachment rate of only $2.04? Please provide an explanation for your answer. If you answer is "no", how would you recommend that this disparity be corrected?

    d) The equal sharing methodology also requires an attacher to be responsible for 100% of the costs of the dedicated space it uses on a joint use pole. Yet, attachers such as generators that require at least 10 feet of dedicated space pay an attachment rate of only $28.61. Please reconcile this anomaly with the mechanics of the equal sharing methodology. How would you correct it?

Response:

1.

Attacher or Attachment	No. of Units 2016	Current Rate 2016	Annual Revenues 2016	Proposed Rate 2018	Annual Revenues 2018
Reciprocal pole-sharing arrangements					
Bell (Full)	331,238	N/A	$0.00	N/A	$0.00
Bell (Clearance or Service)	N/A	N/A	N/A	N/A	N/A
Other Telecom (Full)	N/A	N/A	N/A	N/A	N/A
Other Telecom (Clearance or Service)	N/A	N/A	N/A	N/A	N/A
LDC or Generator Telecom	N/A	N/A	N/A	N/A	N/A
TOTAL	331,238	N/A	N/A	N/A	N/A
No pole-sharing arrangement					
Bell (Full) (Bell MEU)	15,614	$41.28	$578,499	$47.43	$674,969
Bell (Clearance or Service)	N/A	N/A	N/A	N/A	N/A
Other Telecom (Full) (Rec + Non Rec)	256,854	$41.28	$9,700,663	$47.43	$12,155,192
Recip Telecom (Clearance or Service)	2,477	$41.28	$92,789	$47.43	$103,656
Non-Rec Telecom (Clearance or Service)	21,568	$30.96	$611,453	$35.57	$773,582
Generator Telecom	3,613	$41.28	$136,571	$47.43	$174,685
LDC Telecom	0	$0.00	$0.00	$0.00	$0.00
TOTAL	300,126		$11,125,752		$13,882,109*
Other attachments					
Generator power facilities	4,053	Dec_Rate_Order 20161221 Page 25	$241,308	H1-02-03 Table 5 Gen Rates	$434,238
LDC power facilities (excl Hydro One)	11,123	Dec_Rate_Order 20161221 Page 25	$521,798	H1-02-03 Table 4 LDC Rates	$487,512
Streetlights and traffic lights	83,238	$2.04	$169,805	$2.04	$157,777
Bell antennas and other wireless equip.	N/A	$0.00	$0.00	$0.00	$0.00
Antennas and other wireless equipment	N/A	$0.00	$0.00	$0.00	$0.00
Other (signs, banners)	Do not track	$0.00	$0.00	$0.00	$0.00
TOTAL	98,414		$932,910		$1,079,527
GRAND TOTAL	**729,778**		**$12,058,662**		**$14,961,636**

*Due to rounding, the numbers in this column don't add up to the total. There is a $25 discrepancy. The total matches the 2018 projected Joint Use Telecom Revenue filed in E1-01-02, Table 6 (Page 14).

2. LDC and Generator Power pay the applicable pole attachment rate, approved in EB-2013-0416. Refer to EB-2013-0416, G2-5-1, Tables 17-18 for an explanation of the sliding scale rates.

   For streetlight rates of $2.04 per year, refer to I-54-Staff-261 a).

   There are no annual access fees or charges billed by either party in the Bell Canada-Hydro One reciprocal pole sharing agreement. In lieu of these fees, each party has access to the others' poles. The OEB has previously found that Hydro One's reciprocal agreement with Bell has no impact on the pole attachment charge (EB-2015-0141 Decision and Order, Rogers Motion, Page 10).

3. For LDCs and Generators, Hydro One is proposing to charge the fees outlined in H1-02-03, Pages 105-112.

   Hydro One is proposing to keep the streetlight rate constant at $2.04 per year. The rate is explained in I-54-Staff-261 a).

   There are no annual access fees or charges billed by either party in the Bell Canada-Hydro One reciprocal pole sharing agreement. In lieu of these fees, each party has access to the others' poles. The OEB has previously found that Hydro One's reciprocal agreement with Bell has no impact on the pole attachment charge (EB-2015-0141 Decision and Order, Rogers Motion, Page 10).

4. No, the PAWG Proceeding only addresses the rate to be charged to telecom attachers.

5.

Attacher or Attachment	Location on pole	Space allocated or dedicated
Generator power facilities	Power space	Varies depending on number of circuits
LDC power facilities	Power space	Varies depending on number of circuits
Streetlights	Top of separation space	6 inches
Antennas and other wireless equipment	N/A	N/A

6. No current agreements in place. Not applicable.

7. Wireless attachment revenue will not be used to reduce the regulated amount for wireline attachments. It will be reported as external revenue, which will reduce Hydro One's distribution rate revenue requirement.

8.

a) Yes, the total attachers listed in the referenced table were included. Please refer to I-54-Staff-260 b) where the number of attachers per pole ratio was corrected. No, the calculation does not include any other attachers not listed in the referenced table.

b) Refer to I-54-Staff-261 a).

c) Refer to I-54-Staff-261 a).

d) In 2017, Generators using 10 ft. of space paid $47.82, not $28.61. This rate is proposed to increase to $85.33 in 2018.

The equal sharing methodology for generator rates is described in H1-02-03, Page 110-112, and 1-51-VECC-124 a), b) and c).

Rogers Communications Interrogatory # 6

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Net Embedded Cost (NEC) per pole of $944.59 (based on 2014 year-end value)
Pole Maintenance Expense of $5.52 per pole (Response to Board Staff Interrogatory #2.1(10))

Interrogatory:

1. We need to understand exactly how the costs associated with pole replacement costs have been included in the pole attachment rate to ensure that there has been no double-counting. It is possible that they have been included in Pole Maintenance Expenses, as well as been capitalized in Account 1830.

    a) Does your calculation of $5.52 per pole for Pole Maintenance Expenses include all or a portion of the costs of ongoing pole replacement? If so, provide a value for such expenses, with supporting detail.

    b) Are the capitalized costs associated with the replacement of your joint use poles included in Account 1830 and hence your calculation for the Net Embedded Cost per pole?

    c) If your assertion is that these costs are not included in Account 1830, then demonstrate, with specific supporting evidence, how these costs have been accounted for.

    d) If such costs have been included in Account 1830, provide a value for these costs (or your best estimate) for each of the 10 years from 2006 to 2017. If you are providing an estimate, explain the rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

Witness: BOLDT John

e) Please show the necessary adjustment to the NEC of $944.59 to ensure that there is no double-counting of pole replacement costs. Provide all supporting assumptions and calculations.

f) If it is not reasonably possible to adjust the NEC, then show what adjustments must be made to Pole Maintenance Expense to ensure that there is no double-counting. Provide all supporting assumptions and calculations.

2. The following questions have to do with Hydro One's assets that are situated on the poles owned or operated by others (e.g., Bell Canada).

a) Confirm that power assets and other equipment owned or operated by Hydro One that are located on poles owned by Bell or other third parties are included in Account 1830 and hence your calculation for NEC per pole.

b) If your assertion is that these assets are not included in Account 1830, then demonstrate, with specific supporting evidence, which account such assets have been included.

c) If such costs have been included in Account 1830, provide a value for them (or your best estimate) for the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate. Please show how the number was obtained with supporting calculations and documents.

d) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

3. The following questions have to do with make-ready costs paid by telecom attachers.

a) Provide the value of make-ready costs paid by telecom attachers to Hydro One in respect of their attachments in each of the years 2015-2017 and the accounts in which these amounts were recorded.

b) Confirm that third party telecom make-ready costs and other third party contributions to the capitalized installed costs of joint use poles are included in Account 1830 and hence your calculation for NEC per pole.

c) If your assertion is that these costs are not included in Account 1830, then demonstrate, with specific supporting evidence, which account such costs have been included.

d) If such costs have been included in Account 1830, provide a value for them (or your best estimate) for each of the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

e) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

4. The following questions have to do with guying and anchoring provided on joint use poles.

a) Confirm that, when the addition of a telecom attachment requires additional guying and anchors for a joint use pole, the telecom attacher is responsible for the costs of such guying and anchors.

b) Confirm that the costs of guying and anchoring required for a joint use pole that has no telecom attachments are included in Account 1830 and hence your calculation for NEC per pole.

c) If your assertion is that these costs described in paragraph (b) are not included in Account 1830, then demonstrate, with specific supporting evidence, in which account such costs have been included.

d) If the costs described in paragraph (b) are included in Account 1830, provide a value for them (or your best estimate) for each of the years 2015, 2016 and 2017. If you are providing an estimate, explain the assumptions and rationale for doing so, as well as who from Hydro One, including their title and job description, prepared this estimate.

e) Please show the adjustment to the NEC of $944.59 necessary to remove these costs.

Response:

1. a) Pole maintenance costs of $5.52 were not filed in this application. As filed in Exhibit H1-02-03, Page 104, Hydro One's 2016 pole maintenance costs are $4.08. That value was inflated by the OEB Inflation Rate, less Hydro One's productivity factor, to determine the 2018 rate. There are no pole replacement costs included in the pole maintenance expenses.

   b) All poles are capitalized in USoA 1830. Poles replaced by Hydro One driven programs or projects are capitalized at full value, less pole removal costs. Any Hydro One pole that is replaced at the request of a third party is capitalized at the cost, less the third party's contribution.

   The third party's contribution is inserted into USoA 1830 as a negative value, therefore reducing the capital value of the pole change.

   c) N/A

   d) Hydro One does not specifically track capitalization costs of replaced Joint Use poles.

   e) There is no double counting of pole replacement costs, as per Exhibit I-54-Rogers-6 1.b). Therefore, no adjustment of the NEC is required.

   f) Refer to Exhibit I-54-Rogers-6 1.a) and 1.e)

2. a) Confirmed.

   b) N/A

   c) Hydro One does not specifically track the cost of fixtures separately in USoA 1830.

   d) N/A

3. a) Hydro One does not track to this level of granularity.

   b) Yes, confirmed, but they are included as a negative value. Refer to Exhibit I-54-Rogers-6 1.b)

c) N/A

d) Referring to 3. b) above, the value of all third party contributions associated to USoA 1830 for 2015, 2016 and 2017 are shown below.

Year	USoA 1830 Third Party Contributions
2015	-17,889,000
2016	-17,800,000
2017	-31,478,000

e) N/A

4. a) Yes, unless a common anchor is used.

b) Confirmed.

c) N/A

d) Hydro One does not track to this level of granularity.

e) N/A

Rogers Communications Interrogatory # 7

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?
Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Interrogatory:

1. We understand that, over the last several years, Hydro One has replaced several pole lines with significantly larger (60-70 feet) poles to accommodate the facilities of generators. We also understand that, in some cases, the generator constructed the pole lines and then assigned them to Hydro One, while in other cases, it paid for the cost of the new poles less the depreciated value of the existing poles.

    a) For the last 10 years, how many poles were replaced with new poles to accommodate these generators?

    b) Please describe in detail the accounting reconciliation that was conducted in respect of these replacement poles and confirm that such assets were included in Account 1830. If the costs of these assets are not included in Account 1830¸ then demonstrate, with specific supporting evidence, in which account such costs were included.

Response:

1. a) In the last 10 years, 3,356 poles were replaced to accommodate for generators.

    b) Capitalization was conducted as per I-54-Rogers-6 1.b).

Rogers Communications Interrogatory # 8

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Pole Maintenance Expense of $5.52 per pole (Response to Board Staff Interrogatory#2.1(10))

Interrogatory:

1. In the EB-2015-0141 proceeding, the Board accepted a value of $5.52 per pole for Pole Maintenance Expenses (prior to the 15% deduction for power-only assets). According to your evidence, this number is based on the total of Line Patrol costs of $5.4M and Defect Correction costs of $3.3M, divided by the total number of all of Hydro One's poles (1,575,195).

    a) Please describe in detail all of the activities that are conducted for each of Line Patrol and Defect Correction. Provide the recorded costs for each activity.

    b) Describe how the costs were determined for each activity listed in (a) above (e.g., time studies, invoices, time-keeping records).

    c) From which Account Codes to these expenses originate (e.g., 5120, 5135)? Please show the amounts used from each Account Code in the above expenses and how such amounts were determined, including all assumptions, methodologies and calculations.

    d) Do the costs claimed in Pole Maintenance Expenses include any costs from Account Codes 5125 and 5020? If yes, provide the amounts and an explanation as to why costs from these Account Codes should be included in Pole Maintenance Expenses.

    e) In the PAWG Proceeding, Hydro One proposed that 5% of Account 5120 - Maintenance of Poles, Towers and Fixtures should be allocated to pole maintenance. Please reconcile the costs claimed above with your proposal in the PAWG

Proceeding. If it is indeed different, please explain why and which one is the more appropriate methodology for this current proceeding.

f) Do any of the amounts claimed in Pole Maintenance Expenses include expenses for activities related to pole replacement? If yes, what is the amount? If not, where do such expenses occur?

Response:

1.

a) Pole maintenance costs from the EB-2015-0141 application have been updated as part of the EB-2017-0049 application. Please refer to exhibit H1-02-03, Page 104 in this rate application.

b) Please see the response to 1 a) above.

c) Please refer to H1-02-03, Page 104.

d) Please refer to H1-02-03, Page 104.

e) Please refer to H1-02-03, Page 104. As submitted in the evidence, 5% was used, as indicated in the PAWG proceeding.

f) No pole replacement costs are included.

Rogers Communications Interrogatory # 9

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None
EB-2015-0141 – Hydro One Reply (17 June 2016)

Interrogatory:

1. In the Reply Argument for the EB-2015-0141 proceeding, Hydro One states as follows:

> Hydro One has explained how the Bell agreement factors into the calculation of the average number of attachers. Hydro One uses all third party permitted attachments, divided by the number of Hydro One owned poles that contain attachments, to arrive at its number of attachers per joint use pole. *Removing Bell attachments from the calculation will decrease the number of attachers per pole, thereby increasing the pole attachment rate. [Emphasis added.]*

We still have difficulty understanding the last statement. In our view, removing Bell attachments from the calculation is only part of the correction. One must also remove the poles with the Bell-only attachments, as demonstrated by the example below.

		Include Bell-only attachments	Exclude Bell-only attachments
Attachers	**# of joint use poles**	**# of attachers**	**# of attachers**
Both Bell and Rogers	30	60	60
Bell only	60	60	-
Rogers only	10	10	10
Total	**100**	**130**	**70**
Total # of poles		100	40
Calculation		130/100 = **1.3**	70/40 = **1.75**

Based on the above illustration, do you still hold the view that removing Bell attachments from the calculation will decrease the number of attachers per pole, thereby increasing the pole attachment rate? If your answer is "yes", please explain why you do not agree with the other calculation shown above and where its logic falls apart. In particular, please explain why it would make sense to deduct the Bell-only attachments without deducting the corresponding Bell-only poles.

2. Your calculation for average number of attachers per pole includes poles on which Bell is the only attacher. Please explain, using suitable economic and regulatory principles, why it is acceptable for telecom attachers to contribute to the costs of poles they do not occupy (i.e., the Bell-only poles).

3. At page 45 of the PAWG Draft Report, the Board addresses the relationship between LDCs and Bell as follows:

> The OEB is of the view that Bell and LDCs both have equal bargaining power, and access is not an issue as both own poles that have the possibility of accommodating the other party. *Presumably, Bell Canada and LDCs have reached agreements that are reflective of parties' costs. The OEB assumes that the 60/40 ownership ratio selected represents the differences in space, costs, and other requirements essential for each of the parties to share a pole.* The OEB also notes that LDCs and Bell are actively maintaining these balances – a recent OEB Decision and Order, for example, granted Hydro One approval to sell seven poles to Bell for the purpose of maintaining the ownership balance between Bell and Hydro One, as per the Joint Use Agreement.

> *The OEB is of the view that Bell is effectively paying the rate "in kind" where there are these reciprocal agreements*. Where there is no reciprocal agreement, Bell pays the OEB approved pole attachment charge. *[Emphasis added.]*

Further, at p.10 of the EB-2015-0141 Decision, the Board states as follows:

> The OEB finds that Hydro One's reciprocal arrangement with Bell has no impact on the pole attachment charge. Bell "pays" for its attachments to Hydro One's poles by allowing free access for Hydro One to Bell's poles. No money changes hands. *Contrary to the Carriers' repeated statements, Bell does not pay for 40% of Hydro One's pole costs. [Emphasis added.]*

Let's look at each of the statements emphasized in italics above.

"Presumably, Bell Canada and LDCs have reached agreements that are reflective of parties' costs."

a) Is this a correct presumption? If so, please explain how Bell and Hydro One have reached an agreement that is reflective of their costs. If this presumption is not correct, explain why. If the agreement is not reflective of the parties' costs, what does it reflect or purport to reflect?

"The OEB assumes that the 60/40 ownership ratio selected represents the differences in space, costs, and other requirements essential for each of the parties to share a pole."

b) Is the above assumption correct? If so, please explain how and why the 60/40 split was derived.

c) Do you believe this arrangement with a 60/40 split and zero reciprocal attachment rates ensures that Hydro One is recovering an appropriate share of its costs from Bell and there is no subsidy from the ratepayers to Bell? Please demonstrate that this is so. (Please do not respond with the assertion that whatever Hydro One charges Bell, Bell would charge Hydro One even more and therefore it is revenue neutral to the ratepayers. We understand that premise. What we are concerned here is with the recovery of costs, which is a separate concept from revenue neutrality.)

d) Have you performed any kind of analysis to demonstrate that the value to Hydro One of having access to Bell-owned poles for no additional charge, including not having to install (capital avoidance) and maintain the poles, is equivalent to the pole attachment revenues Hydro One would otherwise collect from Bell?

Regardless of whether you have or have not performed this analysis, please provide the analysis described above.

"The OEB is of the view that Bell is effectively paying the rate "in kind" where there are these reciprocal agreements."

e) Do you agree with the above statement? Why or why not?
Have you performed any kind of analysis to demonstrate that the value Bell has provided to Hydro One by installing 40% of the poles Hydro One has access to is equivalent to the annual pole attachment fees it would otherwise pay to Hydro One? Regardless of whether you have or haven't performed this analysis, please provide the analysis described above.

f) As we understand the above statement, which we believe is shared by Hydro One, the value of the poles Bell installs for Hydro One's use (e.g., the CAPEX to build the poles plus the present value of 59 years of OPEX) is equivalent to 59 years of the pole attachment fees Bell would otherwise pay to use Hydro One's poles. Please explain how this value is always equivalent to the forgone revenues from Bell regardless of what telecom pole attachment rate is used. In other words, is it Hydro One's assertion that Bell's contribution to the poles to which Hydro One has access is equal to what Bell would pay in pole attachment fees if that fee was $22.35? $37.60? $41.28? $52.00? Please demonstrate how this calculation works, showing all assumptions and historical data.

"Contrary to the Carriers' repeated statements, Bell does not pay for 40% of Hydro One's pole costs."

g) Say that Bell and Hydro One determine and agree that they require a 1000 poles between them and decide to build them under the 60/40 pole- sharing arrangement. With an installed cost of, say, $1000 per pole, Bell goes ahead and

builds 400 poles at a cost of $400,000 and Hydro One builds 600 at a cost of $600,000. Hydro One has access to all 1000 poles at a cost of $600,000.

h) Under a different scenario, Bell agrees to contribute to 40% of Hydro One's costs in building 1000 poles in exchange for a right to access these poles at no cost. Therefore, similar to the above scenario, Hydro One has access to all 1000 poles at a cost of $600,000.

4. Imagine a world where Bell is the only telecom attacher and Hydro One and Bell have entered into their current 60/40 pole-sharing agreement.

   a) Do the contractual arrangements and financial obligations of the parties ensure that the ratepayers are not in any way subsidizing the costs of the poles that are allocated to Bell? Why or why not?

   b) Do the contractual arrangements and financial obligations of the parties ensure that Hydro One is recovering the common costs of the poles associated with the telecom attacher (Bell)? Why or why not?

5. If all of the telecom attachers other than Bell were to remove their attachments from Hydro One's poles and build their own poles or go buried, would the ratepayers now be required to subsidize the costs of the poles that are attributable to Bell? Why or why not?

6. Please provide copies of all agreements with any party (including without limitation Bell Canada, other telecom attachers, other LDCs, and municipalities) that relate to:

   a) the right of that party to attach to Hydro One poles;

   b) the right of Hydro One to attach to the other party's poles; or

   c) the right of both Hydro One and the other party to attach to jointly-owned poles.

Response:

1. This interrogatory deals with Hydro One's reciprocal arrangement with Bell. The OEB in its EB-2015-0141 Decision found that "Hydro One's reciprocal arrangement with Bell has no impact on the pole attachment charge". The Draft Report of the Board issued on December 18, 2017, entitled "Review of Miscellaneous Rates and Charges (EB-2015-0304) re-affirms the findings of the EB-2015-0141 proceeding. Hydro One notes that Rogers Communications was an active participant in both proceedings. Hydro One does not expect that the Board intends to have all issues considered in the aforementioned proceedings re-litigated or commented upon as issues relevant to this proceeding. Rogers made no attempts at requesting such issues be included in the List of Issues for this proceeding and as requested by the Board in Procedural Order No. 1. Hydro One therefore does not see these matters as relevant to this proceeding and declines to provide responses to this interrogatory on that basis. Hydro One is willing however to deal with any questions related to Issue 45 in this proceeding dealing with the appropriateness of the proposed other revenues.

2. Please see the response to 1 above.

3. a)-h) Please see the response to 1 above.

4. a) and b) Please see the response to 1 above.

5. Please see the response to 1 above.

6. Please refer to the response to I-45-SEC-87 a).

Rogers Communications Interrogatory # 10

Issue:

Issue 54: Are the proposed specific service charges for miscellaneous services over the 2018 – 2022 period reasonable?

Issue 46: Are the inputs to the cost allocation model appropriate and are costs appropriately allocated?

Reference:

None

Interrogatory:

1. In the PAWG Proceeding, you proposed that 33% of vegetation management costs embedded in Account 5135 should be allocated to telecom attachers. The Board has since endorsed this approach in its PAWG Draft Report. Yet, as we understand it, under its pole-sharing arrangement with Hydro One, Bell is only responsible for 10% of the vegetation management costs for the joint use poles it shares with Hydro One. Please explain why Hydro One proposed 33% in the PAWG Draft Report but only requires Bell to pay 10%. How was the 10% determined?

2. Please demonstrate exactly how the 33% allocation of vegetation management costs to telecom attachers was determined, showing all calculations, assumptions and drawings.

    a) In theory, would the 33% allocation be applied to all of the costs Hydro One deems part of vegetation management (e.g., line clearing and brush control) taken over its entire pole population?

    b) Does the 33% allocation take into account the differences and diversity in vegetation among in Hydro One's three forestry zones: (1) Eastern, (2) Northern and (3) Southern?

    c) Does the 33% allocation take into account the fact that there are significantly more telecom attachments located in the Eastern and Southern zones, as well as in more heavily populated urban areas, all of which require less vegetation management than in the Northern zone?

3. Please confirm that if pole must be replaced to accommodate the equipment of a telecom attacher, the telecom attacher is responsible for the full cost of replacing that pole and that ownership of the new pole will reside with Hydro One.
   We understand that, under its pole-sharing arrangement with Hydro One, Bell is only required to pay the residual value of the replaced pole as opposed to the full value. Please explain why this discrepancy exists and, from a cost recovery point of view, which practice you believe is correct.

Response:

1. As referenced in the response to 1-54-Rogers-1 3), Hydro One will not be performing vegetation management activities, nor charging any telecom attachers for vegetation management services (including Bell Canada) during the 2018-2022 period. As such this question is no longer relevant. Please also refer to the response to I-54-Rogers-9 1).

2. a) Refer to I-54-Rogers-9 1).

   b) Refer to I-54-Rogers-9 1).

   c) Refer to I-54-Rogers-9 1).

3. Confirmed.

   In the Hydro One and Bell agreement for one off requests, from one party to the other, the requestor pays the owner of the pole the residual value of the pole, removal cost of the pole and all transfer costs. For any project greater than 15 poles, the requestor pays the pole owner's actual costs of all labour, equipment, and material, including forestry.

   Residual value is paid for one off requests only. Since Bell Canada owns poles that Hydro One attaches to, when Hydro One requests to attach to a one off pole owned by Bell, reciprocally, only residual value, removal cost of the pole and transfer costs are paid. From a cost recovery point of view, in this agreement, both companies are held whole.

TAB 5

Canadian Radio-television and Telecommunications Commission
Conseil de la radiodiffusion et des télécommunications canadiennes

Telecom Decision CRTC 2010-900

PDF version

Route reference: Telecom Notice of Consultation 2009-432, as amended

Ottawa, 2 December 2010

Review of the large incumbent local exchange carriers' support structure service rates

File numbers: 8638-C12-201017137, 8690-C12-200910408, and 8690-T66-200814774

In this decision, the Commission approves revised rates for the wholesale support structure services of Bell Aliant, Bell Canada, MTS Allstream, TCC, and Télébec, effective 21 July 2009. The Commission also initiates a follow-up proceeding regarding service pole rates and a possible markup on Phase II support structure costs.

Introduction

1. In response to an application by TELUS Communications Company (TCC), dated 30 October 2008, and having considered subsequent comments from other parties, the Commission issued Telecom Notice of Consultation 2009-432 (the notice) to examine the support structure service rates of the following incumbent local exchange carriers (ILECs): Bell Aliant Regional Communications, Limited Partnership (Bell Aliant), Bell Canada, and Télébec, Limited Partnership (Télébec) [collectively, Bell Canada et al.]; MTS Allstream Inc. (MTS Allstream); and TCC.[1]

2. The ILECs' support structure services are tariffed wholesale services that make three types of support structures – poles, strands, and conduits – available to third parties for use as an input to provide competitive retail services.[2] ILECs also use their support structures to provide retail services. Each of the three support structure types has a different rate. A brief description of each type is set out in Appendix 1 to this decision.

3. Currently, all ILECs' rates for each type of support structure are the same. The rates, which the Commission approved in Telecom Decision 95-13, were established based on Bell Canada's support structure costs. In the notice, the Commission indicated that any revised rates would be ILEC-specific and would be established using the

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1 Saskatchewan Telecommunications requested that it be excluded from this proceeding.

2 Each ILEC provides support structure service in its incumbent serving territory, which includes, for Bell Aliant, the Atlantic provinces and most rural and remote areas in Ontario and Quebec; for Bell Canada, most large urban, suburban, and non-rural areas in Ontario and Quebec; for MTS Allstream, the province of Manitoba; for Télébec, areas in Quebec; and for TCC, most of Alberta and British Columbia, and areas in Quebec.

pricing methodology in Telecom Decision 95-13 (the 95-13 pricing methodology). Further, the Commission made current rates interim effective 21 July 2009, the date of the notice.

4. Parties that participated in the proceeding included Bragg Communications Inc., the Canadian Cable Systems Alliance, Cogeco Cable Inc., Quebecor Media Inc. on behalf of its affiliate Videotron Ltd., Rogers Communications Inc., and Shaw Communications Inc. (collectively, the cable carriers); TekSavvy Solutions Inc.; and Xittel Télécommunications Inc., on its own behalf and on behalf of the Regroupement québécois des utilisateurs de structures de soutènement (Le Regroupement).[3]

5. Comments were also received from others, including La Fédération Québécoise des Municipalités, La Fédération des commissions scolaires du Québec, and l'Association des commissions scolaires anglophones du Québec (referred to, collectively, with Le Regroupement, as the Quebec submissions); Le ministère de la Culture, des Communications et de la Condition féminine du Québec, with the participation of Le ministère de l'Éducation, du Loisir et du Sport, and Le ministère des Affaires municipales, des Régions et de l'Occupation du territoire (collectively, the MCCCF), and Le Bloc Québécois.

6. Parties commenting on the ILECs' proposals opposed various aspects of those proposals, including the size of the proposed rate increases. The MCCCF, the Quebec submissions, and Le Bloc Québécois opposed the ILECs' proposed rate increases in Quebec because, if approved, they would jeopardize provincial government programs, such as Villages branchés du Québec and Communautés rurales branchées, that aim to make affordable high-speed Internet service available throughout Quebec for public policy reasons. Bell Canada et al. submitted that their proposed rate increases reflect costs, and that they alone should not be required to subsidize public policy objectives or competitors.

7. The public record of this proceeding, which closed on 6 August 2010, is available on the Commission's website at www.crtc.gc.ca under "Public Proceedings" or by using the file numbers provided above.

Issues

8. The Commission has identified the following issues to be addressed in this decision:

   I. Is the 95-13 pricing methodology consistent with the Policy Direction?
   II. Are the ILECs' proposed costs reasonable?
   III. What support structure rates would be just and reasonable?
   IV. Should revised rates be applied on a retroactive basis?
   V. What matters should be considered in a follow-up proceeding?

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[3] Le Regroupement represented a dozen organizations that provide retail services to public and private users, chiefly in non-urban centres in Quebec.

I. Is the 95-13 pricing methodology consistent with the Policy Direction?

9. The 95-13 pricing methodology determines support structure rates on the basis that rates should, at a minimum, exceed the ILECs' Phase II costs[4] and make a reasonable contribution to their fixed structure costs.

10. In Telecom Decision 95-13, the Commission applied a different pricing methodology to determine the ILECs' support structure service rates than it typically uses to establish rates for wholesale services.[5] This different pricing methodology was applied because ILECs make space on their support structures available to third parties on a different basis than they provide other wholesale services. That is, the ILECs' tariffs provide that the ILECs have a right of priority access to use their support structures, with the result that they are required to provide space to a third party only if the structure has spare capacity.[6]

11. As a result, third-party demand for ILEC support structures does not result in, or advance the timing of, construction of the structures themselves. In contrast, third-party demand for other wholesale services typically causes the ILEC to construct or to advance construction of facilities used to provide these services.

12. The 95-13 pricing methodology treats ILEC costs for the structures themselves as fixed costs and assesses them on an embedded cost basis – that is, using historical accounting costs from its books (embedded costs). The amount of contribution third parties make to the ILECs' fixed structure costs is based on third-party use of the ILECs' structures.[7] Phase II costs for support structure services include costs associated with administration and lost productivity.[8]

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4 Phase II costs are costs that are determined on a causal, prospective, and economic basis using a Commission-approved costing manual.

5 When the Commission establishes a new rate or reviews existing rates for a wholesale service, it may require ILECs to submit a cost study in support of proposed rates. This study typically estimates the service's costs based on Phase II costs. The Commission then typically adds an appropriate percentage markup to the service's Phase II costs, with the result that the service's rate equals its Phase II costs plus the amount of markup. The markup contributes to the ILEC's recovery of fixed common expenses (such as corporate overhead expenses) and embedded costs that are not included in Phase II costs.

6 Spare capacity, as defined in the ILECs' tariffs, is considered to be total structure capacity less the sum of (a) all capacity the ILEC requires to meet both its current and anticipated future needs, and (b) all structure capacity currently used by third parties. The bases on which ILECs provide access to their support structures are set out in their support structure tariffs and are not under review in this proceeding.

7 The reasonable amount of contribution to fixed structure costs is 100 percent of the embedded costs attributable to third parties.

8 Administrative costs reflect, for example, billing activities. Productivity loss costs reflect, for example, additional time and money the ILEC may incur to maintain its facilities on its poles when third-party facilities have also been installed.

Positions of parties

13. Bell Canada et al. and TCC submitted that support structure rates determined using the 95-13 pricing methodology would violate the Policy Direction for various reasons, notably because such rates

    - would not recover costs because costs for the structures themselves would not be determined using replacement (cost new) costs,
    - would be below market levels,
    - would subsidize cable carriers and interfere unduly with competitive market forces,
    - would not be competitively neutral, and
    - would not represent efficient regulation.

14. Bell Canada et al. and TCC noted the Commission's statement in Telecom Decision 95-13 that it "considers competitive equity a valid factor to consider in determining rates." They also noted the Commission's characterization of competition in that decision as limited in extent. These ILECs submitted that competition is no longer limited, and that cable carriers are now the ILECs' leading competitor and, as such, should pay their fair share of support structure costs.

15. TCC also submitted that using embedded costs for the capital costs of the structures themselves to develop support structure rates is not consistent with the Commission's typical costing practices. Bell Canada et al. also submitted that Telecom Decision 95-13 did not establish a specific costing methodology for determining support structure rates.

16. Parties disagreed with Bell Canada et al.'s and TCC's views, for the following reasons, among others:

    - rates established using the 95-13 pricing methodology would not understate costs and would not be artificially low or anti-competitive because third-party use of ILEC structures does not cause structure costs; and
    - the reasons why third parties are not encouraged to construct their own support structure facilities, and would have difficulty doing so, are not related to rates.

17. Parties also disagreed with Bell Canada et al.'s and TCC's submissions regarding competitive equity as a rate-setting factor for various reasons, including that ILECs retain the right to priority access to their structures.

Commission's analysis and determinations

18. Regarding Bell Canada et al.'s and TCC's submissions that "cost new" should be used to assess the structure costs, the Commission continues to consider that, given the ILECs' right of priority access to these structures, rates established using the 95-13 pricing methodology recover the appropriate costs. Regarding these ILECs' submissions that current rates are below market level, the Commission notes its finding in Telecom Order 2009-731 that support structures are not provided on a competitive basis. In Telecom Decision 2008-17, the Commission also rejected

Bell Canada et al.'s proposal that the pricing approach for ILEC support structure rates should take into account rates charged by other support structure providers, such as electrical utilities.[9]

19. With respect to the submissions of Bell Canada et al. and TCC regarding competitive equity as a valid factor for rate-setting purposes and the limited extent of competition at the time of Telecom Decision 95-13, the Commission considers that the relevant references in that decision must be read in the context of the full paragraph in which they appear:

> The Commission considers competitive equity a valid factor to consider in the determination of appropriate rates. However, in light of the limited extent of competition at this time, the Commission is of the view that the sharing of support structure costs, as proposed by Stentor[10] in this proceeding, is not justified, *particularly given that the telephone companies will have priority access to support structures in order to meet current and anticipated future service requirements.* (emphasis added)

20. When Telecom Decision 95-13 referred to the limited amount of competition as a reason for rejecting Stentor's cost-sharing proposal, it also made particular reference to the ILECs' right of priority access to support structures as a reason for rejecting the proposal. While retail competition is no longer limited, the Commission notes that ILECs continue to have the right of priority access to their support structures.

21. The Commission considers that, while the level of retail competition is not a separate factor affecting rates, rates established based on support structure service costs and a percent-utilization factor will, at least in part, reflect the level of competition. The Commission notes its determination in Part II of this decision regarding the percent-utilization factor for poles, which is greater than that used to determine pole rates in Telecom Decision 95-13. In the Commission's view, it is reasonable to expect that this greater percent-utilization reflects increased competition in retail markets.[11]

22. Further, regarding Bell Canada et al.'s and TCC's submissions that the cable carriers' competitive position should be taken into account for rating purposes, the Commission notes that support structure rates, and wholesale service rates generally, are not established with specific reference to retail market share or a third party's ability to pay.

23. In light of the above, including the rationale for the 95-13 pricing methodology, the Commission finds that the 95-13 pricing methodology as applied in this decision to determine revised support structure rates would not result in below-cost rates, subsidize

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9 Electrical utility rates are not regulated under the *Telecommunications Act*.

10 Stentor was an ILEC association that existed from 1992 to 1999. It included Stentor Resource Centre Inc., which represented Bell Canada and some of the current ILECs' predecessors in the proceeding that led to Telecom Decision 95-13.

11 Percent-utilization factors for strand and conduit were not changed for the reasons set out in Part II of this decision.

third parties, interfere with competitive market forces, subject ILECs to a competitive disadvantage, or discourage investment in support structures. The Commission also finds that the 95-13 pricing methodology represents efficient regulation. The Commission reiterates its finding in Telecom Decision 2008-17 that the use of this methodology to determine support structure rates is consistent with the Policy Direction.

II. Are the ILECs' proposed costs reasonable?[12]

24. In this proceeding, the ILECs filed proposed costs using the template provided by the Commission.[13] The Commission has reviewed all cost elements in each ILEC's cost estimates and has adjusted many of them. Appendix 3 sets out for each ILEC, by structure type, costs assessed by the Commission, reflecting all adjustments.

25. Costing issues are addressed below in three groups: i) costing issues common to all the ILECs, ii) major ILEC-specific costing issues, and iii) minor ILEC-specific costing issues.

26. Adjustments discussed in i) and ii) account for approximately 90 percent of the effect of all Commission adjustments on each ILEC's proposed costs.

i) Costing issues common to all the ILECs

27. The portion of the ILECs' embedded costs for poles assigned to third parties was determined in Telecom Decision 95-13 based on three considerations. These are a) the percent-communication factor, b) the percent-utilization factor, and c) the fairness factor. For strands and conduits, the portion of the ILECs' embedded costs assigned to third parties was determined based only on the percent-utilization factor.

28. This section addresses costing issues related to these three factors, as well as two other common costing issues: service poles and new cost inputs.

a) Percent-communication factor

29. The percent-communication factor refers to the approach used to determine what portion of a pole's cost is attributable to communications. For wholly owned poles,[14] the percent-communication factor is 100 percent. For joint-use poles,[15] the percent-communication factor used in Telecom Decision 95-13 was the

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[12] Appendix 2 to this decision sets out, on a step-by-step basis, the Commission's approach to the assessment of embedded and Phase II costs in Telecom Decision 95-13.

[13] The Commission provided the template in Telecom Order 2009-731. Each ILEC filed its proposed costs on 8 February 2010. Bell Aliant and Bell Canada filed revised proposed costs on 17 March 2010. MTS Allstream filed revised proposed costs on 20 July 2010. TCC filed revised proposed strand costs for Alberta and British Columbia on 23 March 2010, and revised proposed pole and strand costs for Quebec on 28 May 2010.

[14] Wholly owned poles are poles that are owned by the ILEC and for which there is no sharing agreement with hydro companies. Each ILEC has wholly owned poles.

[15] Joint-use poles are poles that are owned either by the ILEC or the hydro company, and for which there is a sharing agreement between the ILEC and the hydro company. Bell Aliant, Bell Canada, Télébec, and TCC in Quebec have joint-use poles.

percentage of physical communications space on a pole relative to total usable space for both communications and hydro. The Commission notes that rates approved in Telecom Decision 95-13 were established using an average percent-communication factor of 51 percent, reflecting the weighted average of Bell Canada's wholly owned and joint-use poles.

30. Bell Canada et al. and TCC proposed to modify the approach used in Telecom Decision 95-13 to calculate the percent-communication factor for joint-use poles. They proposed to use the percentage of the joint-use poles owned by an ILEC relative to the total number of joint-use poles owned by both the ILEC and the hydro company. They submitted that this would reflect the ILEC's real cost based on its joint-use agreement with the hydro company.

31. Cable carriers submitted that costs for support structures should be assessed in the same manner as they were in Telecom Decision 95-13. They also submitted that the ILECs' cost estimates are based on radical departures from the 95-13 methodology.

32. Regarding the cable carriers' submissions, the Commission notes that, when reviewing current support structure service rates to determine whether they remain just and reasonable, it assesses the ILECs' current costs to provide this service. The Commission considers, however, that the use of a different approach to estimate the ILECs' structure costs, on an embedded basis, does not constitute a change in the 95-13 pricing methodology.

33. The Commission notes that in joint-use agreements between ILECs and hydro companies, the ILEC owns a percentage of the total number of joint-use poles and has access to the hydro company's joint-use poles at no cost to the ILEC. The Commission considers that joint-use agreements effectively reduce an ILEC's cost for joint-use poles. The Commission therefore considers that the approach proposed by Bell Canada et al. and TCC reflects the ILEC's true average cost per joint-use pole for all joint-use poles to which the ILEC has access.

34. Accordingly, the Commission considers it appropriate to determine the percent-communication factor for joint-use poles by using the percentage of the joint-use poles owned by an ILEC relative to the total number of joint-use poles owned by both the ILEC and the hydro company.

b) Percent-utilization factor

35. The percent-utilization factor refers to the approach used to determine what portion of a structure's embedded cost is attributable to third parties.

36. For poles, all ILECs except MTS Allstream proposed to determine the percent-utilization factor by assigning an equal share of the embedded cost per pole to each party that attaches to the pole,[16] including the ILEC itself, regardless of the number of cables each party has. MTS Allstream proposed an approach that would use forecast usage rather than current usage.

37. In the Commission's view, however, an approach that determines ILEC-specific percent-utilization factors for poles based on the average number of third-party cables relative to the average total number of cables attached to a pole continues to provide a more accurate reflection of ILEC and third-party consumption of pole space than the ILECs' proposed alternatives.[17]

38. For strands and conduits, each ILEC proposed a different approach for determining the percent-utilization factors.

39. For strands, no information was provided that would allow the Commission to determine ILEC-specific percent-utilization factors based on relative use. In view of this, the Commission considers that for costing purposes, consistent with Telecom Decision 95-13, third parties have one cable and ILECs have two cables on an ILEC strand.

40. For conduits, Telecom Decision 95-13 rates reflect embedded costs determined using a percent-utilization factor of 25 percent. ILECs were considered to have twice as many cables in ILEC conduits as third parties did, which would have resulted in a percent-utilization factor of 33 percent. However, the percent-utilization factor was adjusted to 25 percent to take into account that ILECs' cables, comprised mostly of copper cables, were larger than third-party cables.

41. In this proceeding, TCC was the only ILEC to provide information on the relative use of conduits by an ILEC and third parties. TCC's sample information showed that third parties own 30 percent of cables in conduits. The Commission considers this sample information does not differ materially from the 33 percent-utilization factor discussed above. However, unlike in Telecom Decision 95-13, the Commission considers that the percent-utilization factor for conduits should not be adjusted for differences between the size of ILEC and third-party cables given the increased use of fibre cables since that time.

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[16] The support structure tariff states that there can only be one pole rate charged to a third party per pole, regardless of the number of attachments the third party has on the pole.

[17] As part of its determination of the total embedded cost attributable to third parties, in this decision – as in Telecom Decision 95-13 – the Commission determined the number of poles to which third parties attach to be the number of pole-attachment billing units, divided by the average number of third parties per pole. If the average number of third parties attached to a pole is greater than one, the number of pole-attachment billing units will be greater than the number of poles to which third parties attach.

42. Accordingly, the Commission considers it appropriate to use the percent-utilization factors identified in Appendix 3 for each ILEC and structure type.

c) Fairness factor

43. The fairness factor was employed in Telecom Decision 95-13 to recognize differences between the costing of joint-use and jointly owned poles[18] in Bell Canada's and BC TEL's[19] territories, respectively, given that a single pole rate was approved in that decision for all ILECs across the country.

44. In this proceeding, Bell Canada et al. proposed to exclude the fairness factor on the basis that its use would effectively double-count the effect of the ILEC-hydro company split in the ownership of joint-use poles. However, the cable carriers submitted that the fairness factor should be used because ILECs do not pay an additional amount for access to hydro-owned poles.

45. The Commission notes that in this proceeding it is considering revised rates that would be ILEC-specific, and not uniform nationally as was the case in Telecom Decision 95-13.

46. The Commission further notes its finding above that assessing the percent-communication factor as the percentage of the joint-use poles owned by an ILEC relative to the total number of joint-use poles owned by both the ILEC and the hydro company appropriately recognizes an ILEC's reduced costs for access to joint-use poles.

47. Accordingly, the Commission considers that the fairness factor is no longer relevant and, therefore, should not be used to assess ILEC-specific costs and establish ILEC-specific rates.

d) Service poles

48. The Commission uses the term "service poles" in this decision to refer to poles where the only third-party attachment is a drop wire to the subscriber's premises. The Commission notes that the ILECs' current support structure tariffs effectively provide that an ILEC's service pole rate is zero.[20]

49. All ILECs expressed the view that they should be allowed to recover service pole costs. Bell Aliant, Bell Canada, and TCC included service pole costs in their cost estimates for poles. Bell Canada et al. submitted that service pole costs are real and that service poles benefit the third parties that use them. Cable carriers submitted that the application of the 95-13 pricing methodology to poles does not provide for specific compensation for service pole costs.

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[18] Jointly owned poles are poles that are owned jointly by the ILEC and the hydro company, and for which the ILEC can charge pole attachment rental rates to third parties.

[19] Now TCC's territory in British Columbia.

[20] An ILEC cannot charge a pole rate to a third party if the third-party's only attachment to the pole is a subscriber drop wire.

50. Consistent with the ILECs' tariffs, the Commission considers that pole rates should not recover service pole costs. However, the Commission notes that the ILECs incur service pole costs and that third parties use ILEC service poles. The Commission considers that the current effective service pole rate does not adequately compensate ILECs for third-party use of service poles and should be revised, using the 95-13 pricing methodology, to permit recovery of service pole costs.

51. Accordingly, in Part V below, the Commission establishes a follow-up proceeding to determine a revised service pole rate and seek parties' comments on its preliminary view that each ILEC's service pole rate should be the same as its revised pole rate.

e) New cost inputs

52. The ILECs proposed to include cost items that were not included in the costs used to determine support structure rates in Telecom Decision 95-13.

53. The cable carriers submitted that no additional costs should be included unless the costs can be justified as reasonable and consistent with the 95-13 methodology.

54. The Commission has reviewed all proposed new cost inclusions and considers that costs associated with pine beetle tree clearing, warehousing and distribution, joint-use management, and rights of way are directly related to the provision of support structure service. Further, the Commission considers that the inclusion of these additional embedded cost inputs is consistent with the 95-13 pricing methodology. Accordingly, the Commission considers it appropriate to include these costs.[21]

55. The Commission considers that TCC's proposed corporate overhead costs are not directly related to support structures. Accordingly, the Commission does not consider it appropriate to include these costs.

56. The Commission is not persuaded that TCC's proposed audit costs would be incurred in the foreseeable future and considers that the support structure tariff provides TCC with an opportunity to address the recovery of non-recurring audit costs. Accordingly, the Commission does not consider it appropriate to include TCC's proposed audit costs.

ii) Major ILEC-specific costing issues

57. The following table briefly describes the Commission's major adjustments to each ILEC's proposed costs and provides the rationale for each adjustment. As noted above, the Commission's determinations on these issues and the issues common to ILECs described above account for approximately 90 percent of the effect of all adjustments to each ILEC's proposed costs.

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[21] For pine beetle tree clearing, an adjustment for TCC is reflected in the table following paragraph 57. For warehousing and distribution, the Commission made adjustments for Bell Aliant, Bell Canada, and Télébec. For joint-use management, the Commission made adjustments for Télébec and TCC. For rights-of-way, the Commission made adjustments for TCC.

ILEC	Proposal	Commission adjustment	Rationale for adjustment
Bell companies	For each of poles and strands, exclude fully depreciated structures from the denominator when calculating Net Book Value (NBV) per unit.	Included fully depreciated structures when calculating NBV per unit.	Support structure rates apply to all assets in service, whether they have depreciated or not.
Bell companies	Calculate depreciation expense per unit based on cost new amortized over Phase II life estimate.	Used depreciation expense on the books averaged over in-service assets.	Depreciation should reflect historical embedded costs.
Bell Aliant	Use Bell Canada's removal cost for poles and strands as proxies for Bell Aliant.	Used the average of the Commission-adjusted removal costs of all other ILECs ($3.75 per pole and $0.47 per strand span of 36.6 metres).	No evidence to suggest using Bell Canada costs alone would be the appropriate base. It is better to develop a proxy using a larger base.
Bell Canada	Calculate weighted average percent-communication factor based on number of Bell Canada's joint-use and wholly owned poles.	Included an additional 800,000 joint-use poles owned by Hydro Quebec in the calculation of the weighted average percent-communication factor.	Joint-use agreement with Hydro Quebec allows Bell Canada to charge for pole attachments on Hydro Quebec poles.
Bell Canada	Determine number of strand spans using ratio of new strand metres to new aerial cable metres installed between 2001 and 2008.	Determined number of strand spans based on the number of poles (excluding service poles) to which Bell Canada has access, assuming one strand per pole.	Bell Canada's approach can lead to inaccuracies in cases where new cables were installed on existing strands.

ILEC	Proposal	Commission adjustment	Rationale for adjustment
Bell Canada	Use Phase II cost factor to estimate removal cost for poles.	Used the average number of poles removed over last five years (5,844) multiplied by a removal cost per pole of $400, averaged over total number of Bell Canada poles, to estimate removal cost.	Embedded costs should reflect, to the extent possible, explicit historical costs rather than costs estimated from corporate average factors.
MTS Allstream	For each of poles and conduits, calculate depreciation expense per unit based on original cost amortized over Phase II life estimate.	Used depreciation expense on the books averaged over in-service assets.	Phase II life estimate does not reflect historical life implicit in the depreciation expense on the books.
MTS Allstream	Use Phase II factor to estimate maintenance cost.	Used actual maintenance costs averaged over in-service assets.	Embedded costs should reflect, to the extent possible, explicit historical costs rather than costs estimated from corporate average factors.
Télébec	Estimated original cost for strands using the average cost new for years 1993 to 2008, instead of using original cost on the books.	Calculated original cost for strands using 11.8% of original cost on the books for aerial cable (which includes strand cost). The11.8% figure is the average of the percentages used by the other ILECs.	Approach is consistent with other ILECs' approaches. Many strands pre-date 1993.

ILEC	Proposal	Commission adjustment	Rationale for adjustment
Télébec	Reduce the number of conduit spans by 12.5% to account for emergency conduit.	Did not reduce the number of conduit spans to account for emergency conduit.	Embedded cost per conduit span should reflect total costs on the books averaged over all assets in service.
Télébec	Calculate debt interest and return on equity based on specific formulae provided by Télébec.	Recalculated debt interest and return on equity to correct an error.	Error in application of the formulae.
Télébec	Increase NBV to reflect regulatory accounting practices (RAP) instead of generally accepted accounting principles (GAAP).	Calculated NBV based on GAAP.	Télébec's accounting practices have been based on GAAP since 2002. Year 2008 embedded costs should reflect accounting practices for 2008.
Télébec	Calculate Phase II prospective annualized administration costs based on a demand forecast from 2009 to 2013.	Adjusted Phase II prospective annualized costs to reflect 2008 level of demand.	Télébec's Phase II prospective annualized costs, which are associated with higher demand levels than those of 2008, are averaged over 2008 billing units, thereby overestimating the unit costs for 2008.
TCC	Use 792,000 strand spans for Alberta and British Columbia, and 175,300 strand spans for Quebec.	Used the revised strand span estimate of 838,000 for Alberta and British Columbia, and 340,700 for Quebec.	TCC provided revised estimates for number of strand spans but did not revise its cost study.

ILEC	Proposal	Commission adjustment	Rationale for adjustment
TCC	Apply activity-based costing (ABC) administration unit costs only to those structures to which third parties attach.	Recalculated administration costs according to TCC's stated approach.	The record does not support that TCC's administration costs were derived by applying ABC unit costs only to those structures to which third parties attach.
TCC	Apply revenue charge rate to NBV instead of revenue.	Applied revenue charge rate to revenue.	TCC did not apply the revenue charge rate to revenue.
TCC (Alberta/ British Columbia)	Assign vegetation management and pine beetle tree-clearing costs to poles.	Assigned 20% of vegetation management and pine beetle tree clearing costs to poles and 80% to aerial cables. Then attributed to strands the costs assigned to aerial cables based on TCC's 14.1% ratio.[22]	Vegetation management and pine beetle tree clearing is done around poles and cables/strands. Vegetation and dead trees, if not cleared, would affect poles to a much lesser extent than they would cables/strands.
TCC (Quebec)	Use TCC's Alberta and British Columbia maintenance costs for poles and conduits as proxies for TCC Quebec.	Used the average of the Commission-adjusted maintenance costs of all other ILECs ($3.09 per pole and $2.19 per conduit).	No evidence to suggest TCC Alberta and British Columbia costs alone would be appropriate base. It is better to develop a proxy using a larger base.
TCC (Quebec)	For strands, calculate debt interest and return on equity based on specific formulae provided by TCC.	Recalculated debt interest and return on equity to correct an error.	Error in application of the formulae.

[22] The Commission calculated the 14.1% ratio using ratios proposed by TCC for aerial copper cable and aerial fibre cable, weighted using the company's proposed book values.

iii) Minor ILEC-specific adjustments

ILEC	Cost Item	Commission Adjustment
Bell Aliant	Original cost	Included fully depreciated units (poles and strands)
	Maintenance	Reflected adjusted NBV (poles and strands)
	Loss in productivity	Reflected 2008 level of demand (poles)
	Administration	Reflected 2008 level of demand (poles and conduits)
	Depreciation	Excluded double-counting of productivity loss (poles and strands)
Bell Canada	Original cost	Included fully depreciated units (poles and strands)
	Maintenance	Reflected adjusted NBV (poles and strands)
	Loss in productivity	Reflected 2008 level of demand (poles and strands)
	Quebec public utility tax	Used 2.7% tax rate for strands and 2.0% for conduits
	Removal	Reflected adjusted NBV (strands)
	Administration	Reflected 2008 level of demand (conduits)
	Depreciation	Excluded double-counting of productivity loss (poles and strands)
MTS Allstream	Maintenance	Excluded double-counting of productivity loss (strands)
Télébec	Original cost	Included fully depreciated units (poles)
	Maintenance	Reflected adjusted original cost (poles and strands)
	Loss in productivity	Reflected 2008 level of demand (poles and strands)
	Number of billing units	Reflected revised numbers provided by Télébec (poles, strands, and conduits)
	Removal	Applied Télébec's proposed factors of 24% and 11% to adjusted depreciation for poles and depreciation for strands, respectively
	Joint-use management	Reflected zero cost for wholly owned poles (poles)
	Revenue charge	Corrected calculation error (poles, strands, and conduits)
	Depreciation	Excluded double-counting of productivity loss (strands)

ILEC	Cost Item	Commission Adjustment
TCC (Alberta/ British Columbia)	Pole rental	Reflected adjusted percent-utilization factor and excluded double-counting of engineering and sales costs
	Removal	Reflected 108,663 BC wholly owned poles (strands)
	Depreciation	Excluded double counting of productivity loss (poles and strands)
TCC (Quebec)	Maintenance	Reflected adjusted pole maintenance cost (strands)
	Removal	Used average of other ILECs' removal costs for equivalent 47.73-metre length of span (strands)
	Depreciation	Excluded double-counting of productivity loss (poles and strands)

III. What support structure rates would be just and reasonable?

58. In light of its determinations above, the Commission finds that the support structure rates for each ILEC in the table below are just and reasonable. Accordingly the Commission **approves on a final basis** the monthly rates set out below.

ILEC	Pole	Strand (per 30 metres)	Conduit (per 30 metres)
Bell Aliant (Atlantic provinces)	$1.54	$0.48	$1.64
Bell Aliant (Ontario and Quebec)	$1.04	$0.20	$1.76
Bell Canada	$1.04	$0.20	$1.76
MTS Allstream	$1.37	$0.27	$3.15
Télébec	$1.34	$0.24	$4.80
TCC (Alberta/British Columbia)	$1.44	$0.43	$2.25
TCC (Quebec)	$0.80	$0.13	$2.14

59. The Commission directs each ILEC to issue, within 10 days of the date of this decision, revised tariff pages that reflect (a) for poles and conduits, the rates above, and (b) for strands, the 30-metre strand rate above, adjusted as required to reflect tariffed strand spans of different lengths.

IV. Should revised rates be applied on a retroactive basis?

60. The Commission made current support structure rates interim effective 21 July 2009, the date of the notice.

61. Bell Canada et al. submitted that revised rates should be approved on a retroactive basis, as of 21 July 2009, because current rates may not recover costs. Other parties commenting, including the MCCCF and Le Regroupement, opposed rate retroactivity. These parties submitted that applying the ILECs' proposed rate increases with retroactive effect would worsen the significant negative impact of the resulting rate shock. They further submitted that the length of the proceeding had increased the uncertainty associated with interim rates.

62. The Commission notes that the rates approved in this decision reflect current costs and replace rates that were approved in 1995. In the circumstances of this case, the Commission considers it appropriate to approve revised rates with retroactive effect as of 21 July 2009. Regarding the payment of amounts due, whether directly or indirectly, by publicly funded entities as a result of this determination, ILECs are to take into account the reasonableness of payment schedules and provide a period of up to two years for payment of retroactive charges.

V. What matters should be considered in a follow-up proceeding?

63. The Commission considers that two matters arose in this proceeding that merit consideration in a follow-up proceeding. One matter is the level at which revised service pole rates should be approved, which is discussed in Part II above. The other matter is the possible inclusion in support structure rates of an explicit markup on Phase II costs. This other matter was not within the scope of the current proceeding.

64. Interested parties registered in the current proceeding are made parties to the follow-up proceeding.

65. Other persons interested in participating in the follow-up proceeding and receiving copies of all submissions must notify the Commission of their intention to do so by filling out the online form or by writing to the Secretary General (by mail: CRTC, Ottawa, Ontario, K1A 0N2; by fax: 819-994-0218) by **15 December 2010** (the registration date). Parties are to provide their email addresses, where available. If parties do not have access to the Internet, they are to indicate when they notify the Commission whether they wish to receive disk versions of hard-copy filings.

66. As soon as possible after the registration date, the Commission will post on its website a complete list of interested parties, their mailing addresses, and, if available, their email addresses, identifying those parties who wish to receive disk versions.

67. Parties may file written comments with the Commission on the matters below, serving copies on all other parties, by **14 January 2011**:

    a) the Commission's preliminary view that each ILEC's revised service pole rate should be the same as the pole rate approved in this decision for that ILEC; and

    b) whether ILEC support structure service rates should include an explicit markup of 15 percent on Phase II costs.

68. All parties may file written reply comments with the Commission, serving copies on all other parties, by **24 January 2011**.

69. Any person who has not registered but who wishes merely to file written comments in this proceeding, without receiving copies of the various submissions, may do so by writing to the Commission by **14 January 2011** at the address or fax number noted above, or by filling out the comments form.

70. Submissions longer than five pages should include a summary. Where a document is to be filed or served by a specific date, the document must be actually received, not merely sent, by that date. Parties may file their submissions electronically or on paper.

71. The record of the current proceeding is made part of the record of the follow-up proceeding.

72. The Commission expects to publish a decision on the issues raised in this follow-up proceeding within 120 days of the close of record.

73. The Commission will not formally acknowledge comments. It will, however, fully consider all comments, which will form part of the public record of the proceeding.

74. Electronic submissions should be in HTML format. Alternatively, Microsoft Word may be used for text and Microsoft Excel for spreadsheets.

75. Each paragraph of all submissions should be numbered. In addition, the line ***End of document*** should follow the last paragraph. This will help the Commission verify that the document has not been damaged during electronic transmission.

76. The Commission encourages parties to monitor the record of this proceeding and/or the Commission's website for additional information that they may find useful when preparing their submissions.

Secretary General

Related documents

- *Review of the large incumbent local exchange carriers' support structure service rates – Requests from cable carriers*, Telecom Order CRTC 2009-731, 27 November 2009

- *Call for comments – Review of the large incumbent local exchange carriers' support structure service rates,* Telecom Notice of Consultation CRTC 2009-432, 21 July 2009, as amended by Telecom Notice of Consultation CRTC 2009-432-1, 20 August 2009

- *Revised regulatory framework for wholesale services and definition of essential service,* Telecom Decision CRTC 2008-17, 3 March 2008

- *Access to telephone company support structures,* Telecom Decision CRTC 95-13, 22 June 1995

Description of support structure service

Poles support aerial facilities such as strands – which, in turn, are used to carry cables. Poles have varying heights. Taller poles are typically required to support both ILEC and hydro company facilities. The ILEC charges the tariffed pole rate when a third party attaches any of the following: its own strand to the pole, its own cable to the ILEC strand attached to the pole, or any other facility – except a subscriber drop wire – in the pole's communications space.[23]

Strands are steel wires that support cables between two poles. Typically, no more than three strands can be attached to a pole due to space considerations. The ILEC charges the tariffed strand rate when a third party attaches its cable to the ILEC's strand. However, the ILEC does not charge a strand rate when a third party attaches a cable to the third party's own strand.

In contrast to poles and strands, **conduits** are contained in structures installed beneath ground level. An ILEC's conduit structure typically contains more than one conduit. For example, Bell Canada's and Bell Aliant's average number of conduits per conduit structure is about eight and five, respectively. The ILEC charges the tariffed conduit rate for each third-party cable installed in the ILEC's conduit structure.

[23] Some poles have both a "communication space" and a "hydro space." In each case, pole space is assigned exclusively for the attachment of communications facilities and hydro company facilities.

The following steps describe the Commission's approach to the assessment of embedded and Phase II costs in Telecom Decision 95-13.

Step 1: Determine the average embedded cost per unit for those units to which third parties attach

Step 2: Determine how much of the embedded cost per unit is attributable to communication space (See Note following Step 7)

- For poles, the embedded cost per pole from Step 1 was multiplied by the weighted average percent-communication factor and by the fairness factor.

- For joint-use poles, the percent-communication factor was calculated as the percentage of usable space on the pole that was assigned to communications versus hydro requirements. For wholly owned poles, the percent-communication factor was 100 percent.

- In Telecom Decision 95-13, the Commission used Bell Canada's costs to determine the rates for all ILECs. However, Bell Canada had only wholly owned and joint-use poles.

- The "fairness factor" was used to recognize differences between the costing of joint-use poles in Bell Canada's territory, where no consideration was given to the fact that Bell Canada had access to hydro joint-use poles at zero cost, and the costing of jointly owned poles in BC TEL's territory, where BC TEL's cost for jointly owned poles was averaged over all of the BC TEL and BC Hydro jointly owned poles. The fairness factor was calculated as the number of poles owned by Bell Canada divided by the number of poles to which Bell Canada had access.

- For strands and conduits, Step 2 was not applicable since these structures are used only for communications.

Step 3: Determine what proportion of the embedded cost per unit is attributable to third-party use

- The embedded cost per unit from Step 3 for poles, and from Step 1 for strands and conduits, was multiplied by the percent-utilization factor associated with units to which third parties attach. For each of poles, strands, and conduits, the percent-utilization factor was calculated based on the number of cables owned by third parties relative to the total number of cables owned by both the ILECs and third parties.

Step 4: Determine the total embedded costs attributable to third-party use

- The embedded cost per unit from Step 3 was multiplied by the number of units to which third parties attach.

Step 5: Determine the Phase II annual equivalent costs associated with administration and loss of productivity

Step 6: Determine the total annual costs to be recovered from third-party use

- The total annual costs recoverable from third parties were determined by adding the total embedded costs from Step 4 and the Phase II costs from Step 5.

Step 7: Determine the average annual cost to be recovered for each billing unit

- For each of poles, strands, and conduits, the total annual costs from Step 6 were divided by the number of billing units. The Commission set the rates equal to this average annual cost per billing unit.

Note: All seven steps were used to assess embedded costs and Phase II costs for the purpose of approving rates in Telecom Decision 95-13. These steps are also used in this decision to assess costs and establish revised rates. However, in Step 2, the Commission has adopted a different approach to calculate the percent-communication factor and has determined that the use of the fairness factor is no longer relevant. These matters are discussed in Part II, section i) of the decision.

Bell Aliant (Atlantic provinces)	**Poles**	**Strands 36.6 metres**	**Conduits 30 metres**
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	504,273	1,027,985	177,831
Embedded cost (book value or original cost)	$553.51	$130.46	$552.14
Net embedded cost (NBV)	$224.92	$42.20	$253.34
Annual embedded costs per unit (2008)			
Depreciation	$15.26	$5.34	$13.86
Maintenance	$1.75	$0.51	$3.47
Removal	$3.75	$0.47	$0.00
Capital taxes	$1.75	$0.33	$1.98
Revenue charge	$0.92	$0.22	$0.92
Debt interest	$9.19	$1.72	$10.35
Return on equity	$12.37	$2.32	$13.93
Income tax expense	$5.78	$1.09	$6.52
Other costs (warehousing and distribution)	$3.82	$0.90	$3.81
Other costs (joint-use management)	$0.27		
Total annual embedded cost per unit	$54.86	$12.89	$54.83
Percent-communication factor	54.90%		
Percent-utilization factor	48.78%	33.33%	33.33%
Embedded cost per unit attributable to third parties	$14.69	$4.30	$18.28
Number of structures to which third parties attach	202,633	265,764	11,478
Total embedded cost attributable to third parties	$2,976,795	$1,142,015	$209,789
Annualized Prospective Incremental Costs			
Loss in productivity costs	$517,911	$263,528	
Administration costs	$260,967	$463,853	$16,054
Total annualized prospective incremental costs	$778,878	$727,381	$16,054
Total costs			
Total annual costs	$3,755,674	$1,869,396	$225,842
Number of annual billing units	202,633	265,764	11,478
Annual cost per billing unit	**$18.53**	**$7.03**	**$19.68**
Monthly cost per 36.6m strand billing unit		**$0.59**	
Monthly cost per billing unit (30m for strands)	**$1.54**	**$0.48**	**$1.64**

Bell Canada and Bell Aliant (Ontario and Quebec)	**Poles**	**Strands 36.6 metres**	**Conduits 30 metres**
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	1,859,226	3,064,513	4,218,375
Embedded cost (book value or original cost)	$531.76	$76.58	$497.78
Net embedded cost (NBV)	$231.44	$19.77	$274.01
Annual embedded costs per unit (2008)			
Depreciation	$16.83	$1.59	$10.41
Maintenance	$2.03	$0.34	$2.40
Removal	$1.26	$0.22	$0.00
Capital taxes	$0.22	$0.02	$0.26
Other taxes	$8.97	$0.53	$5.48
Revenue charge	$0.50	$0.05	$0.45
Debt interest	$6.13	$0.52	$7.26
Return on equity	$15.38	$1.31	$18.21
Income tax expense	$6.95	$0.59	$8.22
Other costs (warehousing and distribution)	$3.67	$0.53	$3.43
Other costs (Joint-use management)	$0.85		
Total annual embedded cost per unit	$62.78	$5.71	$56.12
Percent-communication factor	60.49%		
Percent-utilization factor	50.00%	33.33%	33.33%
Embedded cost per unit attributable to third parties	$18.99	$1.90	$18.71
Number of structures to which third parties attach	572,458	988,281	282,957
Total embedded cost attributable to third parties	$10,869,796	$1,879,930	$5,293,587
Annualized prospective incremental costs (AEC)			
Loss in productivity costs	$767,109	$415,510	
Administration costs	$504,743	$625,681	$687,808
Total annualized prospective incremental costs	$1,271,852	$1,041,191	$687,808
Total costs			
Total annual costs	$12,141,648	$2,921,121	$5,981,395
Number of annual billing units	973,179	988,281	282,957
Annual cost per billing unit	**$12.48**	**$2.96**	**$21.14**
Monthly cost per 36.6m strand billing unit		**$0.25**	
Monthly cost per billing unit (30m for strands)	**$1.04**	**$0.20**	**$1.76**

MTS Allstream	Poles	Strands 36 metres	Conduits 30 metres
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	12,529	144,127	30,333
Embedded cost (book value or original cost)	$255.87	$41.49	$854.34
Net embedded cost (NBV)	$161.20	$25.31	$599.11
Annual embedded costs per unit (2008)			
Depreciation	$12.86	$2.31	$35.36
Maintenance	$2.09	$1.39	$1.27
Removal	$4.71	$0.51	$0.00
Salvage	-$0.13	-$0.12	$0.00
Capital taxes	$0.23	$0.04	$0.84
Revenue charge	$0.34	$0.06	$0.91
Debt interest	$3.84	$0.60	$14.26
Return on equity	$10.64	$1.67	$39.54
Income tax expense	$4.22	$0.66	$15.69
Other costs (warehousing and distribution)	$3.73	$0.32	$5.03
Total annual embedded cost per unit	$42.52	$7.44	$112.90
Percent-communication factor	83.99%		
Percent-utilization factor	45.85%	33.33%	33.33%
Embedded cost per unit attributable to third parties	$16.37	$2.48	$37.63
Number of structures to which third parties attach	4,603	106,432	31,771
Total embedded cost attributable to third parties	$75,369	$264,065	$1,195,598
Annualized prospective incremental costs (AEC)			
Loss in productivity costs		$131,935	
Administration costs	$538	$12,433	$3,919
Total annualized prospective incremental costs	$538	$144,368	$3,919
Total costs			
Total annual costs	$75,907	$408,433	$1,199,517
Number of annual billing units	4,603	106,432	31,771
Annual cost per billing unit	**$16.49**	**$3.84**	**$37.76**
Monthly cost per 36m strand billing unit		**$0.32**	
Monthly cost per billing unit (30m for strands)	**$1.37**	**$0.27**	**$3.15**

Télébec	**Poles**	**Strands 56.5 metres**	**Conduits 30 metres**
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	111,690	225,330	14,370
Embedded cost (book value or original cost)	$557.72	$88.29	$1,223.53
Net embedded cost (NBV)	$174.31	$16.25	$561.51
Annual embedded costs per unit (2008)			
Depreciation	$18.72	$3.26	$28.75
Maintenance	$2.45	$1.38	$0.17
Removal	$4.49	$0.36	$0.00
Capital taxes	$0.63	$0.06	$2.02
Other taxes	$7.34	$0.68	$23.64
Revenue charge	$0.48	$0.07	$1.01
Debt interest	$4.64	$0.43	$14.94
Return on equity	$10.32	$0.96	$33.23
Income tax expense	$4.61	$0.43	$14.86
Other costs (warehousing and distribution)	$2.68	$0.42	$5.87
Other costs (joint-use management)	$2.96		
Total annual embedded cost per unit	$59.31	$8.06	$124.49
Percent-communication factor	51.57%		
Percent-utilization factor	45.64%	33.33%	33.33%
Embedded cost per unit attributable to third parties	$13.96	$2.69	$41.50
Number of structures to which third parties attach	24,331	54,773	438
Total embedded cost attributable to third parties	$339,668	$147,081	$18,176
Annualized prospective incremental costs (AEC)			
Loss in productivity costs	$73,404	$52,069	
Administration costs	$158,308	$94,520	$7,052
Total annualized prospective incremental costs	$231,712	$146,589	$7,052
Total costs			
Total annual costs	$571,380	$293,671	$25,228
Number of annual billing units	35,601	54,773	438
Annual cost per billing unit	**$16.05**	**$5.36**	**$57.60**
Monthly cost per 56.5m strand billing unit		**$0.45**	
Monthly cost per billing unit (30m for strands)	**$1.34**	**$0.24**	**$4.80**

TCC (Alberta and British Columbia)	Poles	Strands 36.6 metres	Conduits 30 metres
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	826,663	838,000	1,412,000
Embedded cost (book value or original cost)	$452.06	$175.30	$723.63
Net embedded cost (NBV)	$203.35	$55.01	$397.16
Annual embedded costs per unit (2008)			
Depreciation	$13.39	$6.90	$18.59
Maintenance	$7.11	$1.24	$3.64
Removal	$4.84	$0.90	$0.00
Capital taxes	$0.02	$0.01	$0.04
Property taxes	$4.07	$1.10	$7.94
Revenue charge	$0.47	$0.15	$0.65
Debt interest	$8.01	$2.17	$15.64
Return on equity	$12.30	$3.33	$24.03
Income tax expense	$5.16	$1.40	$10.08
Other costs (pine beetle)	$1.35	$0.75	
Other costs (joint-use management)	$0.34	$0.10	
Other costs (rights of way)	$0.41		
Total annual embedded cost per unit	$57.47	$18.03	$80.62
Percent-utilization factor	40.96%	33.33%	33.33%
Embedded cost per strand attributable to third parties		$6.01	
36.6m to 30m strand conversion factor		81.97%	
Embedded cost per unit attributable to third parties	$23.54	$4.93	$26.87
Number of structures to which third parties attach	259,193	714,786	234,920
Total embedded cost attributable to third parties	$6,101,891	$3,522,119	$6,312,742
Embedded pole rental cost per unit[24]	$16.24		
Number of rented poles to which third parties attach	85,399		
Total pole rental costs	$1,386,987		
Annualized prospective incremental costs (AEC)			
Loss in productivity costs	$534,296	$121,669	
Administration costs	$55,135	$50,035	$14,095
Total annualized prospective incremental costs	$589,431	$171,704	$14,095
Total costs			
Total annual costs	$8,078,309	$3,693,823	$6,326,837
Number of annual billing units	468,645	714,786	234,920
Annual cost per billing unit	**$17.24**	**$5.17**	**$26.93**
Monthly cost per billing unit (30m for strands)	**$1.44**	**$0.43**	**$2.25**

[24] The Commission considers that pole rental costs are to be treated as embedded costs since they are not caused by the presence of third parties.

TCC (Quebec)	Poles	Strands 47.73 metres	Conduits 30 metres
Embedded and net embedded costs per unit (year-end 2008)			
Total number of poles / strands / conduits	144,680	340,675	27,306
Embedded cost (book value or original cost)	$508.71	$66.56	$939.34
Net embedded cost (NBV)	$157.59	$23.66	$416.04
Annual embedded costs per unit (2008)			
Depreciation	$20.71	$2.25	$13.68
Maintenance	$3.09	$0.75	$2.19
Removal	$3.46	$0.61	$0.00
Capital taxes	$0.02	$0.00	$0.04
Property taxes	$3.15	$0.47	$8.32
Revenue charge	$0.42	$0.06	$0.62
Debt interest	$6.21	$0.93	$16.38
Return on equity	$9.53	$1.43	$25.17
Income tax expense	$4.00	$0.60	$10.56
Other costs (joint-use management)	$0.35	$0.09	
Other costs (rights of way)	$0.37		
Total annual embedded cost per unit	$51.30	$7.19	$76.97
Percent-communication factor	45.40%		
Percent-utilization factor	39.51%	33.33%	33.33%
Embedded cost per unit attributable to third parties	$9.20	$2.40	$25.66
Number of structures to which third parties attach	72,270	197,448	3,138
Total embedded cost attributable to third parties	$664,970	$473,057	$80,511
Annualized prospective incremental costs (AEC)			
Loss in productivity costs	$93,511	$21,294	
Administration costs	$11,563	$13,821	$188
Total annualized prospective incremental costs	$105,074	$35,115	$188
Total costs			
Total annual costs	$770,045	$508,172	$80,700
Number of annual billing units	80,374	197,448	3,138
Annual cost per billing unit	**$9.58**	**$2.57**	**$25.72**
Monthly cost per 47.73m strand billing unit		**$0.21**	
Monthly cost per billing unit (30m for strands)	**$0.80**	**$0.13**	**$2.14**