- Q. Please provide a copy of the CRTC decision of March, 1998 cited in footnote 22 at page 32 of 67.
- 4 A. A copy of the CRTC decision of March, 1998 cited in footnote 22 at page 32 of 67 of Ms. Kathleen McShane's prepared testimony is provided in Attachment A.

CRTC decision of March, 1998



Canadian Radio-television and

Conseil de la radiodiffusion et Telecommunications Commission des télécommunications canadiennes



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Telecom Decision

Ottawa, 5 March 1998

Telecom Decision CRTC 98-2

IMPLEMENTATION OF PRICE CAP REGULATION AND RELATED ISSUES

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OVERVIEW

(Note: This overview is provided for the convenience of the reader and does not constitute part of the Decision. For details and reasons for the conclusions, the reader is referred to the various parts of the Decision.)

A. Introduction

In Implementation of Price Cap Regulation, 1997 Contribution Charges and Related Issues, Telecom Public Notice CRTC 97-11, 25 March 1997, the Commission initiated a proceeding to implement price cap regulation and to determine, among other things, the appropriate Utility segment rates prior to the implementation of price caps (going-in rates), effective 1 January 1998, for BC TEL, Bell, Island Tel, MTS, MT&T, NBTel, NewTel and TCI (the telephone companies).

The Commission issued Implementation of Price Cap Regulation - Decision Regarding Interim Local Rate Increases and Other Matters, Telecom Decision CRTC 97-18, 18 December 1997 (Decision 97-18), with respect to, among other things, interim local rate increases, contribution rate reductions and the local subsidy requirement, with an effective date of 1 January 1998.

B. 1997 Contribution Charges

In this Decision, the Commission determines the final 1997 contribution charges for the telephone companies and TCEI as set out in Attachment A to this Decision. In setting these rates, the Commission makes adjustments to the contribution requirements (such as local competition and local number portability expenses, MTS' operating expenses and pending/planned tariff filings) and to total market minutes. The Commission also concludes that the Gross Receipts Tax adjustment should be discontinued.

C. Construction Program Review

The Commission finds the telephone companies' construction program submissions, as well as expenditures for Bell's Service Improvement Program (SIP), to be reasonable.

D. Depreciation

The Commission approves most of the depreciation life characteristics for which the telephone companies proposed changes, effective 1 January 1998. The Commission's determinations on the telephone companies' proposals are set out in Attachment B to this Decision.

E. Return on Equity

The Commission finds that a rate of return on average common equity of 11% is appropriate for the telephone companies' Utility segments in determining the going-in rates, effective 1 January 1998. The Commission limits the average common equity to a maximum of 55%, except for MTS, in setting the telephone companies' going-in rates.

F. Going-in Contribution and Revenue Requirements

The Commission determines each of the telephone companies' going-in contribution and revenue requirements after incorporating various adjustments for, among other things, the impact of unbundled equal access rates, implicit discounts, the amortization of regulatory deferred charges and pending/planned tariff filings.

As well, the Commission (1) denies MTS' proposal for a shareholder entitlement, (2) includes the revenue requirement impact of Bell's SIP, (3) excludes the impact of accounting changes proposed by NBTel and TCI, and (4) reduces the going-in revenue requirements for MTS and NBTel due to excess earnings earned during the transition period.

The Commission also determines, effective 1 January 1998, the going-in contribution charges (see Attachment C to this Decision) and the surcharge to be paid by wireless service providers on interconnecting circuits.

Based on the interim rate increases approved in Decision 97-18, the Commission determines that the telephone companies (except NBTel) will have residual going-in revenue shortfalls.

G. Rates

Regarding the recovery of the residual shortfalls, the Commission determines that the telephone companies should be given a choice: (1) implement further rate increases, effective 1 January 1998, to recover all or part of their respective shortfalls, or (2) adjust their respective price cap constraints to allow for the deferral of all or part of the rate increases. The telephone companies are directed to inform the Commission of their respective choices by 31 March 1998.

H. Local Subsidy Allocation

The Commission gives final approval to the rate band structures and assignments given interim approval in Decision 97-18.

The Commission determines, on an interim basis, the local subsidy allocation by band for each of the telephone companies, which will be finalized after the decision is issued in the follow-up proceeding to Local Competition, Telecom Decision CRTC 97-8, 1 May 1997.

The Commission denies Bell's proposal to exclude multiple unit dwellings from the subsidy allocation.

I. Service Baskets

The Commission generally accepts the telephone companies' proposed assignments of services to the price cap sub-baskets. The Commission's determinations are set out in Attachment D to this Decision.

INTRODUCTION

A. Background

- 1. In Review of Regulatory Framework, Telecom Decision CRTC 94-19, 16 September 1994 (Decision 94-19), the Commission determined that, among other things, earnings regulation would be replaced with price cap regulation for the Utility segment, effective 1 January 1998. In that Decision, the Commission recognized the need for a transition period to establish suitable conditions for price caps, including moving local rates closer to costs and decreasing the subsidy provided by long distance services.
- 2. In Price Cap Regulation and Related Issues, Telecom Decision CRTC 97-9, 1 May 1997 (Decision 97-9), the Commission determined the appropriate regulatory framework for the price cap regime, including the principles and components of the price cap formula.
- 3. The Commission issued Implementation of Price Cap Regulation, 1997 Contribution Charges and Related Issues, Telecom Public Notice CRTC 97-11, 25 March 1997 (PN 97-11), in order to

initiate a public proceeding to implement price cap regulation and to determine, among other things, the appropriate Utility segment rates prior to the implementation of price caps (going-in rates) for BC TEL, Bell Canada (Bell), The Island Telephone Company Limited (Island Tel), Maritime Tel & Tel Limited (MT&T), MTS NetCom Inc. (MTS), The New Brunswick Telephone Company, Limited (NBTel), NewTel Communications Inc. (NewTel) and TELUS Communications Inc. (TCI) (the telephone companies). Going-in rates provide the basis for the application of the price cap formula after 1 January 1998.

B. Scope of Proceeding

1. Telecom Public Notice CRTC 97-11

- 4. In PN 97-11, the Commission directed the telephone companies to file, by 13 June 1997, their respective financial forecasts, split rate base results, depreciation studies and capital plan submissions for 1997.
- 5. The Commission also considered that it would be more efficient to include the 1997 contribution charges proceeding, including issues regarding the contribution rates for TELUS Communications (Edmonton) Inc. (TCEI), in the context of the proceeding.
- 6. The telephone companies and TCEI were directed to file 1995 and 1996 data regarding conversation minutes as well as their respective 1997 forecasts. ACC TelEnterprises Ltd., AT&T Canada Long Distance Services Company (AT&T Canada LDS), fONOROLA Inc. (fONOROLA), London Telecom Network Inc. (London Telecom), Sprint Canada Inc. (Sprint) and Westel Telecommunications Ltd. (Westel) (the entrants) were requested to provide similar information for each telephone company's operating territory. In addition, AT&T Canada LDS and the other entrants operating in Ontario were directed to provide their views, with supporting rationale, as to why the Gross Receipts Tax (GRT) adjustment should be continued.
- 7. In PN 97-11, the Commission also stated that it intended to issue decisions, by 1 May 1997, in several other proceedings that could impact on the telephone companies' going-in rates and indicated that it would at the same time set out the remaining scope of the proceeding initiated by PN 97-11.

2. Telecom Decision CRTC 97-9

- 8. In Local Competition, Telecom Decision CRTC 97-8, 1 May 1997 (Decision 97-8), the Commission approved a central fund approach to accommodate the evolution of the local market from a monopoly to a competitive environment. The contribution scheme approved in Decision 97-8 requires the remittance of all toll contribution to a central fund and the distribution of proceeds to all Local Exchange Carriers (LECs) based on subsidy requirements per residential Network Access Services or equivalent (NAS) by rate band. In Decision 97-9, the Commission stated that, in the proceeding initiated by PN 97-11, it would (1) determine the telephone companies' subsidy requirements by residence NAS for each rate band, and (2) finalize the rate band classifications which were given interim approval in Decision 97-8.
- 9. In Decision 97-9, the Commission considered that the telephone companies should be allowed a basic residential local service weighted-average rate increase of up to \$3.00 at the start of the price cap regime in order to move contribution rates to an appropriate level and to recover their going-in revenue requirements. The telephone companies were directed to file applications to restructure their basic residential local service rates in the proceeding initiated by PN 97-11.
- 10. In Decision 97-9, the Commission also stated that it would also consider the following issues

in the context of the proceeding initiated by PN 97-11:

- (1) the establishment of the going-in revenue requirement (including an appropriate rate of return on average common equity (ROE)(and rates (including contribution) for each telephone company effective 1 January 1998;
- (2) the mechanism to recover, during the price cap regime, any revenue requirement shortfall which cannot be recovered from going-in rates;
- (3) proposals to increase basic residential service rates effective 1 January 1998;
- (4) the depreciation life characteristics to be implemented 1 January 1998;
- (5) the Utility segment services to be designated as Uncapped Services and as Competitor Services;
- (6) the finalization of rate band classifications:
- (7) any potential financial impacts of privatization on MTS' Utility segment;
- (8) the applicability of TCI's tax-factor (T-factor) to changes in allowable Additional Tax Deductions (ATDs); and
- (9) the removal of the freeze on NewTel's contribution rate prior to the implementation of price caps.

3. Telecom Order CRTC 97-590

- 11. In Telecom Order CRTC 97-590, 1 May 1997 (Order 97-590), the Commission determined, among other things, that wireless service providers (WSPs) interconnecting with the Public Switched Telephone Network (PSTN) to carry toll traffic should contribute on the same basis as toll services provided by wireline carriers and that this contribution should be paid as a surcharge on interconnecting circuits. In Order 97-590, a process was established to determine, among other things, (1) the number of WSP toll minutes that are contribution-eligible, (2) the number of trunks connecting WSPs to the PSTN, and (3) the per-circuit surcharge, effective 1 January 1998, on the circuits leased by WSPs to interconnect with the PSTN.
- 12. The telephone companies, TCEI and the WSPs were made parties to the process initiated by Order 97-590. The Commission directed that any information filed pursuant to this process would form part of the record of the proceeding initiated by PN 97-11 and that the Commission's determinations would be made in this Decision.

4. Bell's Service Improvement Program

13. On 26 June 1997, Bell filed Tariff Notice (TN) 6038 providing for a Service Improvement Program (SIP). Under the SIP, Bell proposed to implement a four-year plan that would: (1) make individual line service available on demand throughout the company's served territory by the year 2001; (2) eliminate mileage charges; (3) establish expanded local calling based on Natural Calling Centres; and (4) upgrade analog transmission facilities in northwestern Ontario. Bell proposed to fund this initiative through increases to rates, effective 1 January 1998, for primary exchange residence service averaging \$1.51.

14. By letter dated 7 July 1997, the Commission considered that, given the significance of the proposed changes and the fact that the company's rate increase proposal pursuant to Decision 97-9 took into account the proposed \$1.51 increase, the tariff revisions proposed under TN 6038 would be more appropriately addressed in the context of this proceeding. Accordingly, the Commission made TN 6038 part of the record of the proceeding initiated by PN 97-11.

C. Procedure

- 15. The telephone companies, the entrants and TCEI were made parties to this proceeding. On 13 June 1997, those parties and Stentor Resource Centre Inc. (Stentor), on behalf of the telephone companies, filed evidence and/or responses to initial Commission interrogatories. Other interested parties, including competitors, consumer groups and subscribers, also participated in the proceeding.
- 16. The following parties filed evidence by 26 September 1997: Alberta Council on Aging, the Consumers' Association of Canada, the Fédération nationale des associations de consommateurs du Québec and the National Anti-Poverty Organization (ACA et al.); the Canadian Cable Television Association (CCTA); City of Calgary (Calgary); Consumers' Association of Canada (Manitoba) and the Manitoba Society of Seniors (CAC/MSOS); and Consumers' Association of Canada, Alberta Branch (CACAlta). Several rounds of interrogatories were also addressed by parties and the Commission.
- 17. A public hearing took place in Hull, Quebec, on 3 November and 4 November 1997, before Commissioners David Colville (chairman of the hearing), Françoise Bertrand, Gail Scott, Peter Senchuk and Andrée Wylie for the presentation of oral final argument.
- 18. Oral and written final arguments were provided by the following parties: Stentor; BC TEL; Bell; Island Tel/MT&T; MTS; NBTel; NewTel; TCl; ACA et al.; AT&T Canada LDS; BC Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, Federated Anti-Poverty Groups of BC, Senior Citizens' Association of BC, West End Seniors' Network, End Legislated Poverty, BC Coalition for Information Access, and Tenants' Rights Action Coalition (BCOAPO et al.); Calgary; CAC/MSOS; CACAlta; Call-Net Communications Inc. (Call-Net); CCTA; Clearnet Communications Inc. (Clearnet); Corporation of the Township Euphrasia; fONOROLA; Government of British Columbia; Government of Ontario; London Telecom; Mr. Pat McCarthy; Microcell Telecommunications Inc. (Microcell); Ontario Federation of Agriculture; Township of Milton; Township Municipality of Palmerston, North and South Canonto; Rogers Cantel Inc. (Cantel); and Westel.
- 19. On 14 November 1997, written reply arguments were provided by the following parties: Stentor; BC TEL; Bell; Island Tel; MT&T; MTS; NewTel; TCl; ACA et al.; AT&T Canada LDS; BCOAPO et al.; Calgary; CAC/MSOS; CACAlta; Call-Net; CCTA; MetroNet Communications Group Inc. (MetroNet); Microcell; Cantel; and Westel.
- 20. The Commission also received about 2,000 comments from subscribers across Canada, as well as 134 petitions containing over 18,000 names.
- D. <u>Decision Regarding Interim Rate Increases and Other Matters</u>
- 21. In PN 97-11, the Commission set out the schedule required to meet the 1 January 1998 implementation date for price cap regulation. In a letter dated 30 May 1997, the Commission modified the procedure outlined in PN 97-11 to allow parties to participate more effectively in the proceeding. In extending the length of the proceeding, the Commission stated the following:

In order not to jeopardize the implementation of local rate increases and contribution rate

reductions on 1 January 1998, the Commission will issue an interim decision in late December, with an effective date of 1 January 1998, with respect to local rate increases, contribution rate reductions and the subsidy requirement.

22. On 18 December 1997, the Commission issued Implementation of Price Cap Regulation - Decision Regarding Interim Local Rate Increases and Other Matters, Telecom Decision CRTC 97-18 (Decision 97-18), providing for interim average rate increases to basic residential service for the telephone companies, effective 1 January 1998, as set out below:

Average Rate Increase (\$)

BC TEL 2.84 Bell 2.57 Island Tel 2.05 MT&T 2.00 MTS 0.35 NBTel 0.00 NewTel 2.50 TCI 1.10

- 23. In Decision 97-18, the Commission approved Bell's SIP under TNs 6038, 6038A and 6038B, given that it would provide rural customers with the benefits of urban grade service, such as improved 9-1-1 service, Internet access without mileage or toll charges and choice of long distance and terminal equipment suppliers. While the extension of local calling was proposed as an exception to the extended area service (EAS) criteria, the Commission was of the view that the proposal would be in the interests of subscribers, and these outweigh competitive concerns. The Commission also considered that approval of the SIP would be consistent with the Canadian telecommunications policy objectives.
- 24. However, the Commission concluded that the average increase of \$1.51 per residence line to fund the SIP was not warranted. The Commission considered, on a prima facie basis, that the approved interim rate increases would provide the company with a reasonable opportunity to recover the costs associated with the SIP, as well as other revenue requirement needs, including the company's ability to recover investment in its assets.
- 25. The following summarizes some of the other determinations made by the Commission in Decision 97-18:
- (a) BC TEL's proposed business rate restructuring was denied;
- (b) NewTel's proposal to align its business rates in Rate Group 1 with the rates for its other four rate groups was approved;
- (c) interim contribution rates and interim WSP per-circuit surcharges, effective 1 January 1998, were established:
- (d) MTS' proposals to subdivide the existing Band D into two bands and to re-assign the Douglas and Alexander exchanges from Band C to Band E were approved on an interim basis, and, for the other telephone companies, the assignment of wire centres and exchanges to bands remained unchanged from those given interim approval in Decision 97-8;
- (e) the interim percent subsidy requirement by band, effective 1 January 1998, was established; and

- (f) the assignment of Utility segment services under the price cap regime was established on an interim basis.
- 26. In Decision 97-18, the Commission stated that this Decision would provide the reasons for the determinations made in Decision 97-18 and would also make final determinations on a variety of matters, including those made on a preliminary or interim basis in Decision 97-18.

II 1997 CONTRIBUTION CHARGES

A. General

- 27. In Implementation of Regulatory Framework Splitting of the Rate Base and Related Issues, Telecom Decision CRTC 95-21, 31 October 1995 (Decision 95-21), the Commission determined that the contribution requirement for the Utility segment should be based on a revenue requirement methodology. In general terms, the contribution requirement for each telephone company is calculated as the difference between the company's Utility segment costs (including a return on equity based on the midpoint of the Utility segment ROE range) and the company's Utility segment revenues (excluding contribution revenues from entrants and from the company's Competitive segment). This amount divided by total market minutes (telephone company and entrants) yields the average per-minute contribution rate.
- 28. The following Sections deal with specific issues related to the 1997 contribution requirement, market minutes and the GRT adjustment.
- B. Contribution Requirement
- 1. Local Competition and Local Number Portability Costs
- 29. Several telephone companies included start-up costs for local competition and local number portability (LNP) in their 1997 forecast operating expenses. Bell's 1997 forecast operating expenses included LNP costs amounting to \$8.0 million and local competition costs amounting to \$27.8 million. The total revenue requirement impact, including the capital apportionment for 1997 of \$2.2 million, amounted to \$38.0 million. BC TEL included LNP expenses of \$4.8 million and local competition expenses of \$1.8 million for a combined expense level of \$6.6 million. TCl included local competition expenses of \$3.0 million. NewTel included LNP expenses of \$0.5 million and local competition expenses of \$0.1 million for a combined expense level of \$0.6 million.
- 30. AT&T Canada LDS and London Telecom argued that expenses for local competition and LNP should be excluded from the contribution calculation. AT&T Canada LDS argued that it would be entirely inappropriate for the telephone companies to include local competition-related start-up costs in their 1997 toll contribution requirements as it would have the perverse effect of requiring long distance competitors to fund the development of local competition.
- 31. TCl argued that the Commission accepted in TELUS Communications Inc. General Rate Increase 1996 and 1997, Telecom Decision CRTC 96-13, 13 December 1996 (Decision 96-13), that local competition costs are legitimate revenue requirement items and should be included in the local access shortfall and that 1997 local competition start-up costs have already been included by the Commission as a legitimate and appropriate Utility segment expense for purposes of establishing rates in Decision 96-13. TCl further argued that, if the Commission found this expense to be just and reasonable for 1997 in Decision 96-13, the only reasonable interpretation of the statements made by the Commission in connection with LNP costs in Decision 97-8 and Telecom Order CRTC 97-591, 1 May 1997 (Order 97-591), is that the future proceeding to be initiated by the Commission to deal with start-up costs for local competition

and LNP (the Local Competition Start-up Costs Proceeding) will be for those costs incurred beyond 1997.

- 32. BC TEL and Bell argued that, until a determination is made by the Commission in the upcoming proceeding announced in Order 97-591, it would be appropriate to treat these Utility segment costs like any other reasonable expense and they should properly be included in the calculation of the 1997 contribution requirement.
- 33. The Commission notes that Decision 97-8 and Order 97-591 concluded that the carrier specific start-up costs should be borne by the carriers incurring the costs, noting that the LNP start-up costs are likely to be the most significant portion of total start-up costs. The Commission agrees with AT&T Canada LDS and London Telecom that contribution from toll providers should not fund the telephone companies' start-up costs for local competition and LNP. Therefore, the telephone companies' 1997 expenses for local competition and LNP, except for TCI as noted below, have been excluded from the calculation of the telephone companies' contribution requirements.
- 34. Expenses attributed to the preparation for local competition were included in TCl's revenue requirement in Decision 96-13 and the local rates established in that Decision were set to recover, among other things, TCl's 1997 forecast local competition expenses.
- 35. The Commission further notes that Order 97-591 recognized a need to determine the means by which the telephone companies would recover their costs and indicated that it would be initiating a proceeding to address the appropriate cost recovery by the telephone companies. The Commission is of the view that the Local Competition Start-up Costs Proceeding will deal with all start-up costs for local competition and LNP for the year 1997 and beyond, except for TCI's 1997 costs as noted above. The Commission notes that this proceeding will be initiated shortly and will examine, among other things, whether any start-up costs for local competition and LNP should be recovered from subscribers (see Part VII of this Decision for a further discussion of this issue).

2. Year 2000 Compliant Expenses

- 36. Year 2000 Compliant expenses include a review and upgrade of computer systems in use by the telephone companies to ensure that their computers recognize the year 2000 in their respective operating systems. All of the telephone companies, with the exception of MTS, included Year 2000 Compliant expenses in their 1997 forecasts. All of the telephone companies indicated that Year 2000 Compliant expenses would be incurred during the price cap period (see Part VI of this Decision for a further discussion of this issue).
- 37. In response to a Commission interrogatory, Bell and TCI indicated that additional expenses over and above those shown in the original 1997 forecasts would be incurred in 1997. Bell submitted that, for 1997, it would incur additional expenses of \$7.3 million not included in the 1997 Regulatory View, bringing Bell's total 1997 expenses associated with Year 2000 Compliant expenses to \$26.0 million. TCI submitted that it had reclassified \$2.3 million from capital to expense, bringing its total Year 2000 Compliant expenses in 1997 to \$4.2 million.
- 38. AT&T Canada LDS argued that it would be inappropriate to include, in the 1997 contribution requirement, expenses required to address system requirements for the year 2000 as these expenses are not causal to the 1997 test year. AT&T Canada LDS further argued that the Year 2000 Compliant related costs should not be included as eligible expenses for the 1997 test year since these costs are more properly considered to be betterment costs and as such should be capitalized.

- 39. Bell argued that the company could not wait until the year 2000 before incurring its Year 2000 Compliant expenses as the process of making its systems operational for the year 2000 and beyond is a lengthy and complex one which, of necessity, has already begun and must be completed before the year 2000.
- 40. In reply argument, BC TEL stated that it must manage its system requirements and that it developed a three-year plan to ensure all outstanding necessary changes are made prior to the year 2000. BC TEL argued that AT&T Canada LDS' argument would be tantamount to suggesting that preventative maintenance on the company's telecommunications network is not causal to the year, since the network problems were not expected to occur until some future year. BC TEL further argued that, while the modifications are necessary, they simply allow the assets to continue to do what they did before.
- 41. The Commission notes that this system requirement will benefit all subscribers, including competitors, using the operating systems of the telephone companies. The Commission is of the view that expenses to make the information systems operational for the year 2000 and beyond are legitimate operating expenses, similar to BC TEL's example of preventative maintenance.
- 42. Accordingly, the Commission approves the inclusion of Year 2000 Compliant expenses in the calculation of contribution for 1997, including the additional 1997 Year 2000 Compliant expenses of \$7.3 million for Bell and \$2.3 million for TCI.

3. BC TEL - Operating Expenses

- 43. In its 1997 forecast, BC TEL included \$9.0 million for Product Management and Sales and Commissions expense. BC TEL indicated that the expense was for local services including Options and Features (Utility) and Competitive services.
- 44. AT&T Canada LDS argued that BC TEL's 1997 Utility segment revenue requirement included \$9.0 million of expenses associated with the sale and promotion of Competitive segment services and, as a result, these expenses should be excluded from the 1997 contribution requirement.
- 45. BC TEL argued that these expenditures are associated with Options and Features and competitive local services included in the Utility segment, noting that the Utility segment does include competitive services such as the Utility portion of Private Line Service, Digital Channel Service, Microlink, Megalink and Digital Exchange Service. BC TEL further argued that the classification of these services in the Utility segment is entirely appropriate and consistent with approved split rate base principles and procedures.
- 46. The Commission notes that BC TEL clarified that the expenditures are associated with Options and Features and competitive local services included in the Utility segment. The Commission is of the view that the \$9.0 million expense is a legitimate Utility segment expense and should be included in the 1997 contribution requirement.

4. Bell - Operating Expenses

a. Administration Expense

47. Bell indicated that the 1997 expenses for Administration "Other" increased by \$46.1 million over 1996, with \$36.4 million of this expense increase attributable to its business transformation program.

- 48. London Telecom questioned the appropriateness of Bell's 1997 forecast and submitted that the Commission should examine this increase carefully. London Telecom submitted that Bell has deferred certain aspects of its business transformation program in order to ensure that its quality of service levels did not become unacceptable in 1996 and, as a result, it questioned whether consumers and competitors should be required to pay for these deferred charges.
- 49. Bell argued that the business transformation expenditures are entirely appropriate and necessary and that it would be inappropriate to disallow any part of such an item without also considering the adverse impacts on costs or revenues that would result from not pursuing the business transformation initiatives. Bell further argued that significant cost and revenue benefits are inherent in its 1997 Regulatory View largely as a result of the business transformation initiatives.
- 50. The Commission notes that Bell has significant expense decreases in other expense categories that are due, in part, to the business transformation program, notably in its Sales Management expense and Service Provisioning expense. Therefore, the Commission finds the forecast increase in Administration expense to be reasonable.

b. Staff Reductions

- 51. In July 1997, Bell announced its intention to eliminate an additional 2,200 positions by October 1997. In response to a Commission interrogatory, Bell indicated that the 2,200 positions would reduce expenses by \$20.6 million and that this reduction was not incorporated in its 1997 Regulatory View.
- 52. AT&T Canada LDS noted that, although Bell has indicated that it would incur lower operating expenses in 1997 than forecast in the 1997 Regulatory View, Bell has argued that it would be inappropriate to treat in isolation the impact of this downsizing on the 1997 Utility segment View. AT&T Canada LDS argued that failure to adjust the 1997 contribution requirement to reflect realized and/or forecast operating expense reductions would lead to inappropriately high contribution charges.
- 53. In reply argument, Bell indicated that, as the year 1997 began to unfold, it became evident that the financial targets of the 1997 View would not be achievable unless further drastic action was taken. Bell submitted that, during the year, it re-examined its operations, including other expense increases not included in its 1997 View, and then developed measures aimed at getting the company back on track to achieve the financial targets set out in its 1997 View. Bell stated that one of the measures to achieve this goal was the downsizing of its workforce by 2,200 positions.
- 54. However, Bell submitted that, due to service and operational considerations, it no longer expected that the downsizing target would be achieved. Bell argued that it would not be appropriate to treat in isolation the intended impact of this downsizing on the 1997 Regulatory View as the \$20.6 million reduction is no longer expected to materialize.
- 55. The Commission notes Bell's argument that the staff reductions were planned to allow the company to get its financial targets back on track and thus achieve its 1997 View. The Commission notes that many of the staff reductions were forecast to occur in the latter part of 1997. The Commission further notes Bell's argument that the company no longer expects that this downsizing target will be achieved. In the circumstances, the Commission is of the view that no additional expense adjustment is required.

c. Overestimation of Expenses

- 56. Bell forecast its 1997 total operating expenses (including Depreciation and Operating Taxes) at \$3,413.0 million. The 1997 operating expenses (excluding Depreciation and Operating Taxes) amount to \$1,683.8 million, representing a decrease of \$30.2 million (or -1.8%) over 1996.
- 57. AT&T Canada LDS argued that there is compelling evidence on the record of this proceeding to support a 1.5% downward adjustment to Bell's Utility segment operating expenses, which would reduce total operating expenses and the 1997 contribution requirement by approximately \$52.5 million. AT&T Canada LDS argued that the adjustment was required, based on Bell's historic overestimation of its operating expenses and given Bell's incentive to inflate its expenses and going-in revenue requirement prior to the implementation of price caps. AT&T Canada LDS noted that Bell's 1995 and 1996 actual expenses were lower than its forecast expenses by 1.3% and 1.7%, respectively.
- 58. AT&T Canada LDS argued that its proposed adjustment to Bell's 1997 Utility segment operating expenses is consistent with the approach the Commission has taken in the past in dealing with Bell's overestimation of operating expenses. As an example, AT&T Canada LDS submitted that in Bell Canada Revenue Requirements for 1993 and 1994, Telecom Decision CRTC 93-12, 30 August 1993, the Commission adjusted Bell's expenses downward due to Bell's overestimation of its expenses.
- 59. Bell replied that its 1997 View was developed with the intention of achieving specific financial objectives after experiencing a dramatic deterioration in its financial health following the introduction of long distance competition. Bell further argued that, to maintain the confidence of investors, it undertook a dramatic recovery plan in the form of a three-year transition plan which was designed to return Bell to a more acceptable financial performance by the end of 1997.
- 60. Bell further argued that it was inappropriate to examine, as AT&T Canada LDS has done, expenses in isolation from revenues (as expenses are incurred for the purpose of generating revenues and thus expense performance is significantly affected by revenue performance). Bell further argued that the 1995 and 1996 historical variances from View of -1.3% and -1.7%, respectively, represented a reasonable and accurate standard of forecasting.
- 61. The Commission notes that Bell's operating expenses, excluding Depreciation and Operating Taxes, for 1997 have decreased by over \$30 million (or 1.8%) over 1996. The Commission notes that, over the first six months of 1997, Bell is under its cumulative forecast by 0.4%. The Commission considers a 0.4% variance between forecast and actual expenses to be reasonable. Therefore, the Commission concludes that no adjustment to Bell's overall expenses should be made for forecasting performance.

5. MTS - Productivity

- 62. MTS' total implied productivity (TIP), as set out in response to interrogatory MTS(CRTC)12Sep97-3602, was estimated to be -1.0% for 1997. MTS indicated that its TIP calculation should include an adjustment to remove \$4.3 million from the TIP calculation for increases to various expenses. MTS also submitted that the inflation factor, supplied by the company, should be adjusted from 1.6% to 2.0% as used elsewhere in the company's revenue forecast. MTS submitted that the adjusted TIP calculation for 1997 would be 2.6% if these adjustments were made.
- 63. The \$4.3 million adjustment proposed by MTS is broken down as follows: (1) \$0.9 million for Data Processing as the company no longer qualifies for Crown corporation rates; (2) \$1.6 million for Outside Services to support one-time Information Systems projects, such as the Year 2000 Compliant expense project; and (3) \$1.8 million for Advertising Expense and Sales and Marketing staff to reflect the increasingly competitive nature of the local services market.

- 64. The Commission considers that MTS' explanation for the increase due to Outside Services to support projects, such as the Year 2000 project, contradicts the company's response to another Commission interrogatory wherein MTS stated that it had not included any Year 2000 costs in its 1997 Regulatory View. The Commission also considers increased advertising expense and increased Sales and Marketing staff expenses to be an ongoing business expense.
- 65. The Commission is of the view that the explanations provided by MTS do not support excluding from the TIP calculation \$1.6 million for Outside Services and \$1.8 million for increased Advertising Expense and increased Sales and Marketing staff. The Commission accepts MTS' rationale for increasing the inflation factor to 2.0% and excluding \$0.9 million for Data Processing expense in the TIP calculation. The Commission notes that the revised 1997 TIP for MTS after making these adjustments to the TIP calculation is 0.1%.
- 66. The Commission notes that the other telephone companies had superior TIP results to that of MTS, and had estimated that their TIP rates would be at, or above, 2.0%. The Commission is of the view that, going into the price cap period, the TIP for 1997 for MTS should be no lower than 2.0%. The Commission is of the view that it is reasonable to expect MTS to achieve the minimum of the range of TIP rates expected for the other telephone companies. Accordingly, the Commission finds it appropriate to reduce MTS' 1997 operating expenses by \$2.5 million for calculation of the 1997 contribution requirement. This adjustment would result in a 2.0% TIP for 1997.

6. TCI - TELUS Management Services Inc. Fee

- 67. During the proceeding which culminated in Decision 96-13, TCI indicated that the 1997 estimate for the Utility segment portion of the TELUS Management Services Inc. (TMSI) management fee was \$9.4 million. In this proceeding, TCI revised its estimate of 1997 Utility segment expenses associated with the TMSI management fee to \$33.5 million.
- 68. In response to a Commission interrogatory, TCI explained that the 1997 TMSI management fee increase related primarily to the transfer to TMSI of a number of support functions that were previously performed within TCI. TCI submitted that it transferred its Corporate Communications, Environmental Health and Safety and Learning Centre (Human Resources) functions in the fourth quarter of 1996, and that several additional functions were transferred on 1 January 1997. TCI further stated that the overall increase also included incremental changes to the original functions reflected in the TMSI management fee.
- 69. AT&T Canada LDS argued that the significant increase in Utility segment expenses associated with the 1997 management fee payable by TCI to TMSI has not been adequately justified by TCI and should be carefully scrutinized by the Commission. AT&T Canada LDS submitted that it was concerned that the \$24.1 million increase in the 1997 management fee did not appear to be offset by equivalent expense reductions in the 1997 View. ACA et al. expressed similar concerns regarding the increase in the TMSI management fee.
- 70. In reply argument, TCI submitted that the overall increase is a result of functions transferred from TCI to TMSI, noting that \$2.5 million of the increase has been offset by reductions to Marketing and Sales expenses. TCI further argued that, for 1997, greater expenses would normally have been reflected in the Administration and Support expenses but have been offset by the TMSI management fee.
- 71. The Commission notes that the TMSI expense increase for 1997 is less than that which TCI would have incurred if the functions had remained within TCI and were not transferred to TMSI. The Commission notes that the explanations provided by TCI indicate that there are offsetting

reductions to the TMSI fee. Accordingly, the Commission is of the view that the TMSI management fee expense is reasonable.

7. Depreciation

- 72. As outlined in Decision 97-9, the 1997 depreciation expense amounts for each of the telephone companies were to be determined using the approved depreciation life characteristics as of the date of that Decision, i.e., 1 May 1997.
- 73. The Commission noted, in a letter dated 16 May 1997, that NBTel had not, to date, filed depreciation studies for approval and directed NBTel to use the depreciation life characteristics in place at 31 December 1996 in estimating its 1997 depreciation expense. Further, NBTel was directed to file depreciation studies supporting its 31 December 1996 depreciation life characteristics for all Utility segment depreciation accounts(categories. The Commission notes that the studies supporting these life characteristics were filed on 20 June 1997.
- 74. While recognizing that NBTel's depreciation studies, in some cases, are dated, the Commission is of the view that the studies are appropriate for estimating the company's depreciation expense for 1997, and approves the depreciation life characteristics used by NBTel to estimate its 1997 depreciation expense. The Commission's determinations with respect to the appropriate depreciation lives for the establishment of NBTel's going-in rates are discussed in Part IV of this Decision.
- 75. The Commission has reviewed the submissions of the telephone companies, and finds that the forecast depreciation expense for 1997 is appropriate in the establishment of 1997 contribution rates for BC TEL, Bell, NBTel and TCl. The forecast depreciation expense amounts for 1997 for these companies are reflected in their respective responses to interrogatories ____(CRTC)1May97-404 and 609 (CRTC-404 and CRTC-609).
- 76. However, a review of the information filed by Island Tel, MT&T, MTS and NewTel indicates that these companies have not developed the forecast 1997 depreciation expense amounts provided in response to CRTC-404 in the same manner as the forecast amounts shown in their responses to CRTC-609 (which were estimated at the account level). The Commission notes that, in Decision 97-9, paragraph 330, it directed the telephone companies to allocate all over/under accruals between the Utility and Competitive segments on the basis of individual account splits. The Commission is of the view that the forecast 1997 depreciation expense amounts should be determined at the account level, and as such, has relied on the companies' forecast amounts for 1997 which are found in their respective responses to CRTC-609. Therefore, the Commission has adjusted the 1997 depreciation expense amounts for these companies as follows: increases of approximately \$0.2 million and \$4.7 million for NewTel and MTS, respectively, and decreases of \$0.1 million and \$2.7 million for Island Tel and MT&T, respectively.

8. Other Adjustments

- 77. In determining each of the telephone companies' 1997 respective contribution requirements, the Commission has made adjustments to the respective 1997 revenue forecasts of BC TEL, Bell, MT&T and NBTel to reflect more current information regarding the status of certain pending and planned rate initiatives. The adjustments relate primarily to the implementation of significant rate initiatives, such as the restructuring of business service rates, directory listings and revised company revenue impact estimates of previously-approved rate initiatives.
- 78. Adjustments have also been made to the revenue forecasts for switching and aggregation and recovery of start-up costs, which are included in the determination of the contribution

requirement, to reflect increased revenues from the additional contribution minutes determined by the Commission (see Section C below). For MT&T and Island Tel, this adjustment also includes revenues for entrants' use of switching and aggregation services and of start-up costs, which had not been included in their 1997 contribution requirement calculations.

- 79. As discussed in Part VI of this Decision, the Commission has made an adjustment to exclude the excess earnings which MTS and NBTel had included in their respective Utility segment average common equity for 1997.
- 80. In Decision 95-21, the Commission approved the use of the forecast company-wide capital structure for the Utility segment, provided that the common equity component did not exceed 55%. Accordingly, the average common equity for the Utility segments of Island Tel, MT&T and TCI were limited to 55%. BC TEL's submission already reflected the 55% equity limit for 1997, and the equity components of Bell, NBTel and NewTel were forecast to be below 55%. As discussed in Part V of this Decision, the Commission has not imputed the 55% limit for MTS for 1997.

C. Contribution Minutes

- 81. Each of the telephone companies provided estimates of its own 1997 contribution-eligible minutes, as well as projections of the entrants' minutes and total market minutes. Entrants provided estimates of their own contribution-eligible minutes. The telephone companies stated that they have had a consistent record in forecasting their own minutes and that these estimates should be used in establishing the final 1997 contribution rates. The telephone companies also stated that the Commission should adopt their estimates of entrants' contribution-eligible minutes. BC TEL and Bell noted that (1) several entrants have revised their forecasts or actuals or both, (2) certain entrants have significantly overestimated their contribution-eligible minutes in the past, and (3) entrants' projections for 1997 appear unrealistic in light of previous trends.
- 82. AT&T Canada LDS, London Telecom and Westel considered that entrants' estimates of their own minutes should be employed in determining total contribution-eligible minutes and noted that, in 1996 Contribution Charges, Telecom Decision CRTC 96-11, 10 December 1996, the Commission accepted the entrants' forecasts of their respective 1996 switched minutes.
- 83. The Commission notes that total contribution-eligible minutes based on the combined respective estimates of each of the entrants and the telephone companies would result in a projected total market growth for 1997 of 13% over 1996, which is significantly higher than the average annual growth rate achieved since 1993. Conversely, the telephone companies' projections of the total contribution-eligible minutes (including those of the entrants) are slightly below the average growth achieved in the past. Accordingly, the Commission has based the 1997 contribution charges on the telephone companies' projections of total market minutes, but has increased these projections by 1% to maintain consistency with historical total market growth rates.

D. Gross Receipts Tax

- 84. As stated earlier, AT&T Canada LDS and other entrants operating in Ontario were directed to provide their views, with supporting rationale, as to why the GRT adjustment should be continued.
- 85. In final argument, Bell noted that all participating entrants confirmed that they had never paid GRT and stated that the discount for the GRT should not be reflected in establishing the final 1997 contribution rates. Bell also requested that the company be compensated, through adjustments to contribution charges applicable to entrants, for an estimated \$10 million in

contribution not paid since the issuance of Competition in the Provision of Public Long Distance Voice Telephone Services and Related Resale and Sharing Issues, Telecom Decision CRTC 92-12, 12 June 1992 (Decision 92-12), as a result of the GRT adjustment.

- 86. AT&T Canada LDS and London Telecom pointed out that the GRT is still under consideration by the Government of Ontario and therefore should be continued until the issue is resolved. AT&T Canada LDS also stated that Bell's suggestion that the Commission allow it to recover \$10 million in excess contribution is unreasonable and would require that the Commission engage in retroactive rate-making.
- 87. The Commission notes that the issue of whether entrants' contribution payments are deductible for tax purposes prior to calculating the GRT payable has been outstanding since 1993 and that most of the evidence filed by entrants focuses on whether there is a requirement for entrants to pay GRT in Ontario, as opposed to whether contribution payments would be deductible in calculating the GRT liability. The Commission notes that entrants have benefited from the GRT adjustment without having paid any GRT and considers that the adjustment should be discontinued. Accordingly, the GRT adjustment is discontinued, effective 1 January 1997. The Commission is of the view that, if it is determined at some future time that entrants are required to pay GRT and that contribution payments are not deductible in determining the tax payable, a re-examination of the applicability of the factor would be warranted at that time on a going-forward basis.
- 88. With respect to Bell's request for compensation for contribution not paid since the issuance of Decision 92-12 as a result of the GRT adjustment, the Commission agrees with AT&T Canada LDS that this would amount to retroactive rate-making and therefore considers such an adjustment to be inappropriate. Therefore, Bell's request for compensation is denied.

E. Conclusions

89. Based on the determinations made in the previous Sections, the Commission gives final approval to the contribution rates for 1997 as set out in Attachment A to this Decision. The telephone companies and TCEI are directed to issue forthwith tariff pages, effective 1 January 1997, reflecting the rates set out in Attachment A to this Decision and to make any necessary billing adjustments to amounts already billed to entrants as expeditiously as possible.

III CONSTRUCTION PROGRAM REVIEW

A. Capital Plan Submissions

- 90. In PN 97-11, the telephone companies were directed to file, on the record of this proceeding, their 1997 Utility segment construction program submissions. These submissions comprised actual capital expenditures for each of the years 1995 and 1996 and forecast capital expenditures for each of the years 1997 to 1999.
- 91. The Commission has reviewed the evidence to ensure that no major initiatives or programs had been accelerated, which could result in the Utility segment rate base being inflated unnecessarily prior to the implementation of price caps. The Commission has reviewed the detailed annual expenditure data over the five-year period and compared the current data with information provided in previous construction program submissions, both on an actual-to-forecast and forecast-to-forecast basis.
- 92. The Commission is satisfied that the telephone companies have continued to make prudent investments during the split rate base regime. The Commission considers that there is no evidence to indicate that any of the telephone companies have advanced previously planned

1998 and 1999 major initiative or program investments into 1997 or prior years, with one exception. The 1997-over-1996 View comparison of Bell's current and previous construction programs indicated an increase of \$90.7 million in Switching Equipment Modernization expenditures for 1997. However, this increase (due to the acceleration for completion of this program in 1997) was approved in Telecom Order CRTC 96-1381, 26 November 1996. The Commission notes that any new major initiatives or programs, which are discretionary in nature and have been added in the 1997 capital plans of the telephone companies, have been justified by supporting economic evaluations.

93. Accordingly, the Commission considers the construction program submissions of the telephone companies to be reasonable.

B. Bell - Service Improvement Program

- 94. As noted earlier, on 26 June 1997, Bell filed TN 6038 providing for a SIP. By letter dated 7 July 1997, the Commission made TN 6038 part of the record of this proceeding. The capital expenditures associated with the SIP were not included in the 1997 View of Bell's construction program.
- 95. Bell indicated that the SIP would require \$200 million in capital expenditures and capital-related expenses to restructure and upgrade the basic service provided to customers residing outside major urban centres. The SIP would provide all customers access to a similar level of basic service whether they reside in urban centres, small towns or rural communities.
- 96. The Commission notes that Bell plans to use the most cost-effective technologies for the SIP. The Commission also notes that Bell is required to file a detailed roll-out plan for the SIP by 1 May 1998 as set out in Decision 97-18. The Commission is of the view that the planned capital expenditures and capital-related expenses for the SIP are reasonable.

C. Reporting Requirements

- 97. In Decision 97-9, the Commission stated that the telephone companies will not be required to file annual construction program submissions beginning in 1998. However, the Commission accepted BC TEL's proposal to continue filing annual progress reports for its Service Extension Program and Rural Upgrade Program until completion.
- 98. In Decision 97-9, the Commission also accepted Bell's proposal to report on customer satisfaction with respect to the availability of facilities for new services/service regrades outside its Base Rate Areas. However, on 24 July 1997, the Commission issued Quality of Service Indicators for Use in Telephone Company Regulation, Telecom Decision CRTC 97-16, wherein the Commission was of the view that subjective indicators were not appropriate and directed the telephone companies to employ indicators based on objective criteria in the new monitoring model. Therefore, the Commission finds that Bell is not required to report on customer satisfaction as set out in Decision 97-9.

IV DEPRECIATION

A. Introduction

99. In Decision 97-9, the Commission stated that any proposed changes to depreciation life characteristics introduced during the follow-up proceeding, and the consequent impact on the depreciation reserve deficiency (DRD)/surplus, would be taken into account in setting the going-in rates for price caps on 1 January 1998. In that same Decision, the Commission also decided

that any DRDs of the telephone companies as of 1 January 1998, as determined in the follow-up proceeding, should be amortized, for regulatory purposes, using the core composite remaining service life of each company's assets as of that date.

B. Methodology for Going-in Depreciation Expense

- 100. The Commission notes that the determination to amortize the DRD in the manner described above does not conform to its Phase I Directives for determining depreciation expense. Un/der the approach outlined in Decision 97-9, the amortization of the DRD would be on a straight-line basis over the average remaining service life of the plant and equipment for regulatory purposes, thus ensuring that the amount included in the going-in rates would not change relative to the amounts reflected in the rates for subsequent years of the price cap plan.
- 101. In CRTC-609, the telephone companies were asked to provide, among other things, documentation in support of their estimated 1997 and going-in depreciation expense amounts. The 1997 expense amounts were to be determined using the approved depreciation life characteristics for each company as of the date of Decision 97-9, with the exception of NBTel as discussed in Part II of this Decision.
- 102. In response to CRTC-609, the telephone companies did not use a consistent methodology to determine the going-in depreciation expense amounts. Therefore, in interrogatory _____(CRTC)21Aug97-2601 (CRTC-2601), the telephone companies were requested to calculate the going-in depreciation expense amounts assuming that the changes in depreciation life characteristics and the amortization of the DRD were implemented on 1 January 1998.
- 103. In the Commission's view, the methodology outlined in CRTC-2601 is consistent with the Commission's determinations in Decision 97-9 (i.e., the proposed changes to currently-approved depreciation life characteristics would be taken into account in setting the going-in rates on 1 January 1998, and any DRD as of 1 January 1998 would be amortized over the average remaining service life of each company's assets as of that date). Accordingly, the Commission has utilized the information filed by the telephone companies in response to CRTC-2601 as the base for determining the estimated going-in depreciation expense for each of the telephone companies.

C. Analysis of Depreciation Studies

1. General

104. The telephone companies proposed changes to the service lives for a number of accounts and, in most cases, recommended service life reductions. Their proposals were based on the need to implement new technology to facilitate new and enhanced services in a competitive environment. In particular, the new studies that were filed focused on outside plant paired copper and digital switching equipment.

2. Summary of Parties' Positions

- 105. Stentor indicated that there are two major drivers of service life reduction: technological evolution and local market competition. Stentor further stated that the historical retirement patterns of plant and equipment will not be mirrored in the future and that a future-oriented service life analysis is required.
- 106. ACA et al.'s expert witness, Snavely, King, Majoros, O'Connor and Lee, Inc. (Snavely King), performed a detailed analysis of the telephone companies' proposed changes to

depreciation life characteristics, and provided its views as to the appropriateness of the proposed changes. Snavely King's recommendations reflected (1) its analysis of the telephone companies' historical data, (2) information provided by the telephone companies concerning competition and their retirement forecasts, and (3) its general and specific knowledge of the telephone industry and depreciation.

- 107. In those instances where Snavely King did not agree with the telephone companies' proposals, it recommended one of the following: (1) some reduction in the average service life (ASL) for certain accounts, but not to the extent proposed by the telephone companies, (2) maintaining the current depreciation life characteristics for some accounts, or (3) increasing the ASLs of certain accounts.
- 108. Rather than providing specific depreciation studies in support of particular service lives, CCTA made general comments regarding changes proposed by BC TEL, Bell and TCI. CCTA focused, for the most part, on local switching, underground cable and buried cable accounts. While noting that the DRD involves many asset accounts, CCTA stated that two major account categories make up about 75% of the proposed Utility segment DRD: local switching and copper cable. In particular, CCTA stated that Bell's aggressive reductions in the average service life of copper cable are not borne out by either technological developments or historical data. CCTA also noted that both Bell and TCI had changes to depreciation life characteristics approved for a number of accounts in 1996, implying that no further change is required at this time.
- 109. Calgary's expert witness, Mr. William M. Stout, reviewed the proposed changes in depreciation life characteristics to three accounts put forward by TCI. Mr. Stout concluded that the proposed changes should be rejected. In Mr. Stout's opinion, the parameters that were determined by the Commission in Decision 96-13 remain applicable.
- 3. Company-Specific Depreciation Studies

a. Introduction

110. The Commission's analysis consisted of reviewing the telephone companies' actuarial data for each depreciation account/category for which the companies proposed changes and assessing that data in view of the future plans of each company. Subject to the specific findings set out below, the Commission finds the telephone companies' proposed service life and dispersion changes in general to be reasonable. The approved depreciation life characteristics, for those accounts for which the telephone companies proposed changes, are set out in Attachment B to this Decision.

b. BC TEL

- 111. BC TEL requested service life changes to eight depreciation categories. These changes were mainly to the company's outside plant and digital switching accounts.
- 112. For outside plant Accounts C221/C223: Aerial Cable Exchange/Toll and C231/C233: Underground Cable Exchange/Toll, BC TEL proposed a reduction in the ASL of Aerial Cable from 21 years to 18 years and Underground Cable from 21 years to 17 years. BC TEL's proposed service life reductions were based upon a plan to replace paired copper cable with fibre transmission systems by the turn of the century.
- 113. In the 1997 2000 timeframe, BC TEL plans to minimize the placement of twisted pair copper in favour of new fibre-based technology and to continue the use of twisted pair copper for basic local customers where new technologies are not cost effective. In the 2001 2010 timeframe, BC TEL plans to cap the placement of twisted paired copper feeder and to minimize

the use of twisted pair copper in the distribution portion of the access network. In areas of high service demand or intense market pressure, under BC TEL's proposal, twisted pair copper would be replaced with new technologies where economically viable.

- 114. In Snavely King's view, the ASL for Aerial Cable should be increased to 23 years, and the ASL for Underground Cable should be left at 21 years. Snavely King questioned the company's basic substitution assumption, stating that technological advances often contribute to lengthening service lives by augmenting the capacity of existing plant so that it can continue to meet new service requirements.
- 115. In the Commission's opinion, while adaptive technologies do enhance the current network and allow for higher bit rates, there are physical and economic limitations which constrain the use of the technology in certain areas. The Commission is of the view that a balance between adaptive technologies and the need to modernize the access network is reasonable. Based on the plan presented and the analysis conducted by the company, the Commission finds the proposed depreciation life characteristics for these accounts to be reasonable. Accordingly, the Commission approves the proposed depreciation life characteristics for these two accounts.
- 116. For switching Accounts C641D: Digital SPC Switching Local DMS and C641G: Digital SPC Switching Local GTD, BC TEL proposed a reduction in the service life of its digital switching equipment to 13 years. BC TEL relies mainly on two types of switching equipment: the GTD 5 and the Digital Multiplex Systems (DMS). BC TEL noted that there is a significant risk that continued and timely development of the GTD switch may not be supported in the future. BC TEL also noted that, while software upgrades have been adequate to date, the company is concerned that switch replacement rather than upgrades will become necessary as software augments will not be sufficient to meet demands for new services and applications. BC TEL proposed to reduce the service life of the GTD 5 equipment from 16 years to 13 years to reflect this uncertainty.
- 117. Regarding the DMS switches, BC TEL indicated that the design of the switch is such that hardware and software can be upgraded continuously to increase service capacity and provide new features. BC TEL indicated that the DMS switch retirements are driven by the constant retrofitting of components within the switch, which results in a reduced service life for individual components. While BC TEL has no firm plans to retire DMS switching equipment at this time, the company proposed to reduce the service life of DMS switches from 15 years to 13 years based on its retrofitting plans.
- 118. Snavely King recommended that the ASL for Account C641D (DMS) be increased from 15 to 16 years, and that the ASL for Account C641G (GTD 5) be left at 16 years. In reaching these conclusions, Snavely King argued that competition will have little or no impact on the life of these accounts since the competitors will be using the same basic switch types. Snavely King stated that the current version of digital switches are capable of being upgraded, and that this upgrade ability greatly extends the life of the switches.
- 119. In the Commission's opinion, the GTD 5 switching equipment will face retirement near the turn of the century while the DMS switching equipment remains viable because of its ability to be upgraded. The Commission finds the proposed depreciation life characteristics for these two accounts to be reasonable and accordingly approves the company's proposed depreciation life characteristics for these accounts.
- 120. The Commission also finds the proposed service life and dispersion changes for the remainder of the accounts to be reasonable and approves BC TEL's proposals for these accounts.

121. In light of its determinations above, the Commission has estimated BC TEL's going-in depreciation expense to be \$281.5 million, resulting in an adjustment of \$37.3 million which was included in the company's going-in revenue requirement.

c. <u>Be</u>ll

- 122. Bell requested service life changes to 20 depreciation accounts. Bell's proposed service life reductions were mainly in three areas: Central Office Equipment (COE) Transmission, Digital Switching and Outside Plant paired copper.
- 123. Bell submitted that the shortening of service lives for COE Transmission accounts is driven by technology as the company moves from analogue transmission on radio and copper to digital transmission technology on fibre optic cable. In the Commission's opinion, the service lives proposed for the depreciation categories in this group of accounts are reasonable and accordingly are approved.
- 124. Bell proposed to reduce the service life of DMS Switching from 18 years to 13 years. Bell submitted that the Digital Switching accounts are experiencing a shortened service life due primarily to the retrofitting of components within the individual switches. Snavely King was of the view that Bell's proposed ASL for Account 2217600: COE DMS Toll was reasonable, but that the ASL for Account 2217500: COE DMS Local should be reduced from 18 to 16 years. In recommending acceptance of Bell's proposed ASL for toll switching, Snavely King indicated that, if competition is going to have an impact anywhere, it would be in the toll market.
- 125. The Commission is of the opinion that the deployment of remote switching centres connected to main switches by fibre transmission links will reduce the requirement for main switches in the future. The Commission also notes that the actuarial data supplied by Bell shows a declining retirement rate for the transaction years 1994 and 1995, and that Bell has explained the declining retirement rate as resulting from the restructuring currently taking place within the company. The Commission concurs with Bell that the retirement rate for these accounts will increase in the near future, as service demand and capacity requirements increase the level of retrofitting and effectively decrease the service life of the digital switching equipment. Therefore, the Commission finds the service lives proposed by Bell for the Digital Switching accounts to be reasonable, and accordingly approves the proposed depreciation life characteristics for these accounts.
- 126. For Outside Plant, Bell proposed to align the service lives of Submarine and Buried Cable and Station Connection Outside Wire at 20 years, a slight reduction from the current ASL of 21 years. Snavely King agreed that an ASL of 20 years was reasonable for Outside Wire, but submitted that the ASLs of Buried and Submarine Cable should be increased to 23 and 25 years, respectively.
- 127. The Commission is of the view that Bell's proposed service lives for these accounts are supported by the actuarial data and the outlook for the accounts, and accordingly approves the proposed depreciation life characteristics for these accounts.
- 128. Bell also proposed to reduce the service life of Underground Cable from 21 to 16 years. In its proposal, Bell assumed that paired copper transmission technology would be retired in the 2012 to 2014 timeframe. While noting that technological advances often contribute to lengthening service lives, Snavely King recommended that the ASL for this account should be maintained at 21 years. In Snavely King's opinion, large feeder cables will not necessarily be retired when they are replaced by fibre transmission systems, in that they can be re-deployed as distribution cable.

- 129. The Commission considers that cable, such as Underground Metallic Cable in the feeder portion of the network, is the next major area for replacement by fibre-based technologies. The Commission considers that Bell's proposed service life for Underground Cable is reasonable, and accordingly approves the proposed depreciation life characteristics for this account.
- 130. The Commission finds the proposed service life and dispersion changes for the remainder of the accounts to be reasonable and approves Bell's proposals for these accounts.
- 131. In light of its determinations above, the Commission has estimated Bell's going-in depreciation expense to be \$1,520.4 million, resulting in an adjustment of \$182.8 million which was included in the company's going-in revenue requirement.

d. Island Tel

- 132. Island Tel proposed service life changes to 15 depreciation accounts.
- 133. For Account 221-65773: Digital Switching Local, Island Tel proposed an Iowa L5-12 survivor curve, compared to the currently-approved Iowa L2-15 survivor curve, based on an analysis of the actuarial data available. Snavely King argued that there is no justification for an ASL shorter than 16 years.
- 134. The Commission is of the view that the most important factor in determining the service life of digital switches is the rate of plug-in or maintenance spare (PIMS) replacement, and notes that Account 221-42590: Circuit Exchange PIMS Other contains a number of the modules employed by these digital switching machines. Having considered the retirement data and further plans for digital switching, along with the company's service life estimate for PIMS, the Commission is of the view that an lowa L5-13 survivor curve better reflects the probable future retirement pattern of digital switching machines. Accordingly, the Commission approves an lowa L5-13 survivor curve for this account.
- 135. For Account 242-10023: Aerial Cable Exchange, Island Tel proposed to reduce the ASL from 27 years to 18 years. Snavely King agreed that the ASL for this account should be reduced, but not to the extent proposed by the company. Snavely King recommended that the ASL be reduced by 15%, resulting in an ASL for this account of 23 years.
- 136. The Commission notes that the depreciation study for this account does not contain any analysis specific to Island Tel. The Commission considers the Iowa L2 dispersion to be reasonable, but not Island Tel's proposed 18-year ASL. The Commission considers that an Iowa L2-20 survivor curve, with an average remaining life (ARL) of 13 years, to be more appropriate for this account, and accordingly approves these life characteristics for this account.
- 137. For Account 242-30658: Buried Copper Cable Exchange, Island Tel proposed a reduction in the ASL from 21 to 17 years. Similar to the previous account, the company's analysis for this account was based on industry-average remaining life estimates rather than on conditions specific to Island Tel. Snavely King argued that the ASL for this account should be increased to 23 years.
- 138. In the Commission's view, evidence was presented supporting a reduction in the service life of this account, but not to the extent proposed by Island Tel. In the Commission's view, the actuarial data, tempered by the future introduction of new technology, supports an Iowa S1-19 survivor curve. Accordingly, the Commission approves an Iowa S1-19 survivor curve for this account.

- 139. The Commission finds the proposed service life and dispersion changes for the remainder of the accounts to be reasonable and approves Island Tel's proposals for these accounts.
- 140. In light of its determinations above, the Commission has estimated Island Tel's going-in depreciation expense to be \$12.5 million, resulting in an adjustment of \$0.5 million which was included in the company's going-in revenue requirement.

e. MTS

- 141. MTS requested service life and dispersion changes to 11 depreciation accounts, basing its service life analysis primarily on actuarial data.
- 142. For Account 261.2 26C, 226C: General Purpose Computers Plant Applications, MTS currently uses a Gompertz-Makeham (GM)4-10 survivor curve with an ARL of 5.8 years. MTS proposed the use of a GM5-6 survivor curve with an ARL of 2.3 years. Snavely King argued that there was no justification for reducing the ASL for this account.
- 143. In the Commission's view, the survivor curve chosen by MTS for this account does not reflect the retirement pattern of the retirement experience curve. The Commission has weighted its analysis towards the retirement experience curve because of the relatively short service life of plant application computers. Based on its analysis, the Commission finds that a GM5-8 survivor curve with an ARL of 3.8 years reflects the expected future retirement pattern of plant application computers, and accordingly approves these depreciation life characteristics for this account.
- 144. The Commission finds the proposed service life and dispersion changes for the remaining 10 accounts to be reasonable and approves MTS' proposals for these accounts.
- 145. In light of its determinations above, the Commission has estimated MTS' going-in depreciation expense to be \$107.5 million, resulting in an adjustment of \$4.9 million which was included in the company's going-in revenue requirement.

f. MT&T

- 146. MT&T proposed service life changes to 28 depreciation accounts.
- 147. For Account 221-65773: Large Digital Switches, MT&T proposed an Iowa R5-12.5 survivor curve as compared to the currently-approved Iowa R2.5-18 survivor curve. MT&T submitted that the proposed service life reduction is based on a revised digital switching plan that could eliminate up to four exchanges in the near future. Snavely King stated that there appears to be no justification for an ASL shorter than 16 years for this account, given that the smaller switch locations have been replaced and the current investment is dominated by the larger DMS machines.
- 148. The Commission is of the view that the elimination of exchanges is an important factor in the proposed reduction in the ASL for this account. However, the Commission is of the view that the most important factor in determining the service life of digital switches is the rate of PIMS replacement. Having considered the retirement data and further plans for digital switching, along with the company's service life estimate for PIMS, the Commission is of the view that an Iowa R5-13 survivor curve better reflects the probable future retirement pattern of digital switching machines. Accordingly, the Commission approves an Iowa R5-13 survivor curve for this account.

- 149. For Account 221-65773: Digital Switching Local Remote Switching Centres (Group B), MT&T proposed to revise the depreciation service life characteristics from an lowa L3-18 to an lowa L3-14 survivor curve. MT&T's service life reduction for this account is based on the need to upgrade remote switching equipment to accommodate new services, such as call management. As in the case of the large digital switches, Snavely King argued that an ASL of 16 years is reasonable for this account.
- 150. In its assessment for this account, the Commission has taken into account two main considerations: the need for new technology to accommodate the increasing demand for new services (such as call management services) and the effect of re-arrangements required as the number of DMS main switches are decreased. In the Commission's view, while the actuarial data does not support a reduced service life at this time, the requirement to upgrade and reconfigure remote switches does support a reduction. In the Commission's view, an lowa L3-15 survivor curve better reflects this account's future retirement pattern, and accordingly approves an lowa L3-15 survivor curve for this account.
- 151. MT&T proposed to reduce the ASL for Account 242-10023: Aerial Cable Exchange from 25 years to 19 years, with an ARL of 12 years. Snavely King agreed that the ASL for this account should be decreased, but not to the extent proposed by the company. Considering the long life indications and the low level of retirements for this account, Snavely King considered a 10% reduction in the ASL to be appropriate for this account, and accordingly recommended an ASL of 23 years.
- 152. The Commission notes that MT&T based its service life estimates for this account mainly on industry forecasts from sources such as Stentor and Technology Futures Inc. (TFI). As noted in Decision 97-9, at paragraph 282, the Commission has, to date, encouraged carriers to develop depreciation life characteristics based on their own particular circumstances. Given that the TFI statistics are heavily influenced by the experience in the United States (U.S.), the Commission considers that the TFI estimates should be given lesser weight in determining the appropriate service lives for MT&T for this account. Based on an examination of the historical data for this account and the company's future plans, the Commission does not consider that a major change in technology is imminent which would warrant a reduction of the ASL of the magnitude proposed by the company. The Commission considers an lowa R1.5-21 survivor curve with an ARL of 14 years to be more appropriate for this account, and accordingly approves these life characteristics for this account.
- 153. MT&T proposed to reduce the ASL of Account 242-20055: Underground Copper Cable Exchange from 25 years to 18 years. Snavely King viewed the company's proposed reduction in the ASL of this account to be excessive, recommending an ASL of 22 years for this Underground Cable account.
- 154. As with the previous account, MT&T used industry-derived remaining life estimates to determine its service life estimates. In the Commission's opinion, industry-wide studies should not be the main factor for service life estimates and should only be used to temper an individual company's experience. The Commission agrees with MT&T that a reduction in service life is required for this account, but not in the order of magnitude suggested by the company. The Commission notes that the majority of MT&T's underground cable (87%) is used as feeder. While the Commission considers that feeder cable is the next major area for replacement by fibre-based technologies, the Commission is of the view that there is no evidence to suggest that underground feeder will be replaced at the rate proposed by MT&T. The Commission considers that an lowa R2.5-20 with an ARL of 11 years is more reasonable, and accordingly approves these life characteristics for this account.
- 155. The Commission finds the proposed service life and dispersion changes for the remainder

of the accounts to be reasonable and approves MT&T's proposals for these accounts.

156. In light of its determinations above, the Commission has estimated MT&T's going-in depreciation expense to be \$90.8 million, resulting in an adjustment of \$6.4 million which was included in the company's going-in revenue requirement.

g. NBTel

- 157. NBTel proposed service life changes to 16 depreciation categories.
- 158. For Account 221-500-300: Circuit Exchange, NBTel provided an extended analysis by estimating retirements and additions to the year 2010. In its analysis, NBTel concluded that an lowa L3-11 survivor curve was the best fit to the actuarial and future data. Snavely King argued that there is no justification for reducing the ASL from the current level of 12 years.
- 159. In the Commission's view, while NBTel's analysis indicated a declining service life due to the introduction of new technology, the data presented does not warrant a change in the survivor curve for this account as proposed by the company. Therefore, the Commission concludes that the current lowa L3-12 survivor curve remains appropriate.
- 160. For Account 242-100-111: Aerial Cable (Copper), NBTel proposed to reduce the ASL from 19 years to 16 years. NBTel provided an extended analysis by estimating retirements and additions to the year 2020. NBTel predicted that, by 2020, 100% of the paired copper feeder and 80% of the distribution plant would be retired as it planned to change its access network from paired copper to fibre. Noting that technological advancements often contribute to lengthening service lives, Snavely King argued that the ASL for this account should be increased to 21 years.
- 161. The Commission agrees with NBTel that a reduction in service life for this account is appropriate, but not to the extent proposed by the company. In the Commission's opinion, the data presented does not support NBTel's proposed lowa L1-16 survivor curve. The Commission is of the view that an lowa L1-18 survivor curve with an ARL of 10.71 years provides a better fit to the projected experience curve developed by NBTel. Accordingly, the Commission approves an lowa L1-18 survivor curve for this account.
- 162. For Account 232-000-700: Station Connections Outside Wire, NBTel proposed a service life based on the service life analysis of Account 242-100-111: Aerial Cable Copper. Snavely King recommended that the ASL for this account be maintained at its current level of 19 years, stating that outside wire will be one of the last elements of the network to be replaced due to competition, wireless or fibre deployment.
- 163. The Commission is of the view that the ARL of this account should be aligned with that of the Aerial Cable account. Given its determination with respect to Account 242-100-111: Aerial Cable Copper, the Commission approves the use of an Iowa S1-17 survivor curve with an ARL of 10.91 years for Account 232-000-700: Station Connections Outside Wire.
- 164. For Account 261-300-100: General Purpose Computers Other, NBTel proposed to reduce the ASL of personal computers from 7 to 5 years. NBTel plans to replace its stand-alone personal computers with a network-based Java computing system in the future. In the interim period, NBTel stated that upgrades would continue to be made to the existing personal computers. Snavely King noted that, while the historic life indication of 8.5 years appears to be a good representation of the future trend for this account, it recommended an ASL of 6 years for General Purpose Computers to take into account the significant retirements that occurred in 1996.

- 165. The Commission notes that, although NBTel plans to continue upgrading its existing computer systems, the proposed depreciation life characteristics of an lowa R4-5 survivor curve with an ARL of 2.26 years is extremely short. The Commission considers that an lowa R4-6 survivor curve, with an ARL of 2.92 years, provides adequate time for capital recovery based on NBTel's plans, and accordingly approves these life characteristics for this account.
- 166. The Commission finds the proposed service life and dispersion changes for the remaining 12 accounts to be reasonable and approves NBTel's proposals for these accounts.
- 167. In light of its determinations above, the Commission has estimated NBTel's going-in depreciation expense to be \$62.6 million, resulting in an adjustment of \$2.7 million which was included in the company's going-in revenue requirement.

h. NewTel

- 168. NewTel proposed service life changes to 16 depreciation categories.
- 169. For Account 221.0.570: Digital Switching, NewTel proposed to revise the service life from the current lowa R2-18 with an ARL of 11.95 years to an lowa R2-13 with an ARL of 7.3 years. NewTel's analysis indicated that the service life of DMS switches is decreasing when a 5-year transaction band is compared to a 3-year transaction band (both bands include all placements). By truncating older vintages in the analysis procedure, NewTel arrived at a service life in the range of 12 to 13 years. Consistent with its other recommendations with respect to digital switching, Snavely King recommended an ASL of 16 years for this account.
- 170. In the Commission's view, a reduction in service life is warranted, but not to the extent proposed by NewTel. The Commission notes that, when the full spectrum of data is considered, 3 and 5-year transaction bands produce a service life in the 16 to 20-year range and not in the 12 to 13-year range. The Commission also notes that NewTel is in the process of switch consolidation, which is expected to produce some retirements and supports a shorter service life. The Commission is of the opinion that an ARL of 7.3 years is not reasonable under the circumstances. In the Commission's view, an Iowa R2-14 survivor curve with an ARL of 8.22 years is more consistent with NewTel's switch consolidation plans, and accordingly approves these life characteristics for this account.
- 171. NewTel analyzed its paired copper cable as a single depreciation category, although different service lives have been established for each of the account categories: Aerial Cable, Underground Cable, Buried Cable and Submarine Cable Copper. NewTel based the study on Aerial Cable Exchange, and combined (1) the retirement experience in Newfoundland, (2) the remaining life predictions of TFI and other industry sources, and (3) its view of the future competitive market in Newfoundland, to arrive at new service lives.
- 172. In the Commission's opinion, the industry predictions for remaining life estimates should be adjusted to reflect the situation in Newfoundland. The Commission's main considerations in its analysis of NewTel's aerial, buried and underground cable account categories were the company's retirement experience for the account category, technological change and the development of a competitive marketplace.
- 173. For Accounts 242.0.110: Aerial Cable Exchange and 242.0.120: Aerial Cable Toll, NewTel proposed to reduce the ASL from 26 to 18 years. Snavely King agreed that a reduction to the ASL for these accounts was warranted, but not to the extent proposed by the company. Snavely King recommended an ASL of 23 years.
- 174. The Commission considers that a shorter service life is justified for these accounts, but that

NewTel's proposal for an Iowa R1-18 survivor curve with an ARL of 10.05 years is not reasonable. The Commission considers that an Iowa R1-20 survivor curve with an ARL of 11.95 years best reflects the probable retirements for these accounts, and accordingly approves these life characteristics for these accounts.

- 175. For Accounts 242.0.210: Underground Cable Exchange and 242.0.220: Underground Cable Toll, NewTel's analysis indicated that a service life reduction from 29 to 19 years is required. Snavely King viewed the proposed reduction in the ASL as being excessive and recommended an ASL of 26 years for these accounts.
- 176. The Commission notes that the majority of the underground cable is in urban areas, such as St. John's, which NewTel claims are most vulnerable to competition. The Commission considers that a service life reduction is justified but not to the extent proposed by NewTel. The Commission considers that an Iowa R2-21 survivor curve, with an ARL of 9.22 years, is more appropriate, and accordingly approves these life characteristics for these accounts.
- 177. For Accounts 242.0.310: Buried Cable Exchange and 242.0.320: Buried Cable Toll, NewTel proposed to reduce the service life from 29 to 20 years. As with the other cable accounts, NewTel used its Aerial Cable analysis and the remaining life predictions of other sources in determining the service life of Buried Cable accounts. Snavely King argued that the proposed decrease to the ASL for these accounts was excessive and recommended an ASL of 26 years.
- 178. Based on a minimal number of retirements due to the limited deployment of buried cable, the Commission considers that an Iowa R2-22 survivor curve with an ARL of 9.63 years provides for adequate future capital recovery. Accordingly, the Commission approves these life characteristics for these accounts.
- 179. The Commission finds the proposed service life and dispersion changes for the remainder of the accounts to be reasonable and approves NewTel's proposals for these accounts.
- 180. In light of its determinations above, the Commission has estimated NewTel's going-in depreciation expense to be \$48.3 million, resulting in an adjustment of \$7.9 million which was included in the company's going-in revenue requirement.

i. TCI

- 181. For Account 887C: Switching Electronic Digital Intertoll, TCI proposed to change the study method from an Integrated to a Mass Property approach. Mr. Stout found the depreciation life characteristics approved in Decision 96-13 for this account to be reasonable and was of the view that they should be retained. Mr. Stout stated that the change proposed by TCI for this account was one of form, not substance, and its impact was not material.
- 182. The Commission notes that Snavely King accepted the company's proposed ASL as being reasonable, and that Calgary's witness indicated that the proposed change was one of form, not substance. The Commission is of the view that the proposed change in study methodology better suits the retirement pattern of the switching equipment. The Commission also notes that the change in depreciation accruals between the two methods is not significant. Therefore, the Commission approves the proposed change in study methodology for this account.
- 183. TCl also proposed service life reductions for Account 5C: Underground Cable Exchange from 18 to 15 years, and Account 65C: Buried Cable Exchange from 22 to 18 years. Both Snavely King and Mr. Stout argued that there was no evidence presented to justify a change from the depreciation life characteristics recently approved by the Commission in Decision 96-

184. In analyzing account 5C, the Commission has taken into account retirement patterns based on TCl's analysis and projected future retirements dependent on technology and customer demand. In the Commission's opinion, the service life estimate put forward by TCl is not justified based on customer demand, technology and the expected actions of competitors. The Commission, therefore, has determined that the currently-approved service life of an Iowa R1.5-18 survivor curve continues to reflect the probable retirement pattern of Account 5C, and accordingly denies TCl's proposed change.

185. In analyzing Account 65C, the Commission has taken into account the retirement pattern (based on TCI's analysis, technology and competitive elements) and where the buried cable is placed. The Commission notes that the current lowa R2-22 survivor curve reflects the near-term retirements of the plant. While the Commission considers that replacement transmission technologies such as fibre, wireless and co-axial may be employed in the future, it does not agree with TCI that the roll-out of this technology is imminent, especially considering the substantial portion of underground cable that is deployed in rural areas. Therefore, the Commission has determined that the currently-approved depreciation life characteristics of an lowa R2-22 survivor curve should be retained for this account, and accordingly denies TCI's proposed change.

186. In light of its determinations above, the Commission has estimated TCI's going-in depreciation expense to be \$274.2 million, resulting in an adjustment of -\$6.8 million which was included in the company's going-in revenue requirement.

D. Other Matters

187. As part of their respective going-in revenue requirements, MT&T and NBTel proposed to amortize the net book value of their respective inside wire assets, as at 31 December 1997, over five years. The Commission notes that no intervener commented on this matter and that the proposed treatment of these costs would be consistent with previous Commission determinations. Accordingly, the Commission approves the proposals of MT&T and NBTel.

V RETURN ON EQUITY

A. Introduction

188. In Decision 94-19, the Commission adjusted the midpoint of the telephone companies' ROE ranges downward by 50 basis points, for the transitional period prior to the implementation of the price cap regime, to reflect the lower risk of the Utility segment relative to the total company. The Commission also widened the allowed ROE range for the Utility segment to 200 basis points, 100 basis points on either side of the new midpoint.

189. In Decision 95-21, the Commission recognized the risk differential between the Utility and Competitive segments by approving the use of the forecast company-wide capital structure for the Utility segment, provided that the common equity component did not exceed 55%. If it did, the telephone companies, with the exception of TCI (then AGT Limited), were directed to impute a maximum common equity component of 55%. TCI was permitted to have a common equity component exceeding 55% until such time that it paid income tax.

190. In the proceeding leading to Decision 97-9, Stentor proposed that the going-in rates, to be set in the follow-up proceeding, should reflect the removal of the 50 basis point downward adjustment set in Decision 94-19 and confirmed in Decision 95-21. TCl also supported the removal of the adjustment in principle.

- 191. The Commission determined in Decision 97-9 that it would set an appropriate ROE in this proceeding, in order to have the most timely reflection of capital market and industry conditions in determining the level of local rates required going into the price cap regime.
- 192. Recognizing that the Commission would be setting the ROE level for more than one telephone company and to avoid the significant expenditure of time and resources by all parties, the Commission stated in Decision 97-9 that this process would be ideally suited to some form of benchmarking, rather than the traditional methodologies used to estimate cost of capital. Further, the Commission stated that it intended to restrict its focus to changes in conditions since Decision 95-21, in which the existing ROE level was confirmed to be still appropriate.
- 193. In the context of setting the going-in rates for price cap regulation, the Commission must determine a fair and reasonable ROE for the telephone companies. In so doing, the Commission considered the technical quantitative evidence filed by various parties, as well as the following issues: (1) the extent, if any, that the overall risk level of the Utility segment has increased, therefore justifying an increase to the existing ROE midpoints; and (2) whether the Utility segment is at least as risky as the Competitive segment, therefore justifying an ROE and capital structure applicable to the entire company to serve as a reasonable proxy for the Utility segment.
- 194. The Commission also considered the issue of whether one level of ROE should be applicable to all eight telephone companies. In doing so, the Commission considered whether the telephone companies share similarities in risk profiles, such that company-by-company differences may exist but, on balance, any differences in terms of the level of total risk are judgmental and too small to quantify.

B. Summary of Parties' Recommendations

- 195. Stentor maintained that an ROE of 12.75% should be applicable to each of the telephone companies based on each company's actual capital structure. Dr. William E. Avera, the expert witness for TCI, recommended an ROE of 12.75% for TCI.
- 196. Other parties participating in this proceeding recommended a much lower ROE level. Specifically, Drs. Laurence D. Booth and Michael K. Berkowitz, on behalf of ACA et al., recommended an ROE of 9.75% for the Utility segment. CAC/MSOS and BCOAPO et al. concurred with ACA et al.'s submission as it applied to the Utility segment ROE of 9.75% for MTS and BC TEL, respectively.
- 197. Dr. William R. Waters, on behalf of Calgary, recommended that the weighted-average allowed ROE should be between 9.65% and 9.90% if a single ROE is used for all telephone companies. However, Dr. Waters submitted that, if the Commission were to continue to recognize risk differentials among the telephone companies, the existing individual ROE midpoints for all of the telephone companies would vary, ranging from a low of 9.50% to 9.75% for Bell to a high of 10.50% to 10.75% for NewTel.
- 198. CCTA recommended a company-specific ROE ranging from 9.00% for Bell to 10.00% for NewTel, with an average ROE of 9.45% for all of the telephone companies. In reply argument, CCTA decreased the observed long-term Government of Canada bond (LTC) yield, thereby reducing its recommended average ROE to be between 9.00% and 9.15% for the telephone companies.
- 199. AT&T Canada LDS concurred with CCTA in its ROE determinations. AT&T Canada LDS noted that the implicit risk premium embodied in the telephone companies' existing ROEs provides more than a reasonable opportunity for the telephone companies to meet their financial

obligations throughout the price cap regime.

200. Westel supported an ROE range between 9.25% and 9.75% for BC TEL. The Government of British Columbia was of the view that an ROE of 11.15% would be appropriate for BC TEL. CACAlta recommended an ROE of 9.90% for TCI.

C. Analysis of Technical Evidence

1. Risk Premium Methodology

201. In the past, the Commission has considered the use of the following three techniques in assessing the cost of equity: equity risk premium, discounted cash flow (DCF) and comparable earnings. In light of the Commission's desire to focus on changes which have occurred since Decision 95-21, all financial experts relied primarily on alternative risk premium methodologies to estimate a fair ROE for the telephone companies. The three expert witnesses for the telephone companies (Ms. Kathleen C. McShane, Dr. Roger A. Morin and Dr. James H. Vander Weide), as well as Dr. Waters and Drs. Booth and Berkowitz, presented evidence based on a risk-free rate, beta analyses, the assessment of an appropriate risk premium, and the evaluation of common equity issue costs. Drs. Booth and Berkowitz supplemented their risk premium studies with a DCF analysis.

202. In addition to using the results of risk premium methods, Dr. Avera included the results of DCF methods as applied to firms in the regulated and non-regulated sectors of the Canadian and U.S. economies in his examination of various quantitative benchmarks to be used as a guide to the current ROE for TCl's Utility segment.

203. The Sections which follow examine the evidence related to the main risk premium parameters used to estimate a "bare-bones" cost of equity. These parameters include the risk-free rate represented by the LTC yields, the market risk premium itself, and the beta coefficient (which measures the extent to which returns on a stock vary relative to the market as a whole). Given that the cost of equity is applicable to the market value of the common equity, the Commission also considered the need for an adjustment for flotation costs to ensure that the telephone companies can raise additional equity without diluting the book value per share of the existing equity.

2. Risk-Free Rate

204. Throughout this proceeding, parties updated their LTC estimates, which serve as a proxy for the risk-free rate. The forecast LTC rates ranged from 6.0% to 7.2%.

205. Specifically, in response to a Commission interrogatory, the expert witnesses for Stentor updated their LTC estimate to be in a range of 6.5% to 7.2%. Dr. Waters submitted an LTC forecast yield range for 1998 of 6.5% to 6.75%, while Drs. Booth and Berkowitz adopted an LTC of 6.75%.

206. The Government of British Columbia, CACAlta and CCTA used an LTC estimate of 6.9%, 6.6%, and 6.0%, respectively.

207. Taking into account actual interest rate levels in 1997 and expectations for 1998, the Commission considers an LTC forecast yield between 6.7% and 7.0% to be reasonable.

3. Market Risk Premium

a. Holding Periods

- 208. The expert witnesses estimated the required market risk premium by beginning with the analysis of achieved risk premiums as presented in a number of Canadian and/or U.S. capital markets.
- 209. In calculating the risk premium, Ms. McShane used both "all holding periods" returns, reflecting geometric averages, and one-year average returns. Dr. Morin was of the view that the only relevant measure of the historical risk premium is the arithmetic average of annual risk premiums over a long period of time.
- 210. Dr. Avera used an average of the arithmetic and geometric means in an effort to minimize controversy, noting that some analysts favour the arithmetic mean while others advocate using the geometric mean.
- 211. Drs. Booth and Berkowitz used alternative data series to estimate a Canadian market risk premium and also noted that the arithmetic rate of return is always higher than the geometric rate of return. However, in reply argument, they noted that they did not use the geometric mean return in any of their recommendations in arriving at their risk premium estimate.
- 212. Dr. Waters noted that the geometric mean of the benchmark or market portfolio is more appropriate.
- 213. In the Commission's view, the use of arithmetically-averaged risk premiums would, on its own, tend to overestimate a market risk premium for any of the telephone companies. For an investor with a multi-period investment horizon, the Commission considers it more appropriate to rely on the geometric mean of the historical risk premium.

b. U.S. Data

- 214. Stentor submitted that the U.S. experience should be given some weight in light of the internationalization of world capital markets. The weight given to U.S. data varied from the 20% as suggested by Ms. McShane, to at least equal weighting as proposed by Dr. Morin.
- 215. Stentor submitted that Canadian fund managers and individual investors are taking a more global perspective in allocating investment capital. As a result, they are increasingly comparing the telephone companies with international investment opportunities. Stentor maintained that this has increased the competition for capital and has underlined the importance of maintaining the telephone companies' financial integrity.
- 216. On behalf of Stentor, RBC Dominion Securities (RBC) contended that, if the telephone companies are to continue to attract and maintain investment capital, they need to provide a return on investment which is competitive with their international peers after taking into account the increased business and regulatory risk inherent in the Canadian market.
- 217. Dr. Avera noted that, with the U.S. telecommunication firms operating in an environment analogous to that facing TCI and with trends in the U.S. industry widely considered comparable to those in Canada, the cost of equity results for U.S. telephone companies provide a useful benchmark in evaluating the ROE for TCI's Utility segment under price caps.
- 218. In assessing the business risks of local telephone service, Dr. Waters was of the view that the U.S. experience warrants some weight, although not to the extent suggested by the Stentor witnesses, given the similarity of the technologies of incumbents and entrants. In his evidence,

- Dr. Waters gave some weight to achieved rates of return in the U.S. equity markets.
- 219. Drs. Booth and Berkowitz maintained that the use of U.S. data in a Canadian regulatory context to directly estimate a fair rate of return is not acceptable. They noted that, although the two real economies are partially integrated at present, there are serious impediments to the full integration of the Canadian and U.S. financial markets, such as the different monetary policies of both countries. Consequently, Drs. Booth and Berkowitz estimated the risk premium solely on Canadian data.
- 220. The Commission is of the view that, while national capital markets remain imperfectly integrated, they are converging toward integration as submitted by Stentor. The Commission concurs with Dr. Waters that the increased integration of world capital markets has a potential impact on the overall Canadian equity market risk premium since it should, in theory, bring the Canadian market risk premium closer to that experienced in the U.S. equity market.
- 221. Accordingly, the Commission determines that some weight should be given to the U.S. experience in the estimation of the market premium through the equity risk premium method. However, the Commission considers that it would be inappropriate to provide equal weighting to the U.S. experience as proposed by Dr. Morin.

c. Time Period

- 222. With respect to the period over which the historical market risk premium is calculated, Ms. McShane focused on the period 1947 to 1996, while Dr. Morin used data from 1924 to 1995, and Dr. Vander Weide used data from 1924 to 1996.
- 223. Drs. Booth and Berkowitz maintained that the period after 1956 is most useful due, in part, to the non-existence of consistent equity market data prior to 1956.
- 224. Dr. Waters gave primary weight to the realized risk premium in Canada over the period 1926 to 1996 but increased the risk premium to recognize the somewhat higher result for the U.S. market over the same period as well as the higher return for the period 1950 to 1996.
- 225. The Commission has given little weight to the risk premium proposed by Drs. Morin and Vander Weide, given that they were unable to update their Hatch & White study results for the period after 1987.
- 226. The Commission concurs with Ms. McShane that, while reliance on longer-term periods is essential to capture all types of economic events, this factor must be balanced with the recognition that structural changes in the economy may alter the relationship between experienced and expected risk premiums.
- 227. Consequently, the Commission concurs with Ms. McShane that the latter consideration warrants placing the focus on the returns for the Canadian experience over the period 1947 to 1996 and rejects the recommendation of Drs. Booth and Berkowitz to truncate the data to include only the post-1956 period. Furthermore, the Commission has considered investors' expectations concerning the amount by which the return on equity will exceed the LTC yield, by taking into account that these expectations will be strongly influenced by historical differences as well as by considering the risk premium that investors could reasonably expect in the future.
- 228. As a result, the Commission has adopted a market risk premium estimate between 5.8% and 6.0%.

d. Direct Estimates of Risk Premiums

- 229. The Commission has also examined a direct estimate of the risk premium for the Canadian telephone company industry by adjusting Ms. McShane's achieved risk premiums for the industry, exclusive of BCE Inc., over the period 1958 to 1996. The Commission used the achieved risk premiums based on the geometric average and made an upward adjustment to reflect investors' future requirements in light of the increased risk posture of the telephone companies during the price cap period.
- 230. As noted above, the Commission also considers that there exists rationale for providing some weight to the U.S. experience with respect to the market risk premium. Accordingly, the Commission has considered this risk premium by examining a simple regression based on the DCF-based risk premium analysis for the seven U.S. Regional Bell Holding Companies as filed by Ms. McShane for the period 1984 to 1996.
- 231. By weighting the Canadian and U.S. risk premiums, the Commission determines that direct estimates of the telephone company risk premiums indicate a premium which is slightly lower than the 4.6% recommended by Ms. McShane.

e. Beta Coefficient

- 232. Extensive submissions were made with respect to an appropriate beta coefficient for the telephone companies. Ms. McShane, Dr. Morin and Dr. Vander Weide recommended an adjusted beta of 0.85, compared to Dr. Waters' beta of 0.65 and the 0.55 beta recommended by Drs. Booth and Berkowitz. CCTA also supported a beta coefficient of 0.55.
- 233. Ms. McShane, Dr. Morin and Dr. Vander Weide adjusted upwardly the raw (or calculated) betas, effectively giving two-thirds weight to the raw beta and one-third weight to the market beta of 1.0. The witnesses contended that there exists a tendency over the years for the betas of high-beta stocks to become lower and for those of low-beta stocks to become higher and hence adjusted betas are likely to be a better predictor of future betas than those based exclusively on the experience of the past five years. As well, Ms. McShane noted that (1) the forward-looking business risk profile of Canadian telephone companies is compatible with upward-drifting betas, (2) adjusted betas are widely available to investors in U.S. markets and are accepted by regulators in estimating the required equity return, and (3) cross-industry and cross-border comparisons require using a similar standard for the telephone companies.
- 234. The Commission concurs with Drs. Booth and Berkowitz that there is no basis to make the adjustment proposed by Stentor's witnesses, both in theory or in the way in which the Canadian capital markets work. The Commission also agrees with Dr. Waters that an adjustment of the telephone companies' betas towards a value of 1.0 is a biased estimation procedure, which increases the values of all beta estimates rather than adjusting the estimates towards an informed prior value. Accordingly, and consistent with the Commission's past treatment of beta coefficients, the Commission remains of the view that the use of adjusted betas, as proposed by the Stentor witnesses, is inappropriate.
- 235. Ms. McShane noted that the recent unadjusted betas for the telephone companies are currently in the range of 0.50 to 0.60. Since the introduction of long distance competition in 1992, the shift in Canadian telephone company betas (measured on an adjusted basis) has been, on average, approximately 0.15. In addition, Dr. Morin submitted that given that the local business represents a similar proportion of total revenues as the toll business for the telephone companies on average, it is not unreasonable for investors to expect that the effect of local competition on beta will be similar to that of toll competition.

- 236. In response to a Commission interrogatory, Dr. Morin stated that, while interest rates have declined since the filing of Stentor's evidence on 13 June 1997, the unadjusted beta for the telephone companies had increased from 0.60 in 1996 to 0.70 in August 1997. In reply argument, Stentor stated that, by removing eight months of stale historic data and replacing it with the experience of the first eight months of 1997, the telephone companies' betas rose by 0.10. However, Stentor continued to be of the view that its ROE recommendation of 12.75% was still appropriate.
- 237. The Commission concurs with the Stentor witnesses that an upward adjustment to the beta value is required, given that historical five-year betas do not reflect current investor risk expectations relating to changes in the fundamentals of the telephone companies' operations. The Commission is also of the view that the estimation of individual telephone company betas is prone to estimation error and that, since the Commission is estimating a risk for the telephone companies' equity overall, some weight should be given to the average beta for the telephone companies as measured by the Toronto Stock Exchange Telephone Utilities Sub-Index.
- 238. Accordingly, to reflect the increase in risk, the Commission adjusted the historical average beta values to derive a beta coefficient in the range of 0.70 to 0.75.

4. Other Adjustments

- 239. The proposed adjustment for unavoidable financing costs associated with issuing common equity (flotation costs) varied significantly between the witnesses. Ms. McShane made an adjustment for flotation costs of 7% (or 50 basis points), as well as an additional margin for safety to cover unanticipated capital market conditions, raising the total allowance to no less than 10% (or 75 basis points). These adjustments raised the ROE recommended by Ms. McShane to 12.75%.
- 240. Dr. Morin used a 5% before-tax flotation cost allowance while Dr. Vander Weide added a 25 basis point adjustment for flotation costs. Drs. Booth and Berkowitz made an allowance in the order of 12 to 15 basis points.
- 241. Dr. Avera and Dr. Waters did not make any adjustment. However, in response to a Commission interrogatory, Dr. Avera stated that the cost of equity could be adjusted by 15 to 40 basis points for flotation costs.
- 242. Regarding the additional margin for safety to cover unanticipated capital market conditions such as a sharp break in the stock market, as proposed by Ms. McShane, the Commission is of the view that, while it recognizes that utilities require financing flexibility and that they may have to access capital markets under unfavourable conditions, there was insufficient justification provided to support the need for this particular adjustment.
- 243. Based on the evidence in this proceeding, the Commission is not persuaded that a flotation cost allowance of the magnitude suggested by Ms. McShane and Dr. Morin is warranted. Instead, consistent with the determinations made in prior proceedings, the Commission finds it appropriate to allow a minimal flotation cost allowance of approximately 15 to 25 basis points.

D. Risk Assessment

1. General

244. An evaluation of the business and financial risks associated with local competition is a key element in the assessment of the cost of equity for the telephone companies. In the following

Sections, the Commission considered the extent, if any, to which the overall risk level of the telephone companies' Utility segments has increased and whether the Utility segment is at least as risky as the Competitive segment, thereby justifying a cost of equity and capital structure applicable to the integrated entity to serve as a reasonable proxy for the Utility segment.

2. Risk Profile

- 245. Stentor noted that the financial risk has remained relatively unchanged across the industry since 1991, while business and competitive pressures have increased.
- 246. Given that the relationship between changes in LTCs and estimates of cost of equity is not one-to-one and given the major impact on the cost of equity is the increased business risk for the Stentor-member companies, Stentor submitted that its cost of equity for the local business has increased such that any downward adjustment for risk is not warranted.
- 247. In assessing the risk profile of the telephone companies, the expert witnesses for Stentor and TCI emphasized that, in the context of the ROE determination, the focus on business risk should be primarily on the longer term rather than on short-term transient business risks.
- 248. With respect to local operating risk or competitive risk, Stentor maintained that Competitive Access Providers, shared tenant service providers, Local Centrex resellers, interexchange carriers and long distance resellers looking to become full-service providers, WSPs and cable television operators were preparing for a full-scale attack on the local switched access market in early 1998.
- 249. Dr. Vander Weide stated that competitors who capture a toll customer's business are also likely to capture that customer's local exchange business given that customers prefer to obtain their services from a single provider.
- 250. RBC submitted that investors believe that the telephone companies have experienced increased business risk as a result of factors, such as the greater availability of substitute access technologies, faster than expected long distance market share loss and increased earnings and cash flow volatility.
- 251. Stentor emphasized the increased local business regulatory risk associated with price cap regulation when compared to the more predictable rate of return basis of regulation. Stentor was of the view that this risk results from (1) the productivity offset, which assumes higher productivity than has historically been achievable, (2) limited pricing flexibility, and (3) the fact that, to meet the overall price cap index (PCI), business rates will decline irrespective of market conditions.
- 252. Other examples of existing uncertainties advanced by Stentor included (1) the pace and magnitude of market share losses, (2) the recovery of LNP start-up costs and the requirement to retain the obligation to serve (both to be dealt with in future proceedings), (3) the creation of a central contribution fund which will result in faster roll-out of competition in higher-cost areas, and (4) investors' uncertainty as to whether the link to earnings regulation has been broken given that in re-setting the price cap parameters, the Commission will examine, as one of the factors, the Utility segment's financial results.
- 253. With respect to technological risk, Stentor particularly noted possible stranded investment arising from the competitive search for the most appropriate technology platform. Stentor also emphasized that there exists the risk that implementation of newer work processes may not be realized as estimated.

- 254. Dr. Avera maintained that TCI is exposed to the prospect of intense competition in the key Calgary market where there is extensive demand for advanced intelligent network services. Dr. Avera also noted that Alberta's continued dependence on the resource sector exacerbates TCI's risk, as does the absence of resources available through corporate alliances.
- 255. Drs. Booth and Berkowitz submitted that Decision 97-8 established the framework for the emergence of local competition only in the medium- and long-term and does not create immediate competitive risk for the telephone companies. In support of this conclusion, they noted, among other things, that (1) the stock market's reaction to Decision 97-8 reflected a positive reading of the Commission's denial of wholesale resale and of its proposal for the terms of interconnection, (2) competitive entry into the local market will take much longer to roll-out than in the long distance market, and (3) wireless service will not provide a significant competitive threat in the local exchange market for many years to come.
- 256. CACAlta submitted that Stentor has overstated its risks, given that the telephone companies display healthy equity components and given the decrease in regulatory risk due to the price cap decision being public knowledge. CACAlta was of the view that, throughout the price cap period, the telephone companies will continue to exhibit considerable market power and that their market share losses could be absorbed by total market growth of the local network.
- 257. Dr. Waters examined changes in market conditions and telephone company risks which have occurred since Decision 95-21 and concluded that competitive or technological risks have not increased over the two-year period. In support of his conclusion, Dr. Waters submitted that (1) the risk of future competition from entrants is not a new long-run risk as it was known in 1995 and was established in Decision 94-19, (2) some investment analysts are of the view that competitive risks have decreased, given that Decisions 97-8 and 97-9 were favourable to the telephone companies, and (3) significant competition in the residential local market is not expected within the next few years. Dr. Waters further noted the sharp increase in stock prices at the date of Decisions 97-8 and 97-9.
- 258. Dr. Waters stated that the technological and marketing interdependencies between local and long distance service, such as consumers' desire for one-stop shopping, favour the telephone companies in the future local service market because they have maintained the largest market shares in the long distance sector.
- 259. Dr. Waters submitted that there was no evidence indicating that the telephone companies' financial risk has increased since Decision 95-21, and noted that interest coverage ratios have increased substantially between the end of 1995 and 1996.

3. Risk Differential on the Allowed ROE

- 260. The experts engaged by Stentor viewed as inappropriate any downward risk adjustment from the corporate-determined cost of equity to the local business segment. As support for this view, Stentor noted that, in Decision 94-19, the Commission stated that this adjustment was appropriate to reflect the relatively lower risk of the Utility segment in the allowed ROE range for the transition period.
- 261. Stentor concluded that the local business segment implies a greater risk vis-à-vis the total corporation and competitive toll segment. The greater risk results because (1) price reductions in the local market are not expected to result in the same level of demand stimulation as in the more elastic toll market, (2) local business is more highly capital intensive, and (3) on a standalone basis, the local business segment's cost of equity would be higher given the consolidated corporation's greater economies of scope and the risk-reducing effects of diversification.

- 262. In support of her view that the business risk of the local service segment is no less than that of the long distance competitive operations, Ms. McShane stated that similar factors are driving competitors in local and long distance markets, such as the following: accelerating technological advances and the concentration of high-margin customers; telecommunications firms' desire to be the provider of choice will increasingly be reflected in the provision of packages of local/toll services by competitors; and advances in technology are quickly leading to industry convergence as multiple technologies are able to be merged to create a single network.
- 263. Dr. Morin added that the local business market is encumbered with two additional sources of risk: regulatory price cap risks and the stranded investment risk. He further noted that the long-term business risk of the local business segment and the Competitive segment have increased markedly and are rapidly approaching that of the unregulated industrials.
- 264. RBC submitted that a differential in the rate of return between the local business segment and the overall business is not appropriate as local competition has the potential to have a more negative effect on the telephone companies' earnings than long distance competition.
- 265. Dr. Avera stated that, with competitors already offering local telecommunications services, a host of others poised to enter the market, and the threat of bypass from alternative technologies, any measurable distinction between the risks of the Competitive and Utility segments of the telephone companies has disappeared.
- 266. Drs. Booth and Berkowitz noted that, while no material competition is likely to emerge in the local exchange market in the near term, when it does emerge, the risk premium for an average-risk regulated utility could increase by up to 40 basis points for local service. Given that the price-capped rates will be in effect for four years, Drs. Booth and Berkowitz submitted that the going-in rates should be set using an incremental risk premium and, consequently, 25 basis points should be added to the ROE for a generic regulated utility. They noted that this approach recognizes that, during the four-year price cap period, market entry at most will be at half the speed of long distance, and possibly up to 15% of the local service revenue stream may be at risk.
- 267. Dr. Waters disagreed with Stentor that the Utility segment is as risky as the Competitive segment given that, among other things, (1) lowering the prices of selected services in response to competition allows prices on other, less competitive services to be increased under the price cap constraint, (2) the forecast losses of market shares for local service are less than the actual losses experienced in long distance over the same time period, and (3) WSPs have to this point added to, not subtracted from, the revenues of the telephone companies. Dr. Waters estimated that the telephone companies' Utility segments require a risk premium that is no more than 10 basis points greater than in October 1995.
- 268. The Government of British Columbia maintained that the risk for the Utility segment may now be equivalent to that of the Competitive segment, making it appropriate to raise the telephone companies' ROE by 50 basis points.

4. Determinations on Risk Assessment

- 269. The Commission is of the view that, for the price cap period, the risks of the Utility segment relative to the Competitive segment will continue to be mitigated to some extent by various factors.
- 270. Specifically, the Commission concluded in Decision 97-8 that the full benefits of competition can only be realized with facilities-based competition. Therefore, the Commission permitted resale but did not mandate any discounts. The Commission notes that many of the

investment reports filed by Stentor indicate that residential local competition will be limited, while a resale market is expected to develop in most local business markets. As noted by Dr. Waters, the anticipation of limited competition in the residential market is an important factor in assessing the level of risks of local competition since the size of the residential sector is larger than the business sector. The Commission is of the view that local competition will develop at a more measured pace than in the long distance market.

- 271. In the context of regulatory risks, the Commission considers that its review at the end of the four-year price cap period implies some regulatory uncertainty given that the regulatory risk is dependent on a future decision. However, the Commission is of the view that this review will allow the flexibility to respond to any errors in setting the price cap parameters and thereby, to some extent, would mitigate the risks associated with competition.
- 272. With respect to the productivity offset of 4.5%, the Commission remains of the view that there exists an opportunity for the telephone companies to improve their profitability under the price cap regime. Consequently, a separate risk premium is not required to compensate the telephone companies for the level of the productivity offset.
- 273. The Commission is also of the view that no compelling argument has been presented in this proceeding to suggest that the telephone companies should receive a separate risk premium to compensate them for potential future losses related to stranded investment. In the Commission's view, the determinations made in this Decision, as well as the regulatory structure adopted in Decisions 97-8 and 97-9, will allow the telephone companies a reasonable opportunity to earn a fair return on investment and to recover invested capital.
- 274. Regarding Stentor's view that the local business market is encumbered with the risks associated with the obligation to serve and the recovery of LNP start-up costs, the Commission notes that, in Decision 97-8, it decided to maintain the telephone companies' current obligation to serve, pending further investigation through a public process into an approach for serving high-cost areas that is more suited to a fully-competitive environment. In addition, the upcoming Local Competition Start-up Costs Proceeding will examine, among other things, the recovery of LNP and local competition start-up costs. The Commission concurs with Stentor that some regulatory uncertainty results from the fact that the Commission's decisions regarding an approach for serving high-cost markets as well as with respect to the recovery of LNP and local competition start-up costs are not yet known.
- 275. The Commission notes Stentor's argument that, even if local service competition were to develop more slowly than did long distance competition, this does not mean that local competition would not create immediate risks for the telephone companies. However, the Commission considers that, while the telephone companies are likely to face greater risks given increases in competition in the Utility segment, which generally warrants an increased cost of capital, the decline in interest rates offsets, in most cases, the overall rise in business risk of the previously determined ROEs.
- 276. With respect to the long-term view of investors, the Commission concurs with the opinion of several expert witnesses that investors include prospective circumstances in their risk assessment.
- 277. In Decision 95-21, the Commission stated the following:

[A]ny increase in the Utility segment's risk arising from competition in local services is likely to be minimal in the short run. The Commission remains of the view that the potential exists for meaningful competition in the local telecommunications market. However, the Commission also holds the view that competition is unlikely to develop during the transitional period to the extent

found in the toll market and recognizes that investors would consider the period before meaningful competition exists when assessing the cost of capital for the Utility segment.

- 278. The Commission is of the opinion that investors are aware of the slower roll-out of competition expected in the local services market when compared to the toll market, as depicted in investors' reports as well as recognized by Stentor itself. The Commission also considers that investors are likely aware that the downward risk adjustment of 50 basis points applied to the company-wide ROE to arrive at the Utility segment ROE was based on the Commission's view that "competition is unlikely to develop during the transitional period to the extent found in the toll market". Consequently, the Commission is of the view that well-informed investors have adjusted their expectations accordingly in light of the anticipation that the roll-out of local competition continues to reflect the determinations made in Decision 95-21 and in light of changes in the risk profile since that Decision.
- 279. The Commission concludes that the evidence in this proceeding confirms that investors currently perceive the risk level of the Utility segment to be lower than that of the Competitive segment in the near- to medium-term. As a result, there continues to exist a basis for prescribing an ROE for the Utility segment that differs from the company as a whole.
- 280. Accordingly, the Commission has, for the purposes of setting the going-in rates, reflected the incremental increase in business risk of the Utility segment by reducing the company-wide ROE midpoint by approximately 25 basis points, rather than the 50 basis points determined in Decision 94-19.

E. Capital Structure - Deemed vs. Actual

- 281. Stentor submitted that applying the 12.75% rate of return against the 1997 average Utility common equity base of each company, rather than a target capital structure, would reflect the actual financial risk to which the shareholders are exposed. Stentor further noted that any future changes in capital structure would be at the risk of the shareholders.
- 282. Furthermore, RBC maintained that to achieve access to debt financing on a reliable, reasonable and flexible basis, a Dominion Bond Rating Service (DBRS) investment grade rating of at least Single "A" or higher is typically necessary.
- 283. Ms. McShane was of the view that a range of 55% to 60% would be compatible with a telephone company of average business risk and the achievement of a strong "A" rating. Ms. McShane emphasized that only two companies have equity ratios outside this range, BC TEL and MTS. While BC TEL's equity ratio is marginally above the upper end of the range, its business risk is higher than average. She noted that a higher common equity ratio is required to offset the higher business risk in order for the 12.75% ROE to be consistent with its combined business/financial risk.
- 284. MTS maintained that an equity component of 60% was necessary for the company to obtain an investment grade credit rating, thereby ensuring that it would be able to compete for capital on a reasonable basis. Moreover, MTS noted that TCI was allowed to use a common equity component greater than 55% in recognition that it would not incur income taxes for a period of time.
- 285. Dr. Morin noted that, by opening the local/access business to competition, the Commission has introduced another element of business risk which requires an even stronger capital structure.
- 286. Dr. Avera stated that his ROE recommendation of 12.75% for TCI was consistent with the

55% equity ratio implied by TCI's forecast 1997 capital structure, which he considered to be a reasonable capitalization in light of industry trends and benchmarks.

- 287. Regarding capital markets, Drs. Booth and Berkowitz maintained that the markets are very attractive for issuers and few access problems exist for good quality credits. They stated that the yield spread between Canadian Bond Rating Service (CBRS) "B+" rated debt and that of CBRS "A+" debt, reflecting investor concern for bond quality, has narrowed considerably since 1992 and, during 1997, has narrowed even more.
- 288. Dr. Waters also noted a decline in telephone company bond spreads over LTCs, indicating that the bond markets require substantially less compensation to accept the risks of debenture issues now than in 1995. He also submitted that the common equity ratios for Stentor-member companies increased on average from 52.2% to 54.8% between 1995 and 1996, and may increase further in 1997.
- 289. In considering bond ratings and access to capital markets, the Commission notes that the telephone companies are averaging a rating of an "A(Mid)" by DBRS standards. Furthermore, a capital structure consisting of at least 55% common equity places the telephone companies within the guidelines stipulated by bond rating agencies for a strong "A" to "AA" rating (or "A" to "A+" under the CBRS designation).
- 290. The Commission also considers that the telephone companies' interest coverage ratios have increased significantly over the years, increasing from an average of approximately 2.8 in 1995 to 3.3 in 1996, and will reach an estimated 3.8 in 1997. Bell specifically has increased its earnings coverage from 2.6 times in 1995 to 3.1 times in 1996, and anticipates 3.7 times in 1997.
- 291. Based on the above considerations, the Commission is of the view that there is no basis for concluding that the telephone companies' continued open access to capital markets in Canada at a reasonable cost is being compromised because of increased risk.
- 292. As previously discussed, the Commission continues to view the business risk of the Utility segment as less than that of the Competitive segment for the near- to medium-term. Accordingly, for the purpose of determining the going-in revenue requirement, the Commission has applied the appropriate ROE against a deemed common equity base if the company-wide capital structure for the Utility segment exceeded 55%, with the exception of MTS.
- 293. With respect to MTS' request to use its actual capital structure, the Commission notes that, in AGT Limited Revenue Requirements for 1993 and 1994, Telecom Decision CRTC 93-18, 29 October 1993 (Decision 93-18), the Commission allowed a common equity component greater than 55% for TCI (then AGT Limited) given that it was not incurring income tax expense at that time. The Commission considers that, since MTS does not currently incur income tax expense, the company's rates would not permit it to achieve interest coverage and a debt rating commensurate with its peers without recognition in the capital structure of the company's different circumstances. Accordingly, the Commission accepts MTS' actual common equity for the purpose of setting its 1997 contribution requirement and its going-in rates.

F. Risk Differentials Between Telephone Companies

294. In determining a fair return on equity for the telephone companies, Stentor proposed that one level of ROE should apply to all eight companies. In support of this proposal, Stentor assumed that the telephone companies share similarities in risk profiles such that company-by-company differences may exist, but for practical purposes these differences are indistinguishable when considering overall risk.

- 295. Ms. McShane submitted that, while the larger telephone companies face more immediate and intense competitive pressures, the smaller telephone companies serve markets whose demographics and weaker and less diverse economies create challenges for these companies. Ms. McShane stated that, even if the larger telephone companies were to be, at present, in a stronger financial position, that financial position would be more likely to be eroded in the near term due to market share losses. Ms. McShane was of the view that, on balance, any differences in terms of the level of total risk among the companies are judgmental and too small to quantify.
- 296. Dr. Morin maintained that the introduction of competition in all the markets served by the telephone companies, the explosion of alternate telecommunications technology and the growing interdependence between local and toll revenues have blurred traditional risk differences between the telephone companies.
- 297. Dr. Vander Weide stated that BC TEL, Bell and TCl face higher business risks than the remaining telephone companies because they receive a high percentage of their revenues from customers in highly competitive urban markets. Dr. Vander Weide was of the view that, due to their larger size and access to the capital markets, BC TEL, Bell and TCl have higher bond ratings than the remaining telephone companies. Considering both business and financial risk, Dr. Vander Weide maintained that the total risk faced by each of the telephone companies is approximately the same.
- 298. Dr. Avera submitted that the relative positioning of Canadian telephone companies is dynamic, with investors more focused on industry-wide uncertainties than historical relationships among companies. Dr. Avera concluded that, taken as a whole, any differences between the risk of individual Canadian telephone companies are much less significant than the increasing risk trend of the industry.
- 299. Drs. Booth and Berkowitz maintained that historical risk differences will be moderated as the local service market experiences competition, such that for going-in rates that will set the base over a four-year period, the risk differences are not significant enough to warrant individual ROEs.
- 300. Dr. Waters concurred with Stentor that company-by-company differences are difficult to quantify, and that it would be practical for the same ROE point estimate to apply to all telephone companies. However, if the Commission were to maintain risk differentials among telephone companies, Dr. Waters recommended a decrease of 125 to 150 points to apply to each of the ROE levels confirmed in Decision 95-21.
- 301. In final argument, Calgary submitted that the largest companies should continue to be regarded as the lowest risk companies.
- 302. Recognizing that any analysis of the overall risk of the telephone companies is, by its nature, in large part subjective, the Commission considered the various risk factors for the telephone companies as addressed by the parties participating in this proceeding. The Commission concurs with Dr. Morin's submission that the same pervasive forces of change, competition, and technology are transforming each of the telephone companies in an industry-wide common fashion. While the Commission is of the view that each telephone company possesses risk characteristics specific to itself, the Commission concurs with most parties that these risk differences are too fine to attribute differential costs of equity on a forward-looking basis.
- 303. In light of the above considerations, the Commission is of the view that, with the opening up of the local market to competition, the risk differentials between the telephone companies will

become less accentuated than they have been historically. The Commission considers that investors are likely to view any differences in terms of the level of total risk among the companies as unquantifiable.

304. Accordingly, for the purpose of setting the going-in rates, the Commission determines that one ROE level is appropriate for all of the telephone companies.

G. Conclusions

305. In light of the determinations made in the previous Sections, the Commission concludes that an ROE of 11.0% is appropriate for the telephone companies' Utility segment in determining the going-in rates, effective 1 January 1998. This ROE level has been applied against the average common equity base, which, with the exception of MTS, has been limited to a maximum of 55% for the telephone companies' Utility segment. In the case of MTS, its company-wide common equity ratio has been applied in setting its going-in rates.

VI GOING-IN CONTRIBUTION AND REVENUE REQUIREMENTS

A. General

306. The telephone companies' 1997 Utility segment forecasts are used as the starting point in determining the going-in contribution and revenue requirements for each company. The Commission requested each telephone company to calculate the going-in contribution and revenue requirement based on the methodology set out in CRTC-404.

307. Generally, in CRTC-404, the going-in contribution requirement was calculated as follows: the 1997 contribution requirement, minus the revenues from the 1 January 1998 rebalancing initiative needed to reduce the contribution rate to 2 cents per minute. The average going-in contribution rate per minute was calculated as follows: (1) the going-in contribution requirement, divided by (2) adjusted total market minutes (i.e., total 1997 market minutes plus additional minutes arising from Order 97-590).

308. Since the 1 January 1998 rate rebalancing initiative set out above has no impact on total revenues, the going-in revenue requirement shortfall/surplus was calculated, in general in CRTC-404, by taking the sum of the incremental changes to the 1997 forecast (for example, additional depreciation expense from proposed changes to asset service lives effective 1 January 1998). This shortfall/surplus, combined with the rate rebalancing initiative, gives the total amount of revenue increases that would be required from residential rates at the start of the price cap period.

309. The Commission notes that all of the telephone companies generally considered this methodology to be appropriate, and that, in general, no other party took issue with this approach. Therefore, the Commission has used this methodology, as amended by the specific determinations in the following Sections, to determine the going-in contribution and revenue requirements for each telephone company.

B. Equal Access

310. In Unbundled Rates to Provide Equal Access, Telecom Decision CRTC 97-6, 10 April 1997 (Decision 97-6), the Commission approved, among other things, tariff revisions for the telephone companies related to the provision, on an unbundled basis, of the Switching and Aggregation services and other service components required to provide equal access. These tariff revisions were implemented on 1 July 1997. The telephone companies, AT&T Canada LDS and CCTA

had varying proposals for the treatment of the revenues resulting from a full year's implementation of Decision 97-6, as compared to the half-year of revenues reflected in the telephone companies' 1997 financial forecasts.

- 311. BC TEL and NewTel reflected the net revenue impact of Decision 97-6 as an adjustment to the going-in revenue requirement. Island Tel, MT&T, MTS, NBTel and TCl were of the view that no adjustment should be made to the going-in revenue requirement to reflect the impact of Decision 97-6.
- 312. Bell was also of the view that the going-in revenue requirement should be calculated without making any adjustments for the partial year impacts embedded in the telephone companies' forecasts, but that, if the Commission were to decide to reflect the full-year impact of Decision 97-6, then the adjustment should be reflected as a change to the going-in contribution requirement. Bell noted that this approach would be consistent with the approach the Commission adopted in Decision 97-6, where it specifically ruled that the impact of changes in certain elements of the Carrier Access Tariff (CAT) should be offset by a reduction in the contribution rate.
- 313. AT&T Canada LDS proposed that the annualized revenue impact of Decision 97-6 be reflected in the going-in contribution rate as a further reduction below the 2-cent level, but that the Phase III cost impact be reflected as an increase to the going-in revenue requirement. CCTA proposed that an annualized adjustment for Decision 97-6 be made to the going-in revenue requirement. CCTA further claimed that BC TEL had inappropriately assigned all Operator Services to the Utility segment, thereby overstating the expense impact of Decision 97-6 on BC TEL's Utility segment. CCTA proposed that a net revenue impact of zero be assumed for BC TEL, rather than the negative impact claimed by BC TEL.
- 314. The Commission agrees with Bell that, since Decision 97-6 relates primarily to elements of the CAT, it would be more appropriate to reflect the impact of Decision 97-6 as an adjustment to the going-in contribution requirement. The Commission considers that this adjustment should reflect a net amount of revenues offset by costs associated with the implementation of Decision 97-6.
- 315. Regarding AT&T Canada LDS' proposal, the Commission finds it more appropriate to direct the net revenues from the full-year impact of Decision 97-6 towards reducing the contribution requirement prior to determining the amount of rebalancing revenues and thereby mitigating (for most of the telephone companies) the increase to residential rates effective 1 January 1998.
- 316. Regarding CCTA's objection to BC TEL's transfer of Operator Services to the Utility segment, the Commission notes that BC TEL's accounting manual does not provide for a further disaggregation of Operator Services expense into specific operator service activities. The Commission considers that the services identified by CCTA (as properly belonging in the Competitive segment) represent a very small proportion of the total Operator Services expense. Therefore, the Commission accepts BC TEL's estimate, provided in response to interrogatory BCTEL(CRTC)1May97-514, of Phase III costs assigned to the Utility segment as a result of Decision 97-6.
- 317. Accordingly, the Commission has adjusted the telephone companies' going-in contribution requirement prior to determining the amount of rebalancing revenues based on their respective estimated net revenue impact for Decision 97-6, except as noted below. The Commission has increased BC TEL's estimate of revenues associated with Decision 97-6 to reflect the company's equal access revenues. The resulting net revenue adjustment for Decision 97-6 for BC TEL is -\$9.4 million, rather than the company's estimate of -\$13.5 million. The Commission has made a similar adjustment to NewTel's estimate provided in response to interrogatory

NewTelComm(CRTC)1May97-404, resulting in a net revenue impact for Decision 97-6 for NewTel of -\$0.03 million rather than the company's proposed adjustment of -\$1.3 million.

C. Other Deferred Charges

318. In Decision 97-9, paragraph 382, the Commission determined that it would be appropriate to amortize the remaining balance of all deferred charges over a five-year period. Generally, the telephone companies proposed that their current amortization schedules be maintained during the price cap period.

310. TCl took the position that the direction in paragraph 382 of Decision 97-9 was not intended to apply, or ought not to apply, in a situation where a company has had its 1997 rate and expense levels determined by the Commission in a revenue requirement proceeding, has had its productivity level imputed, and has no new downsizing costs which would have a significant impact on the level of going-in rates. TCl also noted that, in Decision 96-13, the Commission adjusted TCl's productivity level to achieve a level of imputed productivity for 1996 and 1997. TCl stated that it must rely upon the productivity improvements realized by the downsizing program. TCl further stated that it seems unreasonable to adjust TCl's operating expenses in 1996 and 1997 by an imputed productivity level and then, when establishing going-in rates for the purpose of price caps, strip out part of the underlying cost structure which allowed the company to achieve this aggressive (5.7%) productivity gain.

320. BC TEL stated that the implementation of local competition will directly impact the company's ability to recover these deferred charges through rates. Therefore, BC TEL proposed to maintain its current amortization schedule. BC TEL further noted that extending the amortization period beyond the initial term of the price cap, coupled with intensifying local competition, would significantly jeopardize the company's ability to recover these costs.

321. The Commission notes that interveners who addressed this issue preferred the approach set out in Decision 97-9 (i.e., to amortize the remaining balance of all regulatory deferred charges over a five-year period). The Commission notes that the implementation of existing amortization schedules during the price cap period would result in higher earnings for the telephone companies, all other things being equal, since the going-in rates would have been set to recover those charges as if they were ongoing expenses during the price cap period. Therefore, the Commission considers that it is appropriate to amortize the balance of the regulatory deferred charges as directed in Decision 97-9 and has reduced the going-in revenue requirements for the telephone companies as follows (no adjustment was made for NBTel as it did not have any regulatory deferred charges as at 31 December 1997):

	\$ Millions
BC TEL	6.3
Bell	32.5
Island Tel	0.1
MT&T	2.1
MTS	0.6
NewTel	1.0
TCI	14.1

D. Discounts

322. In Decision 92-12, the Commission set out a schedule of explicit discounts on the contribution rate to be paid by entrants, designed to allow the new competitors to gain entry to the long distance market. At that time, a per-circuit charge for entrants was determined to be the

most appropriate mechanism for the payment of contribution. In Applications by Unitel Communications Inc. and Sprint Canada Inc. to Review and Vary Part of Decision 94-19, Telecom Decision CRTC 94-27, 29 December 1994, the Commission acknowledged that entrants were receiving considerable implicit discounts, in addition to the explicit discounts provided for in Decision 92-12, due to the per-circuit mechanism used in calculating entrant contribution.

- 323. In the proceeding leading to Decision 96-13, TCI proposed that it be allowed to recover from local rates revenues lost to the company due to the effect of both the explicit and implicit discounts. In Decision 96-13, the Commission determined that the explicit discount was designed as a short-term mechanism to ease the entry of competitors into the long distance market, and would be more appropriately borne by the telephone companies' shareholders rather than the general body of subscribers. However, the Commission also determined that it would be appropriate to reflect the adverse effect of the implicit discount in the determination of TCI's revenue requirement.
- 324. In this proceeding, Bell, NewTel and MTS proposed to include both the explicit and implicit discounts in the determination of the going-in revenue requirement. BC TEL proposed to include only the implicit discount that results from the per-circuit mechanism still in place for the payment of contribution on international traffic. Island Tel, MT&T, NBTel and TCl did not include the recovery of either implicit or explicit discounts in their proposed going-in revenue requirement.
- 325. Bell stated that, if these discounts were not included in the revenue requirement, the going-in prices would not afford the company a reasonable opportunity to achieve the rate of return on equity approved by the Commission. Bell further noted that, in the past, the revenue requirement was open to annual assessment and there was some opportunity through various tariff filings throughout the year to attempt to recover the value of these discounts. Bell stated that, however, in the present case, the Commission is setting appropriate prices for basic local services for the next four years. Finally, Bell noted that the price cap formula includes a significant stretch factor and it would be inappropriate and unfair to charge these discounts to shareholders and deny the company a reasonable opportunity to earn an appropriate rate of return on equity.
- 326. NewTel submitted that, if the company is unable to recover the amount of implicit and explicit discounts, then its Utility segment would not have the opportunity to earn an appropriate return on equity. BC TEL submitted that it should be allowed to recover the ongoing implicit discount in order to have the opportunity to achieve the targeted return on equity.
- 327. AT&T Canada LDS submitted that it is neither appropriate nor necessary to raise the rates for the duration of the price cap period and beyond to recover the explicit discount, as the explicit discounts will be in place only for the first half of 1998. AT&T Canada LDS noted that the Commission has made it quite clear that these discounts should be absorbed by the telephone companies and not the Utility segment customers.
- 328. CCTA noted that, if Bell were allowed to recover the explicit discount, it would diminish the value of the consumer dividend adopted in Decision 97-9. CCTA also noted that Bell did not propose to adjust the PCI once the explicit discount has ended for trunk-side circuits.
- 329. The Commission considers that, consistent with Decision 96-13, the explicit discount should continue to be borne by the shareholders of telephone companies, but that the implicit discount should be taken into account in the determination of the going-in revenue requirement.
- 330. The Commission notes that the telephone companies' estimates of the 1997 implicit discount amount reflect the implementation, effective 1 July 1997, of Per-Minute Contribution

Mechanism for Line-Side Connections, Telecom Decision CRTC 96-12, 12 December 1996 (Decision 96-12). That Decision changed the payment of contribution by entrants for line-side connections from a per-circuit to a per-minute mechanism, and eliminated, for the second half of 1997, the implicit discount associated with a per-circuit mechanism. Accordingly, the Commission is of the view that the 1997 implicit discount amount should be reduced, for the purposes of calculating the going-in revenue requirement, to reflect the additional revenues which the telephone companies will receive from entrants as a result of a full-year impact of Decision 96-12.

331. In addition, in Telecom Order CRTC 97-1903, 22 December 1997 (Order 97-1903), the Commission determined that the per-circuit rates applicable to entrants for payment of contribution on international circuits should be based on an average per trunk usage of 14,000 minutes per month (rather than 7,000 as established in Decision 92-12), effective 1 July 1998. The Commission notes that this would result in a doubling of the existing per-circuit rates applicable to entrants for payment of contribution on international circuits. Accordingly, the Commission also considers that it would be appropriate to reduce the implicit discount associated with the per-circuit international contribution mechanism based on this modification.

332. In light of the above, the Commission has estimated below the implicit discounts, associated with the per-circuit contribution regime for international traffic, which have been reflected in the calculation of the going-in revenue requirements for BC TEL, Bell, MTS and TCI (for the remaining telephone companies, the Commission considers the amount of the discount to be negligible):

\$ Millions

BC TEL 3.8

E. Operating Expenses

1. Year 2000 Compliant Expenses

333. MTS, MT&T and Island Tel requested that the Commission make adjustments to the goingin revenue requirement to take into consideration expenses to be incurred during the price cap period to enable the telephone companies' operating systems to be Year 2000 compliant.

334. MTS submitted that its annualized expense for the Utility segment over the price cap period would be \$3.2 million and that no expense would be incurred prior to 1 January 1998. MTS submitted that this expense adjustment should be incorporated into the going-in revenue requirement.

335. MT&T submitted that it would incur Utility segment expenses of \$0.5 million in 1997 and \$2.5 million in 1998 for the Year 2000 Compliant project. Island Tel submitted that its Utility segment expenses for the same project would be \$25,000 in 1997 and \$125,000 in 1998. MT&T and Island Tel submitted that an expense adjustment, equal to the difference between 1997 and 1998 Year 2000 Compliant expenses, should be made to the going-in revenue requirement.

336. The following table provides the Year 2000 Compliant expenses that the remaining telephone companies expect to incur during the price cap period:

	\$ Millions
BC TEL	20.6
Bell	185.0
NBTel	14.6
NewTel	4.9
TCI	17.9

- 337. The Commission is of the view that the Year 2000 Compliant expenses that the telephone companies expect to incur during the price cap period should be amortized over the price cap period and that the difference between this amount and the amount included in the 1997 expense forecast should be included in the calculation of the going-in revenue requirement. The Commission notes that this approach is consistent with MTS' Year 2000 Compliant expense proposal. The Commission is also of the view that the capitalized software expenditure associated with Year 2000 Compliant expenditures should be amortized on a straight-line basis over five years, which is consistent with the Commission's determinations in previous decisions.
- 338. The Commission notes that, in the table above, the costs provided by NBTel and NewTel are for the total company and include capital expenditures. The Commission has assigned these total company costs on a 50/50 basis between the Utility and Competitive segments, in order to determine the adjustment to the going-in revenue requirements for these companies.
- 339. In light of the above, the Commission has estimated below the adjustments for the Year 2000 Compliant expenses which have been reflected in the calculation of the telephone companies' going-in revenue requirements:

	\$ Millions
BC TEL	-0.25
Bell	20.25
Island Tel	0.01
MT&T	0.13
MTS	3.20
NBTel	1.15
NewTel	0.30
TCI	0.28

2. NBTel - Local Competition Costs

- 340. NBTel estimated that it would incur capital costs of \$3.25 million in 1998 for local interconnection. NBTel proposed that an adjustment of \$650,000, representing the amortization of \$3.25 million over five years, be made to the company's going-in revenue requirement. NBTel did not include any start-up costs for local competition in its 1997 operating expenses.
- 341. As noted in Part II of this Decision, the recovery of start-up costs for local competition will be considered in the upcoming Local Competition Start-up Costs Proceeding. Accordingly, the Commission has excluded these costs in the calculation of NBTel's going-in revenue requirement (see Part VII of this Decision for a further discussion of this issue).

F. Pending and Planned Tariff Filings

342. The Commission notes that BC TEL, NBTel and NewTel incorporated into their going-in revenue requirement the annualized net revenue impact of some or all of their respective pending and planned rate initiatives, net of that embodied in the respective companies' 1997

contribution requirement. The remainder of the telephone companies proposed that their goingin revenue requirements not be adjusted to reflect the annualized net revenue impact of pending and planned rate initiatives.

343. The Commission is of the view that the telephone companies' going-in revenue requirements should reflect the rates for Utility segment services in effect at the start of the price cap regime. The Commission therefore has included the annualized net revenue impact of significant rate initiatives approved on or before 1 January 1998 in the telephone companies' going-in revenue requirements, to the extent that they have not been reflected in their respective 1997 contribution requirements. In addition, the Commission has included the net revenue impact associated with the reduction of rates for unlisted number service specified in Telecom Order CRTC 98-109, 4 February 1998 (Order 98-109), in the telephone companies' respective revenue forecasts.

G. Company-Specific Issues

1. MTS - Shareholder Entitlement

a. Background

344. On 28 November 1996, The Manitoba Telephone System Reorganization and Consequential Amendments Act (the Reorganization Act) was passed, providing for the privatization of the Manitoba Telephone System on 7 January 1997. Manitoba Telephone System was continued as a share capital corporation under the name Manitoba Telecom Services Inc. (Manitoba Telecom). From that point on, Manitoba Telecom and its subsidiaries, including MTS, became taxable corporations.

345. Manitoba Telephone System obtained an advance tax ruling from Revenue Canada, dated 10 October 1996, regarding the tax deductibility of contributions made to a new pension plan, whereunder Manitoba Telecom and its subsidiaries would be permitted to deduct, in calculating their taxable incomes, contributions to the new plan. These pension contributions result in non-capital tax losses which can be utilized to reduce the taxable income of Manitoba Telecom and its subsidiaries up to a maximum of seven years. The total additional tax deduction (ATD) amounts to \$383 million, with MTS' portion amounting to \$360 million.

346. MTS stated that, at the time of the initial public offering, shareholders paid \$13 per common share, a price which exceeded the pro-forma consolidated net book value per share for Manitoba Telecom by \$3.77. MTS stated that the premium amounted to \$121.8 million on an after-tax basis, with MTS' portion amounting to \$113.2 million.

b. MTS' Proposal

347. MTS claimed that its shareholders should be entitled to \$82.5 million (the Utility segment portion) of the after-tax premium and proposed it be recovered over eight years. MTS proposed to recover this shareholder entitlement, with interest, from residential subscribers and, accordingly, proposed to increase its going-in revenue requirement by \$13.9 million.

348. MTS submitted that it is reasonable to assume that shareholders expected to receive a portion of the premium as an entitlement due to previously established precedents. MTS submitted that AGT - Issues Related to Income Taxes, Telecom Decision CRTC 93-9, 23 July 1993 (Decision 93-9), and Directive to the Canadian Radio-television and Telecommunications Commission on the Regulation of Edmonton Telephones Corporation and ED TEL Communications Inc., P.C. 1994-1779, 25 October 1994 (the Directive), established strong precedents for the recognition of a shareholder entitlement.

349. In MTS' view, a shareholder entitlement was clearly recognized as a matter of public policy in the Directive concerning the 1995 privatization of ED TEL Communications Inc. (ED TEL). MTS noted that, in the Directive, a return on the unrecovered portion of the shareholder entitlement was allowed to be allocated and fully recovered over a ten-year period. Although the Directive did not prescribe a specific rate to be applied, MTS noted that the Commission, in Decision 93-18, allowed a return on the shareholder entitlement of AGT Limited (AGT). Consistent with that Decision, MTS submitted that its proposed shareholder entitlement should be recovered over an eight-year period with a pre-tax cost of debt rate applying for that portion of the amortization period when MTS does not pay income tax, and an after-tax rate for the remainder of the period.

350. MTS also submitted that the role of shareholders and of MTS was vital to the successful realization of the privatization. MTS stated that the ATD was created by structuring the legal status and accounting treatment for investments held for pension obligations. In obtaining the ATD, MTS stated that it carried out a complex process and expended significant amounts of management and consulting time to obtain these benefits. As well, MTS stated that the circumstances involving its privatization were no less "important or unique" than the circumstances surrounding the privatization of AGT.

351. MTS noted that the employer pension contribution, key to the creation of the ATD, took place after the privatization and came from the assets for which shareholders had paid a premium in the share price. Without this vital contribution, MTS submitted that there would be no ATD.

352. MTS stated that shareholder entitlement is a valid expense and that future recovery cannot be realized or captured through the general inflation factor of the price cap formula. Thus, MTS submitted that shareholder risk should not be increased as a result of the existence of the ATD which shareholders have borne a burden in creating.

c. Positions of Parties

353. CAC/MSOS opposed MTS' proposal for a shareholder entitlement. CAC/MSOS supported its position with evidence filed on its behalf by Mr. Hugh W. Johnson.

354. CAC/MSOS noted that, in Decision 93-9, the Commission determined that its granting of a shareholder entitlement was restricted to the unique facts of the case and should not be taken as a policy precedent. With respect to the Directive, CAC/MSOS stated that, unlike MTS, the City of Edmonton obtained the Directive enabling recovery of the shareholder entitlement in the revenue requirement of ED TEL. CAC/MSOS argued that the City of Edmonton's intent to capture an entitlement in the selling price of ED TEL was made clear when it advised potential purchasers of the existence of an entitlement in both the Confidential Information Memorandum and the Preliminary Prospectus. CAC/MSOS submitted that the management and shareholders of MTS wish to reap the same benefits as the new owners of AGT and ED TEL without making the same contributions or sacrifices.

355. CAC/MSOS submitted that the ATD was intended as a shield against income tax costs and as a means to mitigate future rate increases. CAC/MSOS submitted that there was no mention of a new cost attributable to a shareholder entitlement that would be used to justify increasing rates.

356. Mr. Johnson stated that the key steps in the creation of the ATD took place while MTS was still provincially owned and acting under the direction of the Government of Manitoba. Mr. Johnson also stated that the costs associated with obtaining the tax ruling and legal costs associated with the secondary offering were borne by the Government of Manitoba or paid for

by MTS subscribers through their rates prior to privatization. Mr. Johnson submitted that the price paid for these shares makes it clear that no premium was paid in expectation of a shareholder entitlement.

- 357. CAC/MSOS submitted that MTS' proposal stands a quantum distance from the "special and unique circumstances" surrounding the AGT privatization in Decision 93-9. In support, Mr. Johnson noted that AGT proposed almost \$2.5 billion of ATDs resulting from approximately 23 items, as compared to the single pension deduction in the case of MTS. Mr. Johnson submitted that the only role that MTS played post privatization in obtaining the ATD was to fulfill its obligation under subsection 15(2) of the Reorganization Act to establish a new pension plan. In Mr. Johnson's view, this was hardly a role which would justify anything more than the opportunity for shareholders to earn a fair return and certainly not worth a shareholder entitlement of \$82.5 million.
- 358. CAC/MSOS noted that MTS provided its assurance that the single ATD claimed is unlikely to be re-assessed and will be resolved within a short time after the filing of its return in 1998. CAC/MSOS submitted that the shareholder of AGT did not receive an entitlement because it was an important transaction; rather, the Commission found that it had earned an entitlement due to the complexity of the transactions and the vital role TELUS Corporation played in achieving the magnitude of the ATDs. In contrast, CAC/MSOS submitted that the MTS privatization involved no transfer of assets and the verification of the actual amount of the ATD was non-contentious.
- 359. CAC/MSOS stated that, while the new shareholders of MTS paid a premium for their shares over net book value, they did not pay any more than they would have expected to pay for shares in similar utilities offering similar yields and values. CAC/MSOS submitted that there was no suggestion that shareholders would receive the benefit of a rate increase reflecting a payment made to shareholders in lieu of taxes.
- 360. Mr. Johnson stated that stocks providing a high dividend yield were trading at significant premiums over their book value. Mr. Johnson submitted that, at \$13 per share, the 1.4 market-to-book ratio of MTS was well below that of comparable companies. Mr. Johnson concluded that the only premium received by the Province of Manitoba related to the general circumstances of the equities market and how it was reacting to the equity stocks of utilities and telecommunications companies. Accordingly, Mr. Johnson submitted that MTS was priced at a discount compared to the other telephone companies and utilities.
- 361. CAC/MSOS submitted that the MTS share offering was repeatedly rated as a good value by a number of brokers who did not make a single reference to the existence of a shareholder entitlement. CAC/MSOS submitted that the prudent investor, reasonably informed, did not require the inducement of a shareholder entitlement to partake in the share offering. CAC/MSOS concluded that no shareholder entitlement was earned.
- 362. The evidence submitted by Mr. Johnson, on behalf of CAC/MSOS, was supported by ACA et al. and AT&T Canada LDS.

d. Commission's Determinations

363. The Commission notes that the Directive, including the shareholder entitlement, was explicitly referenced in the prospectus at the time of the privatization of ED TEL. In addition, the Commission was bound by the Directive to recognize the shareholder entitlement in ED TEL's revenue requirement. Therefore, the Commission considers that MTS' proposal cannot be compared to ED TEL's shareholder entitlement, since MTS' shareholders were not specifically informed of nor guaranteed an entitlement to the ATD prior to the time of privatization.

- 364. In Decision 93-9, the Commission stated that the privatization of AGT was a complex process which necessarily involved a variety of unique economic, regional, social and political circumstances. The Commission also stated that the role of TELUS Corporation was vital to the successful completion of that process.
- 365. In Decision 93-9, the Commission stated that the special and unique circumstances surrounding the privatization of AGT were unlikely to occur again in combination. Further, the Commission stated that its determinations should not be construed as a policy decision that would apply in other situations involving the privatization or other sale of a telephone company.
- 366. The Commission concurs with CAC/MSOS that the role MTS' shareholders played in the completion of the contribution to the new pension plan emanated from the obligations under the Reorganization Act. The Commission considers that process to be fairly simple and uncontentious when compared to the uncertainty surrounding the privatization of AGT.
- 367. The Commission notes that the contribution to the new pension plan by MTS represented the only item contributing to the ATD of \$360 million which, in MTS' submission, is unlikely to be reassessed. The Commission considers these circumstances to be significantly different than was the case for AGT. In that situation, the Commission notes that, prior to the settlement with Revenue Canada, AGT's ATDs comprised 23 items which amounted to a maximum of \$2.5 billion. The Commission also notes that significant portions of these ATDs were subject to a high risk of reassessment. The Commission considers that these complexities were not present in the events undertaken by MTS to realize its ATD.
- 368. Further, the Commission is of the view that future significant expenditures by MTS are not foreseen, as the magnitude of the ATD is unlikely to significantly change at the time of reassessment by Revenue Canada.
- 369. Based on the record of this proceeding, the Commission considers that MTS has failed to support its submission that its shareholders played a vital role in the realization of the ATD. Therefore, the Commission considers that Decision 93-9 cannot be used as a precedent by MTS in this case.
- 370. The Commission notes that the Information Memorandum provided by CIBC Wood Gundy, dated December 1996, made reference only to a tax shelter of approximately \$365 million in pension contributions available to shield taxable income for several years. The Commission also notes that a similar reference was made in the initial prospectus available to investors. However, the Commission notes that neither of these documents, nor any other industry reports, provided on the record of this proceeding indicated that the financial community had any expectation of a shareholder entitlement.
- 371. The Commission agrees with Mr. Johnson that, even at \$13 per share, MTS was priced at a discount relative to other telephone companies without considering the potential for higher returns from a possible shareholder entitlement. In fact, the Commission notes that MTS' proposal in this proceeding was the first public statement referring to a shareholder entitlement. The Commission considers that, since investors had no knowledge of a possible shareholder entitlement, such a factor could not have been incorporated in the premium implicit in the initial selling price. Moreover, in Decision 93-18, the Commission considered that the premium paid by the shareholder of AGT did not factor in the decision to grant a shareholder entitlement. Accordingly, the Commission cannot justify a shareholder entitlement for MTS based on any portion of the premium that shareholders paid over book value.
- 372. In light of the above, the Commission denies MTS' proposal for a shareholder entitlement, and accordingly has reduced the company's proposed going-in revenue requirement by

2. Bell - Service Improvement Program (SIP)

- 373. As noted earlier, under TN 6038, Bell proposed to implement a SIP over a four-year period and filed forecast expenditures for each of the four years of the program roll-out.
- 374. Bell submitted that it would be inappropriate to include the revenues, expenses and investment causal to the SIP in the company's going-in revenue requirement. Bell stated that it considered various alternatives as to how the SIP could be funded, such as including the costs in the going-in revenue requirement and use of exogenous-like factors in the price cap formula. However, Bell stated that these alternatives would have resulted in longer payback periods, which the company was unable to justify as financially prudent.
- 375. Bell proposed an average increase of \$1.51 to residence primary exchange rates in order to fund the SIP. The company indicated that, without the proposed rate increases, it would be unable to justify financially the implementation of the SIP in the manner and timeframes proposed.
- 376. In argument, Bell stated that, because of the substantial investment required, the SIP provides little opportunity for recovery of revenues directly from the customers expected to benefit from the service. Bell also stated that the elimination of mileage charges and the conversion of toll links to EAS will negatively impact Utility segment revenues. Bell stated that the payback period for the SIP would have been 4.5 years as originally proposed in TN 6038; deferral of the start date to 1 January 1998 would stretch this to 5 years. Bell submitted that the recovery of the SIP investment would be subject to risk, and considered a longer payback period to be imprudent.
- 377. In support of its position, Bell noted that local residential service, particularly for many of the exchanges benefiting from the SIP, requires substantial subsidy from other services, and that, by the end of the price cap period, residential rates are still not expected to recover even incremental costs. Bell also noted that (1) the long distance contribution mechanism established to support basic residential local service provides only a fraction of the total subsidy required, and (2) as other service providers begin to draw from this subsidy pool, that support is expected to erode. Consequently, Bell argued that, while the burden to support basic residential service will increasingly fall on the company's Utility segment, this source of subsidy will erode with competition, as market forces drive the prices of these other services down towards their incremental costs.
- 378. Bell noted that the SIP, as proposed, would have a positive net present value, but that this criterion is a measure of the profitability of a project in the absence of any risk. Bell stated that, while such a measure might have been appropriate in a monopoly environment, it does not incorporate the risk inherent in a competitive market. In Bell's view, the discounted payback period for risky projects, reflecting the time needed for the DCF to turn positive, is the more appropriate criterion. Bell considered that a discounted payback period of longer than five years for the SIP would expose the company to an unacceptably high amount of risk.
- 379. ACA et al. supported the SIP proposed by Bell, but questioned the need for a further rate increase to fund such improvements.
- 380. CCTA was opposed to Bell's proposal, noting, among other things, that it included a higher rate increase than necessary. Of particular concern to CCTA was that, contrary to the Commission's Phase II costing guidelines, Bell did not reflect the terminal value of the assets involved in the program in the economic study filed in this proceeding. CCTA considered that

accounting for this factor alone would reduce, by one-third, the size of the rate increase proposed for the SIP.

- 381. Call-Net submitted that the SIP raises the issue of how future proposals to expand local calling areas should be dealt with in an environment of local competition. Call-Net noted that toll contribution charges are assessed based on the free calling boundaries of the incumbent local exchange carrier (ILEC). Exempting traffic from the continued application of toll contribution charges reduces the size of the subsidy fund, with resulting financial consequences for all LECs. Call-Net further noted that expanding free calling boundaries has serious network planning implications for competitive local exchange carriers (CLECs). Call-Net submitted that the ILECs should not have special status with respect to setting these boundaries that are not available to CLECs. In Call-Net's view, all LECs must have an equal opportunity to propose changes in the local/toll distinction and to respond to the needs of their customers. Call-Net proposed that the Commission direct the CRTC Interconnection Steering Committee (CISC) to make recommendations within 90 days regarding concerns related to local calling area boundaries.
- 382. Microcell, like Call-Net, expressed concern with the cost and contribution implications that Bell's proposal and similar future proposals will have on CLECs. Microcell submitted that CLECs must have a reasonable degree of certainty as to how local calling area boundaries will be determined on an ongoing basis.
- 383. The Commission notes that the issues raised by Call-Net and Microcell are beyond the scope of this proceeding. Notwithstanding the above, the Commission considers that the extension of local calling area boundaries involves stakeholders other than the LECs. The Commission notes that Bell's proposed extension of local calling areas was proposed as an exception to the EAS criteria and was approved after considering representations by all parties. Any future applications to extend local calling boundaries outside the current EAS criteria will be dealt with on a case-by-case basis.
- 384. With respect to the impact of the SIP on the company's going-in rates, the Commission notes that, in response to interrogatory Bell(CRTC)1Aug97-1406, Bell provided an estimate of the revenues and expenses causal to the SIP for each of the years 1998 to 2001 (i.e., the price cap period) as well as the average revenue requirement impact over the four-year period.
- 385. The Commission notes that, under Bell's proposal, the local rate increases will be implemented at the inception of the program while the costs associated with providing individual line service and EAS links will be incurred over a four-year period. The Commission also notes that, based on the evidence filed by the company, the revenues from the rate increases proposed by Bell would significantly exceed the average annual revenue requirement impact of implementing the SIP over the price cap period. The Commission considers that Bell's proposal would result in the establishment of going-in rates at the start of the price cap period which would exceed the ROE set out in Part V of this Decision.
- 386. Accordingly, the Commission has included, in the company's going-in revenue requirement, the average annual revenue requirement impact for the SIP over the four-year price cap period, as provided in response to interrogatory Bell(CRTC)1Aug97-1406.

3. NBTel and TCI - Accounting Changes

- 387. TCl and NBTel proposed a number of accounting changes to be implemented at the start of the price cap period.
- 388. TCI proposed to (1) increase the capitalization threshold from \$200 to \$1500, (2) discontinue the capitalization of Allowance for Funds Used During Construction (AFUDC),

- (3) expense, rather than capitalize, exempt materials, and (4) expense, rather than capitalize, non-chargeable labour costs.
- 389. NBTel proposed to (1) change the rate used in the calculation of AFUDC from the previous year's rate of return to the current cost of debt, (2) apply AFUDC to construction projects where the financing is directly attributable to the project, and (3) amortize the undepreciated balance of AFUDC that was not applied consistent with these changes.
- 390. TCI and NBTel reflected the financial impacts of their proposed changes in their going-in revenue requirement calculations, which represented a net revenue requirement increase of \$7.4 million for TCI and \$1.6 million for NBTel.
- 391. Calgary opposed the accounting changes put forward by TCI, and was of the view that the going-in revenue requirement and resulting rates should be established on the regulatory regime in place prior to price caps. ACA et al. considered that there was no compelling reason to change the capitalization/expense treatment for certain assets at this time, and that approval of these changes prior to the initiation of price caps would serve to artificially inflate these companies' going-in revenue requirements.
- 392. In the Commission's view, the going-in rates should be set on the basis of currently-approved accounting procedures. Therefore, the Commission has not reflected the impact of the accounting changes proposed by NBTel and TCI in determining each company's going-in revenue requirement.

4. MTS and NBTel - Excess Earnings

- 393. In Decision 94-19, the Commission stated that, should the Utility segment achieve earnings above the upper limit of the allowed ROE range, the excess earnings would be applied to a deferral account to be cumulated over the transition period. At the end of the transition period, the Commission would determine, as part of the price cap implementation proceeding, how to deal with the deferral account.
- 394. NBTel stated that it had accumulated excess earnings of \$2.9 million (\$5.6 million before taxes) in its deferral account and proposed to dispose of the excess earnings by rebates to the contribution-paying entrants and NBTel's Competitive segment. NBTel stated that the existence of excess Utility segment earnings is an indication that the subsidy required from contribution was less than originally determined when contribution rates were initially set.
- 395. MTS stated that the company had realized \$4.8 million of excess earnings in 1995, did not have excess earnings for 1996 and does not expect to realize excess earnings for 1997. MTS proposed to apply the 1995 excess earnings to 1996 as this would allow MTS to remain within its ROE range for both years. MTS also noted that, by applying the 1995 excess earnings to 1996, it had avoided an application for a general rate increase; thus, smoothing the earnings over the two years resulted in a streamlined regulatory process.
- 396. MTS stated that, until Decision 95-21 was released in the final quarter of 1995, MTS did not know its form of regulation, the methodology for calculating the return on equity and its allowed return on equity. MTS also submitted that, before this proceeding, its Utility segment results were calculated based on Phase III proxies, as MTS did not have its own Phase III results. MTS noted that, based on Phase III proxies, it did not have over or under earnings. MTS also submitted that, just as it would be inappropriate for MTS to request a retroactive rate increase on account of its under earning in 1996, it would be equally inappropriate to rebate in any form the apparent over earning in 1995.

397. ACA et al. submitted that the only logical approach to deal with NBTel's excess earnings is to use them to reduce the company's Factor-A allowance (see Part VII of this Decision) that would otherwise be permitted by the Commission. ACA et al. argued that this approach would provide benefits to NBTel's customers, rather than simply returning the same benefits to the owners of the company.

398. The Commission considers that it would be appropriate, for both companies, to use the excess earnings to reduce the going-in revenue requirement in order to mitigate any increases to going-in rates or future increases to local rates during the price cap period. The Commission is of the view that the excess earnings should be amortized over the four-year price cap period. Accordingly, the going-in revenue requirements for MTS and NBTel have been reduced by \$1.2 million and \$1.4 million, respectively.

399. The Commission notes that MTS and NBTel have included the after-tax excess earnings in their respective Utility segment average common equity. Accordingly, these excess earnings have been deducted from the companies' respective Utility segment average common equity.

400. With respect to the existence of excess earnings for any telephone company for 1997, the Commission notes that this cannot be determined at this time, since actual results will not be filed until the last quarter of 1998. Therefore, the Commission directs the telephone companies to address the disposition of any excess earnings for 1997 in their 31 March 1999 price cap filings.

5. TCI - T-Factor

401. In the proceeding leading to Decision 97-9, TCI proposed that a tax-factor (T-factor) adjustment to the PCI be used to reflect, among other things, (1) any difference between the amount of ATDs used for regulatory purposes and the amount ultimately permitted by Revenue Canada, and (2) changes in ATDs that could occur through the Revenue Canada appeal process. In Decision 97-9, the Commission considered that TCI's T-factor would deal with industry-specific taxes or tax-like orders and changes in TCI's effective tax rate as the company's ATDs are depleted during the price cap period. Regarding the applicability of the T-factor to any changes in allowable ATDs, the Commission determined that, due to a settlement reached with Revenue Canada regarding the amount of allowable ATDs, it would deal with that issue in this proceeding.

402. In response to a Commission interrogatory, TCI noted that the settlement reached with Revenue Canada eliminated the requirement to include changes in ATDs resulting from a possible appeal process for the 1990 and 1991 taxation years as a component in the T-factor. TCI subsequently confirmed that the valuation of the ATDs applied entirely to the years 1990 and 1991.

403. Accordingly, the Commission concludes that the T-factor for TCI, established in Decision 97-9, is not applicable for any changes in tax expense arising from changes, due to any further reassessment by Revenue Canada, in the amount of allowable ATDs.

H. Going-in Contribution Charges

1. Contribution Minutes

404. In Order 97-590, the Commission determined that minutes associated with (1) line-side connections used by entrants for internal administrative use, and (2) line-side connections to the PSTN which are used to connect to toll data networks, would be required to pay contribution effective 1 January 1998.

- 405. The telephone companies, TCEI and the entrants provided estimates of additional minutes associated with such line-side connections (Order 97-590 minutes). The estimates provided by the telephone companies and TCEI were based on counts of circuits which are currently contribution-exempt, but which would be contribution-eligible under Order 97-590.
- 406. The Commission notes that none of the entrants disputed the telephone companies' and TCEI's estimates of the entrants' Order 97-590 minutes. The Commission considers the approach used by the telephone companies and TCEI to estimate the Order 97-590 minutes to be reasonable and, accordingly, has included their estimates of the Order 97-590 minutes in the total market minutes used to calculate the going-in contribution rates.
- 407. AT&T Canada LDS, supported by Call-Net and Westel, submitted that the going-in contribution rates should be adjusted to reflect forecast 1998 toll market minutes. Stentor argued that it would be inappropriate to use 1998 minutes in calculating going-in contribution rates, as the financial projections on which the going-in contribution requirement is based pertain to the 1997 test year and reflect projected 1997 demand levels. The Commission considers that it would be inappropriate to calculate contribution rates based on a contribution requirement for one year using minute projections for another year. Therefore, AT&T Canada LDS' request is denied.
- 408. Based on the above, the Commission has determined the total market minutes used to calculate the going-in contribution rates to be the sum of the total 1997 market minutes (determined in Part II of this Decision) plus the Order 97-590 minutes as set out above. These total market minutes for each telephone company and TCEI are set out in Attachment C to this Decision.

2. De-averaged Contribution Mechanism

- 409. In Decision 92-12, the Commission determined that a 2% contribution surcharge on all switched minutes would compensate for contribution revenues lost through direct access line (DAL) usage.
- 410. In Order 97-590, the Commission concluded that the existing treatment of DALs should be replaced with a contribution mechanism that discourages contribution avoidance through DAL usage. The Commission considered that a differential contribution rate based on originating and terminating toll traffic, whereby the rate for terminating traffic would be higher than that for originating traffic, would be more appropriate. The Commission stated that it would finalize the details of the new contribution mechanism and the resulting contribution rates in the proceeding initiated by PN 97-11.
- 411. In a letter dated 18 December 1997, the Commission made a determination to vary that portion of Order 97-590 which required the implementation of a de-averaged contribution mechanism. Accordingly, effective 1 January 1998, the existing 2% contribution surcharge for DALs continues to apply, pending the outcome of the proceeding initiated by Contribution on Traffic Carried by Alternate Providers of Long Distance Services Over Direct Access Lines, Telecom Public Notice CRTC 98-4, 27 February 1998.

3. Surcharge for Wireless Service Providers

a. Background

412. As stated earlier, the Commission determined in Order 97-590 that a surcharge should be paid by WSPs on circuits interconnecting with the PSTN effective 1 January 1998, and that the issues regarding this matter would be determined in the proceeding initiated by PN 97-11.

- 413. The WSPs were directed to conduct a four-week study during May and June 1997 to estimate, on an annual basis, in the operating territories of each telephone company and TCEI, (1) the number of toll minutes, excluding 800/Vnet traffic, and (2) the number of 800/Vnet minutes. The telephone companies and TCEI were directed to conduct a four-week study during May and June 1997 to estimate the number of trunks connecting wireless carriers to their local switches.
- 414. At the same time, the telephone companies and TCEI were to file (1) the details to be used to calculate a per-circuit surcharge, effective 1 January 1998, on the interconnecting circuits leased by wireless carriers to access the PSTN, and (2) the impact of the additional revenues on the local/access shortfall.
- 415. On 18 July 1997, the Commission granted an exemption to Clearnet and Microcell from the requirement to submit a toll traffic study, due to the limited availability of data for these companies and based on their agreement to pay the common surcharge resulting from the studies submitted by the other WSPs.
- 416. The following parties filed submissions: BC TEL Mobility; Bell Mobility; Cantel; Island Tel Mobility; MTS Mobility; MT&T Mobility; NBTel; NewTel Mobility; Stentor (on behalf of the telephone companies and TCEI); TCI; and TELUS Mobility.
- 417. AT&T Canada LDS, Cantel, Clearnet, Canadian Wireless Telecommunications Association (CWTA), Microcell, Mobility Canada (on behalf of individual member companies that were party to the proceeding) and Stentor filed comments on 3 November 1997. AT&T Canada LDS, Cantel, Clearnet, Microcell, Mobility Canada and Stentor filed reply comments on 14 November 1997.

b. Definition of Interexchange Traffic

- 418. In Order 97-590, the Commission stated that contribution was payable to the extent that the WSPs require or make use of the PSTN for carrying interexchange traffic.
- 419. CWTA submitted that it would be inappropriate and unfair to require wireless carriers to pay contribution on traffic that would be treated as a local call by a wireless carrier, and that it would be impractical to re-define wireless local calling areas to fit wireline calling areas. Mobility Canada also submitted that contribution should not be based on wireline boundaries, and that the Commission could accommodate boundary differences by imposing a surcharge that would be administratively simpler (e.g., 10% to 15% on on-net minutes terminating on the PSTN).
- 420. In Decision 97-8, the Commission determined that the ILECs' exchanges would be maintained as the elementary unit for the purposes of interconnection and calculation of contribution in a competitive environment. The Commission is of the view that the definition of WSP interexchange traffic, which is subject to contribution, must be based on each telephone company's local calling area boundaries.

c. Contribution-Eligible Minutes

421. CWTA and Cantel submitted that only long distance calls originating on the Canadian networks of WSPs and terminating on the networks of the wireline local telephone companies in Canada should attract contribution, whereas inbound wireline long distance traffic to the networks of WSPs need not be counted since the wireline interexchange carrier is responsible for paying contribution.

- 422. In addition, the WSPs submitted that calls from wireline subscribers to wireless subscribers who are roaming outside of the wireless subscribers' home serving areas should be excluded from contribution since subsequent routing of the call by the wireless carrier must be considered a wireless to wireless call.
- 423. Mobility Canada submitted that contribution should not be assessed on the minute end that uses the wireless switched network for origination or termination of traffic. Mobility Canada also submitted that (1) roaming should be contribution-exempt, and (2) WSPs should be permitted to recover contribution from toll originating carriers.
- 424. Clearnet submitted that the Commission should ensure that the surcharge reflects only the contribution from one end of a contribution-eligible call, namely the end that accesses the PSTN. Clearnet argued that the end that accesses the WSPs' network does not access the PSTN and hence should not attract contribution.
- 425. Stentor submitted that the obligation of toll contribution applies at both ends of the call and that, when traffic is contribution-eligible, it is the responsibility of both the originating and terminating carrier of the call to account for its contribution obligations.
- 426. In Order 97-590, the Commission determined that WSPs connecting with the PSTN for carrying toll traffic should contribute on the same basis as toll services provided by wireline carriers and that wireless to wireline and wireline to wireless toll traffic should be subject to contribution. The Commission noted that wireless to wireless toll traffic was considered to be beyond the scope of that proceeding.
- 427. In Order 97-590, the Commission also stated that traffic interconnected to the PSTN through 800/Vnet services currently pays contribution in the retail tariffs for these services. The Commission notes that this type of traffic was designated as off-net by all parties for purposes of the traffic studies and concurs that these off-net minutes, as well as those involving wireless to wireless connections, should be excluded from contribution-eligible minutes.
- 428. The Commission notes that both originating and terminating toll minutes are contributioneligible and that the routing of the call does not have any bearing on whether contribution is paid on the minutes of the call. The Commission considers that, if a call originates or terminates on the PSTN and if the point of origination is across interexchange boundaries from the point of termination, the minutes of the call, including traffic to roaming subscribers, should be included in the contribution calculation.
- 429. As defined in Order 97-590, the Commission has determined that the WSPs' contributioneligible minutes are the minutes associated with (1) the originating end of wireless to wireline calls, and (2) the terminating end of wireline to wireless calls, that interconnect to the PSTN. The Commission has also determined that minutes of WSP traffic that use the PSTN to interconnect on Canada/U.S. and overseas calls are also contribution-eligible.

d. Calculation of the Surcharge

430. Using the results of the WSP traffic studies from the four-week period in June 1997, annualized for 1997, and the contribution rates applicable in each telephone company's operating territory, Stentor calculated the equivalent revenue that would result if contribution were paid on a per-minute basis. This revenue and the average number of interconnecting circuits (in use by the WSPs over a similar four-week period in June 1997 in each telephone company territory) were used by Stentor to calculate the average surcharge per interconnecting circuit in each telephone company's operating territory.

- 431. Cantel argued that the Commission should adopt a company-specific surcharge for each WSP in order to satisfy the requirement that rates be just and reasonable. Cantel supported its position by noting significant differences in the toll calling patterns of Cantel from those of the Mobility Canada companies across the country. Clearnet supported Cantel's position. Clearnet submitted that the rates specific to Cantel should be employed for Clearnet and Microcell pending the development of specific rates for those two companies.
- 432. Microcell submitted that the preliminary results do not appear consistent and reliable enough to warrant establishing WSP-specific surcharges and that no information is available at this time to set similar WSP-specific surcharges for either Microcell or Clearnet.
- 433. Stentor and Mobility Canada submitted that the per-circuit surcharge should be the same for all WSPs in each LEC territory, adding that the Commission has never applied carrier-specific charges for alternate providers of long distance services. Mobility Canada also argued that, since contribution for wireless carriers will be applied on a per-line basis assuming an average loading, the requirement to de-average peak and off-peak would be redundant. Stentor argued that there are fundamental inconsistencies in the traffic study results related to the different methodologies used and the varying underlying assumptions (such as sample sizes, factors to account for local calling boundaries and annualization methods) and that the information is not sufficient to calculate an appropriate per-circuit surcharge for each WSP.
- 434. The Commission has considered the results of the four-week traffic studies, and accepts the explanations from the WSPs for (1) variations in calling patterns, (2) the different levels of peak and off-peak traffic, (3) variations in the toll traffic throughout the telephone companies' territories, and (4) the limitations of the studies themselves. Therefore, the Commission has derived a per-circuit surcharge based on the results of these studies.
- 435. Based on the determinations made in Order 97-590, the Commission is of the view that consideration of a company-specific surcharge for each WSP is beyond the scope of this proceeding. In light of the four-week study results submitted by the WSPs, the Commission has determined a single surcharge applicable to all WSPs in each telephone company's operating territory or, in the case of TCI and TCEI, in the Province of Alberta, consistent with Order 97-590 and the Commission's previous determinations regarding per-circuit contribution charges.
- 436. The Commission notes that Stentor and TCI used the 1998 entrant contribution rates proposed by each telephone company for 1 January 1998 for their WSP surcharge calculations. The Commission is of the view that the 2% DAL surcharge, currently applied to entrant contribution rates to compensate for toll traffic carried over DALs, should not be applicable to the WSPs since they do not use DALs.
- 437. In Telecom Order CRTC 96-1607, 23 December 1996 (Order 96-1607), the Commission determined that, in calculating contribution rates, the discounts for (1) line-side connections, except where equal access is not available, and (2) the stimulation factor, would terminate for BC TEL, Bell, Island Tel, MT&T, MTS and TCl on 1 July 1998 and for NBTel and NewTel on 1 January 1998. The Commission notes that the discounts for trunk-side connections will terminate on the same schedule as noted above. The Commission is of the view that the use of entrant discounts, which were established to facilitate the development of toll competition, as well as the stimulation factor, which exempted entrant stimulated minutes from paying contribution, should not be applicable to the WSPs. In any event, the Commission notes that these discounts will have ended in all of the telephone companies' territories by 1 July 1998.
- 438. In light of the above, the Commission concludes that the surcharge should be calculated based on the telephone company and TCEI contribution rates, for peak and off-peak, as set out in this Decision and adjusted for the impact of Order 96-1607.

439. The following table sets out the WSP per-circuit surcharges, effective 1 January 1998:

	Per-circuit Surcharge (\$)
BC TEL	24.14
Bell	6.60
Island Tel	6.68
MTS	9.48
MT&T	11.53
NBTel	18.48
NewTel	20.09
TCI/TCEI	51.54

- 440. These surcharges are given final approval, with the exception of TCI/TCEI as explained in the following Section. The Commission notes that the estimated revenues from these surcharges have been included in the calculation of the telephone companies' going-in contribution requirement as determined in Order 97-590. The Commission also notes that the per-circuit surcharge for TCI/TCEI reflects TCI's 4 February 1998 corrections to the 1997 trunk study results for the number of interconnecting circuits leased by TCI to WSPs in June 1997.
- 441. The telephone companies are directed to issue forthwith tariff pages to reflect the approved surcharges to be effective 1 January 1998 and to make any necessary adjustments to amounts already billed as expeditiously as possible.

e. Changes to the Surcharge

- 442. Cantel and CWTA were of the view that it would be appropriate to review the surcharge annually due to, among other things, (1) changes to local calling areas, (2) equal access that could impact the number of long distance minutes a wireless carrier would carry over its own facilities, and (3) tremendous growth expected in the volume of wireless to wireless calls.
- 443. Cantel argued that, given the difficulties associated with maintaining the appropriate percircuit surcharge, the WSPs should be granted the option of collecting actual traffic data on an ongoing basis and changing to a per-minute WSP contribution calculation. Cantel submitted that, in the meantime, regular review proceedings must be instituted in order to adjust the surcharges as conditions evolve.
- 444. The Commission is of the view that consideration of a per-minute contribution mechanism for the WSPs is beyond the scope of this proceeding. The Commission notes that any adjustments to surcharges during the price cap period would require the filing of new traffic studies, new estimates of circuits in use and adjustments to the existing contribution rates. The Commission considers that new traffic studies may not result in any material changes in the WSP surcharges, given the limitations of the available WSP toll data, the necessity of reliance on various assumptions and the expected growth in minutes and circuits. Therefore, with the exception of the TCI/TCEI surcharge as explained in the following Section, the Commission concludes that the WSP surcharges set out in this Decision will be frozen for the price cap period.

4. Conclusions

445. In Decision 97-8, the Commission stated that toll contribution rates would be frozen for the telephone companies, except TCI, at the going-in rates, effective 1 January 1998, for the price cap period. In Decision 97-9, the Commission determined that, when TCI's shareholder

entitlement is completely amortized in 1998, the company's contribution rate will be reduced accordingly and frozen for the remainder of the price cap period.

- 446. The contribution rates approved by the Commission, effective 1 January 1998, are set out in Attachment C to this Decision. The telephone companies and TCEI are directed to issue forthwith revised tariff pages reflecting going-in contribution rates as set out in Attachment C to this Decision and to make any necessary adjustments to amounts already billed to entrants as expeditiously as possible.
- 447. As stated earlier, the discounts for line-side connections, except where equal access is not available, and for the stimulation factor will terminate for BC TEL, Bell, Island Tel, MT&T, MTS and TCl on 1 July 1998. In addition, the per-circuit rates for international contribution will increase, effective 1 July 1998, pursuant to Order 97-1903. The Commission directs the telephone companies to issue, by 1 June 1998, revised tariff pages reflecting the contribution rates to come into effect 1 July 1998.
- 448. TCI is directed to issue revised tariff pages, by 1 December 1998, reflecting rates to come into effect 1 January 1999 when its shareholder entitlement will be completely amortized. The Commission notes that these changes will have an impact on the WSP surcharge determined in this Decision for TCI/TCEI. Accordingly, TCI is also directed to issue revised tariff pages, by 1 December 1998, to be effective 1 January 1999, reflecting changes to its WSP surcharge based on the contribution rates effective 1 January 1999.
- 449. In Form of Regulation for TELUS Communications (Edmonton) Inc., Telecom Public Notice CRTC 98-3, 23 February 1998 (PN 98-3), the Commission initiated a proceeding to, among other things, finalize TCEI's contribution rate for 1998. Accordingly, the 1998 contribution rate for TCEI (and the Blended Alberta rate) and the WSP surcharge for TCI/TCEI set out in this Decision will remain interim and will be finalized in the proceeding initiated by PN 98-3.

I. Summary of Determinations

- 450. Based on the determinations made in this Decision, the Commission has calculated the going-in contribution requirement for the telephone companies as follows: the 1997 contribution requirement (as set out in Part II of this Decision), minus the net revenue impact of Decision 97-6, minus the amount of rebalancing revenues needed to reduce the contribution rate to 2 cents per minute (except for TCI), minus the amount of revenue generated by the surcharge on WSP interconnecting circuits. For TCI, the amount of rebalancing revenues was based on the amount needed to reduce the contribution rate to 2 cents per minute assuming the shareholder entitlement is fully amortized (i.e., the going-in contribution requirement was reduced by the pretax amount of the shareholder entitlement estimated for 1998). The average going-in contribution rate per minute was calculated as follows: (1) the going-in contribution requirement, divided by (2) the sum of the total 1997 market minutes plus the Order 97-590 minutes.
- 451. The going-in revenue requirement shortfall was determined by taking the sum of the incremental changes, as detailed in Parts IV, V and VI of this Decision, to the approved 1997 forecast. These changes included, among other things, (1) additional depreciation expense from approved changes to asset service lives effective 1 January 1998, (2) changes to the allowed Utility segment ROE, (3) net revenue impacts of pending and planned tariff items which came into effect during 1997 or at 1 January 1998, (4) adjustments for the amortization of deferred charges and excess earnings, and (5) recognition of the ongoing implicit discount. This shortfall amount was then reduced by any 1 January 1998 rebalancing revenues in excess of the revenues needed to reduce the contribution rate to 2 cents per minute. In the event that the total of the going-in adjustments resulted in a revenue requirement surplus, this surplus was used to reduce the going-in contribution requirement (prior to determining the amount of the rebalancing

revenues).

- 452. Based on the methodology set out above, the following summarizes the Commission's findings with respect to the telephone companies' going-in contribution and revenue requirements.
- 453. For BC TEL, the Commission estimates that the company will require \$44.4 million in rebalancing revenues to reduce its going-in contribution rate to 2 cents per minute. The Commission also estimates that the company will have a going-in revenue requirement shortfall of \$19.0 million. Therefore, the Commission estimates that BC TEL requires \$63.4 million in revenue increases from residential rates. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$7.6 million.
- 454. For Bell, the Commission notes that the company's contribution rate is already below 2 cents per minute. The Commission estimates that the company will have a going-in revenue requirement shortfall of \$230.9 million. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$12.2 million.
- 455. For Island Tel, the Commission estimates that the company will require \$1.42 million in rebalancing revenues to reduce its going-in contribution rate to 2 cents per minute. The Commission also estimates that the company will have a going-in revenue requirement shortfall of \$0.27 million. Therefore, the Commission estimates that Island Tel requires \$1.69 million in revenue increases from residential rates. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$0.37 million.
- 456. For MT&T, the Commission estimates that the company will require \$9.1 million in rebalancing revenues to reduce its going-in contribution rate to 2 cents per minute. The Commission also estimates that the company will have a going-in revenue requirement shortfall of \$5.3 million. Therefore, the Commission estimates that MT&T requires \$14.4 million in revenue increases from residential rates. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$5.4 million.
- 457. For MTS, the Commission notes that the company's contribution rate is already below 2 cents per minute. The Commission estimates that the company will have a going-in revenue requirement shortfall of \$4.6 million. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$2.7 million.
- 458. For NBTel, the Commission notes that the company's contribution rate is already below 2 cents per minute. The Commission estimates that the company will have a going-in revenue requirement surplus of \$2.0 million, which was applied towards reducing the going-in contribution requirement. This adjustment is reflected in the contribution rates for NBTel set out in Attachment C to this Decision.
- 459. For NewTel, the Commission estimates that the company will require \$7.4 million in rebalancing revenues to reduce its going-in contribution rate to 2 cents per minute. The Commission also estimates that the company will have a going-in revenue requirement surplus of \$1.1 million. Therefore, the Commission estimates that NewTel requires \$6.3 million in revenue increases from residential rates. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission

estimates that there will be a residual shortfall of \$0.3 million.

460. For TCI, the Commission estimates that the company will require \$37.6 million in rebalancing revenues to reduce its going-in contribution rate to 2 cents per minute, effective 1 January 1999, after the shareholder entitlement is fully amortized. The Commission also estimates that the company will have a going-in revenue requirement surplus of \$24.3 million. Therefore, the Commission estimates that TCI requires \$13.3 million in revenue increases from residential rates. After taking into account the revenues expected to be generated from the interim rate increases approved in Decision 97-18, the Commission estimates that there will be a residual shortfall of \$2.3 million.

VII RATES

461. As stated earlier, in Decision 97-9, the Commission considered that the telephone companies should be allowed to increase basic residential local service rates by up to \$3.00 on average at the start of the price cap regime in order to move contribution rates to a more appropriate level and to recover their going-in revenue requirements. The telephone companies were directed to file applications to implement proposed increases in the proceeding initiated by PN 97-11. Decision 97-9 also specified that the mechanism to recover any revenue requirement shortfall not reflected in going-in rates would also be determined in the PN 97-11 proceeding.

462. Pursuant to Decision 97-9, the telephone companies filed in this proceeding proposed increases to basic residential local service rates to take effect 1 January 1998. The telephone companies' rate proposals varied significantly due to differences in their respective requirements to reduce contribution rates and recover revenue requirement shortfalls, and due to marketing considerations. In addition, the telephone companies, except for NewTel, proposed that they be afforded the opportunity to recover their respective going-in revenue requirement shortfalls through adjustments to their price cap constraints (Factor-A). NewTel proposed to implement going-in rates that would provide full recovery of its revenue shortfall at the start of the price cap period. Incorporating the proposed Factor-A into the price cap constraints would allow the telephone companies to increase residential basic service rates, on average, beyond the level of inflation as prescribed in Decision 97-9. The telephone companies' proposals are outlined in the table below:

	Proposed Average Rate Increases 1 January 1998 (\$)	Proposed Factor-A (Basic Residential Local Service Sub-basket)
BC TEL	3.00	19.5%
Bell	2.97	14.0%
Island Tel	3.00	4.0%
MT&T	2.00	5.0% + \$1.00
MTS	3.00	18.1%
NBTel	0.00	19.6%
NewTel	6.40	not applicable
TCI	3.00	16.1%

463. In Decision 97-18, the Commission approved, on an interim basis, residential local rate increases to be implemented 1 January 1998. The Commission also indicated that, on a prima facie basis, the implementation of a mechanism to recover any remaining revenue requirement shortfall would not be required, except for MT&T and possibly BC TEL.

464. The Commission estimates that, based on the final determinations made in Part VI of this Decision, the residential local rate increases, that would result if final rates are implemented on

1 January 1998, would be less than \$3.00 on average for all telephone companies, except for BC TEL and MT&T. A comparison of the average interim rate increases approved in Decision 97-18 and the average rate increases that would result if the final rates are implemented, effective 1 January 1998, is provided in the table below:

Average Rate Increases (\$)

	Interim	Final
BC TEL	2.84	3.20
Bell	2.57	2.72
Island Tel	2.05	2.60
MT&T	2.00	3.19
MTS	0.35	0.84
NBTel	0.00	0.00
NewTel	2.50	2.64
TCI	1.10	1.33

465. The Commission notes that, while MT&T's evidence suggested that increases to residential rates in excess of \$3.00 were required to implement the rate rebalancing directives in Decision 97-9 and to fully recover its revenue requirement shortfall, the company proposed to increase residential rates by only \$2.00, effective 1 January 1998, in light of concerns related to the impact on its customers.

466. In the case of BC TEL, the Commission notes that full recovery of the company's revenue shortfall would result in an average residential rate increase slightly in excess of \$3.00. The Commission considers that customer impacts associated with implementation of an average increase of \$3.20, effective 1 January 1998, would not be significant relative to the interim rates already implemented. However, the Commission notes that BC TEL's proposed residential rate increases, averaging \$3.00, were the maximum increases that the company considered reasonable to implement on 1 January 1998.

467. The Commission is of the view that the telephone companies should be given the opportunity (contemplated in Decision 97-9) to recover their respective revenue shortfalls going into the price cap regime. In order to allow the telephone companies a reasonable opportunity to earn a fair ROE at the start of the price cap period, the Commission considers that the telephone companies should be permitted to implement basic local residential rate increases, effective 1 January 1998, to recover their respective residual revenue shortfalls determined in Part VI of this Decision. However, given that a number of the telephone companies identified concerns with respect to the impact of rate increases on residential customers, the Commission is of the view it would be appropriate to allow the telephone companies the option of adjusting their respective price cap constraints, thereby deferring these increases.

468. Therefore, the telephone companies are directed to file, with their 31 March 1998 price cap filings, their respective choices of one of the following: (1) implementing rate increases, effective 1 January 1998, to recover all or part of their respective residual revenue shortfalls as determined in Part VI of this Decision, or (2) adjusting their respective price cap constraints to allow for the deferral of all or part of the rate increases to recover these shortfalls.

469. Those telephone companies choosing to implement further rate increases effective 1 January 1998 are to file proposed rates with their 31 March 1998 submissions, with supporting calculations to demonstrate that the proposed rate increases recover any or all of the residual shortfall. The Commission notes that this option will require billing adjustments for basic residential local service customers. The Commission also notes that billing adjustments will be

required by most telephone companies to implement rate changes to unlisted number service as set out in Order 98-109. The Commission considers that, where applicable, the telephone companies are to coordinate the billing adjustments resulting from Order 98-109 with those adjustments resulting from this Decision.

- 470. Those telephone companies electing to adjust their respective price cap constraints are directed to file the calculation of the proposed adjustments to their respective price cap constraints with their 31 March 1998 submissions. The Commission considers that, under this approach, each company's PCI and Basic Residential Local Service Sub-basket Service Band Limit (SBL) should be adjusted to reflect the amount of the residual revenue shortfall not recovered through rates effective 1 January 1998. These adjustments to the PCI and SBL would be calculated by dividing this remaining shortfall by the going-in revenues for all capped services and the going-in revenues for the services in the Basic Residential Local Service Sub-basket, respectively.
- 471. As noted in Part II of this Decision, the upcoming Local Competition Start-up Costs Proceeding will examine, among other things, whether any start-up costs for local competition and LNP should be recovered from subscribers. The Commission notes that any rate increases needed to recover these costs from subscribers would be in addition to those approved in Decision 97-18 and in this Decision, and would also be in addition to any increases resulting from the application of the price cap parameters set out in Decision 97-9.

VIII LOCAL SUBSIDY ALLOCATION

A. Rate Band Classification

- 472. In Decision 97-8, the Commission granted interim approval to the rate band structures proposed by each of the telephone companies. A number of companies in this proceeding proposed changes to those rate band structures.
- 473. MTS proposed to disaggregate Band D into Bands D and E. While Bell proposed a similar band structure, unlike MTS, it was unable to provide the cost information to disaggregate Band D. BC TEL proposed to re-assign a number of wire centres and exchanges between rate bands. BC TEL noted that its revised proposal recognized that both density and community size are indicators of market and cost considerations, and that its original proposal (approved in Decision 97-8) had been based primarily on density calculations. TCI proposed to assign the rural local loops from exchanges associated with Bands B, C and D that are defined as beyond the Base Rate Area (BRA) boundary to Band E. TCI submitted that the rural loops in Band E are typically long and in low density areas and therefore exhibit significantly higher costs than loops within a BRA boundary.
- 474. CCTA did not take issue with the telephone companies' proposed rate band classifications, except with respect to TCI's Band E and BC TEL's proposed reclassification of exchanges, from those filed in the proceeding leading to Decision 97-8. CCTA was concerned that without adopting additional measures on the re-assignment of NAS between bands, or within bands, the intent of the banding policy would be undermined. In particular, CCTA requested that the Commission either (1) direct the telephone companies to provide tariffs outlining the criteria for rate band classification, or (2) freeze the assignment of NAS to bands over the price cap period.
- 475. Call-Net expressed concern with the process to define bands. Call-Net noted that BC TEL's proposal to include market considerations as a criterion would result in assignments to exchanges that are inconsistent with the band's cost characteristics. Call-Net submitted that, under the current procedural approach for establishing band definitions, the evolution of bands over time is likely to be a continuing source of dispute and will provide opportunities for the

incumbent telephone companies to manipulate band definitions to their competitive advantage.

- 476. Call-Net, supported by MetroNet, requested that the Commission direct CISC to make recommendations within 90 days with respect to options for industry processes for establishing and modifying rate band definitions, and resolving ongoing related issues through industry negotiation.
- 477. In Decision 97-18, the Commission denied TCI's proposed approach to Band E and expressed the preliminary view that BC TEL's banding structure and assignment of particular wire centres and exchanges to bands should remain unchanged from those given interim approval in Decision 97-8. The Commission granted interim approval to the revised banding structure proposed by MTS. The Commission also noted that, for the telephone companies other than MTS, the assignment of wire centres and exchanges to bands was to remain unchanged from those given interim approval in Decision 97-8.
- 478. The Commission considers that the rate band structures and assignments, given interim approval in Decision 97-18, reflect the broad cost characteristics of providing local loops. Therefore, the Commission grants final approval to the rate band structures and assignments given interim approval in Decision 97-18.
- 479. With respect to CCTA's requests, the Commission notes that the criteria for rate band classification were set out in the proceeding leading to, and were approved in, Decision 97-8, and were supplemented by the determinations in Decision 97-18. Therefore, the Commission considers it unnecessary for the telephone companies' tariffs to reflect the criteria for rate band classification. Further, in light of the proceeding initiated by Service to High-Cost Serving Areas, Telecom Public Notice CRTC 97-42, 18 December 1997, the Commission considers that it would not be appropriate to freeze the assignment of NAS to bands at this time.
- 480. With respect to Call-Net's request, the Commission considers it more appropriate to address requests for additional bands or changes to assignments on a case-by-case basis.
- 481. Therefore, the Commission rejects Call-Net's and CCTA's requests and notes that it will address requests for additional bands or changes to assignments (for wire centres or exchanges to bands) on a case-by-case basis.

B. Phase II Costs

- 482. Call-Net, CCTA and Microcell submitted that the record of this proceeding was insufficient to verify the accuracy of the contribution fund allocation ratios by band calculated by the telephone companies, especially the residence cost estimates underlying these allocation ratios. Call-Net submitted that the telephone companies have an incentive to distort the subsidy allocation ratios by band by understating or otherwise manipulating their residence cost estimates. CCTA submitted that further scrutiny of the costs was required given that there are discrepancies in the residence primary exchange costs by band between different companies as well as discrepancies in the Phase II costs filed in this proceeding with those previously filed in other proceedings.
- 483. Call-Net, CCTA and Microcell supported further process to examine the Phase II costs of residence service and the subsidy allocation ratios. CCTA and Microcell favoured (1) interim subsidy allocation ratios, in order not to delay the 1 January 1998 implementation date, and (2) an expedited proceeding. Call-Net was of the view that this would be insufficient and called for a review of the current contribution system, involving both subsidy collection and distribution arrangements. Call-Net suggested that this review could take place as part of the high-cost serving area proceeding.

- 484. The telephone companies noted that, in response to interrogatories, they had filed their cost studies and provided full details on the underlying assumptions and costing methodologies. The telephone companies also noted that their studies had been conducted in accordance with Phase II costing principles. Bell indicated that it had provided its Prospective Annualized Revenue Cost (PARC) studies for 1996 which provide detailed explanations of year-over-year changes in costs. MTS noted that it filed the results of its own cost studies in this proceeding and that proxies had been used in earlier proceedings.
- 485. The telephone companies submitted that, contrary to CCTA's claim, there are legitimate reasons for expecting cross-company differences in the Phase II costs of residence service. The telephone companies submitted that costs are driven by a number of factors, including population distribution and density, terrain, local loop cable length and cable make-up, labour rates and operating expenses, all of which may legitimately differ across the companies. In particular, the telephone companies argued that the same band designation across the companies would have different characteristics in terms of loop length and density. Further, the telephone companies submitted that cost drivers for each company will reflect the characteristics of its serving area (such as unique network architecture, configuration and technology mix) and traffic profile as well as its unique provisioning rules, mode of operations and business practices.
- 486. The telephone companies submitted that changes in the subsidy allocations across rate bands, from those filed in the proceeding leading to Decision 97-8, reflect the combined impact of not only changing costs but also changing prices, changing demand and the inclusion of the costs and revenues associated with optional services in the calculation of the subsidy by rate band. In particular, Bell noted that changes in costs since the proceeding leading to Decision 97-8 accounted for only a 6% change in the allocation of the subsidy to its Bands C and D.
- 487. The Commission notes that most interveners raised concerns regarding changes to the subsidy allocation ratios, from those filed in the proceeding leading to Decision 97-8, and the amount of subsidy available by band. The Commission notes that these changes stem primarily from changes in rates, inclusion of optional local services and changes in demand, rather than from changes in the Phase II costs of providing residence primary exchange service.
- 488. The Commission notes that the principal cost component associated with the provision of primary exchange service by the telephone companies is the loop. In the follow-up proceeding to Decision 97-8, the Commission is examining the telephone companies' loop costs in detail.
- 489. The Commission considers that it is important for the residence primary exchange service costs (used in the subsidy calculation) to be based on a costing methodology and assumptions consistent with those employed for the purposes of setting rates for local loops. Further, the cost of equity set out in Part V of this Decision will have an impact on the Phase II costs of many of the telephone companies.
- 490. Therefore, the Commission will direct the telephone companies to submit revised 1997 Phase II cost studies for residence primary exchange service by band based on the cost of equity set out in Part V of this Decision and on any relevant determinations regarding the costing of local loops in the decision regarding the follow-up proceeding to Decision 97-8. The Commission will finalize the residence primary exchange service Phase II costs, and therefore the subsidy allocation ratios, following the issuance of the decision regarding local loop tariffs for competitors. The Commission considers that the telephone companies' Phase II costs of residence service by band filed in this proceeding are suitable to be used in the calculation of the subsidy allocation by band on an interim basis.

C. Multiple Unit Dwellings

- 491. Bell, supported by the other telephone companies, proposed that special consideration be given to the subsidy requirements for multiple unit dwellings (MUDs) in view of the likelihood that the costs of serving MUDs are relatively low and prices are above cost. Bell stated that it was not able to provide any supporting cost data and that it did not have the means to identify and track residential NAS located in MUDs.
- 492. London Telecom submitted that the inability of LECs to identify MUDs precludes any consideration of removing these NAS from the subsidy pool. In any case, London Telecom argued that Bell's proposal would be particularly costly with the advent of LNP and would provide no benefit to the consumer.
- 493. The Commission considers that there is insufficient evidence to consider the merits of excluding MUDs from the subsidy allocation. In any event, given that the banding approach approved by the Commission used to allocate the residential subsidy requirement is based on rate and cost averaging, it would not be appropriate to exclude subsets of NAS within a band. Therefore, Bell's proposal is denied.

D. Conclusions

494. In Decision 97-18, the Commission set out the interim percent subsidy requirement by band for each telephone company based on the interim rates approved in that Decision and the methodology outlined in interrogatory ____(CRTC)1May97-508. In Decision 97-18, BC TEL was directed to file, on 12 January 1998, a revised response to interrogatory BCTEL(CRTC)1May97-508 to reflect the Commission's determination regarding rates and rate band structure.

495. With the exception of BC TEL, the interim subsidy requirements by band given interim approval in Decision 97-18 shall maintain their interim status. The Commission approves the following interim percent subsidy requirement for BC TEL, effective 1 January 1998:

Band	Percent
Α	2.1
В	34.2
С	17.0
D	46.7

- 496. The Commission notes that any further rate increases that the telephone companies choose to implement, effective 1 January 1998, to recover the residual shortfall (see Part VII of this Decision) will impact the subsidy requirement. These further rate increases should be reflected in the calculation of the subsidy allocation ratios to be filed following the issuance of the decision regarding local loop tariffs for competitors, as noted above.
- 497. In addition, the Commission notes that MTS' total residential subsidy requirement is approximately five times the company's contribution requirement. The Commission also notes that this relationship is not in line with those of the other telephone companies. The Commission considers that this may be due, in part, to the company's income tax status. The Commission intends to examine this issue prior to the finalization of MTS' subsidy allocation ratios.

IX SERVICE BASKETS

A. Assignment of Services

498. In Decision 97-9, the Commission determined that all capped services would form a single

basket subject to the PCI and that certain Utility segment services would not be capped (the uncapped services). The capped services basket would be divided into three sub-baskets: (1) Basic Residential Local Service, (2) Single and Multi-Line Business Local Services and (3) Other Capped Services. The Commission categorized the services to be included in the sub-baskets for Basic Residential Local Service and Single and Multi-Line Business Local Services.

- 499. The Commission stated that the services to be categorized as Other Capped Services or Uncapped Services would be finalized in the follow-up proceeding. However, the Commission also concluded that (a) services, such as optional local services, that are priced to maximize contribution were appropriately excluded from the price cap regime, (b) it would be redundant or impractical to include under price caps certain services, such as services provided under the terms of Special Facilities Tariffs (SFTs), (c) it was unnecessary to include competitor services in the basket of capped services, and (d) it was appropriate to freeze the level of rates for toll contribution, 9-1-1 and Message Relay Service for the duration of the price cap period.
- 500. In Decision 97-18, the Commission set out its interim assignment of Utility segment services and directed the telephone companies to file, by 12 January 1998, the classification of each of their Utility segment services by tariff item. The Commission notes that a number of the telephone companies identified Utility segment services that were not included in their respective sub-basket assignments filed during this proceeding. These services are identified as New Services in Attachment D to this Decision. Where applicable, the telephone companies are directed to file their proposed classification for these services with their 31 March 1998 price cap submissions. Interested parties will have 30 days to comment on the proposed classifications.
- 501. In general, most interveners did not object to the telephone companies' assignments for the majority of services to the various sub-baskets. The Commission generally accepts the telephone companies' assignments of services to the sub-baskets except as noted below. Accordingly, the final determinations by tariff item are specified in Attachment D to this Decision.
- 502. In general, most of the telephone companies proposed that Support Structures be assigned to the Other Capped Services Sub-basket. However, the Commission notes that the telephone companies and a number of interveners, including AT&T Canada LDS and CCTA, subsequently submitted evidence and argument indicating that Support Structures should be excluded from the price cap and should be priced according to the rules for Competitor Services. The Commission considers that Support Structures should be treated as Competitor Services during the price cap period. In addition, given the relationship between Support Structures and Partial Cable Distribution Systems, the Commission is of the view that both services should be afforded the same treatment under price caps.
- 503. In Decision 97-9, the Commission determined that the rates for 9-1-1 and Message Relay Service would be frozen during the initial price cap period given the nature of these services. In this proceeding, Bell submitted that it also would be appropriate to freeze the rates for Call Blocking 900/976 and Call Display Blocking. The Commission notes that the rates for these services, as well as the terms of the telephone companies' installment payment plans and toll restriction, have been set either on the basis of Phase II costs plus an approved mark-up or otherwise recognizing social policy concerns. As such, the Commission is of the view that it would be appropriate to freeze the rates and/or terms of these services for the price cap period.
- 504. AT&T Canada LDS, Call-Net, Cantel and Microcell generally considered that services or components of services relating to the interconnection of telecommunications service providers to the telephone companies' networks should be assigned as Competitor Services. The Commission notes that, while the telephone companies were in agreement with these interveners for the assignment of many of the services in question, they typically objected to classifying some services or service components as Competitor Services if the service was not

for the exclusive use of competitors. The Commission notes that the assignment of Competitor Services, as detailed in Attachment D to this Decision, is generally premised on whether the service in question is in the nature of an essential service and/or is primarily used by telecommunications service providers. Competitor Services include, for example, equal access services identified at page 51 of Decision 95-21, which are utilized by both competitors and by the telephone companies' Competitive segment.

505. The Commission notes that rates for unlisted number service have in the past been set to maximize contribution available to subsidize basic residential service. In Order 98-109, the Commission set rates for unlisted number service not to exceed \$2.00, in recognition of certain privacy concerns. Given the new regulatory treatment of the rates for this service, the Commission considers it appropriate that unlisted number service be assigned to the Other Capped Services Sub-basket.

B. Procedural Issues

- 506. Several interveners, including AT&T Canada LDS, Call-Net and Microcell, argued that a periodic review of the Phase II costs associated with Competitor Services would be appropriate, given that Competitor Services are not capped and productivity gains would not flow through to the rates for these services.
- 507. In response, Stentor stated that procedural issues for changing rates for Competitor Services are outside the scope of this proceeding. Notwithstanding this, Stentor submitted that the allegation that the benefits of productivity improvements and cost reductions would not be passed along to competitors was incorrect. Stentor stated that the Phase II costs for Competitor Services, filed in response to the directives in Decision 97-8, include the expected effects of productivity increases over the study period. In addition, Stentor indicated that the costs for these services relate exclusively to growth technologies which reflect the most cost-effective solution to the provision of additional services.
- 508. The Commission notes that, in Decision 97-9, it determined that rates for Competitor Services would be subject to change only upon application by the telephone companies or by parties, or by means of a proceeding initiated by the Commission. Accordingly, the Commission rejects the proposal to implement a pre-determined periodic review of the rates for Competitor Services.
- 509. AT&T Canada LDS also recommended that the telephone companies be required to propose a classification for each new service or each new rate element at the time proposed tariffs are filed and that interveners be given 30 days to comment on the proposed classification.
- 510. In response, Stentor stated that, while this issue had not been canvassed in the proceeding, it did not object to interveners being given 30 days to comment from the date of filing provided that any approval process relating to the classification not be permitted to delay the approval of the tariff filing.
- 511. In Decision 97-9, the Commission stated that the telephone companies would be required to submit a proposed price cap classification with tariff applications for new services or new service elements. The Commission determines that parties' comments regarding such classifications should be filed within 30 days of the date the application is publicly available.
- 512. The Commission notes that the telephone companies, in some cases, will have introduced new services or service elements that are not reflected in this Decision. The telephone companies are directed to file, by 31 March 1998, the proposed classification of any Utility segment services not yet classified.

C. Price Indices

513. The Commission notes that, based on its final determinations regarding the telephone companies' respective revenue requirements, amendments to certain of the telephone companies' interim rates are warranted. In addition, in Order 98-109, the Commission approved final rates for unlisted number service (which, in most cases, were different from the rates made interim in Decision 97-18). Accordingly, the telephone companies' Actual Price Indices and Service Band Indices are initialized at a level of 100 based on rates for capped services in effect at 1 January 1998 including rates for unlisted number service approved in Order 98-109 and, where applicable, the final residential local rates to be implemented as of 1 January 1998.

Laura M. Talbot-Allan Secretary General

This document is available in alternative format upon request.

Attachment A

Calculation of Contribution - 1997

	BC TEL	Bell	Island Tel	MTS	МТ&Т	NBTel	NewTel	TCI	TCEI	TCI/TCEI
Contribution										Blended
Requirement (\$ Millions)										
Contribution Requirement	214.9	220.2	7.1	27.6	45.0	29.7	28.8	228.7	18.5	247.2
Toll Minutes										
Calculation (Millions)										
a) Telco Orig. 2. & Term. Minutes Peak	2,593	11,406	98	794	617	832	306	2,050	2,050	2,050
b) Telco Orig. & Term. Minutes Off- Peak	3,866	13,594	138	976	830	910	506	2,838	2,838	2,838
3. a) Entrant Minutes Peak	1,481	6,054	21	221	146	94	90	1,056	1,056	1,056
b) Entrant Minutes Off- Peak	1,238	5,604	25	219	180	126	95	1,005	1,005	1,005
c) Entrant Stimulated Minutes Ratio to Total Minutes	0.0678	0.0678	0.0678	0.0678	0.0678	0.0678	0.0678	0.0678	0.0678	0.0678
d) Deduct: Entrant Stimulated Minutes Peak (L3a x L3c)	100	410	1	15	10	6	6	72	72	72
e) Deduct:	84	380	2	15	12	9	6	68	68	68

	Entrant Stimulated Minutes Off- Peak (L3b x L3c)											
4.	a) Market Orig. & Term. Minutes Peak (L2a + L3a - L3d)	3,974	17,049	118	1,000	753	920	390	3,035	3,035	3,035	
	b) Market Orig. & Term. Minutes Off- Peak (L2b + L3b - L3e)	5,020	18,819	161	1,180	997	1,027	594	3,775	3,775	3,775	
	c) Total Market Orig. & Term. Minutes (L4a + L4b)	8,994	35,868	279	2,179	1,750	1,947	985	6,810	6,810	6,810	
5.	a) Calculated Contribution per Minute per End (\$) (L1 / L4c)	0.0239	0.0061	0.0254	0.0127	0.0257	0.0153	0.0292	0.0336	0.0027	0.0363	
	b) 1997 Contribution Ceiling	0.0306	0.0183	0.0344	0.0237	0.0484	0.0345	0.0349	0.0352	0.0033	0.0385	
	c) Average Contribution per Minute per End (\$) (Min. of 5a and 5b)	0.0239	0.0061	0.0254	0.0127	0.0257	0.0153	0.0292	0.0336	0.0027	0.0363	
	d) Peak Contribution per Min. per End (\$) (2 x L5e)	0.0331	0.0083	0.0357	0.0174	0.0359	0.0207	0.0419	0.0465	0.0038	0.0502	
	e) Off-Peak Contribution per Min. per End (\$) (L5c / (2 - (L4b / L4c))	0.0166	0.0042	0.0179	0.0087	0.0180	0.0104	0.0209	0.0232	0.0019	0.0251	
	ultiplicative justments											
6.	DAL Surcharge	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	
7.	a) Entrant Discount Jan June 1997	85%	85%	85%	85%	85%	90%	90%	85%	85%	85%	
	b) Entrant Discount July - Dec. 1997	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	
8.	Stimulated Minutes Factor	0.9322	0.9322	0.9322	0.9322	0.9322	0.9322	0.9322	0.9322	0.9322	0.9322	
9.	a) Contribution Min. per End -	•	193 0.00	050 0.02	205 0.01	02 0.02	208 0.01	31 0.02	50 0.02°	71 0.002	22 0.0293	

	b) Contribution per Min. per End - Trunk Side (\$) Peak Jan June	0.0268	0.0067	0.0289	0.0140	0.0290	0.0177	0.0358	0.0376	0.0030	0.0406
	c) Contribution per Min. per End - Trunk Side (\$) Off- Peak Jan June	0.0134	0.0034	0.0144	0.0070	0.0145	0.0089	0.0179	0.0188	0.0015	0.0203
	d) Contribution per Min. per End - Trunk Side (\$) Average July - Dec.	0.0204	0.0053	0.0217	0.0108	0.0220	0.0131	0.0250	0.0287	0.0023	0.031
	e) Contribution per Min. per End - Trunk Side (\$) Peak July - Dec.	0.0284	0.0071	0.0306	0.0149	0.0308	0.0177	0.0358	0.0398	0.0032	0.0430
	f) Contribution per Min. per End - Trunk Side (\$) Off- Peak July - Dec.	0.0142	0.0036	0.0153	0.0074	0.0154	0.0089	0.0179	0.0199	0.0016	0.0215
10.	Discounts: Line- Side	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
11.	a) Contribution per Min. per End - Line Side (\$) Average Jan June	0.0164	0.0042	0.0174	0.0087	0.0177	0.0111	0.0213	0.0231	0.0019	0.0249
	b) Contribution per Min. per End - Line Side (\$) Peak Jan June	0.0228	0.0057	0.0245	0.0119	0.0247	0.0151	0.0305	0.0319	0.0026	0.034
	c) Contribution per Min. per End - Line Side (\$) Off-Peak Jan June	0.0114	0.0029	0.0123	0.0060	0.0123	0.0075	0.0152	0.0160	0.0013	0.017
	d) Contribution per Min. per End - Line Side (\$) Average July - Dec.	0.0174	0.0045	0.0185	0.0092	0.0187	0.0111	0.0213	0.0244	0.0020	0.0264
	e) Contribution per Min. per End - Line Side (\$) Peak July - Dec.	0.0241	0.0061	0.0260	0.0126	0.0261	0.0151	0.0305	0.0338	0.0027	0.036
	f) Contribution per Min. per End - Line Side (\$) Off-Peak July - Dec.	0.0121	0.0030	0.0130	0.0063	0.0131	0.0075	0.0152	0.0169	0.0014	0.0183
calc	ne figures may not culate due to nding										

Attachment B

<u>DEPRECIATION LIFE CHARACTERISTICS EFFECTIVE 1 JANUARY 1998</u> (ASL: Average Service Life / AYFR: Average Year of Final Retirement)

BC TEL

<u>Account</u>	Account Description	<u>Dispersion</u>	<u>ASL</u>
C221/C223	Aerial Cable Exchange/Toll	lowa R-1	18
C231/C233	Underground Cable Exchange/Toll	Iowa R-2	17
C641D	Digital SPC Switching - Local DMS	Iowa R-4	13
C641G	Digital SPC Switching - Local GTD	Iowa R-4	13
C751	Circuit Exchange/Toll	Iowa S-4	11
C872	Radio Relay - Toll	Iowa R-3	15
C914	Administrative Personal Computers	lowa L-4	6.5
C921	Motor Vehicles	Iowa L-0	12
<u>Bell</u>			
Account	Account Description	<u>Dispersion</u>	<u>ASL</u>
2215100	COE - Transmission - Deferrable Plug-ins - Analog	g Iowa S-0	7
2215200	COE - Transmission - Hardwired - Analog	Iowa S-0	10
2215300	COE - Transmission - Deferrable Plug-ins - Digital	Iowa S-1	12
2215400	COE - Transmission - Hardwired - Data/Multiplex	Iowa S-1	10
2215500	COE - Transmission - Hardwired - Fibre Optics	Iowa S-1	11
2215600	COE - Transmission - Hardwired - Digital - Other	Iowa S-2	14
2216100	COE - Transmission - Radio	Iowa R-2	10
2217500	COE - DMS - Local	Iowa R-2	13
2217600	COE - DMS - Toll	Iowa R-2	13
2218100	COE - Common Equipment	Iowa R-2	16
2314000	Station Apparatus - Coin & Booths	GM4	15
2321000	Station Connections - Outside Service Wire	Iowa R-2	20
2322000	Station Connections - Inside Wire (Single Line)	RECT	5
2421000	Aerial Cable - Metallic	Iowa S-1	21
2422000	Underground Cable - Metallic	Iowa R-2	16

2423000	Buried Cable - Metallic	Iowa R-2	20
2424000	Submarine Cable - Metallic	Iowa R-2	20
2612000	F&OE - General Purpose Computers - Telephone Plant Application	Iowa R-3	10
2613000	F&OE - General Purpose Computers - Other	GM4	5
2614000	F&OE - Office Equipment and Personal Equipmen	t Iowa S-1	6
Island Tel			
<u>Account</u>	Account Description	Dispersion	ASL/AYFR
212 00100	Buildings	R-0.5	2022
212 00308	Building Eqpt Radiotelephone	RECT	2006
221 00101	COE - DC Power	Iowa R-4	18
221 00200	COE - Main Distribution Frame (MDF)	Iowa R-2	20
221 34779	Digital Switching - TOPS	Iowa S-1	11
221 65773	Digital Switching - Local	lowa L-5	13
221 42574	Circuit Exchange - Other	Iowa R-2	13
221 42590	Circuit Exchange - PIMS Other	Iowa R-2	13
221 45577	Circuit - Digital Multiplex	Iowa R-2	9.5
231 11289	Station Apparatus Telephone & Misc Disposition Units:		
	Telephone & Miscellaneous		2002
	Electronic Telephone Sets		2002
	Electronic SL1 Telephone Sets		2002
	Electronic Key Telephone Sets		2002
	Electronic Mitel Telephone Sets		2002
	Call Management Sets	Iowa R-3	4
242 10023	Aerial Cable - Exchange	lowa L-2	20
	Cable Items		
	Non-Cable Items - Vintaged		

	Non-Cable Items - Non-Vintaged		
242 10429	Aerial Cable - Fibre Optics	Iowa L-1	18
242 30658	Buried Copper Cable - Exchange	Iowa S-1	19
	Cable Items		
	Non-Cable Items - Vintaged		
	Non-Cable Items - Non-Vintaged		
261 00016	Furniture	Iowa R-2.5	19
261 00040	Microcomputers	Iowa R-5	7
<u>MTS</u>			
Account	Account Description	<u>Dispersion</u>	ASL/AYFR
30C	Real Estate - Towers	GM5	2005
107C	Main Distribution Frame (MDF)	GM5	20
87C	Digital Switching - Exchange	GM4	12
687C	Digital Switching - Signal Transfer Points	GM4	12
617C	Operator Services Position System	GM5	6
428C	Coin Telephone	GM5	8
5C	Underground Cable - Exchange	GM3	16
95C	Buried Wire	GM2	12
261.1-03	Word Processors & PCs	GM5	5
261.2-26C, 226C	General Purpose Computers - Plant Applications	GM5	8
261.3-01	General Purpose Computers - Other	GM5	6
MT&T			
Account	Account Description	Dispersion	ASL/AYFR
212 00100	Buildings:		
	Wood	R-0.5	2020

	Small Fire Resistant (0-699 sq. meters)	L-0	2014
	Large Fire Resistant (700 + sq. meters)	B1	2023
	Office and Work Centres	O1	2015
212 00308	Building Eqpt Radiotelephone	RECT	2001
201 00004	Digital Switching, Capital Lease - Local	Iowa R-5	13
221 00101	COE - DC Power	Iowa R-4	18
221 00200	COE Main Distribution Frame (MDF)	Iowa R-2	20
221 65773	Digital Switching - Local:		
	Large Digital Switches	Iowa R-5	13
	Remote Switching Centres	lowa L-3	15
221 65807	Digital Switching Local PIMS	Iowa R-5	13
221 66979	Digital Switching - Toll	lowa S-1	10
221 69114	Digital Switching - E911 Tandem	RECT	2000
221 42574	Circuit Exchange Other	Iowa R-1	13
221 42590	Circuit Exchange - PIMS Other	Iowa R-1	13
221 45577	Circuit - Digital Multiplex	Iowa R-2	11
221 46591	Circuit Fibre Optic - PIMS	Iowa R-5	10
231 11289	Station Apparatus Telephone and Misc Disposition Units:		
	Old Technology Sets		2002
	Electronic Telephone Sets		2002
	Electronic SL1 Telephone Sets		2002
	Accessories		2002
	Other Equipment		2002
	Call Management Sets	Iowa R-3	4
231 11297	Station Apparatus Coin and Other - Disposition Units:		
	Coin Sets	Iowa R-1.5	15

	Booths	Iowa S-2	15
	Millenium Sets	Iowa R-1.5	15
231 31683	Station Apparatus - Data - Disposition Units	Iowa S-6	6
231 32681	Station Apparatus - Data - Other Items	Iowa S-6	6
231 96884	Station Apparatus - E911 Disposition Units	RECT	7
232 80811	Station Connections - Outside Wire	Iowa R-1.5	19
242 10023	Aerial Cable - Exchange	Iowa R-1.5	21
	Cable Items		
	Non-Cable Items - Vintaged		
	Non-Cable Items - Non-Vintaged		
242 10429	Aerial Cable - Fibre Optics	lowa L-1	18
242 10528	Aerial Cable - Fibre Optics - Exchange	lowa L-1	18
242 20055	Underground Copper Cable - Exchange:	Iowa R-2.5	20
	Cable Items		
	Non-Cable Items - Vintaged		
	Non-Cable Items - Non-Vintaged		
242 20451	Underground Cable - Fibre Optics - CONS	Iowa R-2.5	18
242 20550	Underground Cable - Fibre Optics - Exchange	Iowa R-2.5	18
242 30658	Buried Copper Cable - Exchange:	lowa L-2	21
	Cable Items		
	Non-Cable Items - Vintaged		
	Non-Cable Items - Non-Vintaged		
261 00016	Furniture	Iowa R-2.5	19
261 00040	Microcomputers	Iowa R-5	7

<u>NBTel</u>

Account	Account Description	<u>Dispersion</u>	<u>ASL</u>
221-700-400, 401	Digital Switching (DMS)	Iowa R-1	13
221-500-300	Circuit - Exchange	lowa L-3	12
221-500-600	Circuit - Digital Multiplexing	lowa L-4	11
231-200-120	Booths	GM4	13
232-000-700	Station Connections - Outside Wire	Iowa S-1	17
231-000-100	Premium Business	GM4	4
242-100-111	Aerial Cable (Copper)	lowa L-1	18
242-200-121	Underground Cable (Copper)	lowa L-2	16
242-300-131	Buried Cable (Copper)	Iowa R-1	16
244-000-000	Underground Conduit	GM5	55
261-300-310	Integrated Communications Network (ICN)	Iowa R-4	5
261-300-100	General Purpose Computers - Other	Iowa R-4	6
264-300-000	Plow Trains & Snowmobiles	lowa L-3	19
264-500-000	Tools	GM1	15
264-500-000	Trailers	Iowa R-2	18
264-500-010	Test Sets - Non Central Office	GM 1	15
<u>NewTel</u>			
<u>Account</u>	Account Description	Dispersion	<u>ASL</u>
221.0.005	Circuit - Toll	lowa R-1	12
221.0.005	Circuit - Exchange	lowa R-1	12
221.0.005	Analogue MUX	lowa S-2	12
221.0.006	Radio - Toll	lowa R-3	15
221.0.006	Radio - Exchange	Iowa R-3	15
221.0.006	Radio - Mobile Telephone	Iowa R-3	15

221.0.570	Digital Switching	Iowa R-2	14
232.0.203	Station Connections - Outside Wire	lowa O-2	21
232.0.203	Station Connections - Outside Wire Rearrangements	lowa O-2	21
242.0.110	Aerial Cable - Exchange	Iowa R-1	20
242.0.120	Aerial Cable - Toll	Iowa R-1	20
242.0.210	Underground Cable - Exchange	Iowa R-2	21
242.0.220	Underground Cable - Toll	Iowa R-2	21
242.0.310	Buried Cable - Exchange	Iowa R-2	22
242.0.320	Buried Cable - Toll	Iowa R-2	22
242.0.410	Submarine Cable - Copper	Iowa S-1	19
<u>TCI</u>			
Account	Account Description	<u>Dispersion</u>	<u>ASL</u>
887C	Switching Electronic Digital - Intertoll	Iowa R-1.5	10
5C	Underground Cable - Exchange	Iowa R-1.5	18
65C	Buried Cable - Exchange	Iowa R-2	22

Attachment C

Calculation of Contribution - 1998

	BC TEL	Bell	Island Tel	MTS	MT&T	NBTel	NewTel	TCI	TCEI	TCI/TCEI
										Blended
Contribution Requirement (\$ Millions)										
a) Contribution Requirement	179.9	191.0	5.6	24.9	35.0	25.5	19.7	194.9	18.5	213.4
b) WSP Surcharge: Order 97-590	2.5	2.3	0.0	0.3	0.3	0.3	0.1	3.3	1.3	4.6
c) Revised	177.3	188.7	5.6	24.6	34.7	25.2	19.6	191.6	17.2	208.8

Toll Minutes Calculation (Millions)										
a) Telco Orig. 2. & Term. Minutes Peak	2,616	11,589	99	804	622	838	309	2,079	2,079	2,079
b) Telco Orig. & Term. Minutes Off- Peak	3,901	13,813	139	988	836	917	510	2,877	2,877	2,877
3. a) Entrant Minutes Peak	1,496	6,111	21	221	146	94	90	1,060	1,060	1,060
b) Entrant Minutes Off- Peak	1,250	5,657	25	219	180	126	95	1,009	1,009	1,009
c) Entrant Stimulated Minutes Ratio to Total Minutes	0.0678	0.0678	0.0678	0.0678	0.0678	0.0000	0.0000	0.0678	0.0678	0.0678
d) Deduct: Entrant Stimulated Minutes Peak (L3a x L3c)	100	410	1	15	10	0	0	72	72	72
e) Deduct: Entrant Stimulated Minutes Off- Peak (L3b x L3c)	84	380	2	15	12	0	0	68	68	68
a) Market Orig. & Term. 4. Minutes Peak (L2a + L3a - L3d)	4,012	17,290	119	1,010	758	933	399	3,067	3,067	3,067
b) Market Orig. & Term. Minutes Off- Peak (L2b + L3b - L3e)	5,067	19,090	162	1,192	1,004	1,043	605	3,818	3,818	3,818
c) Total Market Orig. & Term. Minutes (L4a + L4b)	9,079	36,380	281	2,202	1,762	1,975	1,004	6,885	6,885	6,885
a) Average Contribution 5. per Minute per End (\$) (L1c / L4c)	0.0195	0.0052	0.0198	0.0112	0.0197	0.0127	0.0195	0.0278	0.0025	0.0303
b) Peak Contribution per Min. per End (\$) (2 x L5c)	0.0271	0.0070	0.0279	0.0153	0.0276	0.0173	0.0280	0.0385	0.0035	0.0420

	c) Off-Peak Contribution per Min. per End (\$) (L5a / (2 - (L4b / L4c))	0.0	0135	0.0	0035	0.0)139	0.0	0077	0.0	0138	0.0	0087	0.	0140	0.0	0193	0.0	0017	0.0210
	Itiplicative ustments																			
6.	DAL Surcharge		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02		1.02	1.02
	Entrant Discount		90%		90%	Ç	90%		90%		90%	1	00%		100%		90%		90%	90%
	Stimulated Minutes Factor	0.9	9322	0.9	9322	0.9	322	0.9	9322	0.9	9322	1.0	0000	1.	.0000	0.9	9322	0.	9322	0.9322
9.	a) Contribution pounding per End - Trunk Side (\$) Average	er	0.01	67	0.004	44	0.01	70	0.00	96	0.01	69	0.0	130	0.019	99	0.023	38	0.0021	0.0260
	b) Contribution po Min. per End - Trunk Side (\$) Peak	er	0.02	32	0.006	60	0.02	:38	0.01	31	0.02	36	0.0	177	0.028	35	0.032	29	0.0030	0.0359
	c) Contribution po Min. per End - Trunk Side (\$) Or Peak		0.01	16	0.003	30	0.01	19	0.00	66	0.01	18	0.00	880	0.014	13	0.016	35	0.0015	0.0180
10.	Discounts: Line- Side		85	5%	85	%	85	5%	8	5%	85	5%	10	0%	100	%	85	%	85%	85%
11.	a) Contribution pour Min. per End - Liu Side (\$) Average	ne	0.01	42	0.003	38	0.01	44	0.00	81	0.01	43	0.0	130	0.019	99	0.020)2	0.0018	0.0221
	b) Contribution po Min. per End - Lin Side (\$) Peak		0.01	97	0.00	51	0.02	:03	0.01	12	0.02	:00	0.0	177	0.028	35	0.028	30	0.0025	0.0305
	c) Contribution po Min. per End - Lii Side (\$) Off-Peak	ne	0.00	99	0.002	26	0.01	01	0.00	56	0.01	00	0.00	880	0.014	13	0.014	40	0.0013	0.0153
cal	me figures may no culate due to nding	ot																		

Attachment D

$\frac{\text{UTILITY SEGMENT SERVICE ASSIGNMENT}}{\text{BC TEL}}$

BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
1005	32	Exchange Rates - Residence
1005	102	Exchange Line Mileage - Voice
1005	102-A	Exchange Line Mileage - Data
1005	108	Locality Rate Area - Voice
1005	108-A	Locality Rate Area - Data
1005	110	Multi-Element Plan (MEP) Service Charges - Residence
1005	155	Telephone Instruments - Partyline Telephone Rentals
1005	255	Exchange Area Radiotelephone Service (EARS)

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
1005	32	Exchange Rates - Business
1005	110	Multi-Element Plan (MEP) Service Charges - Business
1005	255	Exchange Area Radiotelephone Service (EARS)

TARIFF	ITEM NO.	<u>DESCRIPTION</u>
1005	20	Not Sufficient Funds (NSF) Cheque Charge
1005	22	Tariff Subscription Service
1005	104	Extension Line Mileage - Voice
1005	104-A	Extension Line Mileage - Data
1005	106	Interexchange Line Mileage - Voice
1005	106-A	Interexchange Line Mileage - Data
1005	115	Public Coin Telephone Service
1005	117	Semi-Public Coin Telephone Service
1005	119	Toll Station Service
1005	120	Centralized Reporting Service (Dial 911)
1005	122	Foreign Central Office Service - Voice
1005	122-A	Foreign Central Office Service - Data
1005	124	Foreign Exchange Service - Voice
1005	124-A	Foreign Exchange Service - Data
1005	126	Direct-In-Dial Service (DID)
1005	132	Service To Ships and Trains
1005	136	Answer Supervision (AS)
1005	145 F3	Directory Listings - Unlisted Numbers
1005	146 B4	Operator Services - Local Directory Assistance (LDA)
1005	146 B5	Operator Services - Local Operator-Assisted Dialing Service
1005	153	Optional Hunting Arrangement
1005	155 D3	Telephone Instruments - Telephone Set Loss Charge
1005	157	Suspension of Service
1005	164	Dual Tone Multi-Frequency (DTMF)/Multi-Frequency (MF) Services

1005	165	Transfer of Calls
1005	190	Private Branch Exchange Terminal Equipment
1005	192	Multiline Terminal Equipment
1005	236	VHF Mobile Stations (Mobiltel)
1005	238	VHF Marine Public Radiotelephone Stations
1005	242	Mobile and Ship Stations - MF/HF
1005	243	Air-Ground Radiotelephone Service - UHF
1005	250	Radiotelephone Service Charges
1005	252	Radio Toll Station Service - Business
1005	254	Radio Toll Station Service - Residential
1005	256	Local Message Rate
1005	258	Long Distance Message Rate
1005	261	Remote Radiotelephone Service
1005	370	Data Access System
1005	395	Toll Access Service
1005	400	Private Line Service - Voice/Local Channels
1005	400-A	Private Line Service - Data/Local Channels
1005	422	Emergency Reporting and Alerting Systems
1005	440	Digital Channel Service
1005	465	Microlink Services
1005	470	Megalink Service
1005	490	DataDial Service
1005	495	Digital Exchange Access
7400	115	Sale of Tariffs
7400	301	Digital Network Access (DNA)
7400	308	Access Special Routing

UNCAPPED SERVICES

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
1005	15	Late Payment Charge
1005	42-B	Centrex - CO
1005	43	Centrex
1005	97	Construction Charges - Customer's Premises
1005	143	SmartTouch Services
1005	143-A	SmartTouch Supplemental Services
1005	144	Prestige Numbers Service
1005	145	Directory Listings
1005	146 B1	Operator Services - Automated Directory Assistance Call Completion (ADACC)
1005	152	Off-Hook Service
1005	154	Call Info Service
1005	159	Tie Trunk and Tie Line Service
1005	330	Canada & U.S. Wide Area Telephone Service (WATS)

1005	380	Voicecom
1005	406	Program Transmission Service
1005	410-A	Distribution Services
1005	414	Teletype Service
1005	420	Wired-Music Transmission Service
1020		All Special Assembly Tariff Items listed in the Company's Phase III Manual
1027	1	Supplemental Equipment and Services
1286	1108	Extended Exchange Service from Revelstoke to Glacier National Park
7400	200	Advantage Vnet Services
7400	204	Advantage Toll-Free Entry
7400	222	Advantage Outbound Service
7400	381	Enhanced International Private Line Service
7400	401	Dataroute Service
7400	515	Advantage 900
7400	703	Program Channels - C.B.C. Radio
7400	900	Electronic Transfer Capability for Centrex

COMPETITOR SERVICES

TARIFF	ITEM NO.	DESCRIPTION
1005	23	Directory File Service
1005	24	Resale and Sharing
1005	146 B3	Operator Services - Line Verification/Interruption Service
1005	196	Terminal Network Access (TNA) for Local Service
1005	197	Switched Access Types for Conventional Public Mobile Radio Systems
1005	197-A	Wireless Access Service
1005	197-B	Public Cordless Telephone Access Service (PCTAS)
1005	206	Integrated Voice Messaging Service (IVMS) Access
1005	207	Network Portability Access Service (NPAS)
1005	364	Support Structure Service
1017		Tariff for Interconnection with Interexchange Carriers (Other than Contribution Charges)
1019	4	Tariff for Interconnection with Telesat Canada
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-Location Arrangements for Interconnecting Canadian Carriers
7400	700	Co-Located Customer Provided Equipment in a Telephone Company (Telco) Central-Office

SERVICES WITH FROZEN RATES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
1005	14	Payment of Charges - Installment Payment Plan
1005	32	Exchange Rates - BC TEL Message Relay Centre
1005	120-A	Enhanced Centralized Reporting Service (Dial E-911)

1005	143-A	SmartTouch Supplemental Services - Automatic Call Display Blocking
1005	161	Call Guardian
1017	80	Contribution Charges
7400	515	Advantage 900 - 900 Call Denial/Blocking

<u>Bell</u>

BASIC RESIDENTIAL LOCAL SERVICE

TARIFF	ITEM NO.	DESCRIPTION
6716	70.1	Rate Schedules for Primary Exchange (Local) Service - (Residence)
6716	100.1	Work-Function Structure - (Residence)
6716	940.1	Extra-Exchange Distance Charges - (Residence)
6716	1430.1	Exchange Radio-Telephone Service - (Residence)
6716	2150.1	Push-Button Dialing - (Residence)
6716	2300.1	Telephone Station Equipment 500 - Type Telephones

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

6716	70.2	Rate Schedules for Primary Exchange (Local) Service - (Business)
6716	100.2	Work-Function Structure - (Business)
6716	940.2	Extra-Exchange Distance Charges - (Business)
6716	1030	Short-Term Service
6716	1430.2	Exchange Radio-Telephone Service - (Business)
6716	2150.2	Push-Button Dialing - (Business)
6716	4680.8	Information - System Access Line

6716	26	Sale of Bell Canada Tariffs
6716	28	NSF Cheque Charge - Utility Portion
6716	29	Telephone Set Loss Charge
6716	70.6	Rate Schedules for Primary Exchange (Local) Service - (Equivalency)
6716	85	Operator Services - Utility Portion
6716	240.6	Monthly Rates for Extra Listings and for the Omission of a listing from the Directory - (Omission)
6716	290	Public Telephone Service
6716	292	Inmate Service
6716	330	Semi-Public Telephone Contract Arrangements
6716	430	PBX Service - General

6716	500	Inward Dialing
6716	950	Local Channels - Utility Portion
6716	1080	Service on Stationary Boats, Ships, Trailers and Trains Rates and Charges
6716	1160	Suspension of Service - Charges
6716	1190	Service - System Service - General
6716	1230	Service - System Service - Rates
6716	1380	Telephone-Type Alerting System
6716	1385	Individual-Line Type Reporting System
6716	1435	Regional Communication Service
6716	1440	Remote Radio Service (HF Radio)
6716	2205	Suppressed Ringing Service
6716	4040	Intercommunicating Channels with Automatic or Manual Signalling
6716	4210	Diagnostic Maintenance Charge
6716	4480	Tie Trunks
6716	4685	Datalink Service - Utility Portion
6716	5010	Digital Channel Service - Utility Portion
6716	5200	Megalink Service
6716	5201	Megalink Service (rate restructure)
6716	5210	Microlink Services
6716	5300	Digital Exchange Access Service
7396	A-0016	Central-Office Line Transfer
7396	A-0034	Line Transfer
7396	A-2508	Automatic Dialer for Central Office Line or P.B.X Extension Line
7396	A-3552	Multi-Line Transfer Key
7396	A-4016	Overflow Meter for Central-Office Lines
7396	A-4065	Monitoring on P.B.X. Attendant Position
7396	B-0756	3-Digit Dialing Arrangement
7396	B-0795	Diversion of Dial Access to WATS and Foreign-Exchange
7396	B-0800	Add-On Arrangement - Attendant's Console
7396	B-0820	Second Virtual DDD Access Group
7396	B-1032	Tie Trunk Restriction
7396	B-1033	Tie Trunk Toll Diversion
7396	B-2500	Individual-Line Type Systems-Modification
7396	B-2502	Interface to Customer-Provided Radio System
7396	B-2504	Delayed Ringing
7396	B-2505	Telephone-Type Alerting Systems - Miscellaneous Arrangements
7396	B-2510	Emergency Loud-Ringing Bell System
7396	B-2513	Centralized Emergency-Reporting Systems - Misc. Arrangements
7396	B-2514	Bell and Lights Test and False Alarm Notification

7396	B-3506	Modified 12 Button Touch-Tone Telephone
7396	B-3509	Termination of Trunk Line
7396	B-3510	Bridging 2-Wire Circuit from Console to 4-Wire Telephones
7396	B-3519	Intercept on Foreign-Exchange Lines
7396	B-3520	Programmed Multi-Address Sender
7396	B-3524	Audible Tone on Access Lines
7396	B-4505	Sampling on Foreign Exchange Line
7396	B-4506	Activation of an Additional Network Routing Capability
7396	B-4507	Trunk Line Multiple From a Centrex Dial P.B.X. to a Push-Button Telephone
7396	B-4508	Inward Dialing
7396	B-4509	Information (411) & Repair Service (611) Denial
7396	B-4510	Occasional Use Megalink
7396	B-4512	Incoming Call Intercept - Foreign Exchange Trunk
7396	B-4515	Cut off on Disconnect (COD)
7396	B-4516	Rerouting of Calls from DID to LDN Trunks
7396	B-4520	Bridged Connection with Break-Hunt Arrangement
7396	B-4522	Multi-Frequency (MF) Signalling
7396	B-4523	Answer Supervision on Analogue Lines & Trunks
7396	B-4525	Temporary Call Forwarding
7396	B-4528	Trunk Line Transfer from One PBX System to Another
7396	B-4530	Call Forward
7396	B-4531	Bridged Central-Office Line with Foreign-Exchange Line
7396	B-4538	Digital Termination of Local Tie Trunks
7396	B-4546	X.25 Memotec Pads
7396	B-4547	Trunk Modification - Hotel/ Motel Hospital or DND Barrack Block
7396	B-4548	Line Transfer Arrangement
7396	D-0010	Channel Conditioning Arrangements - Utility Portion
7396	D-0011	Loop-Back Arrangements - Utility
7396	D-0038	Digital Type Data Only Facilities - Utility Portion
7396	D-0039	Digital Type Data Only Facilities - Utility Portion
7396	D-0535	Channel Emergency Routing
7396	E-0058	Ship-to-Shore System - Transport Canada Coast Guard
7396	E-0522	Dial Access to One Way Tone and Voice Radio-Paging System
7396	E-1000	Radio Extension Service Option A
7396	E-1014	Two Line Access-RES Option C
7396	E-1015	Private Mobile System for Prime Minister of Canada
7396	E-1016	Siren Control from Mobile Unit
7396	F-1000	Channels Provided to the CN & CP
1000	1 - 1000	Chamboo i fortaca to the off a of

7396	F-1004	Traffic Control Channels
7396	F-1300	Connection of Independent Telephone Company Channels
7396	F-1500	Electric Power Provided on a Signal Channel
7396	F-1501	Emergency Power Equipment
7396	F-1505	Conditioning on Signal Channels - Utility Portion
7396	F-1509	Isolation Panels
7396	F-1522	Signal Channel - Signal Boosting Repeating Arrangement
7396	F-1524	Impedance Matching Arrangement Signal Channels
7396	G-0051	On-Air Conference Circuits
7396	G-0052	Conditioning of Voice Channels for CPE - Utility Portion
7396	G-0061	1.544 Mbps Bipolar Clock Source
7396	G-0100	Echo Canceller
7396	G-0143	Recorder-Connector Manual Bridge Arrangement
7396	G-0151	Recorder-Connector Automatic Bridge Arrangement
7396	G-0168	Connecting Equipment Customer-Provided Radio System & Exchange & Message Toll Service
7396	G-0171	Multi-Line Jack for Connection of Terminal Equipment
7400	301	Digital Network Access - Utility Portion
7400	308	Access Special Routing

UNCAPPED SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
6716	25	Payment of Charges - Utility Portion
6716	73	Telephone Number Services
6716	75	Connection of Primary Exchange Service to Inside Wire and Jacks
6716	110	Other than the Work Function Structure - Utility Portion
6716	160	Trench Provisioning
6716	240	Monthly Rates for Extra Listings and for the Omission of a listing from the Directory - (Extra Listing)
6716	295	Repertory Dialer Service
6716	310	Toll Telephones
6716	450	P.B.X. Service - Centrex I and II Systems - Utility Portion
6716	460	Centrex I and II Extension Lines and Telephones
6716	670	PSTN Connection, Centrex

6716	675	Centrex III Rates & Charges - Utility Portion
6716	1100	Foreign-Exchange Service - General
6716	1260	Toll Terminals - Rates
6716	2070	Jack and Plug Arrangements
6716	2165	Calling Features - Utility Portion
6716	2170	Name That Number
6716	2175	Customer Name and Address
6716	2180	Primeline Executive - Utility Portion
6716	3260	Remote Call Forwarding Service
6716	4160	Mobile-Telephone Service - Rates and Charges
6716	4680.3	Multicom Service - Utility Portion
6716	4750	Voicecom Service - Utility Portion
6716	4970	976 Service
7396	A-2035	Busy Lamp Control
7396	A-3501	Announcement Arrangement on Centrex III
7396	A-3560	Interalia Digital Announcement Unit
7396	A-4013	Neutralizing & Isolation Transformers
7396	A-4055	Centrex Dial PBX Tone In Lieu of Bell
7396	A-4061	Headset Jack & Switch For Centrex III Electronic Business Set
7396	A-4097	Special Toll Telephone
7396	B-0750	Extension Lines Restricted From Outgoing Message Toll Service
7396	B-0751	IVMS Voice Mailbox
7396	B-0752	Access Code Hands-Free Operation
7396	B-0755	Voice Mailbox Arrangement - Utility Portion
7396	B-0757	Tie Trunk Control Arrangement
7396	B-0758	Multiple Wire Centre Centrex III System - C.B.C.
7396	B-0761	Analogue Recorder Interface
7396	B-0762	Extension to Ottawa/Hull EEWD Service
7396	B-0763	Call Recording on a Centrex Meridian Business Set (MBS)
7396	B-0764	Lightweight Head Set for Centrex
7396	B-0765	Attendant Camp-On
7396	B-0766	Centrex Service Outside an Exchange
7396	B-0769	ISDN PRI Signalling on Centrex III or Dedicated DS-1 Access to Advantage VNET
7396	B-0770	Splitting Feature
7396	B-0772	Termination of a Meridian 1 2500-Type Directory Number on a Centrex III Electronic Business Set
7396	B-0773	Centrex III to CBE Call Transfer
7396	B-0774	ISDN PRI Signalling on Centrex with One Way Calling Line ID

7396	B-0776	Network Automatic Call Distribution (ACD) on Centrex
7396	B-0777	Alarm System on Centrex
7396	B-0778	Digital Signal Indicator on Centrex III
7396	B-0779	Recording Interface on Centrex III
7396	B-0781	Trunk Line Transfer Arrangement - Different Systems
7396	B-0782	Simultaneous Call Forwarding Centrex
7396	B-0784	Three Digit Emergency Number - Centrex III
7396	B-0785	Extended Product Support
7396	B-0786	Standby Disaster - Centrex III
7396	B-0789	Access to Automatic Route Selection
7396	B-0790	Tone to Pulse Converter
7396	B-0792	Additional Transparency
7396	B-0794	Supervisory Lamp Cabinet
7396	B-0801	SMDR Processing - Centrex III
7396	B-0802	Tie Trunk Routing
7396	B-0803	Sub-Authorization Codes for Centrex III
7396	B-0804	Local Dialing Plans on Centrex III
7396	B-0805	Speed Call List on Centrex III
7396	B-0806	Intercept Voice Response - Centrex
7396	B-0808	Dial Access To Paging and Announcing
7396	B-0809	Network Management System Access
7396	B-0810	Virtual Facility Group (VFG)
7396	B-0817	Remote Line Concentrator Module
7396	B-0818	Range Extension
7396	B-0819	Trunk Verification - Designated Station
7396	B-0821	Centrex Loop Extender Cards
7396	B-0823	Broadband Interface
7396	B-0824	Call Display on Small Centrex III
7396	B-0825	Consolidation Management System (CMS)
7396	B-0826	PBX Centrex Interconnection
7396	B-0827	Two-Way PBX/Centrex Interconnection
7396	B-0905	Special PBX System - Centrex
7396	B-1004	Tie Trunk Conditioning
7396	B-1042	Network Access by Means of a 3-Digit Code on Centrex II
7396	B-1506	Modified Night Answering Arrangements for Centrex
7396	B-1516	Off-Premises Trunk Answer any Station Night Connection for P.A.S.S. 300, SX-200, SX-20, SD-192, 900 & SL-1 Dial P.B.X.
7396	B-2508	Emergency Telephone - Alerting System
7396	B-2506 B-2511	Special Emergency Reporting System - Tellabs
7396	B-2511	Wescom 931 Emergency Communications System
1 330	D-2010	Western 301 Emergency Communications System

7396	B-2526	Emergency Alerting System
7396	B-3500	Telecommunication Arrangements for the Canadian Forces Communications
7390	Б-3300	Command - Utility Portion
7396	B-3501	Special Telephones & Station Equipment - Canadian Armed Forces
7396	B-3502	Pre-Set Conference Arrangement - Utility Portion
7396	B-3507	Trunk Busy Indicator
7396	B-3516	Call Detail Recording System
7396	B-4500	Equivalent Service Modifications
7396	B-4503	Switched 56 Kbps Service
7396	B-4511	Billed Number Screening (BNS)
7396	B-4514	Inward Route Labeller
7396	B-4517	Bridging Arrangement on Point-to-Point Data Circuit
7396	B-4518	Ring Back Option
7396	B-4521	Digital Access to the Public Switched Telephone Network
7396	B-4524	Permanent Call Forward
7396	B-4532	DMS Translations for International Connectivity
7396	B-4534	DMS Software Load-Message Waiting Indication
7396	B-4537	Message Detail Recording Service
7396	B-4545	Five Digit Dialing - Centrex III
7396	C-0534	Multipoint Bridge
7396	D-0013	Local High Speed Service
7396	D-0017	Microwave System - 45 Mbps
7396	D-0024	OC 12 Access
7396	D-0032	Channelizing Feature
7396	D-0033	Channel Service Unit/Data Service Unit (CSU/DSU)
7396	D-0037	Local Digital Dedicated Voice Channels
7396	D-0044	64 Kbps Channel - Utility Portion
7396	D-0058	Digital Transmission Facilities 1.544 Megabits a Second - Utility Portion
7396	D-0060	Digital Transmission Facilities 1.544 Mbps - Utility Portion
7396	D- 0061	Radio Facilities
7396	D- 0062	DS-3 Protection Channel
7396	D- 0063	Digital Transmission Facilities 1.544 Mbps
7396	D- 0064	Megastream Extension
7396	D- 0067	Digital Transmission Facilities DS-1
7396	D- 0068	DSX-1 Panel

7396	D- 0069	56 Kbps Data Channels - Utility Portion	
7396	D- 0072	Digital Transmission Facilities	
7396	D- 0077	Digital Transmission Facilities Unchannelized Local DS-3 Access - Utility Portion	
7396	D- 0100	Alternate Routing of Facilities - Utility Portion	
7396	D- 0602	Analogue to Digital Converter	
7396	D- 0605	Channel Banks	
7396	D- 1009	Primary Access Aperture II System	
7396	E- 1032	Radio Channel Bridge	
7396	F- 1100	Fibre Optic Transmission Systems - Utility Portion	
7396	G- 0099	Centrex III Console Recording	
7396	G- 0164	Centrex/PABX Tie Trunk Interface to a CPE Paging System	
7396	G- 0194	Teladapt Jacks	
7396	G- 0220	Administration Charges associated with the Flow Through Billing Process	
7396	G- 0230	Maintenance of Customer-Provided Equipment - Utility Portion	
7400	224	Switched Call Completion - Utility Portion	
7400	225	Advantage Long Distance Plan - Utility Portion	
7400	250	Advantage Toll Services - Utility Portion	
7400	400	Pospac - Utility Portion	
7400	401	Dataroute Service - Utility Portion	
7400	404	Full-Time Local Broadcast-Quality Video Transmission Channel Service	
7400	505	Public Dial Access - Datapac - Utility Portion	
7400	505.11	Datapac Outdial Arrangement - Utility Portion	
7400	515	Advantage 900 - Utility Portion	
7400	900	Electronic Transfer Capability for Centrex	
7515	350.1	Service for the Government of Canada in Ottawa/Hull - Utility Portion	

COMPETITOR SERVICES

<u>TARIFF</u>	<u>IT</u>	EM NO.	<u>DESCRIPTION</u>
6716	24	Resale & S	Sharing

6716	26	Sale of Bell Canada Directory Files
6716	1985	Network Portability Access Service
6716	1990	Telephone Number Access Service - Utility Portion
6716	4190	Switched Network Access for Radio Paging System Operators - Utility Portion
6716	4195	Switched Network Access for Conventional Radio System Operators and Private Mobile System Operators - Utility Portion
6716	4698	Managed Internet Protocol Service (MIPS)
6716	4695	Internet Service Provider (ISP) Link Service
6716	4910	Partial Cable-Distribution System
6716	4920	Use of Support Structures
7396	B- 4501	Conversion of Sprint's Interconnecting Circuits from MF to CCS7
7396	B- 4502	Changes to CCS7 Connections
7396	B- 4504	Conversion of CAM-NET's Interconnecting Circuits from MF to CCS7
7396	B- 4551	Interim Trunk Side Access Arrangement for Unitel
7396	G-0192	Co-Location for Interconnecting Carrier
7396	G-0193	Central-Office Located Customer-Provided Equipment
7396	G-0195	Central Office Located Customer-Provided Equipment - Utility Portion
7396	G-0204	Escort Service associated with CPE in the CO
7396	G-0205	Central-Office Located Customer- Provided Equipment - Utility Portion
7396	G-0250	Cellular Access Service Type I
7396	G-0252	Cellular Access Service Types II & III
7396	G-0253	Directory Information for Wireless Service Operators (WSO)
7396	G-0260	Telephone Circuit Protection
7396	G-0310	Call Originator Billing Market Trial - Utility Portion
7400	206	Seven Digit Single Number Access for Alternate Service Providers
7400	636	Co-Location Arrangements for Interconnecting Canadian Carriers
7400	700	Co-Located Customer Provided Equipment in a Telephone Company (Telco) Central-Office
7400	704	Mobile Satellite Access Service - Utility Portion
7400	707	Digital Packet Network Equipment Co-Location
7511		Tariff for Interconnection with the Equipment and Facilities of Telesat Canada
7516		Tariff for Interconnection with Interexchange Carriers (Other than Contribution Charges)
7516	40	Interconnecting Circuits with Trunk Side Access
7516	70	800 Carrier Access Multi-Carrier Selection Capability
7516	80	Network Announcements for Customers of Disconnected IXCs with Feature Group D Service
7516	85	Bulk Transfer of a Customer Base Between IXCs having Feature Group D Service

7516	200	Customer Information Reports
7516	300	Advanced Intelligent Network (AIN) Interconnection

SERVICES WITH FROZEN RATES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
6716	24.1	Resale & Sharing - Contribution Charges
6716	70.4	Rate Schedules for Primary Exchange (Local) Service - (Bell Relay)
6716	82	Toll Restriction
6716	86	Call Display Blocking
6716	90	Partial Payment Option
6716	1395	9-1-1 Emergency-Reporting Service
6716	1400	9-1-1 Public Emergency Reporting Service (PERS)
6716	2200	Call Blocking Service
7396	B-2516	Custom-Designed 911 Arrangement Metropolitan Toronto
7396	B-2518	Custom-Designed 911 Arrangement Dunnville Fire Department
7396	B-2521	Custom-Designed 911 Arrangement Communauté Urbaine de Montréal
7396	B-2522	Enhanced 911 Arrangements
7396	B-2523	Basic 911 System
7396	B-2524	Custom Designed Enhanced 911 Arrangements
7516	50	Contribution Charges
NEW SERVIC	<u>ES</u>	

<u>TARIFF</u>	<u>ITEM NO.</u>	<u>DESCRIPTION</u>
6716	2185	Bell Express Service - Health Care
6716	5400	Asymetric Digital Subscriber Line (ADSL) Access Service - Utility Portion
7400	909	Card Swipe Access

Island Tel

BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
11001	280 A	Network Exchange Service Single Line - Residence
11001	365.1	Service Charges - Residence Single Line
11001	440	One Party Mileage - Residence
11001	1510	Party Line Telephone Set

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

TARIFF ITEM NO. DESCRIPTION

11001	365.1	Service Charges - Business Single Line
11001	365.3	Service Charges - Business Multiline
11001	440	One Party Mileage - Business
11001	720	Network Exchange Service Multiline
11001	770	Joint User Service
11001	280 B	Network Exchange Service Single Line - Business
11001	300.2	Short Term Service

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	301	Digital Network Access Service
7400	308	Access Special Routing
11001	5	Sale of Company Tariffs
11001	365.2	Service Charges (Microlink)
11001	385 A	Labour Rates - Residence
11001	385 B	Labour Rates - Business
11001	391	Set Loss Charge
11001	392	NSF Cheque Charges
11001	400	Temporary Discontinuance of Service
11001	450	Exchange Private Line Mileage
11001	460	Extension Line Mileage
11001	470	Private Property Circuit Mileage
11001	660	Off Premises Extension
11001	500.2	Public Telephone Service
11001	500.3	Semi-Public Telephone Service
11001	660.3	OPX
11001	700	Hotel Services
11001	766	Direct In Dialing Service
11001	775	Hospital Patient Telephone Service
11001	825.5 A & B	Directories and Listings - Non-Published and Non-Listed Telephone Numbers
11001	850 B	Local Directory Assistance
11001	850 D	Busy Line Verification
11001	850 E	LOADS
11001	1047	Exchange Radio Telephone Service
11001	1240.3	Foreign Exchange
11001	1820	CPE Maintenance
11001	2900	Digital Channel Service
11001	3010	Microlink Service

UNCAPPED SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	224	Advantage Vnet Access
11001	365.2	Service Charges - Centrex
11001	370	Other Service Charges - Data Services
11001	385 D	Labour Rates (Data)
11001	390	Late Payment Charge
11001	698.5A	Centrex Business Service
11001	698.5B	Small Centrex Service
11001	698.5C	National Centrex Service
11001	698.5E	Centrex Data Locals
11001	800	Enhanced Local Service
11001	815.1	Information Manager
11001	825	Directories and Listings - Extra and Special Type Listings
11001	860	Construction Charges
11001	915	Conference Service - Local
11001	1480	Voicecom Service - Access Lines
11004		Special Facilities Tariffs

COMPETITOR SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-Located Customer Provided Equipment in a Telephone Company Central-Office
7400	206	Seven Digit Single Number Access
11001	13	Resale and Sharing
11001	815.2	Alternate Service Provider Voice Messaging
11001	835	Directory File Service
11001	890	Support Structures
11001	920	Cellular Access Service
11001	928	Network Paging Access Service
11001	960.4	EMO Mobile Radio Network Access
11001	965	Maritime Electric Mobile Radio Network Access
11006	4	Interconnection with the Equipment and Facilities of Telesat Canada
11008		Tariff for Interconnection with Interexchange Carriers (Other than Contribution Charges)
11008	70.1	STP Port Connection
11008	70.3	Switching and Aggregation
11008	70.3	800 Carrier Identification Query
11008	70.4	PIC Processing
11008	70.5	BNS Database Service

11008	70.5	Bill Number Screening Database Query
11008	70.6	Start-Up Cost
11008	70.7	Carrier Network Profile
11008	71.2	Busy Line Verification/Interruption
11008	71.3	Long Distance Directory Assistance
11008	71.5	800 Directory Assistance
11008	72	Billing and Collection Service
11008	100	Network Announcement
11008	105	Bulk Transfer of Customers between IXCs
11008	200	800 Carrier Access

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SERVICES WITH FROZEN RATES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
11008 11001 11001 11001	80 800.3C 800.3E 361,390.2	Contribution Charge Call Blocking 900/976 Toll Restriction Installment Payment Plan

<u>MTS</u>

BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
24001	475	Rate Schedule for Primary Exchange Service
24001	480	Community Calling Service
24001	490	Urban Unlimited (Winnipeg and Brandon)
24001	510.2	Service Charges (Utility portion)
24001	2182	Touchtone Service

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
24001	475	Rate Schedule for Primary Exchange Service
24001	480	Community Calling Service
24001	490	Urban Unlimited (Winnipeg and Brandon)
24001	510.2	Service Charges (Utility portion)
24001	1000.3	Joint User Service
24001	2182	Touchtone Service

OTHER CAPPED SERVICES

TARIFF	ITEM NO.	DESCRIPTION
24001	300	Non-Sufficient Funds (NSF) Cheque Charge (Utility portion)
24001	350.3	Tariff Subscription Service
24001	710	Exchange Measurement - Telephone Services Facilities (Utility portion)
24001	800	Suspension of Service
24001	1600.9	Directory Listings - Non-Published Listings
24001	1610.2.B	Directory Assistance Service (LDA)
24001	1610.2.D	Busy Line Verification/Interruption
24001	1700	Public Telephone Service
24001	1710	Semi-Public Telephone Service
24001	1990	Digital Exchange Access Service
24001	1995	Microlink Service
24001	2000	Megalink Service
24001	2114.3	Dial Access Computer Port
24001	2115.2	Answer Supervision
24001	2136	Rotary Service (residence)
24001	2140.3	Direct Inward Dialing (DID)
24001	2188	Data Services Access Line
24001	3150.3.B	Dial Access for Customer-Owned Telephone Answering Equipment (trunks)
24002	5100	Channels for Occasional Radio Program Service (Utility portion)
24002	5200	Channels for Signal Transmission
24002	5300	Channels for Data Transmission (Utility portion)
24002	5500	Channel for Interexchange Voice Grade Facilities (Utility portion)
24002	5600	Channel Charges (Utility portion)
24002	6700	Digital Network Services Access (Utility portion)
24002	6800	Digital Channel Service (Utility portion)
24002	9325	Automatic Dialing Announcing Device Access
24002	9350	Conference Access
7400	301	Digital Network Access (Utility portion)
7400	308	Access Special Routing

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UNCAPPED SERVICES

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
24001	310	Surcharge (on Overdue Accounts)

24001	510.2	Service Charges (Centrex)
24001	510.2 510.2.B	Service Charges (Non-Element)
24001	720	Premium Exchange Service
24001	1600.8	Directory Listings - Extra Listing & Other
24001	1980	Centrex
24001	1985	National Centrex Service
24001	2126	Label Service
24001	2135	Custom Telephone Number Service
24001	2142	Calling Features
24001	2142	Residential Discount Packaging
24001	2163	Centrex (Discontinued)
24001	2520	, ,
		Wide-Area Telephone Service (Discontinued)
24001	2600	Mobile Telephone Service
24001	2700.3	Marine Radio Telephone Service
24001	2816	Direct Connection with Teleglobe
24002	5150	Channels for Occasional Video Service
24002	5210	Building Circuits (Discontinued)
24002	5705	Business Video Access
24002	5985	Lan Interconnect Access
24002	7200	Public Air/Ground Mobile Service
24002	7210	Ship Service
24002	7250	Dial Access Mobile Service
24002	7260	Name That Number
24002	8350	Voicecom Service
24002	9025	Toll Diversion (Discontinued)
24002	9100	Teletex Service (Discontinued)
24002	9270	Centrex 5 (Discontinued)
24002	9275	Centrex Digital Data Service Premium
24002	9430	Billing Reprint Service Charge
24003	12170	Centrex Miscellaneous
24003	12400	Explosive Atmosphere Equipment (Discontinued)
24003	12600	Night and Holiday Service (Discontinued)
24003	12930	Stop Hunt Feature
24005	All Items	Supplementary Tariff Special Assemblies
7400	200	Advantage Vnet Service
7400	203	Advantage Toll-Free
7400	204	Advantage Toll-Free Entry
7400	206	Advantage Toll-Free Plus
7400	222	Advantage Outbound
7400	224	Switched Call Completion

7400	225	Advantage Long Distance Plan
7400	515	Advantage 900
7400	636	Co-Location Arrangements for Interconnecting Canadian Carriers
7400	703	Program Channels - C.B.C. Radio

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COMPETITOR SERVICES

TARIFF	ITEM NO.	DESCRIPTION
24001	250	Resale and Sharing (other than contribution charges)
24001	360	Directory File Service
24001	2950	Dial Access for Radio Paging Service
24001	3000	Wireless Access Service
24001	3100	Conventional Mobile Radio Network Access Service
24001	3150.3.A	Dial Access for Customer Owned Telephone Answering Equipment (numbers)
24002	9200	Duct Space (discontinued)
24002	9600	Third Party (non-CATV) Pole Attachments
24006		Tariff for Interconnection with Interexchange Carriers
24006	40	Interconnection Circuits with Trunk Side Access
24006	41	Operator Services
24006	42	Billing & Collection Service
24006	60	Standby Circuits
24006	70	800 Carrier Access Multi-Carrier Selection
24006	75	Dialed Number Transport Capability
24006	80	Network Announcements for Customers of Disc. IXC
24006	85	Bulk Transfer of a Customer Base Between IXC's
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-Location Arrangements for Interconnecting Canadian Carriers
7400	700	Co-Located CPE in Telco C.O.
7400	704	Mobile Satellite Access Service

SERVICES WITH FROZEN RATES

DESCRIPTION
Resale and Sharing (contribution charges)
Province Wide Enhanced 911 Service
Residence Exchange Service Charge Billing Option Plan
Calling Features (Call Display Blocking)
Manitoba Relay Service

24001	2180	Toll Management
24006	50	Contribution Charges
7400	515.3(k)	Advantage 900 - 900 Call Denial/Blocking

NEW SERVICES

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
24002	6690	Central Office Access
7400	909	Card Swipe Access

<u> MT&T</u>

BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
10001	630.3A	Network Exchange Services Single Line - Residence
10001	920	One Party Mileage
10001	930	Exchange Private Line Mileage
10001	520.1	Residence Single Line
10001	3210	Party Line Telephone Set

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

TARIFF	ITEM NO.	DESCRIPTION
10001	630.3B	Network Exchange Services Single Line - Business
10001	631.3	Business Message Rate
10001	1800	Joint User Services
10001	720	Network Exchange Services - Multiline
10001	520.1	Business Single Line Service Charges
10001	520.3	Multiline Service Charges
10001	440	Short Term Service

TARIFF	ITEM NO.	<u>DESCRIPTION</u>
10001	3	Sale of Company Tariffs
10001	1160.B	Local Directory Assistance
10001	1160.D	Busy Line Verification
10001	1160.E	LOADS
10001	1150.B	Non-Published Service
10001	1150.C	Non-Listed Service

10001	1300.3	Public Telephone Service
10001	1310.3	Semi-Public Telephone Service
10001	810	Direct-In Dial Service
10001	940	Extension Line Mileage
10001	950	Private Property Circuit Mileage
10001	1010	Temporary Discontinuance of Service
10001	4500	Megalink Service
10001	520.2	Service Charges
10001	4510	Microlink Service
10001	4550	Digital Exchange Access Service
10001	4400.2	Digital Channel Service
7400	301	Digital Network Access Service
7400	308	Access Special Routing
10001	740	Hotel Services
10001	1510.2	Hospital Patient Telephone Service
10001	2261	Exchange Radio Telephone Services
10001	2510.1	Foreign Exchange
10001	2510.2	OPX
10001	2510.3	TX Trunks
10001	2510.4	Private Line
10001	592	Non Sufficient Funds Cheque Charge
10001	3120	CPE Maintenance

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OTHER CAPPED SERVICES (cont'd)

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
10001	731	Answer Supervision
10001	1390	Metro Transit Service

UNCAPPED SERVICES

TARIFF	ITEM NO.	<u>DESCRIPTION</u>
10001	1150	Directory Listings
10001	1150.A	Extra Listing
10001	1150.D	Special Type Listings
10001	585.D	(Data) Labour Rates
10001	530	Data Services
10001	590	Late Payment Charge

10001	780.4	Centrex Business Service
10001	780.4(a)	Centrex Business Service I
10001	780.4(b)	Centrex Business Service II
10001	780.4(c)	Small Centrex Service
10001	780.4(d)	National Centrex Service
10001	780.4(e)	National Message Feature Network
10001	780.4(f)	Centrex Corp. Services
10001	780.4(n)	Centrex Data Locals
10001	780.4(j)	Centrex Optional Service
7400	900	Transfer Capabilities for Centrex
10001	520.2	Centrex Service Charges
10001	550	Construction Charges
10001	1600.3	Optional Calling Feature (Enhanced Local Services)
10001	1625.1	Information Manager (Mailbox)
7400	224.4	Access Portion of Switched Interexchange Services
10001	3220	Jack & Plug Arrangement
10004		Special Facilities Tariffs
10001	2110	Conference Service Local
10003	6701	Digital Network Access to PSTN
10003	6801	Distance Education

COMPETITOR SERVICES

TARIFF	ITEM NO.	DESCRIPTION
10001	1155	Directory File Service
10001	1365	Network Paging Access Service
10001	1398	Switched Network Access for Radio System Operators (Mobile Radio Network Access)
10001	2000	Support Structures
10001	1450	Voice Messaging Access Service
10001	1625.2	Alternate Service Provider Voice Messaging
10001	13	Resale and Sharing
10001	1270	Cellular Access Service
10001	1225	Public Cellular Operators use of Building and Tower Space
10001	1250	Wireless Access Service
10001	1270	Wireless Access Service - Rates

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COMPETITOR SERVICES (cont'd)

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	206	Seven Digit Single Number Access Service
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-located Customer Provided Equipment in a Telephone Company Central-Office
10008		Tariff for Interconnection with Interexchange Carriers (Other than Contribution Charges)
10008	70.3	Switching and Aggregation
10008	70.4	PIC Processing
10008	70.5	BNS Database Service
10008	70.6	Start-up Cost
10008	70.7	Carrier Network Profile
10008	72	Billing and Collection Service
10008	100	Network Announcement
10008	105	Bulk Transfer of Customers between IXC's
10008	200	800 Carrier Access
10006	4	Interconnection with the Equipment and Facilities of Telesat Canada
10008	70.3	800 Carrier Identification Query
10008	71.5	800 Directory Assistance Usage
10008	71.2	Busy Line Verification/Interruption
10008	70.1	Signal Transfer Point Port Connection
10008	70.5	Bill Number Screening Database Query

SERVICES WITH FROZEN RATES

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
10008	80	Contribution Charge
10001	1605.D	Call Block 900/976
10001	1605.D	Toll Restriction
10001	511.590.2	Installment Payment Plan

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BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
12001	45	Residence Primary Exchange Services
12001	65	Residence Primary Exchange Services
12001	110.2(A&B)	Service Charges

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
12001	50	Business Primary Exchange Services (including single and multi-line, message rate and joint user services)
12001	100	Business Primary Exchange Services (including single and multi-line, message rate and joint user services)
12001	110.2(A&B)	Service Charges

TARIFF	ITEM NO.	DESCRIPTION
12001	25	Tariff Subscription Charges
12001	140.2(B&E)	Operator Services (other than those operator services assigned elsewhere)
12001	105.2	Unlisted/Unpublished Telephone Numbers
12001	55	Public Telephone Service
12001	60	Semi-Public Telephone Service
12001	175	Direct Inward Dialing
12001	22.9	Suspension of Service/Temporary Discontinuance of Service
12001	102	Digital Switched Service (Megalink)
12001	232	Data Line Support Service
12001	235	Switched Digital Data Service
12001	240	Automatic Line Service
12002	3770.2B(2)	Digital Channel Service
7400	301.3(a)	Digital Channel Service (access only)
7400	301.3b1	Digital Channel Service (access only)
7400	401	Digital Channel Service (access only)
7400	308	Access Special Routing
12001	3370	Hotel, Hospital and General Private Branch Exchange (PBX) Services
12001	3600	Hotel, Hospital and General Private Branch Exchange (PBX) Services
12001	3850	Hotel, Hospital and General Private Branch Exchange (PBX) Services
12001	150	Local Channels (including access portions of interexchange private line services)
12001	610	Local Channels (including access portions of interexchange private line services)
12002	1005	Local Channels (including access portions of interexchange private line services)
12002	1010	Local Channels (including access portions of interexchange private line services)
12002	1015	Local Channels (including access portions of interexchange private line services)

OTHER CAPPED SERVICES (cont'd)

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
12002	1040	Local Channels (including access portions of interexchange private line services)
12002	1050.5	Local Channels (including access portions of interexchange private line services)
12002	1050.6	Local Channels (including access portions of interexchange private line services)
12002	1080.6A	Local Channels (including access portions of interexchange private line services)
12001	23.2	Non-Sufficient Funds Cheque Charge
12001	220	Hospital Patient Telephone Service
12001	215	Answer Supervision
12001	210	Suppressed Ringing Service
12001	211	Suppressed Ringing Service
12002	4060	Other Radio-telephone Services (non-exchange)

UNCAPPED SERVICES

TARIFF	ITEM NO.	DESCRIPTION
12001	105	Directory Listings (other than Unlisted/Unpublished Telephone Numbers)
12001	110.2(A&B)	Labour Rates/Service Charges (other than those applicable to capped services)
12001	23	Late Payment Charges
12001	70	Business Communications Service (Centrex)
12001	80	Business Communications Service (Centrex)
12001	110	Business Communications Service (Centrex)
12001	171	Business Communications Service (Centrex)
12001	172	Business Communications Service (Centrex)
12001	174	Business Communications Service (Centrex)
12001	165	Business Communications Service (Centrex)
12001	200	Optional Calling Features (including Advanced Intelligent Network Services)
12001	205	Optional Calling Features (including Advanced Intelligent Network Services)
12001	350	Optional Calling Features (including Advanced Intelligent Network Services)
12001	180	Optional Calling Features (including Advanced Intelligent Network Services)
7400	224.4(a)	Access Portions of Switched Interexchange Services
12001	280	Jack and Plug Arrangements

12003	A.28	Remaining SFTs (other than those relating to wireless access services)
12003	A.29	Remaining SFTs (other than those relating to wireless access services)
12003	A.41	Remaining SFTs (other than those relating to wireless access services)
12003	A.53	Remaining SFTs (other than those relating to wireless access services)
12003	B.69	Remaining SFTs (other than those relating to wireless access services)
12003	D.59	Remaining SFTs (other than those relating to wireless access services)
12003	D.60	Remaining SFTs (other than those relating to wireless access services)
12002	269	Mobile Telephone Services
12002	4060	Mobile Telephone Services

COMPETITOR SERVICES

TARIF	F ITEM NO.	DESCRIPTION
12002	5069	Directory File Service
12001	820	Switched Network Access for Radio Paging System Operators
12002	5200	Support Structures
12002	5800	Integrated Voice Messaging Service Access
12001	801 (exclude 801.4)	Resale and Sharing (Other than Contribution Charges)
12001	805	Wireless/Cellular Access Service
12001	840.4(A,B&C)	Wireless/Cellular Access Service
7400	206	Seven Digit Single Number Access Service
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-Located Customer Provided Equipment in a Telephone Company Central Office
12001	800 (exclude 800.7)	Tariff for Interconnection with Interexchange Carriers (other than Contribution Charges)
12001	803	Tariff for Interconnection with Telesat Canada
12001	800.6D	Interexchange Equal Access Services

SERVICES WITH FROZEN RATES

TARIFF	TITEM NO.	<u>DESCRIPTION</u>
12001	801.4	Contribution Charges
12001	800.7	Contribution Charges
12001	802.1	Contribution Charges
12001	620	911 and Message Relay Service
12001	200	Call Display Blocking
7400	515.3k(2)	Call Blocking 900/976

12001	110.3	Installment Payment Plan
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12001 230 Toll Restriction

<u>NewTel</u>

BASIC RESIDENTIAL LOCAL SERVICE

TARIFF	ITEM NO.	DESCRIPTION
13001 13001 13001	50.7(c) 50.7(c) 50.10 (a)	Residence Exchange Service - four party service Residence Exchange Service - multi party service Residence Exchange Service
13001 13001 13001 13001	50.11(c) 50.16(d) 80.2 330	Residence Extended Area Service Residence Community Calling Plan Residence Multi-Element Service Charge Party Line Telephone Sets - Residence

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

<u>TARIFF</u>	<u>ITEM NO.</u>	DESCRIPTION
13001	50.10(a)	Business Exchange Service
13001	50.11(c)	Business Extended Area Service
13001	50.16(d)	Business Community Calling Plan
13001	80.2	Business Multi-Element Service Charge
13001	330	Party Line Telephone Sets - Business
13001	370.25.3(c)	Voice Information Access Service Multi-line Access

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	15.2	Tariff Subscription Service
7400	301.3	Digital Network Access
7400	308.3	Access Special Routing
13001	130.1	Coin Telephone Service
13001	15.1.5	NSF Cheque Charge
13001	170	Public Mobile Telephone Service
13001	180.3 A	Hospital Patient Telephone Service
13001	200.3 A ii	Digital Exchange Access PSTN Termination
13001	200.3 B	Digital Exchange Access PSTN Connectivity
13001	215.3	Microlink
13001	235.2	Private Branch Exchange DID Service
13001	30.1(f)	Tariff Subscription Service - Individual Pages

13001	30.2(b)	Tariff Subscription Service - Copies of Tariffs
13001	46.2 A	Operator Services - Directory Assistance
13001	50.10 B	Equivalent Line Service
13001	50.12 B	Directory Listings - Omission of Listings
13001	50.15	Short-term Service
13001	310 D	Circuit Charges - Local Circuits
13001	331.2	Set Loss Charge for Party Line Telephone Sets
13003	Sect A, pg 37	Data Channels
13003	Sect A, pg 97C1	Digital Channel Service

UNCAPPED SERVICES

TARIFF	ITEM NO. DE	SCRIPTION
7400	200.4 Ad	vantage Vnet Service
7400	225.3	Advantage Long Distance Plan
7400	900.4	Electronic Transfer Capability for Centrex
13001	15.1.4	Late Payment Charge
13001	46.2 B	Operator Services - Automated Directory Assistance Call Completion
13001	50.13	Extra Listings
13001	50.18	Name That Number
13001	100.3	Construction Charges
13001	190.2	Provincial Centrex
13001	194	National Centrex
13001	195	DMS Data Service
13001	196.2	Centrex Per Agent Service
13001	260.2	Intercommunicating Systems
13001	370.17	Custom Calling Features
13001	370.4	Jack and Plug Equipment
13001	385.3.1	Call Management Service
13003	Sect A, pg 10B	Program Transmission Service Monaural Circuits
13003	Sect A, pg 10B	Program Transmission Service Stereo Circuits
13003	Sect A, pg 16	Telephone Directories
13003	Sect A, pg 20 1A	Special Labour Charges
13003	Sect A, pg 40	Datalink
13003	Sect A, pg 89D	Data Equipment - Teletype
13003	Sect B	Custom Built Equipment Arrangements
13003	Sect D, pg 4	Interconnection with Sealink
13003	Sect D, pg 15	Hibernia Site Centrex

COMPETITOR SERVICES

TARIFF ITEM NO. DESCRIPTION

7400	206	Seven Digit Single Number Access Service
7400	635	Local Network Interconnection and Component Unbundling
7400	636	Co-location Arrangements for Interconnecting Canadian Carriers
13001	45.2	Sale of Directory Files
13001	290.2	Dial Access to Radio Paging Service
13001	295.6	Wireless Access Service
13001	298.5	SNA - Radio/Mobile System Operators
13001	299.2	Interconnection With Telesat
13001	299.3.100.3	800 Carrier Access Multi-Carrier
13001	299.3.70.1	Interconnecting Circuit DS-0 Set
13001	299.3.70.4 d	Network Charge - Switching and Aggregation
13001	299.3.70.4 f	Network Charge - 800/888 Carrier ID
13001	299.3.70.5 h	PIC Processing
13001	299.3.70.7 d	Recovery of Start-Up Costs
13001	299.3.70.8	Carrier Network Profile Change
13001	299.3.72.3 b	Billing and Collection Service
13001	299.3.92.4	Network Announcements
13001	299.3.95.4	Bulk Transfer of a Customer Base
13001	370.25.3	Voice Information Access Service

COMPETITOR SERVICES (cont'd)

TARIFF	ITEM NO.	DESCRIPTION
13003	Sect D, pg 10	Support Structures for CATV Lessees - Poles
13003	Sect D, pg 11	Support Structures for CATV Lessees - Strand
13003	Sect D, pg 11	Support Structures for CATV Lessees - Conduit
SERVICES WITH FROZEN RATES		

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
13001	40.4	Resale and Sharing Contribution Charges
13001	391	Residence Toll Restriction
13001	299.3.80	Contribution Charges
13001	46.2 E	Operator Services - Call Display Blocking

<u>TCI</u>

BASIC RESIDENTIAL LOCAL SERVICE

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
18001	265	Exchange Service - Residence

18001	270	Extended Flat Rate Calling
18001	285	Individual Line Service - Residence
18001	350	Service Charges - Residence
18001	1700	Service Charges - Residence

SINGLE AND MULTI-LINE BUSINESS LOCAL SERVICES

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
10001	005	Fushana Canias Business
18001	265	Exchange Service - Business
18001	270	Extended Flat Rate Calling
18001	285	Individual Line Service - Business
18001	350	Service Charges - Business
18001	1700	Service Charges - Business

<u>TARIFF</u>	ITEM NO.	DESCRIPTION
7400	301	Digital Network Access Service
7400	308	Access Special Routing
18001	170	NSF Cheques
18001	225	Direct In Dial Service
18001	235	Directory Primary Listings - Non-listed/Non-published Numbers
18001	240	Emergency Reporting System
18001	265	Rotary Hunting
18001	287	ISDN BRA (Microlink)
18001	288	Megalink
18001	290	Local Channels
18001	325	Public Telephone Service
18001	345	Semi-Public Telephone Service
18001	350	Service Charges Business
18001	365	Tariff Subscription Service
18001	370	Temporary Disconnect
18001	805	Answer Supervision
18001	1001	Directory Assistance
18001	1002	Busy Line Verification/Interruption
18002	1245	Local Exchange Channel Service
18002	1310	AltaNet 200/300
18002	1325	CityNet 200/300
18002	1406	Digital Network Access
18002	1700	Service Charges Business
18002	1815	Local Channel Conditioning
18002	1820	Network Diagnostic & Maintenance Service

18002	1825	Rotary Splitting
7400	15	Sale of Tariff
7400	308	Access Special Routing
7400	401	Dataroute

UNCAPPED SERVICES

TARIFF	ITEM NO.	DESCRIPTION
7400	200	Advantage Vnet Access
18001	235	Directory Additional Listings
18001	270	Extended Flat Rate Calling Centrex
18001	310	Prestige Telephone Numbers
18001	350	Service Charges - Business
18001	355	Smart Touch Services (except Call Block)
18001	460	Alberta Manual 150 Mobile Telephone Services
18001	465	Alberta Cellular 400 Mobile Telephone Service
18002	1700	Service Charges - Business
18002	1850	Toll Terminal Service
18003	2260	Centrex Service
18003	2261	Centrex Call Management Service
18003	2263	Centrex Data Service
18003	2264	National Centrex Service
18003	2267	Centrex Enhanced Call Processing Service
18006		Special Assembly Arrangements
7400	225	Advantage Long Distance Service
7400	515	Advantage 900

COMPETITOR SERVICES

TARIFF ITEM NO. DESCRIPTION	
7400 206 Seven Digit Single Number Access for Alternate Service F	Providers
18001 236 Directory File Service	
18001 315 Public Cellular Mobile - Network Access	
18001 320 Public Radio Common Carrier - Network Access	
18001 330 Messaging - Services (Radio Paging) - Network Access	
18001 700 Network Portability Access Service	
18001 910 Support Structures	
18001 1001 Directory Assistance	
18001 1002 Busy Line Verification/Interruption Service	
18002 1900 Network Portability Access Service	

•	18002	160	Interconnect Service with Trunk Side Access
•	18002	165	Billing and Collection Service
•	18002	180	Announcement for Customers of Discontinued IXCs
•	18002	185	Bulk Transfer of Customer Base Between IXCs
•	18002	200	800 Carrier Access Multi-Carrier Selection Capability
•	18002	210	Virtual Co-Location
•	18002	211	Physical Co-Location
•	18002	300	Intelligent Network Interconnection
•	18002	400	Local Network Interconnection and Unbundling
SERVICES WITH FROZEN RATES			

<u>TARIFF</u>	ITEM NO.	<u>DESCRIPTION</u>
40004	050	F0.4.4
18001	250	E9-1-1
18001	340	Resale and Sharing
18001	355	Selective Call Block, Total Call Block
18001	1003	Message Relay Service
18002	1845	Toll Restriction Service
18008	170	Contribution Charges

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