



Telecom Decision CRTC 2013-167

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Ottawa, 28 March 2013

TELUS Communications Company – Revised co-location power rates

File numbers: TCI Tariff Notice 643 and TCBC Tariff Notice 4356

In this decision, the Commission approves on a final basis revised power rates charged by TCC to service providers that co-locate in TCC's central offices in Alberta and British Columbia, retroactive to 8 August 2012. TCC is to provide rebates to service providers for the period during which its proposed rates were in effect.

Introduction

1. Telecommunications service providers, who place their equipment (co-locate) in an incumbent local exchange carrier's (ILEC) central office, pay for the electrical power provided by the ILEC. Rates for these services are set as co-location power rates. There are three monthly co-location power services provided: 1) direct current (DC) power, which is used for the co-locators' telecommunications equipment; 2) alternating current (AC) unprotected power, which is used by the co-locators for such things as test equipment; and, 3) AC protected power, which includes generator back-up should a power outage occur.
2. The Commission received applications from TELUS Communications Company (TCC), dated 27 July 2012, in which TCC requested that the Commission approve an increase to its monthly rate for its DC power service and decreases to its monthly rates for its AC power services, in Alberta and British Columbia. TCC filed cost studies in support of its proposed revised co-location power rates. These applications were given interim approval on 8 August 2012.¹ TCC subsequently filed revised cost studies and proposed revised monthly co-location power rates on 6 November and 12 December 2012.
3. TCC submitted that since 2002, power consumption rates charged by provincial electric power utilities in Alberta and British Columbia have increased by 52 percent and 32 percent, respectively. TCC further submitted that the co-location power rates that it had been charging co-locators over the same period declined by over 9 percent.²

¹ Telecom Order 2012-435

² Co-location power rates decreased due to the annual application of the I-X factor. I-X, which stands for inflation minus productivity offset, is a factor applied to some wholesale service rates. In each year that I-X does not equal zero, tariff pages are to be issued reflecting the application of the I-X factor.

4. The Commission received comments on TCC's applications from the Canadian Network Operators Consortium Inc. (CNOOC) and MTS Inc. and Allstream Inc. (collectively, MTS Allstream) [collectively, the competitors]. The public record of this proceeding, which closed on 18 January 2013, is available on the Commission's website at www.crtc.gc.ca under "Public Proceedings" or by using the file numbers provided above.
5. The Commission has identified the following issues to be addressed in its determinations:
 - I. Are the co-location power rates just and reasonable?
 - i. Are the proposed co-location AC and DC power equipment costs appropriate?
 - ii. Are TCC's proposed DC power maintenance expenses appropriate?
 - iii. Are TCC's proposed bad debt expenses appropriate?
 - II. Should the final rates be applied on a retroactive basis?

I. Are the co-location power rates just and reasonable?

i. Are the proposed co-location AC and DC power equipment costs appropriate?

6. Electrical power is generally measured in units called amps. However, competitors purchase co-location power in a different unit called fuse-amps. The difference between these two measurements is referred to in this decision as a power safety factor. Based on industry standards, the power safety factors for DC and AC power are 67 percent and 80 percent, respectively.
7. Accordingly, if a competitor purchases one fuse-amp of power, that competitor's telecommunication equipment should draw, on a continuous basis, a maximum of 0.67 amps of DC power or 0.80 amps of AC power.
8. TCC proposed to estimate the power equipment cost per fuse-amp in two steps: (i) divide the power equipment cost³ by the power safety factor, and (ii) divide the result from step (i) by the power equipment capacity in fuse-amps.
9. The competitors submitted that TCC's approach to divide the power equipment cost by the power safety factor in TCC's proposed step (i) above is incorrect, and would inappropriately increase the power equipment cost per fuse-amp.

³ Power equipment costs proposed by TCC also include the application of specific working fill factors for each of the AC and DC power services. Working fill factors reflect the ultimate utilization of the power plant equipment to recognize non-working capacity (e.g. spare units).

10. TCC replied that its methodology to estimate the power equipment cost per fuse-amp is correct, and was accepted by the Commission in setting co-location power rates in earlier decisions.

Commission's analysis and determinations

11. In Telecom Decision 2006-42, the Commission approved the methodology to determine the co-location power equipment cost per fuse-amp based on two steps as follows: (i) express the amp capacity of the power equipment in fuse-amps using the power safety factor, and (ii) divide the power equipment cost by the power equipment capacity in fuse-amps.
12. In contrast, the Commission considers that TCC has used the power safety factor twice in their proposed calculations; first against the power equipment cost, and second in calculating the equipment capacity in fuse-amps. The Commission notes that TCC did not provide any rationale for applying the power safety factor to adjust the power equipment cost.
13. The Commission also notes that the methodology approved in Telecom Decision 2006-42 does not include the application of the power safety factor to adjust the power equipment cost as proposed by TCC, and considers that this step inappropriately overestimates TCC's proposed power equipment cost per fuse-amp.
14. Accordingly, the Commission revises TCC's power equipment cost per fuse-amp by excluding the application of the power safety factor to the power equipment costs. This approach reduces this cost for DC by 31.6 percent, for AC unprotected by 20.0 percent, and for AC protected by 25.8 percent.

ii. Are TCC's proposed DC power maintenance expenses appropriate?

15. TCC proposed that the maintenance costs for its DC power service be calculated by applying the maintenance factor of 27.12 percent, established by the Commission in Telecom Decision 2006-42, to its monthly DC equipment costs.
16. The competitors submitted that the maintenance factor used to calculate these costs was based on outdated inputs from 1999 or earlier. The competitors therefore submitted that the Commission should recalculate TCC's maintenance costs by applying a factor no greater than that approved in Telecom Decision 2012-226 for Bell Canada's equivalent service. MTS Allstream suggested that, in the alternative, TCC's DC power maintenance expenses be excluded entirely.
17. TCC replied that the competitors' proposed adjustment would be inconsistent with Telecom Decision 2006-42. TCC submitted that the 27.12 percent maintenance factor is still relevant. TCC also submitted that the maintenance costs determined using the maintenance factor established in Telecom Decision 2006-42 are more accurate than the use of Bell Canada's factor advocated by the competitors.

18. TCC further submitted that a comparison of the maintenance expenses estimated using TCC's Activity Based Cost⁴ (ABC) study data with the maintenance expenses arrived at by applying the 27.12 percent factor demonstrates that the latter maintenance expenses are reasonable.

Commission's analysis and determinations

19. The Commission recognizes that TCC incurs costs to maintain the equipment used to provide power to the co-locator's equipment and therefore exclusion of maintenance costs from TCC's cost study, as suggested by MTS Allstream, would not be appropriate.
20. During the proceeding, TCC identified its most recent DC maintenance expenses derived from its ABC study. The Commission considers that this data, which is the most current data available, provides a better estimate of costs for the setting of TCC's monthly co-location DC power rate than the application of the 27.12 percent factor, which was based on outdated data, or the use of a factor based on another company's costs.
21. In addition, the use of maintenance expenses from TCC's ABC study is consistent with the approach prescribed in TCC's Phase II cost manual at Appendix M. This approach would increase TCC's proposed monthly maintenance costs for DC co-location power by 1.2 percent.
22. Accordingly, the Commission revises TCC's proposed maintenance costs for DC power to reflect the ABC study-based maintenance expenses in lieu of using the 27.12 percent maintenance factor proposed by TCC.

iii. Are TCC's proposed bad debt expenses appropriate?

23. TCC indicated that it has historically encountered bad debt on co-location power customer payments and therefore applied a 0.77 percent credit and collections expense factor based on its ABC study, which it called a bad debt expense factor, to its co-location power service costs.
24. MTS Allstream submitted that the proposed bad debt expenses should be removed as TCC provided no real substantiation that it currently encounters bad debt expenses for these services or that the quantum of the proposed expenses is appropriate.
25. TCC replied that all customers for co-location power services have missed payments, resulting in increased collections expenses and therefore these costs were correctly included in its cost studies.

⁴ Activity Based Costing is a company-specific cost model used to estimate costs of activities related to the company's services.

Commission's analysis and determinations

26. In its regulatory economic studies manual, TCC defined bad debt expenses as the amount of revenue from sales that is uncollectible, which is consistent with generally accepted accounting principles.
27. Based on the company's submissions, the Commission is of the view that the expenses at issue are properly characterized as credit and collections expenses rather than bad debt expenses. However, the Commission considers that credit and collections expenses are legitimate administrative costs as prescribed in TCC's approved regulatory economic studies manual and therefore should be allowed in TCC's cost study.
28. Further, the Commission considers that the 0.77 percent factor was developed based on methodology approved in TCC's regulatory economic studies manual and therefore is appropriate.
29. Accordingly, the Commission accepts the proposed credit and collections expense in TCC's co-location power cost studies.

Conclusion

30. In light of the above, and a review of all other proposed costs to ensure they are reasonable and appropriate, the Commission finds that co-location power rates based on TCC's proposed Phase II costs, adjusted to reflect the Commission's determinations in this decision plus a 15 percent markup, are just and reasonable. The Commission therefore **approves on a final basis** the following rates for TCC's co-location power service.

TCC's monthly co-location power service in Alberta and British Columbia	Monthly rate per fuse-amp
-48 volt DC	\$9.15
120 volt AC unprotected	\$2.76
120 volt AC protected	\$4.70

31. The Commission directs TCC to issue, within 20 days of the date of this decision, revised tariff pages to reflect the Commission's determinations in this decision.

II. Should the final rates be applied on a retroactive basis?

32. TCC requested that final co-location power rates be made retroactive to 8 August 2012 when the initial proposed rates were approved on an interim basis.

Commission's analysis and determinations

33. The Commission notes that as a result of its adjustments in this decision to TCC's proposed power plant equipment and maintenance costs, revisions were required to TCC's proposed rates, in order to ensure that these rates are just and reasonable. In the circumstances, the Commission finds it appropriate that the final rates approved in this decision come into effect on 8 August 2012.
34. The Commission directs TCC to provide rebates to co-locators within 90 days of the date of this decision.

Policy Direction

35. The Policy Direction⁵ states that the Commission, in exercising its powers and performing its duties under the *Telecommunications Act* (the Act), shall implement the policy objectives set out in section 7 of the Act, in accordance with paragraphs 1(a), (b), and (c) of the Policy Direction.
36. The Commission considers that its findings in this decision advance the policy objectives set out in section 7 of the Act, including paragraphs 7(b), (c), and (f).⁶ TCC's monthly co-location power service rates approved in this decision were established with a view to ensuring that competitors pay rates constituting Phase II costs plus a 15 percent markup thereby allowing the company to recover the costs that it legitimately incurs in providing this service. The Commission therefore considers that, in accordance with subparagraphs 1(a) (ii) and 1(b) (ii) of the Policy Direction, the rates approved in this decision are (a) efficient and proportionate to their purpose and interfere with competitive market forces to the minimum extent necessary to meet the above-referenced policy objectives, and (b) neither deter economically efficient competitive entry into the market nor promote economically inefficient entry.

Secretary General

⁵ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, P.C. 2006-1534, 14 December 2006

⁶ The cited policy objectives of the Act are:

7(b) to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada;

7(c) to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications; and

7(f) to foster increased reliance on market forces for the provision of telecommunications services and to ensure that regulation, where required, is efficient and effective

Related documents

- Telecom Order CRTC 2012-435, 8 August 2012
- *Bell Aliant Regional Communications, Limited Partnership and Bell Canada – Revised co-location power rates*, Telecom Decision CRTC 2012-226, 19 April 2012
- *Bell Canada and TCC – Co-location power service rates*, Telecom Decision CRTC 2006-42, 30 June 2006, as amended by Telecom Decision CRTC 2006-42-1, 25 August 2006