



Telecom Order CRTC 2019-53

PDF version

Ottawa, 26 February 2019

Public record: Tariff Notices 532, 532A, and 532B

TELUS Communications Inc. – Introduction of service entrance conduit charge in British Columbia

*The Commission **approves, with changes,** TCI's application to introduce a charge applicable to service entrance conduit on a private property's public right of way in British Columbia. The Commission has made certain adjustments to TCI's proposed rate, and sets a monthly rate of \$0.56 for the service.*

Background

1. Incumbent local exchange carriers (ILECs) offer various types of support structure services to competitors, including conduit. In Telecom Decision 2010-900, the Commission approved a monthly rate of \$2.25 per 30 metres of conduit for TELUS Communications Inc. (TCI)¹ in Alberta and British Columbia.
2. The structure of the company's tariffs for conduit differs between Alberta and British Columbia. TCI has a single tariff for conduit in Alberta, whereas in British Columbia, the tariff is divided into (i) mainline conduit,² (ii) service entrance conduit (SEC)³ on a private property's public right of way (hereafter, SEC on public property), and (iii) SEC on private property. The rate approved in Telecom Decision 2010-900 was developed based on an average cost of provisioning both mainline conduit and SEC on public property in both provinces.
3. In March 2015, after an audit to determine the wholesale demand for TCI's SEC on public property in British Columbia (British Columbia SEC), the company began invoicing its wholesale customers for this service at the Commission-approved rate.
4. Shaw Cablesystems G.P. (Shaw) subsequently filed an application with the Commission in which it contested TCI's charging for British Columbia SEC. In Telecom Decision 2017-9, the Commission determined that the rate approved in Telecom Decision 2010-900 was not applicable to TCI's SEC service. Accordingly,

¹ In the proceeding that led to that decision, submissions were received from TELUS Communications Company (TCC). However, effective 1 October 2017, TCC's assets were legally transferred to TCI and TCC ceased to exist. For ease of reference, "TCI" is used in this order.

² Mainline conduit refers to conduit that is provided under city streets, from a company's central office to individual streets, but excludes service entrance conduit, as defined below.

³ SEC is a type of conduit that provides a connection from a mainline conduit to an individual customer's premise.

the Commission directed TCI to cease billing competitors for SEC service, and to refund them for payments made related to the service since the first quarter of 2015, plus interest.

5. The Commission also determined that if TCI is providing competitors with access to its SEC facilities, it must file a tariff specific to that service for Commission approval. The Commission indicated that the application should (i) include a definition of the telecommunications service that is being provided, (ii) identify any costs of the service that are recovered through other means, and (iii) include a supporting cost study specific to the service.

Application

6. The Commission received an application from TCI (Tariff Notice [TN] 532), dated 30 November 2017, in which the company proposed a revision to item 404 – Support Structure Service of its General Tariff to introduce a charge for British Columbia SEC. TCI also provided a cost study in support of its proposed rate.
7. TCI originally proposed a monthly rate of \$1.10, based on an average length of 14.64 metres of SEC on public rights of way. The company filed amendments to its application, dated 17 January 2018 (TN 532A), in which it clarified its proposed definition of SEC, and 17 April 2018 (TN 532B), in which it revised its proposed rate to \$0.86 after refining its costing methodology.
8. The Commission received interventions from the Canadian Communication Systems Alliance (CCSA) and Shaw. The CCSA fully supported Shaw's submissions.

Issues

9. The Commission has identified the following issues to be addressed in this order:
 - Is TCI entitled to introduce a new tariff for British Columbia SEC?
 - Has TCI defined British Columbia SEC correctly in its tariff pages?
 - Is TCI's proposed costing methodology appropriate?
 - What should be the effective date of TCI's tariff?

Is TCI entitled to introduce a new tariff for British Columbia SEC?

Positions of parties

10. Shaw submitted that TCI's existing rate for conduit approved in Telecom Decision 2010-900 was developed by assigning all conduit costs (i.e. for mainline conduit as well as for any minimal design work associated with SEC) to mainline conduit only; therefore, TCI is already recovering all of its conduit costs through its charges for mainline conduit.

11. Shaw argued that, as a result, TCI should not be entitled to impose a new rate for British Columbia SEC since the company has not substantiated, as required pursuant to Telecom Decision 2017-9, that it is not already recovering its SEC costs.
12. TCI submitted that, contrary to Shaw's submission, its existing rate of \$2.25 per 30 metres of conduit was developed based on the total costs of mainline conduit and SEC, divided by the total length of both conduits. However, since this rate is applied to only the demand for mainline conduit, and not to the demand for SEC, the company is not recovering the cost of providing SEC to competitors. Furthermore, given that in Telecom Decision 2017-9 the Commission disallowed the application of the rate approved in Telecom Decision 2010-900 to SEC service, TCI filed the present application to establish a new rate for British Columbia SEC.

Commission's analysis and determinations

13. The Commission notes that TCI's existing rate for mainline conduit established in Telecom Decision 2010-900 was developed based on the total costs of both mainline conduit and SEC, divided by the total length of both. Based on this methodology, TCI should be charging the existing conduit rate for both mainline conduit and SEC to recover its associated total conduit costs.
14. However, in Telecom Decision 2017-9, the Commission determined that TCI's existing conduit rate is not applicable to British Columbia SEC, and directed TCI to refund the money collected from competitors for the use of SEC at the existing rate. Accordingly, the Commission considers that TCI is not recovering its cost to provide British Columbia SEC. The Commission also found no evidence that TCI is recovering its costs to provide British Columbia SEC through any other tariff.
15. The Commission considers Shaw's submission that the conduit rate approved in Telecom Decision 2010-900 was developed by assigning all conduit costs to mainline conduit to be incorrect, since that decision did not distinguish between mainline conduit and SEC, but focused only on the total conduit length.
16. In light of the above, the Commission determines that TCI is entitled to introduce a new tariff for British Columbia SEC.

Has TCI defined British Columbia SEC correctly in its tariff pages?

Positions of parties

17. TCI filed the rate as well as details on the definitions, terms, and conditions associated with British Columbia SEC under item 404 – Support Structure Service of its proposed tariff pages.
18. Shaw submitted that TCI's proposed tariff pages are unclear and deficient due to the lack of a clear and consistent definition of the term SEC, resulting in contradictions in different parts of the tariff. Accordingly, Shaw submitted that the following key changes should be made to TCI's proposed tariff pages:

- amend the definition of SEC to specify that it is strictly limited to conduit that is between the service box on the mainline conduit in the public right of way up to the private property line;
- remove the reference to point of interconnection, since the term appears to have different meanings in different parts of the tariff; and
- eliminate any misleading suggestion that SEC extends beyond the property line to the outside wall of or inside the customer's premise.

19. TCI replied that SEC has been accurately defined, distinguishing the section on a public right of way from that which resides on private property (i.e. past the property line). TCI submitted that, therefore, no further changes are necessary.

Commission's analysis and determinations

20. The Commission considers that TCI's proposed tariff pages require certain modifications to provide a better understanding of the SEC service. In particular, the Commission **directs** TCI to modify its proposed tariff pages to include the following changes, among others:

- a clear definition of the SEC service that is under consideration in TCI's application (i.e. SEC on public property);
- a definition of SEC on private property; and
- an accurate title of the service in the last line of the table in item 404.4.d, and the rate as approved in this order.

21. Guidelines and additional details with respect to the Commission's changes that are to be implemented in TCI's tariff pages are set out in Appendix 1 to this order.

Is TCI's proposed costing methodology appropriate?

22. TCI's British Columbia SEC costs under review in this order pertain only to the engineering costs associated with provisioning SEC, since the SEC itself is supplied and installed by TCI at the expense of the developer.

23. Accordingly, the Commission has identified the following sub-issues related to TCI's proposed costing methodology:

- Extraction of engineering costs from TCI's accounting records
- Allocation of engineering costs to SEC
- Estimate of revenue charge costs
- Inclusion of indirect labour costs in SEC costs
- Percentage of SEC costs assigned to competitors
- Corporate capital structure parameter inputs

Extraction of engineering costs from TCI's accounting records

24. The main cost element in provisioning SEC is engineering costs. Since TCI's conduit costs recorded in the company's accounting records for British Columbia do not identify engineering costs separately, TCI proposed the following approach to extract these costs from its records:

Use of a labour/material ratio derived from provisioning data

Positions of parties

25. TCI proposed to extract engineering costs for conduit by applying an average labour cost to material cost ratio (labour/material ratio [LMR]) against the accounting costs.

26. Shaw submitted that LMRs are generally not used to estimate the disaggregated cost elements of an ILEC's accounting costs, and that this approach should be rejected.

27. TCI replied that its proposed approach is sound and reasonable, and provides a best-effort approach to recover service costs that are otherwise difficult to identify.

Commission's analysis and determinations

28. The Commission notes that TCI's total accounting costs for conduit in British Columbia recorded in the company's books consist of the material, labour, and engineering costs combined as one amount. As proposed by TCI, the Commission considers that using conduit provisioning data, which provide an individual breakdown of these cost elements, to separate out these cost elements from the accounting records, is reasonable and appropriate.

29. The Commission therefore finds TCI's methodology proposed above to estimate SEC engineering costs to be appropriate.

Derivation and application of LMR based on TCI corporate data

Positions of parties

30. TCI proposed to use corporate data to derive the LMR and to apply the LMR against corporate accounting costs to extract the engineering costs.

31. Shaw submitted that the LMR should be developed based on data specific to British Columbia, since the cost study is specific to that province.

32. TCI replied that corporate costs are more appropriate for this study because they capture interprovincial costs incurred by the company that would not be captured using data for British Columbia alone. Further, the use of corporate data would provide a smoother trend in data compared to the use of only British Columbia-specific data.

Commission's analysis and determinations

33. The Commission does not consider TCI's proposed approach to be appropriate. TCI did not explain why interprovincial cost data is relevant to the provisioning of SEC in British Columbia only. The company's argument that the use of corporate data would provide a smoother trend in data, even if true, is irrelevant since the application deals only with the provisioning of SEC in British Columbia.
34. For the same reason, the LMR should be applied only to British Columbia-specific, and not corporate, accounting costs.

LMR calculated based on conduit provisioning data from 2013 to 2017

Positions of parties

35. TCI proposed to calculate a five-year average LMR using conduit provisioning data from each of the years from 2013 to 2017.
36. Shaw submitted that conduit has an average service life of 40 years, and that the LMR should be restated back at least 20 years to match the accounting costs recorded in TCI's financial statements. Shaw submitted that TCI's approach to use only the last five years of conduit provisioning data would overstate the company's engineering costs, since labour costs have generally increased more than material costs over time.
37. TCI replied that its proposed approach was appropriate since (i) the use of relatively recent data would better reflect current annual average conduit costs, and (ii) the company's accounting costs would contain a higher weighting of recent capitalized conduit costs in the asset pool, versus the much lower values of the older conduits.

Commission's analysis and determinations

38. The Commission considers TCI's proposed approach to be appropriate. In particular, the conduit provisioning data provided by TCI shows that during the period from 2013 to 2017, the LMR actually fluctuated, with no definite trend. Thus, this data does not support Shaw's contention that engineering costs have risen over the years.
39. Further, the Commission agrees that TCI's accounting costs would contain a higher weighting of recent capitalized conduit costs in the asset pool, versus the much lower values of the older conduits.
40. The Commission considers that using 20 years of data, as suggested by Shaw, would be a complex and onerous exercise with no guarantee of a different result, since the LMRs based on the previous five years do not show any specific trend in LMR values.

2018 LMR estimate

Positions of parties

41. The next step in TCI's proposed methodology to extract engineering costs from its accounting data was to forecast the above-noted average LMR to the year 2018, to reflect the current proportion of engineering costs in provisioning conduits. TCI proposed to forecast the average LMR derived in the previous step using the growth rate of LMRs based on (i) the previous 16 years of data (i.e. from 2002 to 2017), (ii) corporate-level data (i.e. for British Columbia, Alberta, and Quebec), and (iii) all company assets (instead of conduit alone).
42. Shaw submitted that TCI's proposed approach was inappropriate, since it was based on all asset types, instead of conduit alone, and on material, installation, and engineering labour costs combined, instead of costs for engineering labour only. Shaw further submitted that TCI's proposed approach was not appropriate since the cost study under review is an accounting cost study, not a Phase II cost study.
43. TCI replied that the use of data of all assets combined, instead of conduit alone, to restate the engineering ratio to 2018 is appropriate since it would provide highly averaged data compared to specific data for conduit alone.

Commission's analysis and determinations

44. The support structure costing methodology approved in Telecom Decision 2010-900 requires the use of historical engineering costs only. It is not based on the proportion of engineering costs that the company will spend in 2018 and beyond. Thus, the Commission finds that TCI's proposed approach is not appropriate.

Conclusion

45. In light of all the above, the Commission **approves** TCI's overall proposed approach to extract engineering costs from its accounting records using an LMR based on data from 2013 to 2017. However, the calculations are to be based on data specific to British Columbia, rather than corporate data, and the historical LMR is not to be recalculated based on a 2018 forecast.

Allocation of engineering costs to SEC

Positions of parties

46. The engineering costs that TCI derived using the approach described above are associated with both mainline conduit and SEC. TCI proposed to assign the engineering costs to SEC only, based on the relative conduit lengths of these two types of conduit.
47. Shaw objected to assigning engineering costs equally, on a per-unit-length basis, between mainline conduit and SEC. It argued that compared to mainline conduit, engineering costs associated with SEC on public property on a per-unit-length basis

are marginal, since SEC is not engineered on a premise-by-premise basis, but is subject to highly standardized operating and installation procedures. Further, new installation projects are typically undertaken on a subdivision or neighbourhood basis, which leads to further savings. In Shaw's experience, minimal effort and costs are associated with SEC design.

48. TCI replied that it was proposing an equal allocation of engineering costs between mainline conduit and SEC, on a per-unit-length basis, only because it does not track the costs for these types of conduit separately. It indicated that its proposed methodology would result in a lower cost for SEC than would be the actual case if it were possible to separate the costs.
49. Further, TCI disagreed that engineering costs associated with SEC are minimal. The company submitted that SEC on public property is individually engineered, and includes design time, drafting of ducts, and assessing and determining how the lots are to be connected to the mainline conduit system. The company also submitted that the placement of the service box at each location is unique; therefore, the engineering effort per unit length for SEC exceeds that for mainline conduit.

Commission's analysis and determinations

50. The Commission notes that while TCI has submitted that SEC on public property is individually engineered, Shaw has claimed the opposite – that the installation of SEC is subject to highly standardized operating procedures.
51. However, Shaw did not provide any evidence to substantiate its position that due to the highly standardized operating procedures, only minimal effort and costs are associated with SEC design; further, Shaw did not address whether the design and placement of the service boxes is standard or would vary from street to street based on the specific locations of the dwellings on each street.
52. The Commission considers that, as submitted by TCI, SEC on public property for existing dwellings would potentially need to be individually engineered, since the layout of end-user dwellings and the number of SECs connected to the same service box on each street could be different. In this regard, the Commission also notes that the accounting costs in TCI's records would reflect how TCI provisions its SEC.
53. In light of the above, the Commission finds TCI's proposal regarding the allocation of engineering costs to SEC to be reasonable.

Estimate of revenue charge costs

Positions of parties

54. TCI estimated its revenue charge costs as the product of a constant value (submitted in confidence) times the revenue tax rate (RTR). The company did not provide any information on its proposed approach, including what the constant value used in its calculation represents.

Commission's analysis and determinations

55. The Commission finds that TCI's proposed approach is incorrect since it is based on an arbitrary and unexplained constant value with no supporting rationale. The Commission determines that TCI's SEC-related revenue charge costs should be calculated using the appropriate formula and methodology.⁴

Inclusion of indirect labour costs in SEC costs

Positions of parties

56. In its cost study, TCI included a new cost element: indirect labour loading.

57. Shaw submitted that this element was not part of the formula used to estimate the conduit costs approved in Telecom Decision 2010-900. The company argued that TCI had failed to justify the introduction of this new element; therefore, it should be disallowed.

58. TCI replied that this element was used to estimate the indirect costs related to, but not included in, TCI's direct capitalized accounting costs for SEC service. The company submitted that it obtained the ratio of indirect to direct engineering costs from its Regulatory Economic Studies Manual filed with the Commission. This ratio was applied against the annual depreciation cost of conduit to determine the annual indirect labour costs.

Commission's analysis and determinations

59. The Commission notes that the indirect labour loading costs include non-capitalized costs, such as support staff costs and benefits, associated with direct engineering labour costs.

60. In the Commission's view, such support costs are also causal to the provisioning of SEC service. Further, TCI's proposed methodology to estimate these costs is reasonable. Accordingly, it would be appropriate to include indirect labour loading costs when estimating the cost of providing SEC service.

Percentage of SEC costs assigned to competitors

Positions of parties

61. For SECs in which competitors have their own cable, TCI proposed to assign to competitors the engineering costs per end-user based on a utilization factor of 50%, given that SECs leading to customer premises are typically used by both TCI and the competitor.

⁴ Revenue charge = [(Sum of depreciation, maintenance, property tax, debt interest, return on equity, income tax, indirect labour, and expenses) × RTR] / (1-RTR)

62. Shaw submitted that the utilization factor should be 33.33%, since this factor should be based on the relative number of cables within the SEC, instead of the number of users, as proposed by TCI. TCI's proposed utilization factor ignores the fact that TCI is using existing SEC to overlay fibre cable alongside its existing copper cable facilities. Shaw further submitted that a utilization factor of 33.33% would be consistent with the Commission's determination in Telecom Decision 2010-900 for conduit utilization.
63. TCI replied that the overlay of additional fibre cables to copper cables in existing conduits happens only in brownfield rollouts.⁵ TCI indicated that its proposed 50% utilization factor is similar to the 50% utilization factor approved in Telecom Order 2016-228 for the company's service poles attached to fibre for the provision of an aerial drop to the customer.

Commission's analysis and determinations

64. SECs are used to provide service to an end-user by a competitor or by TCI. In certain older locations, there will be only two cables per SEC, the competitor's cable and TCI's copper cable. Similarly, newer locations will also have only two cables per SEC, the competitor's cable and TCI's fibre cable. These two types of location will therefore have a utilization factor of 50%. However, in locations where TCI is adding fibre as an overbuild, there will be three cables per SEC (competitor cable, as well as TCI's copper and fibre cables), resulting in a competitor SEC utilization factor of 33.33%.
65. TCI did not provide a breakdown of the percentage of locations where different types of cable facilities are provided. Accordingly, the Commission has assumed that 50% of the locations have three cables, while the remaining 50% have two cables. Based on this, the Commission has estimated an average utilization factor of 41.67% for TCI's SECs in British Columbia.

Corporate capital structure parameter inputs

Positions of parties

66. TCI proposed an equity ratio of 70% and a debt ratio of 30% as inputs to its cost study. These values are used to estimate the debt and equity costs of SEC service.

Commission's analysis and determinations

67. The debt and equity ratios to be used in a cost study are mandated by the Commission.⁶ The current approved values are 55% for equity and 45% for debt.
68. Accordingly, the Commission revises TCI's equity ratio to 55% and its debt ratio to 45%.

⁵ Brownfield locations are locations where copper cables are already deployed.

⁶ See Telecom Decision 98-2.

Conclusion

69. Based on the above determinations, the Commission **approves** a final monthly rate of \$0.56 for TCI's British Columbia SEC. Details of the Commission's determinations are set out in Appendix 2 to this order.

What should be the effective date of TCI's tariff?

Positions of parties

70. TCI proposed an effective date for its tariff of 16 January 2018, or 30 days from the date its application was filed.⁷ In the alternative, it sought interim approval of its application so that it could recover its costs through the proposed rate.
71. Shaw submitted that in light of the errors and omissions in TCI's original application and in TN 532A, the material changes in TN 532B, and the Commission's tariff approval principles set out in Telecom Information Bulletin 2010-455-1 (the Bulletin), the effective date of TCI's proposed tariff should be the date of a Commission decision approving TCI's application, or, if further amendments to the tariff pages are required, the date on which the revised pages are filed, whichever is later.
72. TCI replied that its proposed effective date is consistent with the rules as required under the Bulletin.⁸ According to TCI, a revised cost study filed on a subsequent date, on a current tariff application, should not suspend or restart the tariff application process, especially since the company has not altered the intent of the original tariff application. TCI requested that the Commission dismiss Shaw's request to delay the date of introduction of the new service.

Commission's analysis and determinations

73. In this order, the Commission has determined that TCI can introduce a tariff for British Columbia SEC.
74. Approval of TCI's application with the proposed effective date of 16 January 2018 would amount to the setting of the rate retroactively. However, pursuant to Telecom Decision 93-12, the Commission cannot engage in retroactive or retrospective rate-making without clear statutory authority.
75. Accordingly, the Commission **denies** TCI's request for its tariff to take effect on 16 January 2018.

⁷ This date takes into account the holiday period set out in the *Canadian Radio-television and Telecommunications Commission Rules of Practice and Procedure*.

⁸ According to the Bulletin, tariff applications for competitor services must be filed with the Commission at least 30 calendar days before the proposed effective date. Thirty calendar days from the 30 November 2017 date of the application is 16 January 2018, taking into account the holiday period.

76. The Commission also **denies** Shaw's request for the effective date to be set to the filing date of the tariff pages that are revised based on this order. Competitors are already benefiting from having access to British Columbia SEC, and the tariff page revisions required by the Commission are related only to providing more clarity to the definition of the proposed service.

77. Accordingly, the Commission determines that the effective date of TCI's tariff is the date of this order.

Conclusion

78. In light of the above, the Commission **approves, with changes**, TCI's application to introduce British Columbia SEC, **effective the date of this order**. The Commission directs TCI to issue, by **28 March 2019**, revised tariff pages reflecting the changes set out in paragraphs 20 and 69, as well as in Appendix 1 to this order.⁹

Secretary General

Related documents

- *Shaw Cablesystems G.P. – Application requesting relief from TELUS Communications Company's monthly recurring charge for service entrance conduit*, Telecom Decision CRTC 2017-9, 13 January 2017
- *TELUS Communications Company – Application to modify monthly pole attachment rate*, Telecom Order CRTC 2016-228, 16 June 2016
- *Review of the large incumbent local exchange carriers' support structure service rates*, Telecom Decision CRTC 2010-900, 2 December 2010; as amended by Telecom Decision CRTC 2010-900-1, 9 December 2010
- *Approval processes for tariff applications and inter-carrier agreements*, Telecom Information Bulletin CRTC 2010-455-1, 19 February 2016
- *Implementation of price cap regulation and related issues*, Telecom Decision CRTC 98-2, 5 March 1998
- *Bell Canada – Revenue requirements for 1993 and 1994*, Telecom Decision CRTC 93-12, 30 August 1993

⁹ Revised tariff pages can be submitted to the Commission without a description page or a request for approval; a tariff application is not required.

Appendix 1 to Telecom Order CRTC 2019-53

Guidelines for changes to TCI's tariff pages for item 404 – Support Structure Service

In this order, the Commission has directed TCI to make certain modifications to its proposed tariff pages for item 404 – Support Structure Service. TCI may decide on the specific structure and wording for the tariff (except with respect to the elements identified below), and may include any additional previously approved tariff provisions, provided that these changes take into account the following guidelines:

- Item 404 – Definitions: Add the following definitions:
 - “*Service Entrance Conduit on Private Property*” spans from the point of interconnection at the private dwelling property line on the ground (property line) to the point of interconnection on the outside wall of or inside the customer’s premise on private property (the side of the dwelling).
 - “*Service Entrance Conduit on Public Property*” spans from a service box on a public right of way through to the point of interconnection at the property line.
- Item 404.2.20 – Service Entrance Conduit on Private Property: change the title to the more general “Service Entrance Conduit,” and split the text into two paragraphs: one dealing with SEC on private property, and one dealing with SEC on public property.
 - In the paragraph dealing with SEC on private property, provide details as necessary.
 - In the paragraph dealing with SEC on public property,
 - (i) modify the phrase “... up to the Company’s designated point of interconnection on the public right of way ...” to “... up to the Company’s designated point of interconnection on a service box on the public right of way ...”;
 - (ii) identify the entity (TCI, Developer, or Property Owner) responsible for the provisioning and ownership of the facility, as well as how the associated material, installation, and engineering costs are charged (i.e. identify the entity being charged), and whether such charges are one-time or monthly; and
 - (iii) clearly indicate that the rate for SEC on public property provided under item 404.4.d applies to only the associated engineering costs.

- Item 404.4.d – Conduit – B.C. only:
 - Split the last bullet (Service Entrance Conduit) into two sub-bullets:
 - (i) Service Entrance Conduit on Public Property – provide descriptions as required that do not conflict with other sections in the tariff, and include the following sentence: This duct is between the service box on the public right of way and the point of interconnection on the property line.
 - (ii) Service Entrance Conduit on Private Property – provide descriptions as required that do not conflict with other sections in the tariff, and include the following sentence: This duct is between the point of interconnection on the property line and the side of the dwelling.
 - In the table, replace “Service Entrance – \$0.86 monthly per individual customer premise” with “Service Entrance Conduit on Public Property – \$0.56 monthly per conduit per individual customer premise”.
- If item 404 contains the term “point of interconnection” in relation to SEC in any other subsections, that term in those instances should also be clearly expressed in a manner that reflects the above changes.

Appendix 2 to Telecom Order CRTC 2019-53

Commission determinations with respect to cost elements and derivation of monthly rate for TCI's British Columbia SEC (costs per 14.64 metres, based on financial and demand data from 2017)

Table 1

Cost element	Formula	TCI proposal	Commission determination
Depreciation	DEP	\$5.27	\$4.70
Maintenance	MTCE	\$0.61	\$0.61
Property tax	NBV × PTR	\$1.20	\$0.97
Revenue charge	Revenue × RTR	\$0.06	\$0.09
Debt interest	NBV × DR × COD	\$1.56	\$1.88
Return on equity	NBV × ER × COE	\$8.42	\$5.33
Income tax	(ROE × ITR) / (1 - ITR)	\$2.96	\$1.87
Indirect labour	DEP × ILLR	\$0.50	\$0.44
Annual capital cost per SEC	Sum of above elements	\$20.56	\$15.89

Table 2

Cost element	Formula	TCI proposal	Commission determination
Annual capital cost per SEC (from Table 1 above)	(A)	\$20.56	\$15.89
SEC utilization factor (2 cables per SEC)	(B)	50%	41.67%
Annual capital cost per SEC cable	(C) = (A) × (B)	\$10.28	\$6.62
Annual competitor SEC demand	(D)	101,977	101,977
Annual competitor SEC capital costs	(E) = (C) × (D)	\$1,048,408	\$674,970
Annual competitor SEC billing expense	(F)	\$6,216	\$6,216
Annual competitor SEC total costs	(G) = (E) + (F)	\$1,054,624	\$681,187
Annual competitor cost per SEC	(H) = (G) / (D)	\$10.34	\$6.68
Monthly competitor cost per SEC	(I) = (H) / 12	\$0.86	\$0.56
Markup	(M)	0%	0%
Monthly competitor rate per SEC	(I) × (1+ M)	\$0.86	\$0.56