Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of  
Tariffs Implementing Access Charge Reform  
CC Docket No. 97-250

MEMORANDUM OPINION AND ORDER

Adopted: June 1, 1998  
Released: June 1, 1998

By the Commission:

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I.  Introduction

   1. Interexchange carriers (IXCs) must purchase interstate access services from local exchange
   carriers (LECs) in order to provide long-distance telephone service to business and residential telephone
   customers. Under the Commission's rules, incumbent LECs are regulated as dominant carriers because
   they have market power in the provision of access services. This Commission regulates the manner in
   which incumbent LECs provide access in order to prevent that market power from being exercised to the
   detriment of consumers.

   2. On May 16, 1997, the Commission released the Access Charge Reform Order,\(^1\) amending the
   Commission's access charge rules so that access charges better reflect the manner in which the underlying
   costs are incurred. The reforms and the rate restructuring mandated by that Order involve the most
   comprehensive changes to the Commission's system of interstate switched access charges since these
   tariffed charges first were introduced more than ten years ago. Because many of the amended rules took
   effect on January 1, 1998, the Commission directed incumbent LECs to file implementing tariffs that would
   be effective on that date. LECs also were required to file tariff revisions, effective January 1, 1998, to
   comply with (1) the 1997 Annual Access Tariff Investigation Order,\(^2\) (2) the Access Charge Reform Third
   Report and Order,\(^3\) and (3) revisions necessary to implement the new universal service support
   mechanisms.\(^4\)

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3. On December 30, 1997, the Common Carrier Bureau (Bureau) released the Access Charge Reform Tariffs Suspension Order,\(^5\) which, inter alia, suspended for one day the access tariffs implementing the access charge reform requirements filed by the LECs, imposed an accounting order, and initiated an investigation into the lawfulness of a number of issues raised by these tariff filings. The Bureau concluded that the access tariffs filed by all the price cap LECs raised significant questions of lawfulness that warranted investigation. Those carriers are: Aliant Communications Company (Aliant); Ameritech Operating Companies (Ameritech); Bell Atlantic Operating Companies (Bell Atlantic);\(^6\) BellSouth Telecommunications, Inc. (BellSouth); Cincinnati Bell Telephone Company (Cincinnati Bell); Citizens Telecommunications Companies (Citizens); Frontier Communications of Minnesota and Iowa and Frontier Telephone of Rochester (collectively, Frontier); GTE Telephone Operating Companies (GTOC) and GTE Systems Telephone Companies (GSTC) (collectively GTE); Southern New England Telephone Company (SNET); Southwestern Bell Telephone Company (SWBT), Pacific Bell and Nevada Bell (collectively, SBC); Sprint Local Telephone Companies (Sprint LTCs); and US West Communications, Inc. (US West).

4. On January 28, 1998, the Bureau released the Access Charge Reform Tariffs Designation Order,\(^7\) which designated for investigation issues regarding: (1) non-primary residential line counts; (2) the demand for lines that are assessed presubscribed interexchange carrier charges (PICCs) and subscriber line charges (SLCs); (3) the adjustment of common line revenues due to the historic understatement of LECs' revenue requirements for the base factor portion of the Common Line basket; (4) the methodology for calculating exogenous cost changes that reflect reallocations of rate elements or partial rate elements; (5) central office equipment (COE) maintenance and marketing exogenous cost adjustments to the transport interconnection charge (TIC); (6) Signalling System 7 (SS7) costs in the tandem-switched transport revenue requirement; (7) the impact on the TIC arising from the use of actual minutes of use (MOU) rather than an assumed 9,000 MOU for circuit loadings after computing tandem-switched transport rates; (8) recalculations of the residual and facilities-based TIC amounts; and (9) recovery of universal service support obligations.

5. Price Cap LECs filed their direct cases on February 27, 1998. Oppositions and comments on these direct cases were filed on March 16, 1998.\(^8\) All of the price cap LECs except for Citizens and SNET filed rebuttal cases on March 23, 1998.\(^9\) On March 25, 1998, the Bureau released a public notice

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\(^6\) In its direct case, Bell Atlantic distinguishes between the access reform tariffs for Bell Atlantic-North and Bell Atlantic-South. In certain sections of this Order, we also distinguish between Bell Atlantic-North and Bell Atlantic-South.


\(^8\) Comments on the direct cases were filed by AT&T, MCI and DeltaCom.

motion to strike GSA's pleading because it responds to the price cap LECs' direct cases, and it was, therefore, filed out-of-time. BellSouth's Motion to Strike, filed March 27, 1998. We grant BellSouth's motion to strike GSA's pleading, but it will remain a part of the record in this proceeding, 47 C.F.R. § 1.8, and be treated as an ex parte communication. We grant BellSouth's motion because, although the deadline for filing an opposition or comment on the direct cases was March 16, 1998, GSA filed its pleading on March 23, 1998. GSA did not file a motion for an extension of time, provide any explanation for why it filed its pleading late, and failed to respond to BellSouth's motion to strike. Moreover, GSA's pleading cannot reasonably be characterized as a rebuttal because it does not respond to the comments and oppositions that were filed on March 16, 1998; GSA limits its comments to the direct cases filed by price cap LECs in this proceeding.

10 See Appendix A for a complete list of the tariffs and pleading filed in this investigation.
II. Common Line Issues

A. Non-Primary Residential Line Issues

1. Background

8. The Commission's rules permit price cap LECs to recover their permitted common line revenues through: (1) a monthly per-line SLC billed to end users; (2) a monthly per-line PICC billed to the IXCs to whom the end user has presubscribed; and (3) a per-minute CCL charge billed to IXCs. Effective January 1, 1998, the SLC cap for non-primary residential lines was increased from $3.50 to $5.00. Permitted interstate common line revenues not recoverable from SLCs because of the caps, may be recovered through PICCs. PICCs are capped at $1.50 for non-primary residential lines and $2.75 for multi-line business (MLB) lines in 1998. For primary residential lines and single-line business lines, the PICC is currently capped at $0.53 per month. The remainder of permitted common line revenues is recoverable through the CCL charge.

9. The Commission's purpose in the Access Charge Reform Order was to recover non-traffic sensitive costs through flat fees, such as SLCs and PICCs, and to eliminate implicit cross-subsidies between classes of end users. If price cap LECs' non-primary residential line counts are too low, revenues recoverable through SLCs and PICCs are understated, and the maximum CCL charges is too high. For price cap LECs that no longer have a CCL charge or other per-minute residual charges, the maximum multi-line business PICC is too high and the non-primary residential lines not identified as non-primary make too small a contribution to permitted common line revenues.

10. The Bureau designated for investigation the line counts for primary and non-primary residential lines for all price cap LECs. The Bureau observed that non-primary residential line counts were lower than various published estimates and price cap LEC public statements. The Bureau required the price cap LECs to identify the number of lines in each of the following categories: (1) primary...

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11 Access Charge Reform Order, 12 FCC Rcd at 16005.

12 47 C.F.R. § 69.152(e).

13 47 C.F.R. § 69.153(d).

14 47 C.F.R. § 69.153(c).

15 See 47 C.F.R. 69.155, 69.156(d)(e).

16 Access Reform Tariffs Designation Order, 13 FCC Rcd at 2255.

17 Number of lines are reported in price cap LECs' tariffs as demand figures over a twelve month period. In their Tariff Review Plans (TRPs) price cap LECs report the number of lines as the actual number of residential loops times twelve.
residential lines; (2) single-line business lines; (3) non-primary residential lines; and (4) Basic Rate Interface - Integrated Services Digital Network (BRI-ISDN) lines.\textsuperscript{18}

2. Discussion

11. In this section, we calculate the percentage of non-primary residential lines to total residential lines reported by the price cap LECs and compare these percentages with data collected by the Commission Staff, independent studies of additional residential line penetration levels and price cap LEC public statements.\textsuperscript{19} Where we find the percentage reported by a price cap LEC to be unreasonable, we use these data to prescribe a corrected count. Based on the analysis described below, we prescribe corrected counts for Pacific Bell and GTE.

12. Percentage of Non-Primary Residential Lines to Total Residential Lines. Figure 1 below presents the residential line count information reported by the price cap LECs in their direct cases separated by: (1) primary residential lines; (2) lifeline lines; (3) non-primary residential lines; and (4) BRI-ISDN lines.\textsuperscript{20} The percentage of non-primary residential lines to total residential lines shown in the last column in Figure 1, is calculated as the ratio of the sum of non-primary residential and BRI-ISDN lines over the total residential lines.\textsuperscript{21} We use the percentage figures set forth in the last column of Figure 1 in our analysis to determine the efficacy of the price cap LECs’ non-primary residential line identification.\textsuperscript{22}

\textsuperscript{18} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2257.

\textsuperscript{19} The two Commission Staff studies, the Additional Line Study and Excess Residential Loop Study, are based on data filed on the record in this proceeding by the Commission Staff. See Letter from David L. Hunt, Staff Attorney, FCC to Magalie Roman Salas, Commission Secretary (dated May 27, 1998). The independent studies and public statements made by price cap LECs were also made part of the record in this proceeding. Id.

\textsuperscript{20} Single-line business line counts reported by the price cap LECs in their direct cases are identified in Appendix B, Table B-1.

\textsuperscript{21} The total number of residential lines is defined as the sum of primary residential lines, lifeline lines, non-primary residential lines, and BRI-ISDN lines.

\textsuperscript{22} The majority of price cap LECs stated in their direct cases that to determine the numbers of primary and non-primary residential lines, individual lines per month (usually at the end of the month or some other specific date) were counted from a consistent data base (billing records or through field indicator designations) and summed for 1996. Appendix B, Table B-2 explains the search criteria, time frame and data sources used by each price cap LEC to determine line counts for primary and non-primary residential, single line business and BRI-ISDN lines, and the answers to the hypothetical line count classification exercise we required carriers to submit with their direct case, except for U S West which did not comply.
Although BRI-ISDN lines can also be used by single-line business customers, we do not distinguish residential users of BRI-ISDN lines from business users of these lines. Including BRI-ISDN lines, however, for comparison purposes will raise non-primary line penetration levels for price cap LECs with BRI-ISDN lines.

The number of lifeline lines were reported in the price cap LECs access reform tariff filings and taken from their TRPs. See, e.g., TRP CAP-1 Form of Pacific Bell, Attachment ("Calculation of Rate Caps: Demand and Rates, Inputs and Initial Revenue Calculations"), Line 140, filed December 17, 1997. Lifeline lines are not included as a component of primary residential lines. For example, Pacific Bell's TRP and SBC's Direct Case both...

13. We used the above formulation to quantify non-primary line penetration reported by price cap LECs for two reasons. First, both non-primary residential lines and BRI-ISDN lines are subject to higher maximum SLCs and PICCs than primary residential lines. Any additional revenues that could be generated from the collection of these flat fees would lead to lower per-minute CCL charges. Second, including BRI-ISDN lines specifically recognizes a major contributor to the growth in additional lines due to increased Internet and data transmission usage by residential customers. Lifeline lines were included in the count of total residential lines because they are residential lines that require interstate access, are used in the formulation of access charges, and were not included in the direct case residential line counts.

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23 Although BRI-ISDN lines can also be used by single-line business customers, we do not distinguish residential users of BRI-ISDN lines from business users of these lines. Including BRI-ISDN lines, however, for comparison purposes will raise non-primary line penetration levels for price cap LECs with BRI-ISDN lines.

24 The number of lifeline lines were reported in the price cap LECs access reform tariff filings and taken from their TRPs. See, e.g., TRP CAP-1 Form of Pacific Bell, Attachment ("Calculation of Rate Caps: Demand and Rates, Inputs and Initial Revenue Calculations"), Line 140, filed December 17, 1997. Lifeline lines are not included as a component of primary residential lines. For example, Pacific Bell's TRP and SBC's Direct Case both...
14. Figure 2 compares the reported percentage of non-primary residential lines to total residential lines, pursuant to the index outlined supra, to several sources. These sources are: (1) analyses conducted by the Commission staff based on available data; (2) estimates published by financial institutions of the penetration levels of non-primary residential lines; and (3) price cap LEC public statements. Figure 2 summarizes these data.

![Figure 2](image-url)

**Figure 2**

| LEC Reported Non-Primary & BRI-ISDN Lines as Percentage of Total Residential Lines | FCC LEC Additional Study Loop Study | FCC Excess Residential Telecom Services Excess Res. 11/13/96 11/28/97 | Merrill Brothers Price cap Salomon Statement Date |
|---|---|---|---|---|---|---|---|
| Direct Case LEC | Reporting Non-Primary & BRI-ISDN Lines as Percentage of Total Residential Lines | Data | 3Q95 - 3Q96 | 3Q 97 | LEC Public Statements Date |
| Ameritech | 11.17% | 11.55% | 12.19% | 11.00% - 14.00% | 26.00% | 10/27/97 |
| US West | 10.32% | 11.00% | 10.29% | 8.00% - 10.00% | 13.00% | 12.90% | 12.90% | 10/27/97 |
| Sprint LTC | 9.18% | 8.60% | 17.00% | | | | |
| Bell Atlantic - South | 10.40% | 13.45% | 19.12% | 15.00% - 19.00% | 19.00% | 13.00% | 3/1/96 |
| BellSouth | 8.86% | 11.47% | 16.86% | 9.00% - 11.00% | 14.00% | 12.03% | 1/22/98 |
| Southwestern Bell | 9.01% | 12.13% | 13.55% | 11.00% - 12.00% | 16.00% | | |
| Bell Atlantic - North (NYN) | 7.40% | 10.21% | 18.85% | 11.00% | | | |
| GTE | 4.79% | 8.94% | 14.77% | 11.00% - 14.00% | | | |
| SNET | 6.23% | 11.88% | 5.90% | | | | |
| Independents * (Citizens) | 5.09% | 10.46% | | | | | |
| (Frontier) | 3.04% | | | | | | |
| (Aliant) | 5.22% | | | | | | |
| (CBT) | 4.58% | | | | | | |
| (Nevada Bell) | 6.38% | | | | | | |
| Pacific Bell | 7.54% | | | | | | |
| TOTAL or AVG | 8.14% | 11.40% | 14.70% | 12.25% - 14.63% | 18.00% | | |

* Includes Aliant, Frontier, Citizens, and CBT. Nevada Bell is included with the independent LECs due to small sample in the Additional Line Study. Independent LECs in the Additional Line Study's sample also includes rate-of-return LECs.

show identical primary residential and single line business (SLB) line counts. See TRP CAP-1 Form of Pacific Bell, Line 100, filed December 17, 1997; SBC Direct Case, Attachment ("Pacific Line Counts"), filed February 27, 1998. See also, TRP CAP-1 Form of Pacific Bell, Attachment ("Calculation of Rate Caps: Demand and Rates, Inputs and Initial Revenue Calculations"), Line 150, filed December 17, 1997.
15. **Staff Studies of Primary and Non-Primary Residential Lines.** Common Carrier Bureau staff conducted two studies estimating additional residential line penetration. The first study estimated additional line penetration by using extensive survey data on secondary lines (the Additional Line Study). The second Commission staff study estimated additional line penetration levels by quantifying excess residential loops (the Excess Residential Loop Study). The detailed results of these studies are presented in Figure 3.

![FIGURE 3](image)

<table>
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<th>ADDITIONAL LINE STUDY</th>
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<td>1995 Bill Harvesting II</td>
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<td>PNR and Associates</td>
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<td>(CBT)</td>
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* Nevada Bell separated from Pacific Bell.
** Independents include Aliant, Frontier, Citizens and CBT.

16. The Additional Line Study is based on nationwide survey information conducted on residential telephone usage, second lines, household demographics, expenditures on telephone service and other telecommunications information. The primary data source for this research is PNR and Associates (PNR)\(^{25}\) Bill Harvesting studies.\(^{26}\) The sample relied upon in this study was "Bill Harvesting II," a 1995

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\(^{25}\) PNR and Associates is an economic research and consulting firm located at 101 Greenwood Avenue, Suite 502, Jenkintown, PA 19046, (215) 886-9200. PNR has donated a number of research databases and survey information to the Commission, granting permission for their use and the publication of any results on which they are based.

\(^{26}\) PNR first conducted a Bill Harvesting Study in 1994. The format was changed for surveys completed in 1995 and 1996 known as "Bill Harvesting II" and "Bill Harvesting III," respectively. Information from these databases have been used by the FCC in numerous publicly available studies. For example, the results from both of these
surveys were relied on for the recently issued staff report on market shares for long distance service. In addition to answering a series of questions, participants also sent copies of their telephone bills for one month in 1995 to PNR. The Additional Line Study tabulated and analyzed these data by both local exchange carrier and by state, detailing the percentage of households who identified themselves as having at least one additional line. The national average for additional line penetration was 11.40 percent. Because the survey question did distinguish between households with multiple residential lines had only two lines or more than two lines, the Additional Line Study does not capture any additional lines after the second line in a household. The survey question also did not distinguish residential lines between non-primary or BRI-ISDN. Thus, there is a downward bias in the Additional Line Study estimates to the extent multiple non-primary residential lines exist in a household.

The survey question asked was the following: "Does your household have more than one telephone line (i.e. more than one telephone number)? 1 Yes and 2 No". Those who responded "yes" were counted as a household having one additional line. Those responding "no" were counted as a household that had no additional residential service.

The Excess Residential Loop Study calculated total residential loops by taking end-of-year 1995 USF subscriber line counts provided by the National Exchange Carrier Association (NECA) and applying a ratio of residential to non-residential access lines per state based on the Commission's Statistics of Communications Common Carriers and 1995 ARMIS reports. This estimate of 108.1 million residential loops, was then compared with the 1990 Census Bureau estimate of 94.2 million households.

17. The Excess Residential Loop Study calculated total residential loops by taking end-of-year 1995 USF subscriber line counts provided by the National Exchange Carrier Association (NECA) and applying a ratio of residential to non-residential access lines per state based on the Commission's Statistics of Communications Common Carriers and 1995 ARMIS reports. This estimate of 108.1 million residential loops, was then compared with the 1990 Census Bureau estimate of 94.2 million households.

27 See Letter from David L. Hunt, Staff Attorney, FCC to Magalie Roman Salas, Commission Secretary (dated May 27, 1998).

28 The data set specifically coded or identified the following LECs by name: Ameritech, Bell Atlantic, BellSouth, Cincinnati Bell, GTE, NYNEX, Pacific Telesis, SNET, Southwestern Bell, Sprint, and US West. All other carriers were placed in a data category called Independents and were classified as such unless they were specifically identifiable due to state identification. The figures for price cap LECs such as Aliant, Citizens, and Frontier were, therefore, not fully distinguishable from rate-of-return companies or other carriers in the Additional Line study.

29 The survey question asked was the following: "Does your household have more than one telephone line (i.e. more than one telephone number)? 1 Yes and 2 No". Those who responded "yes" were counted as a household having one additional line. Those responding "no" were counted as a household that had no additional residential service.


31 The definition of a household as used by the U.S. Department of Commerce, Bureau of the Census in their 1990 population survey is as follows:

A household consists of all the persons who occupy a housing unit. A housing unit is a house an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements.
with residential telephone service. The 13.9 million line difference was classified as excess residential loops. Using the 1995 ARMIS data to allocate excess residential lines by state to each carrier, the Excess Residential Loop Study estimated excess residential loops for each price cap LEC. Its national average was 14.70 percent. These results for price cap LECs are also shown in Figure 3.32

18. We also compared the price cap LECs' reported non-primary residential line counts with reports made by financial institutions and public statements made by price cap LECs.33 Merrill Lynch34 and Salomon Brothers35 prepared analyses of additional line penetration by price cap LECs and their estimates are included in Figure 2. Public statements made by price cap LECs regarding their additional residential line penetration levels are reported in Figure 2.36

19. Analysis of Surrogate Data. We rely primarily upon the Additional Line Study to evaluate price cap LECs' reporting of non-primary residential lines. We find that the Additional Line Study provides a reliable data source for the purpose of determining the reasonableness of price cap LECs' reporting of non-primary lines because it uses a large representative sample37 of residential phone service.


32 See also, Letter from David L. Hunt, Staff Attorney, FCC to Magalie Roman Salas, Commission Secretary (May 27, 1998).

33 In some cases, penetration figures, referenced in these external reports as "additional" or "second" lines may represent a percentage of households or customers that have at least one additional line. We did not rely on these data, however, to prescribe non-primary residential line counts in cases where we found that LECs had reported an unreasonable percentage of these lines.

34 Merrill Lynch, Telecom Services, RBOCs & GTE, Table 3b at 6 (November 13, 1996) (Merrill Lynch Report).

35 Salomon Brothers, Cincinnati Bell, Inc. - More than A Phone Company: Billing and Teleservices Drive Growth, Figure 7 at 11 (November 28, 1997) (Salomon Brothers Report).

36 These companies are Bell Atlantic, BellSouth, Pacific Bell, and U S West. See Figure 2, supra. Figures reported by these companies on additional residential line penetration were taken from the following sources: Raymond W. Smith, Chairman, Bell Atlantic, "Creating Shareowner Value in a converged, Post-Legislation Environment," (March 19, 1996); BellSouth, Corporate Information Center News Release,"BellSouth Reports Fifth Consecutive Year of Earnings Growth: Increase in access lines sets fourth annual record in row; Wireless customers worldwide surpass 6 million," (January 22, 1998); Pacific Telesis Inside Line "Strong Growth ahead for Pacific Bell," Issue No. 90, (July 15, 1996); U S West, News Center Press Release, "U S West Communications Reports Continued Solid Earnings as it Rolls Out New Products Including First-In-the-Nation PCS Service:Improving Revenues Lead to Double-Digit EPS Growth" (October 27, 1997).

37 We tested the representative sampling of the data used in the Additional Line Study by comparing it to 1995 ARMIS data. We computed relative percentages of (1) the actual number of 1995 residential lines reported for each price cap LEC within each state from ARMIS, and (2) the 10,457 sample observations taken from Bill Harvesting II. This computation produced concentration levels of residential lines in each state by the price cap LECs and the proportion of lines each state contributes to the price cap LECs' total residential line counts. Using standard correlation statistics both the percentage values and cardinal rankings were highly correlated. We
households. Moreover, by using a binary method to measure second lines, the study offers a reasonable and consistent counting procedure that will not over represent the number of additional lines for any carrier. In fact, the Additional Line Study conservatively estimates the number of non-primary residential lines for each price cap LEC for three reasons. First, it counts only one additional line even if a particular household has three or more residential lines. Second, the Additional Line Study relies on 1995 data and the record demonstrates that the number of non-primary residential lines has grown considerably more than primary residential lines since 1995. Finally, the Commission has full knowledge of the data sources, control over study methodology, and has been able to verify the statistical analyses for estimated additional line penetration levels, and will, therefore, rely on its internal research, as compared to outside sources, to evaluate baseline numbers for non-primary residential lines.

20. Additional support for using the Additional Line Study is provided by the Excess Residential Loop Study. The initial purpose of gathering of these data in January 1997, for both the Additional Line and Excess Residential Loop studies, was to determine if there was a relationship between the number of additional residential lines and the level of population concentration. Each study compared their 1995 second line penetration estimates to Census Bureau 1990 percent urban population statistics for each state. Individual regression analyses showed a modest but statistically significant correlation between additional residential lines and percent urban for each data set.

21. Except for a few instances, where insufficient data exist to make a comparison, or, as in SNET’s case, only one Commission study shows a lower non-primary residential line penetration level than those reported in the direct cases, most price cap LECs reported percentages in their direct cases that are lower than both the Additional Residential Line and the Excess Residential Loop study results. Given that additional residential phone lines grow at a faster rate than primary residential phone lines, and both FCC studies use 1995 data to make their estimates, the FCC percentages should be lower than the 1996 figures reported by the price cap LECs. We did not expect the results we found. This is particularly significant therefore concluded that the Additional Line Study line count information reasonably represents the state or service area proportions within each price cap LEC as to where residential lines are actually located. Accordingly, the figures on additional lines per household would not be proportionally misrepresented in any one state or service area for a price cap LEC.

38 See, e.g., Merrill Lynch Report, supra, at 6; Salomon Brothers Report, supra, at 10-11; Pacific Telesis, Inside Line, supra.

39 When we directly compared the two staff study results for each state and each price cap LEC using both a correlation and rank correlation statistic, they were correlated at 60 percent.

40 Regression statistics for these staff studies were made part of the record in this proceeding. See Letter from David L. Hunt, Staff Attorney, FCC to Magalie Roman Salas, Commission Secretary (dated May 27, 1998).

41 Aliant, Nevada Bell, and Cincinnati Bell have relatively small sample sizes when compared to the other price cap LECs and, as explained below, we therefore do not find their non-primary residential line counts to be unreasonable. We also find that the non-primary residential line counts reported by Citizens and Frontier are not unreasonable because the Additional Line Study contains no sample data for these companies.

42 SNET reports a higher additional line penetration level than was calculated in the Excess Residential Loop Study.
when comparing the number of non-primary residential lines reported in price cap LECs' direct cases to the Additional Line Study results because of the binary method of classifying the number of additional lines in the Additional Line Study, which tends to undercount non-primary residential lines.

22. The Merrill Lynch and Salomon Brothers percentages support the finding that certain price cap LECs have significantly under-reported their percentage of non-primary residential lines and that the Additional Line Study is reasonable and conservative. The Merrill Lynch Report estimates additional line penetration as a percentage of total residential lines in service.\textsuperscript{43} The Salomon Brothers Report measures additional lines as the percentage of "penetration of second or additional lines to a customer's home for such uses as access to the Internet."\textsuperscript{44} Merrill Lynch reports second residential line penetration by LEC over five quarters from 1995 and 1996. The Merrill Lynch Report also estimates second line penetration higher than the Additional Line Study, and shows growth in second line penetration by the price cap LECs identified in their Telecom Services analysis.\textsuperscript{45} The Salomon Brothers' estimates, included in Figure 2, also show the significant growth levels in additional residential lines beyond those of the previous year as estimated by Merrill Lynch.

23. For the reasons stated above, we rely primarily on the Additional Line Study to determine the reasonableness of the percentage of non-primary residential lines to total residential lines reported by the price cap LECs.

\textsuperscript{43} Merrill Lynch Report, Table 3b at 6.

\textsuperscript{44} Salomon Brothers Report, supra, at 10.

\textsuperscript{45} The Merrill Lynch Report states: "We believe this strong growth in vertical services has not only been driven by solid growth in primary residential lines, but also by the growing number of second and third lines being added by US households (i.e. customers continue to augment their home office lines (or additional lines) with call management features and voice mail boxes), which continue to grow the potential vertical service subscriber base." Merrill Lynch Report, supra, at 6
FIGURE 4

Additional Line Percentage Comparisons - Direct Case and Staff Study

<table>
<thead>
<tr>
<th>Col</th>
<th>LEC</th>
<th>FCC</th>
<th>Percentage of FCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reported Additional Line Survey Identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Additional Line Study Estimate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(Col 1 / Col 2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **PRICE CAP LEC**
  - SPRINT LTC'S: 9.18% 8.60% 106.69%
  - AMERITECH: 11.17% 11.55% 96.75%
  - U S WEST: 10.32% 11.00% 93.77%
  - BELL ATLANTIC-SOUTH: 10.40% 13.45% 77.31%
  - BELL SOUTH: 8.86% 11.47% 77.21%
  - SWBT: 9.01% 12.13% 74.30%
  - BELL ATLANTIC-NORTH: 7.40% 12.13% 74.88%
  - GTE: 4.79% 8.94% 53.64%
  - SNET: 6.23% 11.88% 52.46%
  - Independents*: 5.09% 10.46% 48.65%
  - PACIFIC BELL: 2.67% 17.61% 15.14%
  - TOTAL or AVERAGE: 8.14% 11.40% 71.45%

* Independents are Aliant, Frontier, Citizens, CBT, and Nevada Bell. This Figure does not include these companies individually because we do not have sufficient data to estimate their percentage of non-primary residential lines to total residential lines.

24. **Reasonableness of LEC Reported Percentages of Non-Primary Residential Line Percentages.** Figure 4 groups price cap LECs based on the difference between the percentage they reported and the percentage estimated by the Additional Line Study. The first group reported between 94 and 106 percent of the percentages identified in the Additional Line Study; the second group reported between 72 and 77 percent; the third group reported between 49 and 54 percent; and the fourth, Pacific Bell reported 15 percent. As explained below, we find that the price cap LECs in the third and fourth groups for which we have sufficient data, (Pacific Bell, GTE, and SNET) reported unreasonably low percentages of non-primary residential lines.

25. We find Pacific Bell's line counts to be unreasonable. Pacific Bell reported non-primary residential line counts of only 2.67 percent, the lowest penetration level reported by any price cap LEC. This estimate is approximately fifteen percentage points lower than the 17.61 percent non-primary residential line count reported by the Additional Line Study for Pacific Bell. Thus, Pacific Bell reported only 15 percent of the non-primary residential lines identified in the Additional Line Study. Further evidence that Pacific Bell's non-primary residential line count of 2.67 percent is unreasonably low can be
found in the second line penetration levels for Pacific Bell identified by Merrill Lynch, 22 percent to 24 percent for 1995-1996, and Salomon Brother's second line estimate of 28 percent for the third quarter of 1997. Additionally, the Excess Residential Loop Study's estimate of excess residential loops per household for Pacific Bell is 19 percent. Furthermore, in a public statement issued by the company on July 15, 1996, Pacific Bell states:

Through targeted promotions in the consumer market, Pacific Bell has maintained its lead among regional Bell operating companies (RBOCs) in customers with two or more lines. Today, nearly 20 percent of Pacific Bell's residential customers have more than one access line compared to 14 percent for the next closest RBOC. During the first five months of 1996, the number of new additional lines increased 152 percent compared with new growth during the same period last year.46 (Emphasis in original.)

Further, as explained in Section II.B, infra, Pacific Bell failed to apply its definition in a way that identified as non-primary the additional residential lines that are billed under the same name and at the same location.

26. We also find that GTE's reported non-primary residential line count of 4.79 percent is unreasonable. This estimate is more than four percentage points lower than the Additional Line Study's estimate of 8.94 percent for GTE. GTE therefore only reported 54 percent of the non-primary residential lines that the Additional Line Study identified for GTE.47 Further, the Merrill Lynch Report estimates that GTE's second line penetration rose from 11 percent to 14 percent between 1995 and 1996. Finally, the Excess Residential Loop Study indicates excess residential loops per household for GTE of approximately 15 percent.

27. Although SNET is in the third group identified above, we do not have sufficient data to corroborate a finding that SNET reported an unreasonably low percentage of non-primary residential lines when compared to the percentage of lines identified for SNET in the Additional Line Study. This is because SNET reports a higher percentage of additional line penetration than was identified for SNET in the Excess Residential Loop Study and SNET was not included in either the Merrill Lynch or Salomon Brothers studies.

28. Finally, we do not find unreasonable the non-primary residential line counts of Aliant, Frontier, Citizens, CBT, and Nevada Bell because we lack sufficient surrogate data with which to compare the non-primary residential line counts reported by these price cap LECs. Specifically, the Additional Line Study and the Excess Residential Loop Study contain either a small sample size or no data for these price cap LECs.

46 Pacific Telesis, Inside Line, supra.

47 We recognize that GTE is located in numerous service areas throughout the country. The Additional Line Study, however, included 999 sample observations for GTE in 26 of the states for which GTE offers residential service. The correlation coefficient between the ARMIS 1995 actual residential line percentage for GTE within each state, and the number of sample observations taken in each state from the Bill Harvesting II data for GTE is 97.05%. This indicates that the Additional Line Study's estimate is a reliable one in terms of distribution of GTE residential lines across service areas.
cap LECs. Moreover, the Merrill Lynch Report does not provide estimates for any of these price cap LECs, and the Salomon Brothers Report only has relevant data for one of these five companies, CBT.

29. Prescription. We order Pacific Bell and GTE to recalculate their PICC and CCL rates to reflect a non-primary residential line count no lower than 70 percent of the lines identified by the Additional Line Study for these companies. We believe that it is reasonable to prescribe a non-primary residential line count of no lower than 70 percent of the lines identified by the Additional Line Study because, on average, price cap LECs in this investigation reported 71.45 percent of the non-primary lines identified by the Additional Line Study. Further, all other price cap LECs for which we have sufficient data report at least 70 percent of the non-primary lines identified by the Additional Line Study for their company. Accordingly, 70 percent closely approximates both the average among the price cap LECs in this investigation (71.45 percent) and the next lowest reporting of non-primary lines among other price cap LECs (72 percent), nearly all of whom are grouped between 77 percent and 72 percent.

30. We believe that this prescription strikes an appropriate balance among the relevant public interest factors, for several reasons. First, we believe it was reasonable to choose the Additional Line Study as the basis for the non-primary residential line prescriptions in this investigation because this study reflects the results of a large representative sample of residential households. It further provides a conservative estimate of the number of non-primary residential lines, which is corroborated by other data in the record. Second, we balanced relevant public interest factors in prescribing a threshold of 70 percent of the number of lines identified by the Additional Line Study, rather than taking unmodified penetration figures from the study. We chose not to prescribe 100 percent of the non-primary residential lines identified by the Additional Line Study because we recognize that by not adopting definitions for primary and non-primary residential lines there would be variations among price cap LECs in the level of non-primary residential line penetration levels when compared to the definition used in the Additional Line Study.

31. We therefore order Pacific Bell and GTE to increase their non-primary residential line counts so that their counts fall within 70 percent of the number of non-primary lines identified by Additional Line Study. Pacific Bell must, therefore, identify a total of 14,728,373 non-primary residential and BRI-ISDN lines. As a result, Pacific Bell must reclassify at least 11,541,877 of its primary residential lines as non-primary residential lines. GTE must identify a total of 9,351,369 non-primary residential and BRI-ISDN lines by reclassifying at least 2,185,593 primary residential lines as non-primary residential lines. We require Pacific Bell and GTE to recalculate their CCL rates and file tariff revisions that reflect these adjustments. These price cap LECs also must issue refunds to their customers as required by Section VI of this Order.

B. Definitions of Primary and Non-Primary Residential Lines

1. Background

32. The Access Charge Reform Order did not provide a definition of primary and non-primary residential lines. Instead, the Commission initiated a rulemaking proceeding which sought comment on how

48 As stated earlier, line count numbers are reported in price cap LEC tariffs and herein as yearly demand figures calculated as actual number of lines times twelve.
to define primary and non-primary residential lines. Incumbent LECs, therefore, developed their own definitions of primary and non-primary residential lines for purposes of the access reform tariff filings, effective January 1, 1998. In the Access Reform Tariffs Designation Order, the Bureau designated for investigation for all price cap LECs, the issue of whether their definitions of primary and non-primary lines were reasonable. The Bureau also tentatively concluded that the definitions used by BellSouth, SNET, and SWBT were unclear and required further elaboration. All three of these price cap LECs filed additional language attempting to clarify their definitions. BellSouth and SNET also filed proposed tariff revisions that include their revised definitions of primary and non-primary residential lines.

2. Discussion

33. We find, for purposes of this investigation, all but one of the definitions of primary and non-primary residential lines used by the price cap LECs are not unreasonable. As explained below, we find unreasonable the definition used by the SBC Companies in cases where it does not identify as non-primary the additional residential lines billed under the same name at the same location. We further find that proposed revised definitions of primary and non-primary residential lines filed by BellSouth and SNET clarify the way they identify primary and non-primary residential lines. We therefore order these companies to revise their tariffs to include these revised definitions.

34. Because we have not defined primary and non-primary residential lines, the price cap LECs were required to select a reasonable definition of primary and non-primary residential lines, and to implement their chosen definitions in a reasonable manner. The residential line definitions adopted by the price cap LECs can be characterized into two broad categories; those that identified and counted primary and non-primary residential lines by location and those who classified residential lines by account.

35. Ameritech and US West used definitions that identified non-primary residential lines by location. Under this definition, at a given location one line is classified as a primary residential line, and the remaining residential lines are classified as non-primary residential lines, regardless of the number of accounts or telephone bills sent to that location. We find that the "location" definition is not unreasonable because, if applied correctly, it identifies one line at a particular residence as primary, and the remainder

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49 Access Charge Reform Order, 12 FCC Red at 16016.

50 Access Reform Tariffs Designation Order at 2257.

51 See SNET Direct Case at 1-2; BellSouth Direct Case at 5-6; SBC Direct Case at 2.

52 BellSouth Direct Case at 6-7; SNET Direct Case at Exhibit 1.

53 Access Reform Tariffs Designation Order at 2255.

54 See Appendix B for a description of price cap LEC line count data sources and sorting criteria that carriers provided in their Direct Cases.

55 See, e.g., US West Direct Case at 1-2.
non-primary. This definition is, therefore, in keeping with both the universal service concerns for telephone access as well as the cost-causation principles set forth in the Access Charge Reform Order. 56

36. The remainder of the price cap LECs identified primary and non-primary residential lines by "account." Within the group that used the "account" definition, there were two general methods of identifying non-primary residential lines. Bell Atlantic counted lines at a particular location as primary if they were billed to separate accounts. If one account was associated with more than one line, the additional lines were classified as non-primary. Bell Atlantic went further, however, and examined the subscriber name and address for each account. If it found multiple accounts with the same subscriber name and address, it treated one line in those accounts as primary and the rest as non-primary.57 We find that application and use of the "account" definition in this manner is not unreasonable for purposes of this investigation, because it should identify, at a minimum, multiple lines billed to the same subscriber at the same location. We find that, at a minimum, definitions of primary and non-primary residential lines should categorize a second residential line as non-primary if the line is billed to the same name at the same location.

37. Another method of identifying non-primary residential lines is the "pure account" methodology used, for example, by SBC Companies. The definition set forth by the SBC Companies is as follows:

"SWBT considers a line a primary residential line if it is a line with a residence class of service, billed on a single line account. In addition, a line is considered to be a primary residential line if it is a line with a residence class of service that is single account billed as part of a multi-line or multi-party service. A line is considered to be a non-primary residential line if it has a residence class of service, is billed as part of a multi-line or multi-party service and is not the first line on the account as is classified as an additional line at any time there is at least one working line present at the time it is installed in a single family living unit. For example, if two lines in the same living unit appear on the same bill, the account would be considered multi-line or multi-party service. The first line would be considered primary and the second line would be classified as non-primary. Another example involves two lines in a single-family living unit, but the lines are billed on separate bills. Because both lines would be considered single line service, both would be considered primary." 58

38. We find that this definition is unreasonable if applied in a way that it does not identify as non-primary the additional residential lines that are billed under the same name and at the same location. If subscribers in a study area with multiple lines consolidate those lines on one bill or to a single account, this

56 Access Charge Reform Order, 12 FCC Rcd at 16000.

57 Using customer billing records for New Jersey, Bell Atlantic ran a report which matched and then provided the number of residential additional lines billed to the same billing name customer, at a single service address, on the same account as the primary residential line in order to identify non-primary residential line penetration when using the "account" criterion. This study was used as a surrogate for the proportion of non-primary residential lines in the Bell Atlantic regions. Bell Atlantic Direct Case at Attachment A pages 4-5.

58 SBC Direct Case at 2-2.
method, like Bell Atlantic's method, will identify most of a subscriber's additional lines at a single location as non-primary and, therefore, can be considered reasonable at least until our rulemaking proceeding is complete. If, however, as with Pacific Bell in California, subscribers with multiple lines at the same location are not encouraged to consolidate those lines on to a single account, the "pure account" definition and methodology is patently unreasonable because it fails to identify additional residential lines even when the lines are billed to the same name and location.

39. However, for purposes of determining the reasonableness of the rates in the January 1, 1998 tariffs, we concluded in Section II.A, that the rates are reasonable if a price cap LEC reported percentages of non-primary residential lines that were 70 percent of those found in our Additional Line Study. Some price cap LECs that used the "pure account" definition met this benchmark, possibly because customers with multiple lines at the same location have them consolidated into one account. These companies do not need to adjust their January 1, 1998 rates.

C. PICC and SLC Demand Amounts

1. Background

40. Subscriber line charges (SLCs) are assessed on a per-line basis upon subscribers to local exchange telephone service or Centrex service. Presubscribed interexchange carrier charges (PICCs) are assessed per-line upon the subscriber's presubscribed interexchange carrier (PIC), in part to recover common line revenues not recovered from the SLC. The maximum PICC that can be assessed, subject to the PICC ceiling, is determined by dividing residual common line and other revenues permitted under our price cap rules by access lines.

41. CCL charges are per-minute charges on originating and terminating minutes. The CCL recovers common line revenues not recovered through SLCs and PICCs. The maximum per-minute CCL charge that the price cap LECs can recover is the lower of: (1) the per-minute rate that would recover annual common line permitted revenues less the maximum amounts allowed to be recovered through SLCs and PICCs; or (2) for originating CCL charges, a cap based on charges assessed on originating minutes on December 31, 1997. This determination requires the price cap LECs to include the maximum SLC and PICC revenues they could recover in their calculations, regardless of whether they actually assess those revenues.

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60 "Pacific does not actively pursue consolidate residential billing. In other words, Pacific does not encourage customers to 'bill on' additional residential lines to existing residential accounts. This could lead to a smaller number of non-primary lines when compared to total residential lines." (sic) Errata to Direct Case of SBC at 2.

61 Access Charge Reform Order, 12 FCC Rcd at 16016; 47 C.F.R. § 69.152(a).

62 47 C.F.R. § 69.153(a).

63 47 C.F.R. § 69.153.

64 47 C.F.R. § 69.154.
charges. If a price cap LEC does not include all of the lines for which it is permitted to charge a PICC when it makes its calculations, the PICC determined using the formula in section 69.153 will be too high, because residual revenues will be divided by too few lines. If the PICCs are above the PICC caps, the residual used to determine the per-minute CCL charge pursuant to the formula in section 69.154(a) will also be too high. Thus, if the price cap LECs do not include in their maximum PICC and CCL calculations all the lines subject to these charges, the IXCs will be overcharged.

42. The Access Reform Tariffs Designation Order tentatively concluded that Ameritech, CBT, and U S West should be required to include in their line counts inward-only lines for their SLC and PICC counts. The Bureau also tentatively concluded that Ameritech failed to include all the Primary Rate Interface - Integrated Services Digital Network (PRI-ISDN) lines in its line count because it assessed five SLCs but only one PICC for PRI-ISDN service.

2. Discussion

43. In its direct case, CBT states that it inadvertently filed tariff language stating that it does not include inward-only lines in its SLC and PICC counts. CBT states that it did, in fact, include inward-only lines in these counts. Upon examination of the data, we find that CBT's explanation is adequate. We require, however, that CBT revise the language in its tariff to eliminate the provision that states it does not include inward-only lines in its SLC and PICC counts.

44. U S West states that it included inward-only lines in its SLC and PICC line counts. U S West states that, although it had not yet billed PICCs to inward-only lines due to an "internal misunderstanding" at the time U S West filed its access reform implementation tariff, this mistake is not reflected in its reported line counts. In fact, because U S West's tariff provides for a PICC on all inward-only lines ordered out of its general exchange tariffs, U S West's SLC and PICC line counts included all such lines. We therefore find U S West did not base its maximum PICC and CCL charge calculation on an undercount of the number of lines.

45. Ameritech argued in its direct case that it does not have to assess a PICC on inward-only lines or include them in its PICC line count because these lines cannot originate calls. The Access Reform Tariffs Designation Order tentatively rejected Ameritech's argument. Ameritech has since revised its tariff to include inward-only lines in its PICC count. This tariff became effective on April 1, 1998. Ameritech, however, maintains that its earlier approach was reasonable. We reject Ameritech's argument.

65 Access Reform Tariffs Designation Order at 2261.
66 CBT Direct Case at 4.
67 U S West Direct Case at 4.
68 Access Reform Tariffs Designation Order at 2260.
69 Ameritech Transmittal No. 1146, Access Reform Revision, filed March 17, 1998.
70 Ameritech Transmittal No. 1146, Access Reform Revision, Description and Justification, page 1 (March 17, 1998).
There is no provision in the Access Charge Reform Order that exempts inward-only lines from being included in either the SLC or PICC count.\textsuperscript{71} Although the end user does not originate traffic on inward-only lines, these lines carry interstate traffic, and part of the cost of each of these lines is assigned to the interstate jurisdiction. These lines should, therefore, be included in a price cap LEC's SLC and PICC counts. Ameritech assesses a SLC on inward-only lines, and we find no basis for including these lines in the SLC count but excluding them from the PICC count. Furthermore, our rules provide Ameritech an opportunity to recover PICCs on inward-only lines. For inward-only lines that do not have a PIC, price cap LECs may assess the PICC upon the end-user.\textsuperscript{72} DeltaCom argues that assessing a PICC on inward-only lines further complicates the auditing and tracking of this charge.\textsuperscript{73} Even if this is true, it does not provide sufficient cause to exclude these lines when calculating the maximum PICC and CCL charges. We therefore order Ameritech to revise its line counts to include inward-only lines in its PICC count. We note that Ameritech, in its March 17 tariff filing, already recalculated its CCL rates for the period starting April 1, 1998.\textsuperscript{74} Accordingly, Ameritech must recalculate its CCL rates for the first three months of 1998 to reflect its revised line counts for the purpose of making refunds to its customers in accordance with the requirements of Section VI of this Order.

46. Ameritech, in its December 17, 1998 reply, stated that each PRI-ISDN service offering was assessed five SLCs, but only one PICC for purposes of calculating its maximum CCL charge.\textsuperscript{75} Ameritech acknowledges that this representation is incorrect, and that it has always counted an equal number of SLCs and PICCs for each PRI-ISDN offering. We have verified Ameritech's claims by examining its tariff filing, and find therefore that Ameritech reasonably counted SLCs and PICCs for each PRI-ISDN offering.

D. Historical Understatement of the BFP

1. Background

47. In preparing its annual access tariff filing, each incumbent LEC must forecast its common line costs and end user demand levels for the upcoming tariff year. These forecasts, in turn, are used to determine the LEC's monthly per-line BFP revenue requirement.\textsuperscript{76} The LEC then uses this monthly per-line BFP revenue requirement to set its SLC, subject to certain SLC caps provided in the Commission's rules.\textsuperscript{77}

\textsuperscript{71} We note that these lines are assessed a SLC, pursuant to section 69.152(a), which states that a SLC is assessed upon end users that subscribe to local exchange service.

\textsuperscript{72} 47 C.F.R. § 69.153(b).

\textsuperscript{73} DeltaCom Comments at 2.

\textsuperscript{74} Ameritech Transmittal No. 1146, Access Reform Revision, Description and Justification, page 1 (March 17, 1998).

\textsuperscript{75} Ameritech Direct Case at 6.

\textsuperscript{76} 47 C.F.R. §§ 69.501, 69.502.

\textsuperscript{77} For price cap LECs, residential and single-line business SLCs are capped at $3.50 per month, while non-primary residential line SLCs are currently capped at $5.00 per month. The MLB SLC assessed by price cap LECs
A price cap LEC then sets its PICCs and its per-minute CCL charges to recover the difference between its anticipated SLC revenues and the total common line revenues permitted by its price cap.\footnote{78}{47 C.F.R. §§ 61.45(c), 61.46(d).}

48. A price cap LEC may be able to improperly increase its overall common line revenues by understating its per-line BFP revenue requirement and calculating correspondingly higher CCL rates. A price cap LEC that has a SLC below the multi-line business (MLB) SLC cap, and that expects growth in minutes-of-use per-line (g) in the upcoming tariff year to exceed g/2 from the previous year, can increase its overall common line revenues by understating its per-line BFP revenue requirement because the revenue from higher CCL charges more than offsets the revenue foregone from lower SLCs. In the 1997 Annual Access Tariff Investigation Order, we concluded that Bell Atlantic-South, Bell-Atlantic-North, GTE, SWBT, the Sprint LTCs, and U S West had unjustly and unreasonably understated their per-line BFP revenue requirement forecasts for tariff year 1997-98, and had tariffed CCL rates that were correspondingly unjustly and unreasonably high. We therefore prescribed per-line BFP revenue requirement forecasts for these LECs.\footnote{79}{47 C.F.R. §§ 61.46(d-e); 69.152.}

49. A price cap LEC's maximum CCL charge is determined, in part, by the last calendar year's (base-period's) aggregate common line basket revenues.\footnote{80}{47 C.F.R. § 69.152.} An improper increase in aggregate common line revenues is carried forward into the following year, increasing future aggregate common line revenues and CCL charges. In the 1997 Annual Tariff Investigation Order, the Commission stated that for a price cap LEC that routinely develops unbiased per-line BFP revenue requirement forecasts, the price cap formula adjusts the CCL rate in a manner intended to generate the remainder of the common line revenues permitted under price caps not recovered from SLCs.\footnote{81}{1997 Annual Tariff Investigation Order, 13 FCC Rcd at 3856.} The Commission also stated, however, that an incumbent LEC that has consistently understated its per-line BFP revenue requirement has consistently and correspondingly inflated its maximum CCL rate. A price cap LEC uses its prior year's total common line revenues as the starting point in computing its CCL rate. If the price cap LEC understates its per-line BFP revenue requirement, thereby inflating its aggregate common line revenues in a given year, the price cap formula automatically builds this inflation into its CCL rate for the upcoming year. The increase to a price cap LEC's aggregate common line revenues is compounded each year a price cap LEC understates its per-line BFP revenue requirement. As the effects of this overstatement compound each year, the maximum CCL charge becomes increasingly inflated, generating revenues that exceed the common line revenues intended to be permitted under price caps.\footnote{81}{Id.} Although we acknowledged this effect in the 1997 Annual Tariff Investigation Order, we did not order reductions to PCIs to remove the lingering effect of current common line basket revenues.
historically inflated maximum CCL rates, because the record did not provide sufficient information to allow calculation of such reductions.\textsuperscript{82}

50. In the Access Reform Tariffs Designation Order, we tentatively concluded that the current maximum CCL rates of Bell Atlantic-South, Bell Atlantic-North, GTE, SWBT, the Sprint LTCs, and U S West were unreasonably high due to past understatement of per-line BFP revenue requirement.\textsuperscript{83} We directed each of these carriers to provide, as part of its direct case, a recalculation of its maximum common line revenues, using the CCL Recalculation Methodology employed by AT&T in its December 23 Petition. We sought comment on this proposed methodology. We also sought comment on whether this proposed methodology should be adjusted to account for specific instances in which price cap LECs have priced their CCL charges below the permitted cap or have reduced their PCIs for a tariff year because of sharing. Additionally, we invited price cap LECs to submit alternative methodologies that in their view may present a more accurate calculation of their maximum common line revenues.\textsuperscript{84}

2. Discussion

51. In this Order, we require Bell Atlantic-South, Bell Atlantic-North, the Sprint LTCs, GTE, SWBT, and U S West to make adjustments to their maximum permitted CCL rates to remove the effect that the consistent understatement of BFP revenue requirements has on their CCL rates. These price cap LECs must make these recalculations using the AT&T CCL rate recalculation methodology, as modified by this Order.

52. U S West, in its direct case, contends that the adjustment of CCL charges, as contemplated by the Access Reform Tariffs Designation Order, would conflict with the Commission's rules.\textsuperscript{85} U S West argues that the Commission's rules do not contemplate a true-up process of this kind. Even if the Commission could require a true-up, U S West argues, it must first find the price cap LECs' CCL rates unreasonable and then determine that a reasonable rate requires this adjustment. U S West argues, however, that the Commission has effectively prescribed U S West's CCL rates and it may not now find those rates unreasonable. Further U S West argues that in order for the Commission to find the price cap LECs' CCL rates unreasonable, the Commission must find that only perfect BFP forecasts can produce reasonable rates.\textsuperscript{86} In addition, U S West argues that if the Commission institutes the adjustment contemplated in the Access Reform Tariffs Designation Order, "it must either determine the allowable margin for error in the LECs' BFP forecasts, or it must require a true-up to actual BFPs for all LECs, regardless of the accuracy of their forecasts."\textsuperscript{87}

\textsuperscript{82} Id. at 3857.

\textsuperscript{83} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2264.

\textsuperscript{84} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2264.

\textsuperscript{85} U S West Direct Case at 6.

\textsuperscript{86} U S West Direct Case at 6-7.

\textsuperscript{87} U S West Direct Case at 6.
53. We reject U S West's assertion that we lack the authority to require price cap LECs to adjust their CCL rates to eliminate any lingering effect of previous understatements of their BFP revenue requirements. Under Section 201(b), we are charged with ensuring the price cap LEC rates are just and reasonable, and in exercising that authority, we have the ability to set just and reasonable rates when we find rates to be unreasonable. 88 The Communications Act empowers us "to determine and prescribe what will be the just and reasonable charge, or the maximum or minimum, or maximum and minimum, charge or charges" these LECs are permitted to impose. 89 We conclude that the current maximum CCL rates of Bell Atlantic-South, Bell Atlantic-North, the Sprint LTCs, GTE, SWBT, and U S West are unreasonably high due to past understatement of per-line BFP revenue requirement, and that they must recalculate their maximum CCL rates and common line revenues using the CCL rate recalculation methodology, as modified by this Order. We are not, in this Order, requiring these companies to refund or adjust their rates to account for the fact that their historic overstatement of BFP resulted in higher CCL rates in any period before January 1, 1998. These price cap LECs have been on notice that this issue is under investigation and that their 1998 rates may need to be adjusted accordingly.

54. U S West asserts that the Commission has "effectively prescribed U S West's CCL rates," and the Commission may not now "find those rates not justified under Section 204(a)." 90 The Commission has not "effectively," or otherwise, prescribed the maximum CCL rates for U S West. In the 1997 Annual Access Tariff Investigation Order, we found that the CCL rates charged by U S West and several other price cap LECs were unreasonably high due to the understatement of the BFP revenue requirement forecast for the 1997-98 tariff year. We therefore required U S West and other price cap LECs to use the forecasts we prescribed to recalculate their common line rates for the January 1, 1998 through June 30, 1998 period. We further found that U S West and several other price cap LECs had consistently overstated their BFP revenue requirement over the course of several years and had correspondingly inflated their maximum CCL rates. Although prior to the 1997 annual access tariff investigation we allowed tariffs to go into effect that reflected understated BFP revenue requirements and inflated CCL rates, these rates went into effect without an investigation of BFP revenue requirement forecasts. The fact that tariffs were allowed to go into effect with CCL rates that reflected understated BFP revenue requirement forecasts, did not constitute a finding that these forecasts were just and reasonable. It is well established that a Commission decision allowing a tariff to go into effect without an investigation "decides nothing concerning the merits of the case; it merely reserves the issues pending a hearing." 91

55. Further, Section 61.46(d)(1) of the Commission's rules sets forth the methodology by which the maximum carrier common line charge shall be computed. The Commission has the authority and the obligation under section 201(b) of the Commission's rules to determine whether price cap LECs have established reasonable rates by using this methodology correctly. In the 1997 Annual Tariff Investigation Order, we specifically noted that although a price cap LEC that consistently understated its per-line BFP revenue requirement inflated its maximum CCL rate, the record did not provide sufficient information to


90 U S West Direct Case at 7-8.

allow calculation of such reductions. This proceeding, however, designated this issue for investigation and has developed a sufficient record.

56. We also find without merit U S West's claim that we cannot require the proposed CCL rate adjustments because we need either to provide acceptable margins of error for BFP forecasts or to require all LECs to true-up their BFP. In the 1997 Annual Tariff Investigation Order, we stated which price caps LECs have reasonable maximum CCL rates and which ones did not. Price cap LECs can use our findings in that investigation as a guide for which kind of BFP forecasts produce reasonable rates. Contrary to U S West's claim, we do not need to find that only perfect BFP forecasts can produce reasonable rates. In fact, in the 1997 Annual Tariff Investigation Order, we found that most of the price cap LECs were able to produce reasonably unbiased and accurate forecasts without making perfect predictions. U S West would have us require a true-up to actual BFPs for all price cap LECs, even ones whose rates we determined were reasonable. In the 1997 Annual Tariff Investigation Order, we stated that "a LEC that has consistently understated its per-line BFP revenue requirement over the course of several years has also consistently and correspondingly inflated its maximum CCL rate." In this order, we require those price cap LECs which have "consistently understated" their per-line BFP revenue requirements to recalculate their maximum CCL rates. There is no need to require price cap LECs that have produced reasonably unbiased and accurate forecasts to recalculate their maximum CCL rates. That would unduly punish price cap LECs that have consistently and reasonably forecast their monthly per-line BFP revenue requirements.

57. We adopt, with some modifications, AT&T's proposed methodology for calculating the impact of the historic understatement of the BFP estimates in current CCL rates. The AT&T methodology uses adjusted SLCs and the formulas on the CCL-1 charts to recalculate the maximum permitted CCL rates and common line revenues for 1991-1997. The AT&T methodology for recalculating the maximum CCL rate adjusts the SLCs proposed in the annual filings by: (1) calculating the percentage difference between the actual BFP and the forecasted BFP in each annual filing; and (2) applying this percentage to the SLCs proposed in each annual filing. For each SLC, the AT&T adjusted proposed SLC is the lesser of this calculation and the SLC cap. The AT&T methodology uses a "true-up" mechanism to account for rate changes that took effect between annual tariff filings.


93 Id.

94 Id. at 3856-57.

95 The CAP-1 chart replaced the CCL-1 chart beginning with the access reform tariff filings that took effect on January 1, 1998.

96 AT&T Petition, Exhibit CCL Refund at 1, 5 (dated December 23, 1997). The AT&T methodology uses the adjusted proposed SLCs in the calculation of the maximum CCL rate and common line revenues on the CCL-1 charts for a given annual tariff filing. It carries these adjusted proposed SLCs forward and uses these as the SLCs at the last PCI update on the CCL-1 chart for each subsequent annual tariff filing. Id. at 1, 3, 3a-3g, and 5.

97 The AT&T methodology accounts for rate changes that take effect between annual tariff filings by first determining the percentage difference between the maximum CCL rate proposed in a given annual tariff filing and
58. We find that the AT&T methodology is generally correct for two reasons. First, it uses CCL-1 charts to recalculate the maximum CCL rate and common line revenues and the formula set forth on these charts is equivalent to the formula set forth in our rules for calculating the maximum CCL rate and common line revenues. Second, AT&T's methodology removes the historic understatement of BFP forecasts from the SLCs proposed in the annual filings because it applies the percentage difference between the actual BFP and the forecasted BFP to the proposed SLCs.

59. We agree with Bell Atlantic, however, that the true-up mechanism in AT&T's methodology does not precisely reflect the impact that rate changes between annual tariff filings have on the maximum CCL rate. The AT&T methodology only uses a "true-up" mechanism because it does not account separately for interim rate changes. Bell Atlantic recalculated the amount of the maximum CCL and common line revenue overstatement for Bell Atlantic-South by measuring the impact on the CCL rate of interim filings between the 1996 and 1997 annual filings. This calculation reveals that Bell Atlantic-South's maximum common line revenue overstatement is approximately two million dollars lower than the overstatement calculated by using the "true-up" reflected in AT&T's methodology. We find that accounting separately for each tariff filing that has affected maximum common line revenues since 1991 may substantially increase the precision of the maximum CCL rate recalculations. We therefore modify AT&T's methodology to account for the impact of interim rate changes. We require Bell Atlantic-South, Bell Atlantic-North, US West, GTE, SWBT, and Sprint to recalculate their maximum CCL rates by accounting separately for each tariff filing that has affected maximum common line revenues since 1991. We require that they revise each CCL-1 chart that they submitted with their previous filings by performing the calculations on these charts using AT&T adjusted proposed SLCs in place of the proposed SLCs in each tariff filing. These LECs should not "true-up" the calculation of the maximum CCL rate and common line revenues because each rate change that has affected maximum common line revenues since 1991 is accounted for separately under this revised methodology.

60. For price cap LECs such as Bell Atlantic-South that file separate SLCs for each state in their territories, the AT&T adjusted proposed SLCs are weighted average rates based on SLC demand for each state in a LEC’s territory. In implementing AT&T's methodology, as revised by this Order, Bell Atlantic-
South must use the same demand for calculating the adjusted proposed SLCs reflected in the calculations on the revised CCL-1 charts as was used originally to calculate the proposed weighted average rates reflected in the calculations on the previously submitted CCL-1 charts. We also find that Bell Atlantic-South must carry forward these same adjusted proposed SLCs and use these as the SLCs at the last PCI update on the CCL-1 chart for each subsequent recalculated tariff filing. By carrying forward the same weighted average rates without modifying the demand reflected in the calculation of these rates, the rates properly reflect the demand that provided the basis for recovery of common line revenues between tariff filings.

61. We disagree with Bell Atlantic's argument that section 61.46(d)(1) of our rules requires that the weighted average SLCs at the last PCI update reflect base period demand for the current tariff filing. These rules require that the SLCs at the last PCI update reflect existing rates. Existing SLCs are those in effect immediately prior to the effective date of the current tariff filing. For a price cap LEC such as Bell Atlantic-South that calculated weighted average SLCs and used these weighted averages on the CCL-1 chart for the prior tariff filing, existing SLCs reflect the demand for whatever period that it used to calculate these weighted averages and the SLCs proposed for each state in its territory in the prior tariff filing.

62. We agree with Sprint that the AT&T methodology, as revised by this Order, must be extended through December 31, 1997 so that it captures any rate changes that may have affected maximum common line revenues between the July 1, 1997 annual filing and the access reform tariff filing. The adjusted proposed SLCs used in the recalculation of the maximum CCL rate and common line revenues on the CCL-1 charts for these tariff filings should reflect the Commission's prescribed BFP forecast. Bell Atlantic-South, Bell Atlantic-North, US West, GTE, SWBT, and Sprint LECs must, therefore, apply the modified AT&T methodology so that it also captures interim rate changes filed between July 1, 1997 and December 31, 1997. They also must reflect the Commission's prescribed BFP forecast in the recalculation of the maximum CCL rate and common line revenues for these tariff filings.

63. We find that SWBT did not account properly for rate changes reflected in its 1997 annual tariff filing. SWBT recalculated the maximum CCL rate and common line revenues by revising its CCL-1 charts for annual and interim tariff filings between 1991 and 1998 using adjusted proposed SLCs in place of the originally proposed SLCs. It did not, however, revise the CCL-1 chart it submitted for the 1997 annual tariff filing. It has not, therefore, accounted separately for rate changes reflected in its 1997 annual tariff filing. Accordingly, SWBT must revise the CCL-1 chart it submitted for the 1997 annual tariff filing. SWBT must use adjusted proposed SLCs in the recalculation of the maximum CCL rate and common line revenues on this CCL-1 chart that reflect the Commission's prescribed BFP forecast. It also must reflect the recalculations of the maximum CCL rate and common line revenues for the 1997 annual tariff filing in the recalculation of the maximum CCL rate and common line revenues for subsequent tariff filings.

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100 Bell Atlantic-South files separate SLCs for each state in its territory. It developed the maximum CCL rate and common line revenues by using a weighted average of the SLCs for each state in the formula for calculating the maximum CCL rate on the CCL-1 charts. It used demand for SLC elements for each state to calculate the weighted average SLCs.

101 47 C.F.R. § 61.46(d)(1).
64. We disagree with Bell Atlantic's argument that AT&T's methodology is unreliable because it does not include the impact of changes in sharing amounts. While the AT&T methodology makes no adjustment to the common line basket PCIs to reflect changes in sharing amounts for 1991-1997, there is no need to make such an adjustment. The effect of sharing is reflected in the PCIs for price cap baskets by making downward exogenous adjustments to these baskets in one tariff year. This effect is then reversed by making upward exogenous adjustments to the price cap baskets in the following tariff year. Accordingly, we do not modify the AT&T methodology to include the impact of changes in sharing amounts.

65. We find that the methodology we adopt in this order for recalculating the maximum CCL rate and maximum common line revenues does not require an adjustment to account for instances in which price cap LECs have priced their CCL rates below the permitted cap because the purpose of the recalculation is to establish on a going forward basis the proper levels for the maximum allowable CCL rate and maximum common line revenues. Price cap LECs may choose to price their CCL rate below the permitted cap. The tariffed CCL rate does not, however, affect the calculation of the maximum allowable CCL rate and maximum allowable common line revenues. Accordingly, it should not affect the recalculation of the maximum allowable CCL rate and maximum common line revenues for price cap LECs going forward.

66. SWBT suggests that the AT&T methodology be refined by revising the PCIs for the common line basket to reflect base period revenues that are based on the amount of the recalculated maximum common line revenues. We do not require the price cap LECs to modify their PCIs to reflect the recalculated maximum common line revenues because this refinement would introduce additional complexity into the recalculation of the maximum CCL rate and common line revenues. At the same time, there is no evidence in the record that this refinement would significantly increase the precision of these recalculation. While SWBT suggests making this refinement, it concedes that the effect of such a refinement for SWBT would be minor.

67. We also find that GTE incorrectly recalculated the maximum CCL rate and common line revenues on a total company basis. GTE's recalculation of the maximum CCL rate and common line revenues on a total company basis is inconsistent with how it actually calculates its maximum CCL rates because it calculates different maximum CCL rates for each of its study areas. Accordingly, we require GTE to recalculate separately the maximum CCL rate and common line revenues for each of its study areas using the AT&T methodology, as modified by this Order.

68. Accordingly, we require Bell Atlantic, the Sprint LTCs, GTE, SWBT, and US West to file tariff revisions with new maximum permitted CCL rates that remove past effects of understating their BFP revenue requirements as required by this section. We also require these price cap LECs to issue refunds to their customers in accordance with the requirements of Section VI of this Order. We note that by applying the AT&T methodology, as revised by this Order, Bell Atlantic-South, Bell Atlantic-North, US West, GTE, SWBT, and the Sprint LECs may demonstrate that their maximum permitted CCL rates and common line revenues are no longer inflated due to historic understatement of BFP.

III. Methodology for Calculating Exogenous Adjustments that Reflect Cost Reallocations

A. Background
69. In the Access Charge Reform Order, the Commission required price cap LECs to make exogenous cost adjustments in their January 1, 1998 tariff filings to reflect certain amendments to the Commission's rules on access charges. In general, the price cap LECs calculated these exogenous cost adjustments by computing a hypothetical revenue requirement based on their reported Part 69 costs and a target cost of capital of 11.25 percent for each exogenous cost item. In the Access Reform Tariffs Designation Order, the Bureau tentatively concluded that the price cap LECs' hypothetical revenue requirement methodology does not accurately identify the amount of exogenous cost adjustments for line ports and end office trunk ports. Instead, the Bureau tentatively concluded that price cap LECs should calculate the exogenous adjustments using a two-step methodology: (1) divide the hypothetical revenue requirement for each exogenous cost item by the hypothetical revenue requirement for the total basket; and (2) multiply this ratio by the maximum permitted basket revenues. In addition, the Bureau suggested that, logically, any method for moving rate elements or services out of baskets or service categories should, if applied seriatim to each element or service, remove all permitted revenues in the basket or service category when the last service or rate element was removed.

70. The Access Reform Tariff Designation Order also sought comment on whether the methodology proposed for ports should be applied to the other exogenous cost adjustments required by the Access Charge Reform Order. The Bureau directed parties to quantify the results of using this method consistently for all such reallocations, and required each price cap LEC to include in its direct case a comprehensive list of all the exogenous adjustments it has made since it entered price cap regulation for the purpose of reallocating costs among baskets, categories, rate elements, or between price cap and non-price cap services. In addition, the Bureau tentatively concluded that if permitted revenues are used as the basis of the exogenous adjustment, the common line rate adjustment should be calculated as follows: price cap LECs should use local switching revenues for the purpose of determining the amount of exogenous cost adjustments to the Traffic-Sensitive and Common Line baskets, but price cap LECs should use their Part 69 revenue requirements to recalculate the BFP, because the BFP is still calculated pursuant to fully-distributed embedded costs and revenue requirements.

B. Discussion

71. In the Access Charge Reform Order, the Commission required price cap LECs to make exogenous cost changes to reflect reallocations of cost recovery among price cap baskets, service categories, and rate elements. Price cap LECs were required to make many of these adjustments in tariffs that became effective on January 1, 1998. In all but one case, the Commission did not adopt a specific

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102 For a description of this methodology, see Access Reform Tariffs Designation Order, 13 FCC Red at 2265-66.

103 Access Reform Tariffs Designation Order, 13 FCC Red at 2269.

104 Access Reform Tariffs Designation Order, 13 FCC Red at 2270.

105 Access Reform Tariffs Designation Order, 13 FCC Red at 2270.

106 Access Reform Tariffs Designation Order, 13 FCC Red at 2270. As discussed in Section II.D supra, the BFP is the portion of the common line revenue requirement that is used to determine the maximum end-user per-line charge. See Section II.D supra. See also 47 C.F.R. §§ 69.152, 69.501(e), 69.502.
methodology for calculating the January 1, 1998 exogenous cost changes required by the Access Charge Reform Order.\textsuperscript{107} It is therefore appropriate and, indeed, necessary for us to determine in this tariff investigation the proper methodology for the January 1, 1998 exogenous adjustments required by the Access Charge Reform Order, pursuant to Sections 201-205 of the Communications Act.\textsuperscript{108} As explained below, we conclude that price cap LECs must calculate these exogenous cost adjustments to reflect reallocations on the basis of permitted revenues, rather than on the basis of revenue requirements.

72. Price cap regulation, unlike rate of return regulation, is designed to focus on the prices that carriers can charge for their services, as opposed to the carriers' costs and authorized rate of return.\textsuperscript{109} Although the initial rate elements under price cap regulation were based on Part 69 revenue requirements and were targeted to earn an 11.25 percent rate of return,\textsuperscript{110} rates have diverged from those original allocated costs over time through operation of the price cap formulas. Price cap regulation has allowed carriers that reduced their costs to keep all or some of the earnings they gained by being more efficient. Moreover, price cap regulation allowed carriers a measure of pricing flexibility within baskets to raise and lower rates on particular rate elements without reference to the revenue requirements originally recovered through those rate elements, or to the revenue requirement that would result today from application of the Part 69 cost allocation rules. We therefore conclude that the price cap LECs' revenue requirement methodology, which uses hypothetical revenue requirements based on these LECs' reported Part 69 costs and allowed return on investment of 11.25 percent, is not a reasonable methodology for reallocating cost recovery among price cap baskets and service categories.

73. Instead, we require price cap LECs to implement the exogenous adjustments due to reallocations among price cap baskets and service categories by transferring permitted revenues proportional to relative revenue requirements. We adopt this method because it recognizes the revenue effect of the reallocation. The methodology reflects fully the effect that demand growth and "GDP-PI minus X-factor" adjustments have over time on the allowance for recovery of the amounts that are being

\textsuperscript{107} The exception is the exogenous adjustment to reallocate one third of the portion of the tandem switching revenue requirement that is recovered form the TIC, excluding SS7 signalling and dedicated tandem trunk port costs reallocated elsewhere, to the tandem switching rate element. In that case, the Commission required price cap LECs to account for the effects of "GDP-PI minus X-factor" reductions to the original portion of the tandem switching revenue requirement allocated to the TIC. See Access Charge Reform Order, 12 FCC Rcd at 16066-67. As discussed below, this methodology prescribed by the Commission accomplishes the same goal as the permitted revenue methodology that we adopt in this Order. The PCIs for price cap baskets are adjusted annually pursuant to formulae set forth in our rules. The PCI formula consists of an inflation measure, the Gross Domestic Product Price Index (the GDP-PI), minus a productivity measure (the X-factor), plus or minus any permitted exogenous cost adjustments. See Section 61.45(b) of the Commission's Rules, 47 C.F.R. § 61.45(b).

\textsuperscript{108} 47 U.S.C. §§ 201-205.


\textsuperscript{110} See LEC Price Cap Order, 5 FCC Rcd at 6814. The Commission adopted an 11.25 percent authorized rate of return in a companion order to the LEC Price Cap Order. See Represcribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, CC Docket No. 89-624, Order, 5 FCC Rcd 7507 (1990).
reallocated, as explained below. If the revenue effect is not factored into the exogenous adjustment when a rate element is reallocated to another basket or service category, the exogenous adjustment either creates headroom for rate increases or forces rate reductions for the remaining rate elements in the basket. Moreover, as explained below, a method that did not remove the revenue effect, if applied seriatim to each element or service, would fail to exhaust permitted revenues in the basket or service category when the last service or rate element is removed.

74. The following scenario illustrates the problematic effects of the price cap LECs' revenue requirement methodology. If the price cap LECs' revenue requirement methodology were used to remove a rate element from a service category or basket, and the service category or basket had been earning returns in excess of 11.25 percent, the price for the remaining elements could be raised, increasing the earned return on the basket even further.\footnote{For example, assume that, prior to the Access Charge Reform proceeding, the local switching rate element consisted of three functions: line ports, end office trunk ports, and other local switching costs. Also assume that the permitted local switching revenues under price caps is $100, that each function has a hypothetical revenue requirement of $30, and that the revenue effect of each function is $33.33. Under the price cap LECs' revenue requirement methodology, the removal of the line port and end office trunk port functions would leave $40 of permitted revenues in the local switching element to be recovered by other local switching costs. Thus, other local switching costs, which have a hypothetical revenue requirement of $30, would now recover $40 in permitted revenues instead of $33.33.}

Following this scenario to its logical end, when the last rate element in the basket is removed, there would be residual permitted revenues in the basket and no rate elements to recover those revenues. We also note that if the price cap LECs' revenue requirement methodology were used to remove a rate element from a service category or basket that had been earning below 11.25 percent, and the basket or service category had no headroom, the price cap LECs would need to decrease prices for the remaining rate elements. We therefore find that the price cap LECs' revenue requirement methodology would produce unreasonable reallocations of rate elements or partial rate elements among price cap baskets and service categories. Accordingly, we require price cap LECs to remove the revenue effect of each January 1, 1998 exogenous adjustment required by the Access Charge Reform Order.\footnote{We give additional specific instructions in Section IV.A on how the permitted revenue methodology should be applied to the exogenous cost change for SS7-STP.}

75. While most price cap LECs acknowledge that a permitted revenue methodology may be appropriate for certain exogenous adjustments, they contend that it is not a reasonable methodology for the January 1, 1998 exogenous adjustments required by the Access Charge Reform Order.\footnote{See, e.g., BellSouth Direct Case at 19-20; Sprint LTCs Direct Case at 5-7.} Some price cap LECs assert that because the exogenous cost changes implemented in the January 1, 1998 tariff filings involve the removal of partial rate elements, rather than entire rate elements, the permitted revenues methodology we adopt in this Order should not be used.\footnote{Bell Atlantic Direct Case, Attachment C at 6-7; BellSouth Direct Case at 19-20; SBC Direct Case at 8-9; SNET Direct Case at 3; U S West Rebuttal at 4. See also GTE Direct Case at 7. We note that on March 3, 1998, Bell Atlantic filed tariff revisions to reflect the use of revenues as the basis for determining exogenous cost adjustments for line ports and end office trunk ports. Bell Atlantic Tariff F.C.C. No. 1, Transmittal No. 1033; NYNEX Tariff F.C.C. No. 1, Transmittal No. 488. Bell Atlantic states that it filed these tariff revisions to 31
while the removal of entire rate elements can be determined on the basis of revenues because the rate elements can be multiplied by demand to calculate the associated revenues, in the case of partial rate elements, no rate exists and thus this revenue calculation cannot be made.\textsuperscript{115} We conclude, however, that the methodology applies equally well even where there were no separate rate elements for these functions prior to the Access Charge Reform proceeding. The absence of a separate rate element merely affects the specifics of the calculation required.

76. The Sprint LTCs argue that if a price cap LEC uses a permitted revenue methodology to separate a new rate element from an existing service category which is earning above 11.25 percent, the LEC must either price the new rate element above cost or shift additional cost recovery to other services in the basket.\textsuperscript{116} The Sprint LTCs argue that this result would distort the rates of the new rate element, which should be priced at cost in order to provide the market with the proper economic signals, or distort the rates of the other services in the basket.\textsuperscript{117} We disagree with the Sprint LTCs' assertion that the use of a permitted revenue methodology to separate a new rate element from an existing service category would "distort" rates. On the contrary, the use of a permitted revenue methodology would evenly apportion permitted revenues between the new rate element and the existing service category. If the price cap LECs' hypothetical revenue requirement methodology were used to separate a new rate element from an existing service category which is earning returns in excess of 11.25 percent, all earnings in excess of 11.25 percent would remain in the existing service category.

77. The Sprint LTCs also argue that the use of a permitted revenue methodology to calculate the January 1, 1998 exogenous adjustments would result in unreasonable discrimination among customers of different price cap LECs.\textsuperscript{118} The Sprint LTCs state that customers served by price cap LECs that have achieved significant efficiency gains, and thus earn above 11.25 percent in baskets from which costs are reallocated, would be affected differently than customers served by price cap LECs that earn below 11.25 percent in baskets from which costs are reallocated.\textsuperscript{119} While we agree that customers served by price cap LECs with different levels of efficiency gains may be affected in different ways by exogenous adjustments calculated on the basis of a permitted revenue methodology, such differences do not constitute unreasonable discrimination. Price cap regulation gives carriers an incentive to reduce costs, while still ensuring that minimize potential refund liability for local switching rates if the Commission decided to apply the revenue methodology retroactively without allowing offsetting common line rate increases. Bell Atlantic asserts, however, that the filing of these tariff revisions does not represent a concession that the revenue methodology proposed by the Bureau in the Access Reform Tariff Designation Order is the only reasonable approach for making exogenous cost changes for ports. Bell Atlantic Tariff F.C.C. No. 1, Transmittal No. 1033, Description and Justification at 1-2; NYNEX Tariff F.C.C. No. 1, Transmittal No. 488, Description and Justification at 1-2.

\textsuperscript{115} Bell Atlantic Direct Case, Attachment C at 6; BellSouth Direct Case at 19-20; SNET Direct Case at 3. See also GTE Rebuttal at 6 n.8; U S West Rebuttal at 4.

\textsuperscript{116} Sprint LTCs Direct Case at 6-7.

\textsuperscript{117} Sprint LTCs Direct Case at 6.

\textsuperscript{118} Sprint LTCs Direct Case at 7.

\textsuperscript{119} Sprint LTCs Direct Case at 7.
customers do not pay rates above a just and reasonable level. Price cap regulation does not, however, ensure that customers of different price cap LECs are affected by exogenous adjustments in the same manner.

78. SNET argues that a permitted revenue methodology cannot be used to calculate the exogenous adjustments for ports because there is a mismatch between the ARMIS Traffic-Sensitive Switching category, which includes tandem switching costs, and the price caps Local Switching category, which does not.\textsuperscript{120} We disagree. Price cap LECs can use the permitted revenue methodology to determine the exogenous adjustment for ports by calculating a percentage of ports to Local Switching revenue requirement and by directly applying that percentage to the price caps Local Switching category.

79. Some price cap LECs contend that their use of the revenue requirement methodology is consistent with the Access Charge Reform Order because the Order directs the carriers to reassign costs among baskets and service categories\textsuperscript{121} and a revenue requirement plus an 11.25 percent rate of return represents the carriers' costs.\textsuperscript{122} We recognize that the Access Charge Reform Order states that price cap LECs should make exogenous adjustments to reflect the reallocation of certain "costs." The term "costs," however, must be considered in the context of price cap regulation. As discussed above, the prices charged and revenues recovered for each element are no longer directly linked to allocated accounting costs. To capture all the costs that are represented by a rate element or partial rate element under price caps, we must take into account all the revenues associated with the rate element or partial rate element that are permitted by the price cap formula.\textsuperscript{123} We recognize that CBT and Citizens entered price cap regulation more recently than the other price cap LECs.\textsuperscript{124} We conclude, however, that the permitted revenue methodology is equally appropriate for the exogenous adjustments made by CBT and Citizens because the length of time that CBT and Citizens have been under price cap regulation merely affects the degree of attenuation between the revenues recovered by these LECs for each element and the LECs' allocated accounting costs for those elements. It does not, therefore, alter our conclusion that all the permitted revenues associated with the rate elements must be taken into account in order to capture all the costs that are represented by the rate elements.

80. Some price cap LECs argue that Commission precedent on exogenous cost changes requires us to allow them to use a hypothetical revenue requirement methodology to make the exogenous cost

\textsuperscript{120} See SNET Direct Case at 4.

\textsuperscript{121} Ameritech Direct Case at 9; Bell Atlantic Direct Case at 8, Attachment C at 1; BellSouth Direct Case at 18; SNET Direct Case at 4; U S West Direct Case at 9-11; Frontier Direct Case at 10-11, 13-15.

\textsuperscript{122} Ameritech Direct Case at 9; Bell Atlantic Direct Case at 8, Attachment C at 1-3; BellSouth Direct Case at 18; SNET Direct Case at 4; U S West Direct Case at 9-11; Frontier Direct Case at 10-11, 13-15.

\textsuperscript{123} See AT&T Comments at 16-19; MCI Comments at 7-9.

\textsuperscript{124} CBT and Citizens entered price cap regulation on July 1, 1997 and July 1, 1996, respectively. See CBT Direct Case at 5; Citizens Direct Case at 3.
changes required by the Access Charge Reform Order. Specifically, these LECs contend that when the Commission has not specified a methodology for exogenous cost changes in a rulemaking, the Commission has previously not challenged the use of a Part 69 revenue requirement calculated using an 11.25 percent rate of return. Conversely, these LECs assert that when the Commission has intended for LECs to use an exogenous cost change methodology other than a Part 69 revenue requirement at an 11.25 percent rate of return, the Commission has specified that methodology in a rulemaking. We have in certain past cases specified in a rulemaking order a particular methodology that price cap LECs are required to follow for the purpose of implementing certain exogenous cost adjustments. This does not mean, however, that the only way we may require the price cap LECs to use a particular methodology for making exogenous cost adjustments is by rulemaking order prior to the filing of a tariff implementing those adjustments. The Commission routinely makes significant policy and methodological decisions based on the records developed in tariff investigations and such decisions do not violate the notice and comment requirements of the Administrative Procedure Act (APA).

81. As the Commission has previously determined, a tariff investigation "is a rulemaking of particular applicability" under the APA. In accordance with the notice and comment requirements of the APA, we have provided carriers with full notice and opportunity to comment on the methodology that we now direct the price cap LECs to use to calculate the exogenous cost changes required by the Access Charge Reform Order. Thus, in the Access Reform Tariffs Designation Order, the Bureau tentatively concluded that price cap LECs should make the exogenous cost changes for line ports and end office trunk ports on the basis of permitted revenues and sought comment on whether the methodology proposed for ports should be applied to the other January 1, 1998 exogenous cost adjustments. In response to the Access Reform Tariffs Designation Order, price cap LECs presented their arguments on the proper methodology for these exogenous cost changes in their direct cases, other parties addressed this issue in their comments on the direct cases, and price cap LECs provided further comments on the issue in their

125 Bell Atlantic Direct Case at 8, Attachment C at 2; BellSouth Direct Case at 17-18; BellSouth Rebuttal at 6; SNET Direct Case at 4, 5. See also CBT Direct Case at 5; Frontier Direct Case at 7-10; Ameritech Rebuttal at 3; SBC Rebuttal at 7.

126 See Bell Atlantic Direct Case, Attachment C at 2, citing Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, Report and Order, 11 FCC Rcd 20541, 20633 (1996); BellSouth Direct Case at 17-18; BellSouth Rebuttal at 6; SNET Direct Case at 4, 5; Frontier Direct Case at 7-10; Ameritech Rebuttal at 3.

127 In fact, as BellSouth points out, in the Access Charge Reform Order we specified a methodology for the exogenous adjustment to reallocate one third of the portion of the tandem switching revenue requirement that is recovered form the TIC to the tandem switching rate element. See BellSouth Direct Case at 16.


130 See Access Reform Tariffs Designation Order, 13 FCC Rcd at 2264-70.

131 Access Reform Tariffs Designation Order, 13 FCC Rcd at 2269-70.
rebuttals. Accordingly, our decision to require price cap LECs to make the January 1, 1998 exogenous cost adjustments required in the Access Charge Reform Order on the basis of permitted revenues is fully consistent with the notice and comment requirements of the APA.

82. Furthermore, there have been instances in the past where the Commission has ordered LECs to make certain exogenous cost changes in a rulemaking proceeding and specified the methodology for making those changes in a subsequent tariff investigation. For example, in the Access Charge Reform Order the Commission required price cap LECs to make a downward exogenous adjustment to the Traffic-Sensitive basket in their 1997 annual access tariff filings to account for the completed amortization of equal access expenses. In the 1997 Annual Access Tariff Investigation Order, the Commission concluded that the price cap LECs' methodologies for removing these expenses were unreasonable because their methodologies did not remove fully the revenue effect associated with that rate element. Accordingly, the Commission prescribed an "R" adjustment factor that would remove the revenue effect of the equal access rate element by adjusting for the growth in revenue in the years between the initiation of price caps and 1997.

83. Some price cap LECs argue that the effect on IXCs of using a revenue methodology to make exogenous cost changes for ports would be de minimis because those costs previously recovered from the per-minute local switching rate would be recovered under the per-minute CCL charge. Some price cap LECs also argue that recovering additional line port costs from the CCL charge would delay the Commission's goal of phasing out the CCL charge. We find, however, that the use of a permitted revenue methodology for making exogenous cost changes for line ports and end office trunk ports is fully consistent with the goals of the Access Charge Reform Order to recover non-traffic-sensitive costs through flat-rated charges. Although the immediate effect of moving additional line port costs to the Common Line basket may be an increase in the per-minute CCL charges, over the long run these costs will be recovered from the flat-rated PICC and flat-rated end user charges as PICC ceilings increase and the formula for calculating the SLC is modified. Moreover, any immediate increase in the per-minute CCL charge will be offset by a concomitant decrease in the traffic-sensitive local switching rate.

84. GTE argues that if the Commission adopts the permitted revenue methodology for the exogenous cost changes for ports, the Commission should exempt all line port costs shifted to the Common Line basket from the Part 61 factor used to reduce next year's per-minute CCL charges (*the g/2

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132 Access Charge Reform Order, 12 FCC Red at 16118.


134 Bell Atlantic Direct Case at 9, GTE Direct Case at 6 n.5.

135 Bell Atlantic Direct Case, Attachment C at 5; SNET Direct Case at 5.

136 Access Charge Reform Order, 12 FCC Red at 16004-06.

137 See 47 C.F.R. § 69.152(b)(2).
factor").  GTE contends that IXCs would otherwise receive "windfalls" caused by the further reduction in local switching rates without the full corresponding increase in the CCL rate.  We decline to exempt the line port costs shifted to the Common Line basket from the g/2 factor.  The g/2 factor was adopted by the Commission when it initiated price cap regulation as part of the Commission's "balanced 50-50" formula for common line revenue recovery.  This formula allows price cap LECs and IXCs both to benefit from one-half of the increase in revenues resulting from growth in minutes of use per line.  In adopting this formula, the Commission concluded that future growth in usage per common line can be maximized only if both LECs and IXCs are encouraged to become more productive and rewarded for their success. We find that GTE has not explained why the application of the g/2 factor to any additional line port costs shifted to the Common Line basket would be inconsistent with the Commission's intent when it adopted the g/2 factor and its intent when it adopted the exogenous cost changes for ports.  We note that the g/2 factor will be removed from common line rate development when all common line costs are recovered through flat-rated charges.

85. Although we are requiring price cap LECs to use local switching revenues for the purpose of making the January 1, 1998 exogenous cost adjustments, we conclude that price cap LECs should use their Part 69 revenue requirements to recalculate the BFP to reflect reallocations to and from the Common Line basket.  The price cap LECs should then use the revised BFP to compute the SLC.  As discussed in Section II.D supra, the BFP is the portion of the common line revenue requirement that is used to determine the maximum end-user per-line charge.  Our rules require price cap LECs to continue to calculate their BFP pursuant to fully-distributed embedded costs and revenue requirements.  Under our Part 69 rules, the maximum per-line end-user charge is the lesser of: (1) forecast per-line BFP revenue requirement based on an 11.25 percent rate of return, or (2) the applicable cap on per-line end-user charges.  Any costs added to the BFP, such as the costs of line ports, would need to be calculated based on a Part 69 revenue requirement using an 11.25 percent rate of return in order to be consistent with our common line rate development rules.  Several parties argue that it would be inconsistent with the Bureau's revised 1997 Tariff Review Plan (TRP) if we require price cap LECs to use local switching revenues for the purpose of making the January 1, 1998 exogenous cost adjustments but use Part 69 revenue requirements to

138 GTE Direct Case at 9-10.  See 47 C.F.R. § 61.46(d)(1).

139 GTE Direct Case at 9-10.


141 LEC Price Caps Order, 5 FCC Rcd at 6795.

142 Access Charge Reform Order, 12 FCC Rcd at 16004-06.

143 See Section II.D supra; see also, 47 C.F.R. §§ 69.152, 69.501(e), 69.502.


145 See 47 C.F.R. § 69.152.

146 See, e.g., BellSouth Direct Case at 20-21; Sprint LTCs Direct Case at 9.
recalculate the BFP.\textsuperscript{147} As explained in Section IV.B.2.c infra, however, the TRP does not set forth, independently of this Commission's rules and orders, additional substantive standards that the Commission must follow in resolving the issues in a tariff investigation.

86. AT&T and MCI argue that the use of revenue requirement rather than revenues to recalculate the BFP would cause more line port costs to be recovered through the CCL charge.\textsuperscript{148} AT&T and MCI argue that this result would violate the requirement in the Access Charge Reform Order that line port costs be recovered through per-line rates, rather than usage rates.\textsuperscript{149} We disagree. Although we concluded in the Access Charge Reform Order that line port costs should be recovered through the flat-rated SLC and PICC, we did not envision that the first tariff filing implementing the Order would provide for recovery of all line port costs from these flat-rated charges. Instead, we anticipated that price cap LECs could impose a per-minute CCL charge to the extent that the ceilings on SLCs and PICCs do not allow recovery of all permitted common line revenues.\textsuperscript{150} We noted that, as the PICC caps increase over time, all common line costs would eventually be recovered through flat-rated charges.\textsuperscript{151} We therefore find that the use of Part 69 revenue requirements to recalculate the BFP is consistent with the Access Charge Reform Order.

87. Although we conclude that price cap LECs properly used Part 69 revenue requirements to recalculate the BFP in their initial access reform tariff filings, we do not determine in this investigation how line port costs should be included in BFP development in future annual access filings. AT&T and MCI raise concerns about the going-forward treatment of line port costs in BFP development because the BFP revenue requirement is based on a 12-month projection.\textsuperscript{152} These parties argue that if the Commission requires price cap LECs to include a line port revenue requirement in the development of the BFP revenue requirement, price cap LECs would have to develop a forecast of that line port revenue requirement. These parties claim that such forecasts will be unreliable and probably will be based on proprietary cost models.\textsuperscript{153} On April 2, 1998, price cap LECs filed their TRPs in support of their 1998 annual access

\textsuperscript{147} See Ameritech Rebuttal at 2; MCI Supplemental Comments at 2.

\textsuperscript{148} AT&T Comments at 19; MCI Comments on Bell Atlantic Transmittal No. 1033 and NYNEX Transmittal No. 488 at 2 (filed April 2, 1998) (MCI Supplemental Comments).

\textsuperscript{149} AT&T Comments at 19; MCI Supplemental Comments at 2.

\textsuperscript{150} Access Charge Reform Order, 12 FCC Rcd at 16004-06.

\textsuperscript{151} Access Charge Reform Order, 12 FCC Rcd at 16004-06.

\textsuperscript{152} AT&T Comments at 20-21; MCI Comments at 9-11.

\textsuperscript{153} AT&T Comments at 20; MCI Comments at 10. AT&T suggests that the Commission require price cap LECs to recalculate the BFP in the following manner: develop the exogenous cost change for line ports using the revenue methodology; calculate a per-line, line port rate by dividing the exogenous cost change by the total number of loops; add the per-line, line port rate to the per-line BFP; and adjust this initial per-line, line port rate in future filings to the same degree that adjustments are made to the Common Line PCI. AT&T Comments at 20-21. MCI suggests that the initial line port investment reassigned from the local switching category to the Common Line basket should be large enough that, when a "line port revenue requirement" is computed with an 11.25 percent rate of return, this revenue requirement is equal to the exogenous cost change computed on the basis of revenues. MCI Comments at 10-11.
filings. These TRPs include, among other things, the methodologies that the price cap LECs propose to use to integrate line port costs into the BFP revenue requirement for the 1998 tariff year. If it becomes necessary, we will have an opportunity to evaluate these methodologies as part of any investigation of the 1998 annual access tariffs that we may initiate. We note that the forecasting of common line costs will become unnecessary when all common line costs are recovered through flat-rated charges\textsuperscript{154} because the SLC will no longer be calculated on the basis of the BFP.\textsuperscript{155}

88. Accordingly, we require price cap LECs to recalculate the following January 1, 1998 exogenous cost changes required by the Access Charge Reform Order using the permitted revenue methodology: (1) the reassignment of all line port costs from the Local Switching category of the Traffic-Sensitive basket to the Common Line basket rate elements;\textsuperscript{156} (2) the reassignment of all end office trunk port costs from the Local Switching category to a new trunk ports category within the Traffic-Sensitive basket;\textsuperscript{157} (3) the identification of the amount of COE maintenance that had been misallocated to the Trunking and Common Line baskets;\textsuperscript{158} (4) the removal of marketing expenses from all access rate elements that are not purchased by and marketed to retail customers;\textsuperscript{159} (5) the reassignment of SS7 costs that are recovered from the TIC to the Traffic-Sensitive basket;\textsuperscript{160} (6) the reassignment of the costs of multiplexers and dedicated tandem trunk ports from the TIC to new rate elements;\textsuperscript{161} (7) the substitution of actual minute of use for the assumption of 9000 minutes of use in the calculation of the rates for the common transport portion of tandem-switched transport;\textsuperscript{162} and (8) the inclusion in the tandem-switched transport category of Host/remote trunking costs not recovered by the current tandem-switched transport rates.\textsuperscript{163}

89. Price cap LECs must file tariff revisions to reflect new rates resulting from the use of the permitted revenue methodology adopted in this section. As explained in Section VI of this Order, however, price cap LECs are not required to issue refunds to their customers for the difference between the new rates resulting from the use of the permitted revenue methodology and existing rates resulting from the use of the hypothetical revenue requirement methodology. Although we do not specify the precise steps that price cap

\begin{itemize}
\item \textsuperscript{154} Access Charge Reform Order, 12 FCC Red at 16004-06.
\item \textsuperscript{155} See 47 C.F.R. § 69.152(b)(2).
\item \textsuperscript{156} Access Charge Reform Order, 12 FCC Red at 16035; see also, 47 C.F.R. § 69.306(d).
\item \textsuperscript{157} Access Charge Reform Order, 12 FCC Red at 16036; see also, 47 C.F.R. § 69.106(f)(1).
\item \textsuperscript{158} Access Charge Reform Order, 12 FCC Red at 16078.
\item \textsuperscript{159} Access Charge Reform Order, 12 FCC Red at 16122.
\item \textsuperscript{160} Access Charge Reform Order, 12 FCC Red at 16076.
\item \textsuperscript{161} Access Charge Reform Order, 12 FCC Red at 16055-57, 16076-77.
\item \textsuperscript{162} Access Charge Reform Order, 12 FCC Red at 16070-72.
\item \textsuperscript{163} Access Charge Reform Order, 12 FCC Red at 16077.
\end{itemize}
LECs must take to implement the permitted revenue methodology for each exogenous adjustment, we emphasize that price cap LECs must implement this methodology in a manner consistent with their obligation under Section 201(b) of the Communications Act, 47 U.S.C. § 201(b), to tariff just and reasonable rates. We will carefully review the price cap LECs’ implementation of the permitted revenue methodology when they file the tariff revisions required by this Order.

90. We do not require the price cap LECs to recalculate the exogenous adjustment for the reallocation of one third of the portion of the tandem switching revenue requirement that is recovered form the TIC to the tandem switching rate element, except to the extent it is affected by the recalculation of the SS7-STP exogenous adjustment. In the Access Charge Reform Order, the Commission required price cap LECs to account for the effects of "GDP-PI minus X-factor" reductions to the original portion of the tandem switching revenue requirement allocated to the TIC. Therefore, the exogenous adjustments made by price cap LECs for the tandem switching revenue requirement recognizes the revenue effect of that reallocation, and accomplishes the same goal as the permitted revenue methodology that we adopt in this Order. We also do not require the price cap LECs to recalculate the exogenous adjustment for the reallocation of the STP port termination rate element to the Traffic-Sensitive basket. Price cap LECs implemented this adjustment by multiplying the rate for the STP port termination element times demand. Thus, the exogenous cost adjustment for the STP port termination element also recognizes the revenue effect of that reallocation and accomplishes the same goal as the permitted revenue methodology that we adopt in this Order.

91. We note that the price cap LECs' January 1, 1998 filings reflected exogenous cost changes required by the GSF Order, as well as those changes required by the Access Charge Reform Order. We recognize that the GSF Order specifically directed price cap LECs to base their exogenous adjustments for GSF costs on an 11.25 percent rate of return, which is inconsistent with the methodology we adopt in this section. We note that the parties to the GSF proceeding did not address this methodology issue in their comments. We also note that the GSF Order, unlike the instant one, involved reallocation of costs from regulated categories to non-regulated categories, as opposed to reallocations among price cap baskets and service categories. Because we specifically ordered price cap LECs to use a revenue requirement approach

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164 See Section IV.A infra; Access Charge Reform Order, 12 FCC Rcd at 16066-70.

165 See Access Charge Reform Order, 12 FCC Rcd at 16066-67.

166 See Access Charge Reform Order, 12 FCC Rcd at 16091.

167 See, e.g., BellSouth Direct Case at 16 n.30.

168 In the Access Charge Reform Order, the Commission proposed changes in the allocation of General Support Facilities (GSF) costs between regulated interstate services and non-regulated billing and collection activities, which the Commission adopted in a subsequent order requiring price cap LECs to make exogenous cost adjustments to reflect the reallocations. See Access Charge Reform Order, 12 FCC Rcd at 16155-60; GSF Order, 12 FCC Rcd at 22446.

in the GSF Order,\textsuperscript{170} we do not at this time require the price cap LECs to calculate the exogenous adjustment due to the GSF reallocation on the basis of permitted revenues. We will consider the continued appropriateness of the methodology used to reallocate GSF costs, in light of our determination in this tariff investigation, when we address the pending petitions for reconsideration of the GSF Order.\textsuperscript{171}

IV. Transport Adjustment Issues

92. Transport service is the component of interstate switched access consisting of transmission between the IXC’s point of presence (POP) and LEC end offices.\textsuperscript{172} Currently, incumbent LECs offer two basic types of interoffice transport services. The first, direct-trunked transport, uses dedicated circuits for transport between a LEC end office and the LEC serving wire center, or between any two points the direct-trunked transport customer requests. The second, tandem-switched transport, uses common transport facilities to connect the end office to a tandem switch. Common transport circuits may be used to transmit the individual calls of many IXC’s. Transport circuits dedicated to a particular access customer connect the tandem switch to the serving wire center. Dedicated entrance circuits carry traffic between the IXC POP and the serving wire center, whether the IXC uses direct-trunked transport or tandem-switched transport.

93. The Commission created the transport interconnection charge (TIC) as a residual charge to ensure that the 1992 interim transport rate structure was revenue neutral for incumbent LECs. As such, the Commission required that the TIC be assessed on a per minute basis on all interstate access customers that interconnect with the LEC switched access network.\textsuperscript{173} A portion of the TIC represented 80 percent of the costs of the tandem switch. These were the tandem switch costs that remained after the Commission set the tandem switching rate to recover 20 percent of the tandem-switching revenue requirement. The rest of the revenues collected from the TIC represented costs previously recovered through transport charges that could not, at that time, be associated definitely with specific facilities or services related to transport.

94. In the Access Charge Reform Order, the Commission reformed the TIC and set forth a plan that will eliminate the per-minute TIC charges over the next few years.\textsuperscript{174} The Commission initially identified amounts that could be associated with particular network facilities and directed incumbent LECs to reallocate these TIC amounts to access rate elements more closely corresponding to these network facilities.

\textsuperscript{170} GSF Order, 12 FCC Rcd at 22447-48.


\textsuperscript{172} Transport Rate Structure and Pricing, Third Memorandum Opinion and Order on Reconsideration and Supplemental Notice of Proposed Rulemaking, 10 FCC Rcd 3030, 3033 (1994).

\textsuperscript{173} Transport Rate Structure and Pricing, Report and Order and Further Notice of Proposed Rulemaking, 7 FCC Rcd, 7006, 7038 (Local Transport Order).

\textsuperscript{174} Access Charge Reform Order, 12 FCC Rcd at 16072-16086.
The portion of tandem-switching costs that the Commission initially allocated to the TIC will be reallocated to the tandem switching rate element in three approximately equal steps concluding January 1, 2000. In addition, the costs of the incumbent LECs’ tandem-switched transport transmission facilities that are not recovered from tandem-switched transport users under the unitary rate structure will be recovered through the TIC until July 1, 1998.

95. For price cap LECs, the "residual TIC," consisting of amounts that the LEC has not reallocated, will be recovered through per-line PICCs, to the extent possible, while remaining within the PICC caps. Residual TIC amounts that the price cap LEC cannot recover through PICCs will be recovered through a per-minute TIC on originating access, up to the cap, with any remainder recovered from per-minute charges assessed on terminating access.

A. SS7 Costs

1. Background

96. SS7 is the internationally standardized protocol, or language, currently used to transmit signalling information over the common channel signaling network. Prior to access reform, SS7 costs were recovered in a number of places. The costs of SS7 signal transfer points (STPs) were recovered in three charges. The port termination costs of SS7-STPs were recovered in a subelement of the dedicated signaling transport rate element established in the Local Transport Order. Other SS7-STP costs were assigned to the tandem switching category. Twenty percent of tandem switching costs were recovered in tandem-switching rates and the remaining 80 percent were recovered in the TIC. Accordingly, certain SS7-STP costs were recovered in both tandem switching rates and the TIC.

97. In the Access Charge Reform Order, the Commission concluded that incumbent LECs must reallocate SS7 costs recovered in the TIC, including SS7-STP costs, to the Traffic Sensitive basket. It also ordered the price cap LECs to reallocate to tandem switching the tandem switching costs recovered through the TIC. This second allocation required each price cap LEC to: (1) calculate the percentage of its total original TIC that represented tandem switching costs; and (2) apply this percentage to its June 30, 1998, tariffs.

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175 The portion of tandem-switching costs that the Commission initially allocated to the TIC will be reallocated to the tandem switching rate element in three approximately equal steps concluding January 1, 2000. In addition, the costs of the incumbent LECs’ tandem-switched transport transmission facilities that are not recovered from tandem-switched transport users under the unitary rate structure will be recovered through the TIC until July 1, 1998.

176 Local Transport Order, 7 FCC Rcd at 7052. The port termination rate subelement was placed in the trunking basket. In the Access Charge Reform Order, the Commission placed the port termination rate subelement in the Traffic Sensitive basket by establishing a separate STP port termination service rate element in the Traffic Sensitive basket. Access Charge Reform Order, 12 FCC Rcd at 16089, 16091. The rate for the second of the two dedicated signaling transport subelements, the signaling link, recovers the costs for dedicated network access lines that transmit queries between a LEC’s signaling network and the signaling networks of other carriers, such as IXCs. Local Transport Order, 7 FCC Rcd at 7052. The rate for the signaling link rate subelement is in the trunking basket. Access Charge Reform Order, 12 FCC Rcd at 16089, 16091.

177 Access Charge Reform Order, 12 FCC Rcd at 16076.
1997, TIC. The tandem switching revenue costs are net of any costs being reallocated to other facilities-based charges, such as SS7-STP costs being reallocated to the Traffic Sensitive basket.

98. In the Access Reform Tariffs Designation Order, the Bureau expressed concern that while most price cap LECs attributed less than 10 percent of their tandem switching revenue requirement to SS7 costs, Bell Atlantic-South attributed 28 percent of its tandem switching revenue requirement to SS7. In addition, the Bureau was unable to determine whether U S West used the correct SS7 cost figure in adjusting its tandem switching revenue requirement. Bell Atlantic-South and U S West were required to provide justification for the SS7 costs removed from their TIC. SWBT, Pacific Bell, and Nevada Bell were found to have included STP port termination costs in calculating the SS7 costs that they were reallocating from the TIC to the Traffic Sensitive basket. The Bureau found that, under the Local Transport Order, these port termination costs are already being recovered in the dedicated signaling transport rate element, and tentatively concluded that these costs should not be included in SS7 costs reallocated from the TIC to the Traffic Sensitive basket.

2. Discussion

99. As we explain in Section III of this Order, we require all price cap LECs to make the reallocations required by the Access Charge Reform Order by transferring permitted revenues proportional to relative revenue requirements. Price cap LECs are, therefore, required to allocate SS7-STP costs from the TIC to the Traffic Sensitive basket by using a "permitted revenue" methodology.

100. For the reasons stated below, in applying the "permitted revenue" methodology to the exogenous adjustment for SS7-STP, the price cap LECs should use the same method to determine permitted revenues as they did for determining the reallocated 80 percent of the tandem switching revenue requirement. The exogenous cost adjustment reallocating to tandem switching the tandem switching costs allocated to the TIC should be the same percentage of the June 30, 1997 TIC as tandem switching costs represented in the original TIC. The reallocation of SS7-STP revenues from the TIC to the Traffic Sensitive basket should be the same proportion of the original TIC that represented SS7-STP costs. Accordingly, the SS7-STP exogenous adjustment should be calculated by determining the percentage of the original TIC that represented SS7-STP costs and applying that percentage to the TIC revenues on June 30, 1997.

101. We conclude that SWBT, Pacific Bell, and Nevada Bell must exclude STP port revenues from the calculation of their SS7 exogenous adjustments to the TIC and the Traffic Sensitive basket. The

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179 Access Charge Reform Order, 12 FCC Red at 16067.
181 Access Reform Tariffs Designation Order, 13 at 2273-74.
182 Access Reform Tariffs Designation Order, 13 at 2273-74.
183 Permitted revenue is the maximum amount of revenue that the Commission's price cap rules allow a price cap LEC to recover through interstate access charges.
Access Charge Reform Order required price cap LECs to reallocate SS7-STP costs recovered in the TIC to the Traffic Sensitive basket. STP port termination costs, however, should not have been recovered in the TIC but in the SS7-STP port termination rate.\textsuperscript{184} SWBT, Pacific Bell, and Nevada Bell have not argued, nor have they presented any evidence, that STP port revenues were ever recovered from the TIC. We therefore require SWBT, Pacific Bell, and Nevada Bell to exclude permitted SS7-STP port revenues in making the exogenous adjustment between the TIC and the Traffic Sensitive basket.

102. We find that US West reasonably excluded SS7-STP costs associated with contracted and separately tariffed SS7-STP services from its SS7-STP exogenous adjustments because it recovers these amounts in SS7-STP tariffed\textsuperscript{185} and contracted SS7-STP rates.\textsuperscript{186} When calculating the reallocation of the tandem switching revenue requirement from the TIC to tandem switching, however, US West unreasonably included SS7-STP costs associated with contracted and separately tariffed STP services in the SS7-STP costs it subtracted from its tandem switching revenue requirement. US West must exclude these costs when adjusting its reallocation of the tandem switching revenue requirement to reflect the reallocation of SS7-STP costs.

103. Bell Atlantic-South asserts that its SS7-STP costs are a greater percentage of its tandem switching revenue requirement compared to this percentage for other price cap LECs because it has more local access and transport areas and more STPs. Upon examination of the record, we find that this is a reasonable explanation of why Bell Atlantic-South's SS7-STP costs are greater than those for the other BOCs. We note, however, that application of the "permitted revenue" methodology for this exogenous cost adjustment set forth above could reduce the amount of Bell Atlantic-South's SS7-STP exogenous cost adjustment.

B. COE Maintenance and Marketing Cost Adjustments to the TIC

1. Background

104. In the Access Charge Reform Order, the Commission required the LECs to move Central Office Equipment (COE) maintenance\textsuperscript{187} misallocated to the Trunking and Common line baskets to the

\textsuperscript{184} Local Transport Order, 7 FCC Rcd at 7052.

\textsuperscript{185} US West has recovered revenues from SS7-STP tariffed rates since first establishing such rates in its interstate common channel signaling access capability tariff on January 1, 1992, pursuant to Transmittal Nos. 203, 216, and 219. Letter from BB Nugent, Executive Director - Federal Regulatory, US West, Inc., to Richard J. Kwiatkowski, FCC (dated April 21, 1998).

\textsuperscript{186} US West leases STP and STP port capacity to other LECs pursuant to contracts. US West has recovered SS7-STP revenues from contract rates since December 7, 1994, the date it established the earliest contract reflected in its existing records. Letter from BB Nugent, Executive Director - Federal Regulatory, US West, Inc., to Richard J. Kwiatkowski, FCC (dated April 21, 1998).

\textsuperscript{187} Marketing expenses are recovered through MLB and non-primary residential SLCs. To the extent that ceilings on the SLC prevent full recovery of these amounts, price cap LECs may recover these amounts through the non-primary residential line PICC and the MLB PICC. In the event that the PICC ceilings prevent full recovery of these amounts any residual may be recovered through per-minute charges. Access Charge Reform Order, 12 FCC
local switching service category in the Traffic Sensitive basket.\textsuperscript{188} The price cap LECs were also required to remove Account 6610 marketing expenses from all access rate elements not purchased by and marketed to retail customers and create a new marketing expense basket.\textsuperscript{189}

105. In the Access Reform Tariffs Designation Order, the Bureau was unable to determine whether the price cap LECs properly removed from the TIC their COE maintenance expenses and marketing expenses.\textsuperscript{190} The Bureau therefore required the price cap LECs to justify the amount that they removed from the TIC as COE maintenance and marketing expenses.\textsuperscript{191} The price cap LECs were also required to explain their theory for determining the portion of those costs removed from the TIC.\textsuperscript{192} The Bureau sought comment on whether the portion removed from the TIC should be based on the relative total or switched revenues in each category, or on a more detailed analysis of the source of the costs.\textsuperscript{193}

106. Finally, the Bureau tentatively concluded that the price cap LECs must base reallocations of TIC revenues on the TIC as it existed prior to July 1, 1997.\textsuperscript{194} The Bureau explained that if the price cap LECs do not compute these reallocations using the TIC as the TIC existed prior to July 1, 1997, the targeted TIC reductions that occurred in the July 1, 1997 tariffs could skew the amount of reallocation costs credited to the facilities-based TIC. The Bureau sought comment on this tentative conclusion.\textsuperscript{195}

2. Discussion

a. COE Maintenance Expenses

107. In the Access Charge Reform Order, the Commission found that allocating COE maintenance expenses on the basis of combined COE investment produced misallocations of these expenses among access services.\textsuperscript{196} The Commission, therefore, modified section 69.401 of the rules\textsuperscript{197} to provide

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\textsuperscript{188} Id. at 16078.
\textsuperscript{189} 47 C.F.R. 61.42(d)(6).
\textsuperscript{190} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2275.
\textsuperscript{191} Id.
\textsuperscript{192} Id.
\textsuperscript{193} Id.
\textsuperscript{194} Id.
\textsuperscript{195} Id.
\textsuperscript{196} Access Charge Reform Order, 12 FCC Rcd at 16078.
\textsuperscript{197} 47 C.F.R. § 69.401.
that the COE maintenance expenses assigned to the interstate jurisdiction be allocated on the basis of the allocation of the specific type of COE investment being maintained. 198

108. All the price cap LECs have submitted detailed information showing the amount of COE maintenance expenses removed from the Trunking basket and the portion removed from the TIC. The price cap LECs, except for Aliant, calculated these Trunking basket adjustments as the difference between the revenue requirement for the Trunking basket reflecting the old Part 69.40 rule for allocating COE maintenance expenses and the revenue requirement reflecting the new Part 69.401 rule for allocating COE maintenance expenses. They based the portion allocated to the TIC on the ratio of TIC revenues to total Trunking basket revenues. 199

109. Aliant first calculated a COE maintenance exogenous cost adjustment solely for the TIC and then an adjustment for undesignated categories of the Trunking basket, including the TIC. Aliant's first adjustment increased the TIC by $184,290. 200 Aliant's second adjustment reduced the trunking basket by $557,843. 201 Aliant allocated to the TIC a portion of the second adjustment based on the TIC's portion of total Trunking basket revenues.

110. We conclude that it is reasonable for price cap LECs to allocate a portion of the Trunking basket COE maintenance exogenous adjustment from the TIC based on the ratio of TIC revenues to total Trunking basket revenues. Using relative revenues to make this allocation equitably distributes a share of the exogenous cost adjustment to each Trunking basket service. This methodology also is consistent with our price cap methodology for making an exogenous cost adjustment to a specific basket when that adjustment is not associated with any particular service within that basket. Under the price cap methodology, an exogenous cost change to a price cap basket index automatically changes service level band indices within that basket based on the proportion of revenues in each service band to total basket revenues. An additional reason for allowing price cap LECs to make this allocation on the basis of relative revenues is that no party has identified a cost-based methodology for allocating the COE maintenance

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198 Access Charge Reform Order, 12 FCC Rcd at 16078.

199 See, e.g., Frontier Direct Case at 14-19, Ameritech Direct Case at 10-12; BellSouth Direct Case at 22-23.

200 Aliant calculated this upward exogenous cost adjustment by first calculating dollar amounts equal to 80 percent of a tandem switching revenue requirement reflecting COE maintenance expenses allocated on the basis of combined investment for central office switching, operator systems, and central office transmission and the same revenue requirement reflecting COE maintenance expenses allocated on the basis of individual investment for these categories of investment. It then determined the exogenous cost adjustment to the TIC for COE maintenance by calculating the difference between these two revenue requirements.

201 Aliant calculated this downward exogenous cost adjustment by first calculating dollar amounts equal to a Trunking basket revenue requirement, excluding 80 percent of the revenue requirement for tandem switching, reflecting COE maintenance expenses allocated on the basis of combined investment for central office switching, operator systems, and central office transmission and the same revenue requirement reflecting COE maintenance expenses allocated on the basis of individual investment for these categories of investment. It then determined the exogenous cost adjustment to undesignated categories in the Trunking basket for COE maintenance by calculating the difference between these two revenue requirements. Aliant allowed the price cap formula to distribute among the Trunking basket categories, including the TIC, the exogenous cost adjustment to the undesignated categories.
exogenous cost adjustment to each particular Trunking basket service. Nor will we require price cap LECs to study or account for their costs at the level of detail needed to make such allocations because any benefit from making such allocations is unlikely to outweigh the burden from performing such a study or detailed accounting of costs. We note that no party opposes the use of this methodology.\textsuperscript{202}

111. We also find that it is reasonable for Aliant to compute the change in the allowance for recovery of the tandem switching revenue requirement arising from the revised Part 69 rules for allocating COE maintenance expense and to make an exogenous cost adjustment to the TIC that is equal to 80 percent of this change. Aliant submitted workpapers demonstrating that allocating COE maintenance expenses based on separate investments for central office switching, operator systems, and central office transmission increases the allocation of these expenses in the tandem switching revenue requirement compared to an allocation based on the combined investments.\textsuperscript{203} In addition, as Aliant argues, the Commission allocated 80 percent of the tandem switching revenue requirement to the TIC when the TIC was established. More specifically, the Commission prescribed an initial rate for tandem switching that recovered 20 percent of the then-current Part 69 tandem revenue requirement, with the remaining 80 percent of this requirement recovered through the TIC.\textsuperscript{204} Because the TIC recovered 80 percent of the tandem switching revenue requirement, Aliant reasonably makes an exogenous adjustment to the TIC that is equal to 80 percent of the change in the allowance for recovery of the tandem switching revenue requirement arising from the revised Part 69 rules for allocating COE maintenance expense.

112. In addition, Aliant's exogenous costs adjustment to the TIC due to COE maintenance is reasonable because Aliant adds the reallocated COE maintenance expense to the portion of the tandem switching revenue requirement in the current TIC that price cap LECs are required to allocate from the TIC to tandem switching.\textsuperscript{205} After Aliant allocates this portion of the tandem switching revenue requirement from the TIC to tandem switching, it will recover properly from customers that purchase tandem switched transport the COE maintenance expenses associated with tandem switching that had been recovered through the TIC.

\textsuperscript{202} See AT&T Comments at 23 n.40.

\textsuperscript{203} See Aliant Direct Case, Exhibits 5 and 6; Letter from Robert A. Mazer, Counsel for Aliant, to Magalie R. Salas, Secretary, FCC (dated April 29, 1998).

\textsuperscript{204} Local Transport Order, 7 FCC Rcd at 7017-19, 7037-38.

\textsuperscript{205} Access Charge Reform Order, 12 FCC Rcd at 16067. The Commission required price cap LECs to allocate from the TIC to tandem switching a portion of the tandem switching costs in the current TIC. The Commission required price cap LECs to determine this portion by subtracting from the tandem switching revenue requirement in the current TIC those tandem switching costs that they were required to allocate from the TIC to service categories other than tandem switching. In the access reform tariff filings that took effect on January 1, 1998, the Commission required price cap LECs to allocate from the TIC to tandem switching one third of the tandem switching costs that remained in the current TIC after allocating those tandem switching costs that they were required to allocate from the TIC to service categories other than tandem switching. Effective January 1, 1999, price cap LECs must allocate approximately one half of the remaining amount of the tandem switching costs in the TIC to tandem switching. Effective January 1, 2000, price cap LECs must allocate any portion of the tandem switching costs remaining in the TIC to tandem switching. Id.
113. We find, however, that Aliant must make an exogenous adjustment to tandem switching that is equal to 20 percent of the change in the allowance for recovery of the tandem switching revenue requirement arising from the revised Part 69 rules for allocating COE maintenance expense. Because the tandem switching rate recovered 20 percent of the tandem switching revenue requirement, Aliant must make an exogenous adjustment to tandem switching that is equal to 20 percent of the change in the allowance for recovery of the tandem switching revenue requirement. After Aliant makes this allocation, it will recover from customers that purchase tandem switched transport all of the COE maintenance expenses associated with tandem switching.

114. We find that it is reasonable for Aliant to compute the change in the allowance for recovery of the Trunking basket revenue requirement, excluding the tandem switching revenue requirement, arising from the revised Part 69 rules for allocating COE maintenance expense and to allocate this change among Trunking basket service categories on the basis of relative revenues. Using relative revenues to allocate this exogenous cost adjustment equitably distributes a share of the adjustment to each trunking basket service. This is consistent with our decision above to allow price cap LECs to use relative revenues to distribute their exogenous COE maintenance cost adjustments among service categories in the Trunking basket.

115. As we explained in Section III of this Order, we are requiring all price cap LECs to make the reallocations required by the Access Charge Reform Order by transferring permitted revenues proportional to relative revenue requirements. Price cap LECs are, therefore, required to make a downward COE maintenance exogenous adjustment to the Trunking basket by using permitted revenues. Accordingly, we require all price cap LECs to revise their tariffs to reflect COE maintenance exogenous adjustments calculated in accordance with the requirements of Section III of this Order. As explained in Section VI of this Order, price cap LECs that made reallocations required by the Access Charge Reform Order by using a revenue requirement methodology are not required to issue refunds to their customers.

b. Marketing Expenses

116. In the Access Charge Reform Order, we concluded that it was appropriate for LECs to recover marketing expenses for special access and interexchange services that are purchased by, and marketed to, retail customers in rates for those services.\textsuperscript{206} We required, however, that marketing expenses be removed from all other rate elements by means of a "downward exogenous adjustment to the PCIs for the common line, traffic sensitive, and trunking baskets . . . (and that) the service band indices within the trunking basket shall be decreased based on the amount of Account 6610 marketing expenses allocated to switched services included in each service category . . . ."\textsuperscript{207}

117. All the price cap LECs have submitted detailed information showing the amount of marketing expenses removed from the Trunking basket and the portion removed from the TIC. The price cap LECs calculated the Trunking basket adjustment as the difference between a revenue requirement for the Trunking basket reflecting the rules for allocating marketing expenses in effect prior to January 1, 1998 and the same revenue requirement reflecting the rules for allocating marketing expenses in effect on

\textsuperscript{206} Access Charge Reform Order, 12 FCC Red at 16122.

\textsuperscript{207} Id.
They based the portion allocated to the TIC on the ratio of TIC revenues to total switched revenues in the Trunking basket.

118. We conclude that it is reasonable for price cap LECs to remove marketing expenses from the TIC based on the ratio of TIC revenues to total Trunking basket switched access revenues. We find it reasonable for the price cap LECs to have used switched access revenues in particular to make this allocation because the Access Charge Reform Order allowed rates for special access services to continue to include recovery of marketing expenses. Using relative switched access revenues to make this allocation equitably distributes a share of the exogenous marketing cost adjustment to each switched access service category in the Trunking basket. In addition, we find that it is reasonable for price cap LECs to make this allocation on the basis of relative revenues because no party has identified a cost-based methodology for allocating the marketing exogenous cost adjustment to each particular Trunking basket service. We also note that no party opposes the use of this methodology.

119. We find that it is unreasonable for CBT to allocate from the TIC the entire exogenous marketing cost adjustment for the Trunking basket. CBT argues that removing from the TIC the entire amount of this exogenous cost adjustment allows it to avoid distorting the pricing between its dedicated switched and dedicated special access rates. We reject this argument. Under price cap rules, CBT has the flexibility to increase or decrease its rates for dedicated switched and dedicated special access services, provided that the SBIs for the service categories in which these services are placed are below the SBI upper limits for these categories. Such pricing flexibility under price caps should enable CBT to avoid pricing distortions between its dedicated switched and dedicated special access rates. Moreover, CBT did not explain how removing the entire exogenous marketing cost adjustment from the TIC without removing any portion of this exogenous adjustment from the other Trunking basket service categories results in an equitable allocation. Nor did CBT demonstrate any cost basis, for example, by comparing the actual amount of marketing costs the TIC recovers relative to the actual amount of these costs recovered in Trunking basket rate elements other than the TIC. Accordingly, we order CBT to remove marketing expenses from the TIC based on the ratio of TIC revenues to total Trunking basket switched access revenues as did the other price cap LECs.

120. In Section III of this Order, we stated that we are requiring all price cap LECs to make the reallocations required by the Access Charge Reform Order by transferring permitted revenues proportional to relative revenue requirements. Price cap LECs are, therefore, required to make a downward marketing exogenous adjustment to the Trunking basket by using a proportional allocation of Trunking basket permitted revenues. Accordingly, we require all price cap LECs to revise their tariffs to reflect marketing exogenous adjustments calculated in accordance with the requirements of Section III of this Order. As explained in Section VI of this Order, price cap LECs that made reallocations required by the Access Charge Reform Order by using a revenue requirement methodology are not required to issue refunds to their customers.

208 See, e.g., Frontier Direct Case at 14-19, Ameritech Direct Case at 10-12; BellSouth Direct Case at 22-23.

209 Under price cap regulation, the weighted average of the prices for the services in a given service category or subcategory within the Trunking and Traffic sensitive baskets, or the service band index (SBI), must be less than or equal to the SBI upper limit for the category or subcategory. Price cap LECs establish SBI upper limits each tariff year for each service category or subcategory that are set at specified percentages above the SBI.
c. Calculation of Exogenous Adjustments Applied to the TIC

121. We find that the price cap LECs must compute their exogenous cost adjustments attributable to the removal of COE maintenance and marketing costs from the TIC as the TIC existed on June 30, 1997. In the Access Charge Reform Order, we modified the TIC and set forth a transitional plan to eliminate per-minute TIC charges over the next few years. As part of that plan, we first ordered the price cap LECs to compute the amount of their anticipated "residual" TIC by excluding TIC revenues that they would reassign on a cost-causative basis to facilities-based charges in the future.\(^{210}\) Moreover, we ordered these LECs to target solely to this residual TIC the "GDP-PI minus X" adjustments they ordinarily would apply to each of their price cap indices for the July 1, 1997 annual filing.\(^{211}\) By targeting the GDP-PI minus X adjustments to the residual portion of the TIC that existed on June 30, 1997, these LECs reduced the amount of their total July 1, 1997 TIC revenues as compared with their total June 30, 1997 TIC revenues. These adjustments reduced the July 1, 1997 ratios of total TIC revenues to total Trunking basket revenues and total TIC revenues to total Trunking basket switched access revenues from their June 30, 1997 levels for the price cap LECs. Because the price cap LECs have used these ratios to allocate their COE maintenance and marketing exogenous cost adjustments from the TIC, price cap LECs that allocated these exogenous cost adjustments from the TIC as it existed on July 1, 1997 have allocated less of these adjustments from the TIC than they would have if they had used the ratios that existed on June 30, 1997.

122. We find that the calculations made by the price cap LECs based on the July 1, 1997 TIC amounts unreasonably underallocated COE maintenance and marketing exogenous costs from the TIC to other facilities-based rate elements. As noted above, our residual TIC reduction plan required price cap LECs to target the GDP-PI minus X adjustment solely to the non-facilities-based residual TIC. That residual TIC is developed by excluding from the TIC those revenues that were expected to be reassigned to facilities-based charges in the future.\(^{212}\) Thus, COE maintenance and marketing expenses, like all other TIC revenues that were expected to be reassigned to facilities-based charges, were not intended to be subject to the targeting. Determining the amount of the exogenous adjustments to the TIC due to COE maintenance and marketing expenses based on post-June 30, 1997 trunking basket revenues has the practical effect of applying some of the targeting to revenues that were reassigned to facilities-based charges on January 1, 1998 and that were intended to be exempt from targeting. By contrast, use of June 30, 1997 relative revenues equitably distributes a share of the exogenous COE maintenance and marketing costs adjustments to service categories in the Trunking basket.

123. Several of the price cap LECs disagree with the Bureau's tentative conclusion that the price cap LECs must allocate the exogenous COE maintenance and marketing cost adjustments from the TIC as it existed prior to July 1, 1997. GTE and BellSouth contend that the Bureau's tentative conclusion is inconsistent with the methodology for allocating "undesignated" exogenous costs contained in the Bureau's revised 1997 Tariff Review Plan (TRP).\(^{213}\) This argument is based on a fundamental misconception of the

\(^{210}\) Access Charge Reform Order, 12 FCC Red at 16122.

\(^{211}\) Access Charge Reform Order, 12 FCC Red at 16084.

\(^{212}\) Id. at 16083.

\(^{213}\) GTE Direct Case 10; BellSouth Direct Case at 24-25.
legal status of a TRP and the role of the TRP in our tariff review process. The TRP is a reporting requirement released by the Bureau that sets forth summary material that LECs should file to support the revisions to the rates in their interstate access service tariff filings. The TRP contains only reporting requirements. Carriers must file the TRP in the specified format, but the TRP does not set forth, independently of this Commission's rules and orders, additional substantive standards that the Commission must follow in resolving the issues in a tariff investigation.

124. Ameritech argues that the use of the pre-July 1 date for purposes of allocating exogenous costs to the TIC is inconsistent with sections 61.45 and 61.47 of the Commission's rules, which provide that exogenous changes that are applied to the price cap LECs' basket PCIs and sub-band SBIs are to be based on the current (t-1) index values. We disagree with Ameritech that allocating these exogenous cost adjustments from the TIC as it existed prior to July 1, 1997 is inconsistent with our price cap rules. We require the price cap LECs to use June 30, 1997 TIC and trunking basket revenues only to identify the ratio of TIC revenues to total trunking basket revenues. That ratio is still applied to the current (t-1) index value pursuant to section 61.45 and 61.47 of our rules.

125. All the price cap LECs except for CBT, Citizens, and U S West allocated their exogenous cost adjustments for COE maintenance and marketing from the TIC as it existed on or after July 1, 1997. We order these LECs to allocate the COE maintenance exogenous cost adjustments they make to their Trunking baskets among Trunking basket services on the basis of ratios of the June 30, 1997 revenues in each service category in the Trunking basket to June 30, 1997 total Trunking basket revenues. We order these LECs to allocate the marketing exogenous cost adjustments they make to their Trunking baskets among Trunking basket services on the basis of ratios of the June 30, 1997 switched access revenues in each service category in the Trunking basket to June 30, 1997 total Trunking basket switched access revenues.

126. All price cap LECs must recalculate the Trunking basket PCI and SBI upper limit for each service category in the Trunking basket to reflect the requirements set forth in this section for calculating exogenous COE maintenance and marketing cost adjustments. The revised PCIs and SBIs must reflect use of permitted revenues to calculate exogenous cost adjustments to the Trunking basket due to COE maintenance and marketing expenses. The revised SBIs also must reflect allocations of the COE maintenance exogenous cost adjustment among Trunking basket services that are based on ratios of the June 30, 1997 revenues in each service category in the Trunking basket to June 30, 1997 total Trunking basket revenues. In addition, the revised SBIs must reflect allocations of the marketing exogenous cost adjustment among Trunking basket services that are based on ratios of the June 30, 1997 switched access revenues in each service category in the Trunking basket to June 30, 1997 total Trunking basket switched access revenues. After recalculating the trunking basket PCI and the SBI upper limit for each Trunking basket service category, they must revise their tariffs to establish rates for each service in each such category such that the SBI for each category does not exceed the SBI upper limit.

C. Impact on the TIC Arising from the Use of Actual Minutes of Use Rather than Assumed 9,000 Minutes of Use

214 47 C.F.R. §§ 61.45, 61.47.

1. Background

127. The Access Charge Reform Order directed all incumbent LECs, both price cap carriers and rate-of-return carriers, to use actual MOU per circuit rather than an assumed 9,000 MOU to develop their tandem-switched transport rates. \(^{216}\) In reviewing the interim rate structure for tandem-switched transport rates in accordance with the CompTel remand, \(^{217}\) the Commission found that its assumption that voice-grade common transport circuits experience uniform loadings of 9,000 MOU was no longer reasonable based on evidence in the record presented by the LECs showing that for many LECs the actual traffic levels were substantially lower than 9,000 MOU per month. \(^{218}\) The Commission found that, as a result, in those cases, use of the 9,000-minute assumption had caused revenues to be assigned to the TIC that would have been assigned to switched transport rates if actual MOU had been used to develop those rates in 1993. The incumbent LECs were therefore directed "to develop common transport rates based on the relative number of DS1 and DS3 circuits in use in the tandem-to-end office link, and using actual voice-grade circuit loadings, geographically averaged on a study-area-wide basis, that the incumbent LEC experienced based on the prior year's annual use." \(^{219}\) As the incumbent LECs developed transport rates based on actual MOU, they were directed to use any increase in tandem-switched transport revenues to decrease the TIC. \(^{220}\)

128. Before the Access Charge Reform Order, section 69.111(c) stated that:

"tandem-switched transport rates generally shall be presumed reasonable if the telephone company bases the charges on a weighted per-minute equivalent of direct-trunked transport DS1 and DS3 rates that reflect the relative number of DS1 and DS3 circuits used in the tandem-to-end office links . . . , calculated using a loading factor of 9000 minutes of use per month per voice-grade circuit." \(^{221}\)

Section 69.111(c)(1) now states that:

"[t]hrough June 30, 1998, tandem-switched transport transmission charges generally shall be presumed reasonable if the telephone company bases the charges on a weighted per-minute equivalent of direct-trunked transport DS1 and DS3 circuits used in the tandem-to-end office links . . . , calculated using the total actual voice-grade minutes of use, geographically averaged on a study-area-wide basis, that the incumbent

\(^{216}\) Access Charge Reform Order, 12 FCC Rcd at 16071-72.

\(^{217}\) See Competitive Telecommunications Ass's v. FCC, 87 F.3d 522 (D.C. Cir. 1996) ("CompTel").

\(^{218}\) Access Charge Reform Order, 12 FCC Rcd at 16070-71.

\(^{219}\) Id.

\(^{220}\) Id.

\(^{221}\) 47 C.F.R. § 69.111(c) (emphasis added).
local exchange carrier experiences based on the prior year's annual use.\footnote{222}

129. The majority of the price cap LECs' tariff filings revealed that tandem usage in their study areas exceeded 9,000 minutes per trunk for 1996.\footnote{223} The recalculated transport rates for the price cap LECs were lower than their previously-existing rates. The price cap LECs attributed the lower rates to the use of circuit loadings greater than 9,000 minutes; to their use of current DS1 and DS3 rates, which are generally lower than they were in 1993 when the initial common transport rates were developed; and to lower transport costs resulting from new technology. Consequently, the price cap LECs made exogenous adjustments that removed revenue from the tandem-switched transport category and added that revenue to the TIC in the amount of $57.3 million. The tariff filings for most small rate-of-return carriers showed that use of actual MOU resulted in increased transport rates and a decreased TIC.

130. In the Access Reform Tariffs Designation Order, the Bureau observed that in the Access Charge Reform Order, the Commission expected that the price cap LECs' use of actual MOU would cause an increase in tandem-switched transport rates. The Commission therefore directed the price cap LECs to use any increase in common transport revenues to decrease the TIC.\footnote{224} The Bureau emphasized that the Access Charge Reform Order did not contemplate that price cap LECs would adjust any other inputs into the calculation to reflect current data, and that it was not the Commission's intention to generate additional TIC.\footnote{225}

131. The Bureau tentatively concluded that price cap carriers should not recalculate their tandem-switched transport rates pursuant to section 69.111(c). The Bureau noted that Section 69.111(c) of the Commission's rules\footnote{226} must be read in context with section 69.1(c)\footnote{227} of the Commission's rules, which states that section 69.111(c) applies to price cap LECs only for purposes of computing initial charges for new rate elements. The Bureau concluded that the amendment to section 69.111(c) applies only to rate-of-return carriers, which recalculate their tandem-switched transport rates each year with updated data. The Bureau sought comment on this conclusion.\footnote{228}

132. The Bureau tentatively concluded that to satisfy the Access Charge Reform Order, the price cap LECs should recalculate tandem-switched transport rates using the same data that was used when those rates were first established in 1993, except using actual minutes of use for circuit loading, rather than

\footnote{222} 47 C.F.R. § 69.111(c)(1) (emphasis added).

\footnote{223} See e.g., Access Reform Tariffs Designation Order, 13 FCC Rcd at 2276.

\footnote{224} Id. at 2278.

\footnote{225} Id. at 2279.

\footnote{226} 47 C.F.R. § 69.111(c).

\footnote{227} 47 C.F.R. § 69.1(c).

\footnote{228} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2279.
assuming 9,000 minutes of use per month.\textsuperscript{229} The Bureau stated that, based on its tentative conclusion, the price cap LECs should compare those rates to the 1993 rates to determine the amount of the TIC that was attributable to using the 9,000 MOU assumption. The Bureau tentatively concluded that the price cap LECs should determine what percentage of the original TIC was therefore attributable to the 9,000 MOU assumption and make an exogenous adjustment to their June 30, 1997 TIC SBI by that percentage. The price cap LECs should then make a corresponding exogenous adjustment to their tandem-switched transport SBIs, based on the percentage of tandem-switched transport revenue attributable to the 9,000 minutes of use assumption. The Bureau sought comment on this approach, or on any other alternative approach a company requested the Commission consider.\textsuperscript{230} The Bureau also sought comment on whether price cap LECs should be permitted to increase their TIC, or whether they should only be permitted to reduce their TIC.\textsuperscript{231}

133. In addition, the Bureau sought comment on whether multiplexer costs are relevant in the computation of the tandem-switch transport rate and required that price cap LECs demonstrate that the weighted (by total DS1 and DS3 lines) average of DS1 and DS3 rates divided by actual minutes of use per voice-grade circuit is affected by the multiplexers at the tandem switch.\textsuperscript{232}

2. Discussion

134. We adopt the Bureau's tentative conclusion that, with the exception of the MOU variable, price cap LECs must use 1993 data for the purpose of making exogenous cost adjustments to the TIC and the tandem switched transport category. With regard to MOU, price cap LECs must use actual MOU in lieu of 9,000 MOU as required by the Access Charge Reform Order. We also adopt the Bureau's tentative conclusion that price cap LECs must compare the rates that result from this methodology to the 1993 rates in order to determine the amount of the TIC that was attributable to the assumption of 9,000 MOU. After determining the percentage of the original TIC that was attributable to the assumption of 9,000 MOU, price cap LECs must make an exogenous adjustment to their June 30, 1997 TIC SBI by that percentage. Further, price cap LECs must make a corresponding exogenous adjustment to their tandem-switched transport SBIs based on the percentage of tandem-switched transport revenues attributable to the assumption of 9,000 MOU. Price cap LECs may not, however, make any adjustment to the TIC if their actual MOU exceed 9,000. In other words, in situations where the 9,000 MOU assumption did not cause revenues to be collected as part of the TIC, no adjustment to a price cap LEC's rates is necessary or reasonable.

135. When we ordered price cap LECs to make exogenous adjustments to the TIC and the tandem-switched transport category using actual MOU to determine the amount of revenues that should have been assigned to tandem-switched transport rates, it was for the express purpose of removing from the TIC any revenues attributable solely to the use of the 9,000 MOU assumption when the TIC was first

\textsuperscript{229} Id. at 2279-80.

\textsuperscript{230} Id.

\textsuperscript{231} Id.

\textsuperscript{232} Id. at 2280.
established. While the Access Charge Reform Order discussed in detail the rationale for modifying the assumption of 9,000 MOU, it made no findings concerning the other inputs that were used in the calculation of initial TST rates pursuant to Section 69.111(c). The Order cannot therefore be reasonably interpreted as authorizing price cap LECs to reinitialize tandem-switched transport rates using current inputs in the section 69.111(c) rate formula.

136. The Access Charge Reform Order amended section 69.111(c) because rate of return carriers adjust their tandem-switched transport rates annually pursuant to that rule. The rule amendment was necessary to ensure that rate-of-return carriers would implement our findings with respect to the 9,000 MOU assumption. Price cap LECs, however, do not set new rates each year pursuant to section 69.111(c). Instead, once an initial rate is established, price cap LECs rates are governed by the price cap formula. Price cap LECs are permitted to use all new current data to calculate rates under two circumstances only: to set the price of a new service and to support a rate that causes the API to exceed the PCI. The Access Charge Reform Order did not change this pricing methodology. SNET, Ameritech, and the other price cap LECs who rely on section 69.111(c) to support their use of current data for the purpose of recalculating tandem-switched transport rates are in error. Section 69.111(c) of the Commission's rules must be read in context with section 69.1(c), which states that 69.111(c) applies to price cap carriers only for the limited purpose of computing initial charges for new rate elements. Because section 69.111(c) applies to price cap carriers only for the purpose of computing initial tandem-switched transport rates, it is inappropriate for the price cap LECs to follow section 69.111(c) in the recalculation of the tandem-switched transport rates. We also reject BellSouth's attempt to characterize tandem-switched transport as a new rate element and the recalculation of these rates as the establishment of initial rates. If the recalculated tandem-switched transport rates were indeed new rate elements, then the earlier tandem-switched transport rates that are based on the 9,000 MOU assumption would continue to be valid, which we have already decided is not the case.

137. The formula for computing the initial common transport TST revenues depends on the following variables: the rates for DS1 and DS3 direct-trunked transport, the proportion of DS1 to DS3 circuits used to provide the common transport portion of TST, the rate for the one DS3 to DS1 multiplexer needed to interconnect DS3 transmission facilities with the end-office switch, the MOU used as a loading factor; and the demand for common transport. The methodology outlined above isolates the difference in TIC revenues arising solely from using 9,000 MOU rather than the actual MOU when the TIC was first established by changing only the value of one variable, i.e, changing the value of MOU from 9,000 MOU to actual MOU. When the MOU are changed from 9,000 to actual MOU while holding constant variables other than MOU that determine the level of the common transport portion of TST revenues at the levels they were at when the TIC was first established, the resulting change in the TST revenues is due solely to

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233 Access Charge Reform Order, 12 FCC Rcd at 16070-72.

234 See 47 C.F.R. § 61.49.

235 See, e.g., SNET Direct Case at 8; Ameritech Direct Case at 15-16; BellSouth Direct Case at 30-31.

236 47 C.F.R. § 69.111(c).

237 BellSouth Direct Case at 29.
the MOU change. Conversely, if some or all of the variables that determine the level of the common transport portion of TST revenues are changed simultaneously from the levels they were at the time the TIC was created, then the effect of the change of any of one these variables on the common transport portion of TST revenue cannot be ascertained.

138. While we adopt the Bureau's tentative conclusion regarding the methodology price cap LECs must use to compute the exogenous cost adjustments to the TIC and the TST service categories to correct for use of the 9,000 MOU assumption when the TIC was established, we clarify the final step of the methodology outlined in the Access Reform Tariffs Designation Order. The final step of the methodology proposed in the Access Reform Tariffs Designation Order accounts for the effects of past GDP-PI minus X-factor reductions to TIC revenues attributable solely to the use of the 9,000 MOU assumption when the TIC was first established. We agree with the Bureau's tentative conclusion that this step is necessary because TST customers would otherwise be denied the continuing benefits of past GDP-PI minus X-factor reductions under price caps. This methodology determines the percentage of the original TIC that was attributable to the assumption of 9,000 MOU and adjusts the June 30, 1997 TIC SBI by that percentage. We now clarify that the dollar amount associated with the percentage change to the June 30, 1997 SBI is the dollar amount of the exogenous adjustments to the TIC and the TST service category. Price cap LECs must calculate this dollar amount by: (1) dividing the original TIC revenues into TIC revenues attributable solely to the use of the 9,000 MOU assumption when the TIC was first established; and (2) multiplying the result of the division in the first calculation by the June 30, 1997 TIC revenues. This dollar amount accounts accurately for past GDP-PI minus X-factor reductions to TIC revenues, as well as demand changes, after the TIC was established.

139. The Bureau's proposed methodology calculates the difference between original common transport TST revenues and common transport TST revenues calculating those revenues using actual MOU. Use of 1992 actual MOU, i.e., MOU for the year prior to the year in which TST rates were established, would provide for the most accurate measurement of TIC revenues attributable solely to the use of the 9,000 MOU assumption when the TIC was first established. For two reasons, however, we will not require the price cap LECs to use 1992 MOU when they calculate TIC revenues attributable solely to the use of the assumption of 9,000 MOU when the TIC was first established. First, some price cap LECs contend that they do not have data on 1992 actual MOU. Second, 1996 actual MOU is a reasonable proxy for 1992 actual MOU. Actual MOU is a loading factor that reflects the average traffic utilization of the trunks that a LEC uses to provide common transport throughout its network. LECs typically aim to utilize their network at a certain percentage of its capacity. Operating the network below its capacity provides an allowance for growth and for breakage. No party has provided any evidence in the record of this proceeding indicating that any LEC utilizes a different percentage of the capacity of the trunks it uses to provide common transport now than it did when the TIC was established. While the absolute amount of TST traffic a LEC carries on its network may have increased over time, we would expect that the absolute number of trunks carrying that traffic also would have increased. Accordingly, we will allow price cap LECs to calculate their exogenous changes to the TIC and the TST service category using 1996 MOU, unless the 1996 MOU exceed 9,000 MOU. For the reasons we set forth below, if any price cap LEC's actual MOU exceed 9,000 MOU, the LEC may not make any exogenous cost adjustments to the TIC or TST service band.

See, e.g., Bell Atlantic Direct Case, Attachment F at 3; U S West Rebuttal at 7; GTE Rebuttal at 8.
140. We reject the claim by Bell Atlantic and other price cap LECs that they should not be required to make this adjustment using the Bureau's proposed methodology because the Access Charge Reform Order does not specify this methodology and the Commission may not require such adjustments absent a rulemaking.\textsuperscript{239} First, the action we take here does not change any of the decisions we made in the Access Charge Reform Order regarding the impact of the 9,000 MOU assumption on the TIC. We decided in that rulemaking proceeding that any amounts in the TIC that were attributable to the 9,000 MOU assumption should be removed from the TIC. In this tariff investigation order we are merely interpreting and implementing that decision. Further, the Commission has previously determined that a tariff investigation "is a rulemaking of particular applicability" under the Administrative Procedure Act (APA).\textsuperscript{240} In the Access Reform Tariffs Designation Order, the Bureau specified the carriers whose tariffs were subject to investigation with respect to these TIC adjustments and sought comment on its proposed and tentative conclusions.\textsuperscript{241} In response to the Access Reform Tariffs Designation Order, Bell Atlantic and other price cap LECs submitted direct cases presenting their arguments on the proposed approach, other parties addressed these issues in their comments on the direct cases, and price cap LECs provided further comment in their rebuttals. Accordingly, our decision to require the price cap LECs to follow the methodology adopted in this Order is fully consistent with the notice and comment requirements of the APA.\textsuperscript{242}

141. We agree with the price cap LECs that the initial calculation of TST rates included the cost of one DS3 to DS1 multiplexer.\textsuperscript{243} This finding is consistent with the statement in the Local Transport Order that common transport TST rates would recover the mutiplexing equipment needed to interconnect DS3 transmission facilities with the end office switch.\textsuperscript{244} It is also consistent with the Bureau's Local Transport Restructure Tariffs Order, which concluded that LECs should include the cost of one multiplexer in developing their common transport TST rates.\textsuperscript{245} Accordingly, we find that when the price cap LECs compute the impact on the TIC of the 9,000 MOU assumption by comparing original TST revenues with TST revenues calculated using the data they used when the TIC was established, except using actual MOU, both of these TST revenue amounts must include revenues from one DS3 to DS1 multiplexer. When price cap LECs determine the difference between original TST revenues and common transport TST revenues calculated using the data they used when the TIC was established, except using

\textsuperscript{239} See, e.g., Bell Atlantic Direct Case, Attachment F at 3.

\textsuperscript{240} Investigation of Special Access Tariffs of Local Exchange Carriers, Memorandum Opinion and Order, 5 FCC Rcd 4861 (1990), citing 5 U.S.C. § 551(4); Cincinnati Bell Telephone Company Tariff FCC No. 35, Memorandum Opinion and Order on Reconsideration, 8 FCC Rcd 4409, 4413 n.54 (1993).

\textsuperscript{241} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2279-80.

\textsuperscript{242} 5 U.S.C. § 553(b).

\textsuperscript{243} See e.g., BellSouth Direct Case at 26-29; U S West Direct Case at 23; Southwestern Bell Direct Case at 16-17.

\textsuperscript{244} Local Transport Order, 7 FCC Rcd at 7036-37 n.113.

actual MOU, the impact of the 9,000 MOU will be isolated because identical revenues reflecting the same
demand and the same rate for one DS3 to DS1 multiplexer will be reflected in both TST revenues.

142. As we indicated earlier, if a price cap LEC's actual MOU exceed 9,000, we prohibit the LEC
from increasing the TIC. In the Access Charge Reform Order, the Commission stated that one of the goals
of the Access Charge Reform proceeding was to reduce, and ultimately eliminate, the TIC in a manner that
fosters competition while, at the same time implementing a cost-based rate structure.\textsuperscript{246} Consistent with
those objectives, the Commission determined in the Access Charge Reform Order that some costs in the
TIC should be reallocated to other access elements.\textsuperscript{247} As an example, in reviewing the interim rate
structure for tandem-switched transport rates in accordance with the CompTel remand,\textsuperscript{248} the Commission
found that its assumption that voice-grade common transport circuits experience uniform loadings of 9,000
minutes of use was no longer reasonable based on evidence in the record presented by the LECs showing
that for many LECs the actual traffic levels was substantially lower than 9,000 minutes of use per
month.\textsuperscript{249} The Commission found that, as a result, in those cases, use of the 9,000-minute assumption had
caused revenues to be assigned to the TIC that would have been assigned to switched transport rates if
actual MOU had been used to develop those rates in 1993. Thus, when the Access Charge Reform Order
ordered price cap LECs to recalculate rates for the common transport portion of tandem-switched transport
using actual minutes of use for circuit loading rather than assuming 9,000 minutes of use per month, it was
for the purpose of removing from the TIC any revenues attributable to the use of that particular assumption
when the TIC was first established.\textsuperscript{250} We find it unjust and unreasonable for a price cap LEC to make
those recalculations in situations where it is demonstrated that the 9,000 MOU assumption did no lead to
additional revenues being collected through the TIC.

143. We disagree with Ameritech and the other LECs who claim that the price cap LECs should
be permitted to increase the TIC because there is nothing in the Access Charge Reform Order that
prohibits such an increase.\textsuperscript{251} While the Access Charge Reform Order did not specifically state that the
price cap LECs were prohibited from increasing the TIC, neither did the Order state that they could
increase the TIC. Indeed, allowing such an increase would be contrary to the Commission's goals of
eliminating the TIC in a manner that fosters competition.\textsuperscript{252}

144. We reject the alternative methodologies proposed by the price cap LECs to recalculate
tandem-switched transport rates using actual minutes of use for circuit loading rather than assuming 9,000
MOU per month. Bell Atlantic’s proposed methodology uses actual base year minutes of use circuit

\textsuperscript{246} Access Charge Reform Order, 12 FCC Red at 16073.

\textsuperscript{247} Id. at 16075.

\textsuperscript{248} See CompTel, 87 F.3d 522.

\textsuperscript{249} Access Charge Reform Order, 12 FCC Red at 16070-71.

\textsuperscript{250} See Access Reform Tariffs Designation Order, 13 FCC Red at 2279.

\textsuperscript{251} See, e.g., Ameritech Direct Case at 15-16 and Aliant Direct Case at 6.

\textsuperscript{252} See Access Charge Reform Order, 12 FCC Red at 16073-74.
loadings, an updated mix of fiber and copper transport facilities, and the most current rates for DS3 and DS1 transport, i.e., July 1, 1997 rates for termination, facility and DS3/DS1 muxes, in order to match the usage data with the facilities and rates for the same time period.\textsuperscript{253} We reject this methodology because it does not isolate the impact on the TIC of using 9,000 MOU to calculate TST rates when the TIC was established.

145. Frontier proposes that the Bureau's proposed methodology be modified to identify the exogenous change to the TIC as a dollar amount and create an offsetting exogenous change of the same dollar amount to the tandem transport band.\textsuperscript{254} As we clarify above, the methodology we adopt by this Order does compute the exogenous cost change to the TIC as a dollar amount. Moreover, if actual MOU are less than 9,000 MOU, we agree with Frontier that price cap LECs should make an offsetting exogenous cost change to the tandem transport band that is equal to the dollar amount of the exogenous change to the TIC that they calculate using our methodology. In this case, the TIC would decrease, a result consistent with the goals of the Access Reform Order. As discussed above, we disagree with Frontier, however, that price cap LECs should compute an offsetting exogenous cost change to the tandem transport band that is equal to the dollar amount of the exogenous change to the TIC if actual MOU are greater than 9,000 MOU. In those circumstances, the 9,000 MOU assumption did not contribute to TIC revenues.

146. We have reviewed the calculations the price cap LECs made using the methodology proposed by the Bureau and we find that Bell Atlantic, BellSouth, and GTE have made these calculations correctly. GTE, however, has made these calculations for some of its companies using actual MOU that exceed 9,000 MOU. For the companies for which GTE made these calculations using actual 1996 MOU that exceed 9,000 MOU, GTE shall not make any exogenous cost adjustments to the TIC or the TST service categories on account of the circuit loading factor.

147. The other price cap LECs either did not use the correct methodology or did not submit calculations based on this methodology. We order these price cap LECs to submit calculations of the TIC and TST exogenous cost adjustments in accordance with the methodology we adopt in this Order. We order these price cap LECs to submit these calculations on a worksheet with a format identical to the worksheet BellSouth used to make these calculations.

148. All price cap LECs also must revise their tariffs to reflect these adjustments. Specifically, they must recalculate the SBI upper limit for the TIC and the TST service category in the trunking basket to reflect exogenous cost adjustments for the impact of the 9,000 MOU based on the methodology we adopt in this Order. After recalculating the SBI upper limit for the TIC and the TST service category, they must revise their tariffs to establish rates for the rate elements corresponding to the TIC and the TST service categories such that the SBI for each category does not exceed the SBI upper limit.

D. Residual and Facilities-Based TIC

1. Background

\textsuperscript{253} Bell Atlantic Direct Case at p. 4 of Attachment F.

\textsuperscript{254} Frontier Direct Case at 22.
149. As part of the TIC reduction plan outlined in the Access Charge Reform Order, price cap LECs were required to separate their TIC revenues between the portion of the TIC that is facilities-related, and that portion of the TIC that cannot be associated with any identifiable cost element -- the residual TIC.\textsuperscript{255} Reassignment of the facilities-related TIC revenue to facilities-based charges will occur in three stages, beginning with the incumbent LEC tariffs that became effective on January 1, 1998. Price cap LECs were required to target to the residual TIC the price cap reductions arising in any price cap basket as a result of the application of the "GDP-PI minus X-factor" formula until the per-minute TIC is eliminated.\textsuperscript{256} This targeting approach was adopted to eliminate the anti-competitive aspects of the TIC.

150. The Commission requires the price cap LECs to compute their anticipated residual TIC by excluding revenues that were expected to be reassigned to facilities-based charges in the future.\textsuperscript{257} In the July 1, 1997 tariff filings, price cap LECs applied "GDP-PI minus X-factor" adjustments to their anticipated residual TIC. Price cap LECs that did not submit actual percentage estimates for their residual TIC amounts on the record in the Access Reform Proceeding were required to use an amount equal to 55 percent of their current TIC.\textsuperscript{258} This percentage was based upon the lowest residual TIC percentage identified in the rulemaking record.\textsuperscript{259} For tariffs that became effective on January 1, 1998, the price cap LECs were required to: (1) recalculate the residual TIC targeted in their July 1, 1997 tariffs; (2) eliminate any excess targeting that resulted in a larger PCI reduction to the TIC SBI than was required to eliminate the per-minute non-facilities-based residual TIC; and (3) direct all necessary exogenous adjustments to their PCIs and SBIs to reverse the effects of any excess targeting.

151. In the Access Reform Tariffs Designation Order, the Bureau tentatively concluded that a worksheet created by AT&T for the TIC recalculation would properly determine the allowance for recovery of transport costs that price cap LECs are required to remove from the TIC and from the facilities-based portion of the TIC. The Bureau identified Pacific Bell, and certain of the Sprint LTCs, Frontier, and GTE operating companies as companies that no longer have a non-facilities-based residual TIC, and thus could have overtargeted their July 1, 1997 X-factor reduction to the TIC. The Bureau ordered these companies to recalculate the removal of allowances for the recovery of costs from the TIC using the AT&T worksheet.\textsuperscript{260}

2. Discussion

152. Although the Bureau tentatively concluded that Pacific Bell no longer has a non-facilities-based residual TIC, on further investigation we find that, although Pacific Bell no longer has a per-minute?

\textsuperscript{255} Access Charge Reform Order, 12 FCC Rcd at 16081-86.
\textsuperscript{256} Access Charge Reform Order, 12 FCC Rcd at 16081.
\textsuperscript{257} Access Charge Reform Order, 12 FCC Rcd at 16081.
\textsuperscript{258} Access Charge Reform Order, 12 FCC Rcd at 16083.
\textsuperscript{259} Access Charge Reform Order, 12 FCC Rcd at 16083.
\textsuperscript{260} Access Reform Tariffs Designation Order, 13 FCC Rcd at 2283.
TIC, it still has a non-facilities-based residual TIC that is being recovered in its PICC. Therefore, it could not have overtargeted its X-factor reduction to the TIC.\textsuperscript{261}

153. In this Order, we adopt AT&T’s worksheet with certain modifications to account for changes to TIC revenues that resulted from exogenous cost adjustments reflected in the price cap LECs' 1997 annual access filings. AT&T’s worksheet calculates the amount by which a price cap LEC overtargeted its July 1, 1997 "GDP-PI minus X-factor" to the non-facilities-based residual TIC by: (1) calculating the "recalculated TIC" by subtracting from the June 30, 1997 TIC revenues allowances for the recovery of actual facilities-based costs that the price cap LECs reallocated to facilities-based rates on January 1, 1998; (2) calculating the "new residual TIC" by subtracting from the recalculated TIC the portion of the TIC that represents the allowance for facilities-based costs that the price cap LEC is required to reallocate to facilities-based rates in the future; and (3) subtracting the dollar amount of the "GDP-PI minus X-factor" targeting from the new residual TIC if the "GDP-PI minus X-factor" targeting exceeds the new residual TIC.\textsuperscript{262}

154. We agree with AT&T that the amount by which price cap LECs overtargeted their July 1, 1997 "GDP-PI minus X-factor" to the residual TIC must be determined by first computing the recalculated TIC by subtracting from the June 30, 1997 TIC revenues the allowances for the recovery of actual facilities-based costs that the price cap LECs reallocated to facilities-based rates on January 1, 1998. In particular, price cap LECs must use June 30, 1997 revenues in this calculation because they computed the residual TIC that they targeted in their July 1, 1997 annual access tariff filings based on June 30, 1997 TIC revenues. More specifically, they developed the non-facilities-based residual TIC estimates they targeted in their July 1, 1997 annual access tariff filings by multiplying June 30, 1997 TIC revenues by percentages prescribed in the Access Charge Reform Order. Computing the recalculated TIC by subtracting from June 30, 1997 TIC revenues allowances for actual facilities-based costs is logically the first step in determining whether the price cap LECs actually overtargeted June 30, 1997 TIC revenues when they subtracted from these same revenues their estimates of the allowances for these costs in their July 1, 1997 annual access tariff filings.

155. We find, however, that the worksheet should also subtract from June 30, 1997 TIC revenues any changes to TIC revenues reflected in the price cap LECs' July 1, 1997 annual access filings that were in addition to the change due to the "GDP-PI minus X-factor" targeting. Actual TIC revenues may have changed as a result of these other changes in the July 1, 1997 annual access tariff filing. The AT&T worksheet underestimates or overestimates the recalculated TIC depending on whether these other changes increased or decreased the TIC. This, in turn, results in an underestimate or an overestimate of the new residual TIC on the AT&T worksheet. By comparing an overestimate or an underestimate of the new residual TIC to the dollar amount of the "GDP-PI minus X-factor" targeting, the AT&T worksheet correspondingly overestimates or underestimates the amount by which price cap LECs overtargeted their July 1, 1997 "GDP-PI minus X-factor" to the non-facilities-based residual TIC.

\textsuperscript{261} SBC Direct Case at 19-20. See, also, Pacific Bell Transmittal No. 1959, tariff review plan CAP-1 form, (dated December 17, 1997). SBC explains that Pacific Bell's total remaining TIC on line 670 is $33,732,293 and the facilities-based TIC on line 690 is $21,258,398, leaving a non-facilities-based TIC of $12,473,895.

\textsuperscript{262} Based on the AT&T worksheet, LECs did not overtarget the residual TIC if the dollar amount of the "GDP-PI minus X-factor" targeting is less than the new residual TIC.
156. Accordingly, we modify the AT&T worksheet to correctly compute the recalculated TIC. We modify the calculation of the recalculated TIC on the AT&T worksheet as follows: (1) subtract from June 30, 1997 TIC revenues the absolute value of the sum of the allowances for recovery of actual facilities-based costs price cap LECs were required to reallocate to facilities-based rates on January 1, 1998; (2) sum the actual targeted revenue differential for the common line, traffic sensitive, and trunking baskets on PCI-1 line 237c, columns (A), (B), and (C) in the TRP supporting the July 1, 1997 annual access tariff filing; (3) subtract from the absolute value of the result in (2) above the absolute value of the entire TIC revenue change on SUM-1, line 171, column E in the TRP supporting the July 1, 1997 annual access tariff filing; (4) add to the result in (1) above the result from (3) above.

157. We note that both SBC and Frontier suggested using as the dollar amount of the "GDP-PI minus X-factor" targeting, the entire TIC revenue change on SUM-1, line 171, column E in the TRP supporting the July 1, 1997 annual access tariff filing. The revision we make here to the AT&T worksheet is mathematically equivalent to SBC's proposal.

158. We disagree with Frontier that use of data from the July 1, 1997 annual access tariff filing imposes an undue burden on the price cap LECs. We find that these data should be readily available because price cap LECs used these data to compute their price cap indices less than one year ago. Nor do we agree with Frontier that the AT&T worksheet is overly complex. It contains no more calculations than are needed to clearly identify all of the exogenous costs adjustments to the TIC that the Access Charge Reform Order required the price cap LECs to make to the TIC on January 1, 1998, and those that it requires the price cap LECs to make in the future.263

159. Accordingly, we order GTE, the Sprint LTCs, Frontier and Nevada Bell to recalculate the amount by which they overtargeted their July 1, 1997 "GDP-PI minus X-factor" to the non-facilities-based residual TIC using the AT&T worksheet as modified by this Order. We have attached to this order the AT&T worksheet modified pursuant to the requirements in this section. These LECs also must recalculate the PCIs for each price cap basket other than the interexchange basket and the SBI upper limit for each service category in these price cap baskets to reflect the calculations they make on the modified AT&T worksheet. After recalculating the SBI upper limit for each service category in these price cap baskets, they must revise their tariffs to establish rates for each service in each such category such that the SBI for each category does not exceed the SBI upper limit. We do not require these LECs to pay refunds to customers to which they would have charged a lower rate had they not overtargeted the non-facilities-based residual TIC because we prescribed the ratios the LEC used to estimate the amount of the non-facilities-based residual TIC, and any overtargeting resulted from overestimating that amount using those prescribed ratios.

V. Recovery of New Universal Support Obligations

A. Background

160. The Universal Service Order established a new funding mechanism for universal service. Contributions to the universal service fund are made by all telecommunications carriers, and the amount of the contribution is a percentage of end-user revenues. Incumbent LECs may recover universal service

263 Furthermore, the calculations on the worksheet require only basic mathematical operations such as addition and subtraction.
contributions via interstate mechanisms. In the Access Charge Reform Order, the Commission stated that price cap LECs may treat their contributions to the new universal service mechanisms as exogenous changes to their price cap indices (PCIs). Price cap LECs electing to recover their universal service obligation through interstate access charges must apportion the amount of the exogenous adjustment among the baskets that contain end-user interstate revenues. These baskets are the Common Line, Interexchange, and Trunking baskets. In the Access Charge Reform Order, the Commission concluded that in the Trunking basket, the service band indices for services that do not recover end-user revenues should not be increased to reflect the exogenous adjustment to the PCI for the Trunking basket. To reflect the exogenous adjustment to the Trunking basket PCI, price cap LECs were ordered to increase the service band indices for the remaining service categories in the Trunking basket based on the relative end-user interstate revenues generated in each service category.

161. The tariffs filed by price cap LECs effective on January 1, 1998, contained universal service contributions based on actual end-user revenue received by price cap LECs in the first six months of calendar year 1997. In the Access Reform Tariffs Designation Order, the Bureau concluded that the price cap LECs' allocations of universal service fund (USF) contributions among the Common Line, Interexchange, and Trunking baskets warranted further review. For each price cap LEC, the Bureau calculated ratios of the USF contribution allocated to the Common Line, Interexchange, and Trunking baskets to its total USF contribution. The Bureau's calculations demonstrated a large variance in the ratios among the price cap LECs. The Bureau also noted that the price cap LECs used three different methodologies to allocate their universal service obligations across price cap baskets. Under the first method, price cap LECs relied solely on the interstate end-user revenues reported in column C of lines 34-47 of FCC Form 457, the Universal Fund Worksheet, to determine price cap basket allocation factors. Price cap LECs that use the second method derived price cap basket allocation factors by using the interstate end-user service category revenue figures summarized on Chart SUM-1 of the Tariff Review.

264 Universal Service Order, 12 FCC Rcd at 9171.

265 Access Charge Reform Order, 12 FCC Rcd at 16147.

266 The end-user charges assessed on services in the Common Line basket were recovered through the SLC (starting on January 1, 1998, some end-user revenues are also recovered through PICCs on lines that are not presubscribed to an IXC); in the Interexchange basket, end-user charges are recovered through per-minute toll charges; and in the Trunking basket, end-user charges are recovered through special access service provided directly to end-users. We note that starting January 1, 1998, the Marketing basket also recovers end-user revenues in the SLC, and that price cap LECs will apportion exogenous adjustments for USF contributions assessed in those revenues to the Marketing basket as well.

267 Rates for tandem-switched transport, interconnection, and tandem switch signalling do not recover end-user revenues. 47 C.F.R. §§ 61.42(e)(2)(v), (vi), and (vii).

268 The four remaining service categories in the Trunking basket are: (1) voice grade entrance facilities, voice grade direct-trunked transport, voice grade dedicated signalling transport, voice grade special access, WATS special access, metallic special access, and telegraph special access services; (2) audio and video service; (3) high capacity flat-rated transport, high capacity special access, and DDS services; and (4) wideband data and wideband analog services. See 47 C.F.R. §§ 61.42(e)(2)(i), (ii), (iii), (iv).

269 Access Reform Tariffs Designation Order at 2265.
Plan and internal company billing records. The internal company billing records were used to determine the amount of interstate end-user revenues generated by service categories within the Trunking basket, while Chart SUM-1 was the bases for all other interstate end-user revenues. Under the third method, price cap LECs used internal company billing records to determine the allocation of the universal service obligation for all three affected price cap baskets.

162. GTE, Bell Atlantic, SBC, U S West, Citizens, Aliant, and SNET used Chart SUM-1 and internal billing records to allocate USF exogenous costs; Ameritech, CBT, Frontier, and Sprint used FCC Form 457 to allocate USF exogenous costs; and BellSouth used internal billing records to report the amount of interstate end-user revenues generated within the three affected price cap baskets.

163. The Bureau designated for investigation the methodology employed by price cap LECs to calculate and allocate their universal service contributions across eligible price cap baskets for recovery purposes. The Bureau required all price cap LECs to submit explanations detailing why the methodologies they used reasonably reflect the distribution of interstate end-user revenues across baskets.

164. In addition, the Bureau required Citizens to explain why it allocated a portion of its USF contribution to the traffic sensitive basket, given the Commission's finding in the Access Charge Reform Order that none of the service categories in this basket generates interstate end-user revenues. The Bureau also required Ameritech to explain the discrepancy between the interstate end-user revenue figures Ameritech reports for Trunking basket interstate end-user revenues in two places. On FCC Form 457, Ameritech reports Trunking basket interstate end-user revenues of $1.2 million, whereas, Ameritech's company records show interstate end-user revenues generated within the Trunking basket of $67.7 million.

165. We find generally that each of the three methods utilized by the price cap LECs reasonably allocates their USF exogenous adjustment among the baskets. We do require, however, those price cap LECs that calculate USF allocation factors across price cap baskets by using revenue figures reported in Chart SUM-1 for the Common Line and Interexchange baskets and internal company billing records for the Trunking basket to use the internal billing record method to calculate the percentage of Trunking basket revenues that are attributable to end-user services and apply this percentage to the Trunking basket revenues reported on Chart SUM-1 of the TRP. Price cap LECs must also use this methodology to allocate the exogenous adjustment to the Trunking basket among the service categories that generate end-user revenues.

166. Price cap LECs using FCC Form 457 for the Common Line and Interexchange baskets and internal billing records for the Trunking basket must each use billing records for the Trunking basket from

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270 Access Reform Tariffs Designation Order at 2286.

271 Access Reform Tariffs Designation Order at 2285.

272 Special access interstate end-user revenues are recovered in the following three Trunking basket service categories: (1) Voice Grade, WATS, Metallic & Telegraph; (2) Audio & Video; and, (3) High Caps & DDS.
the same time period for which the Form 457 reports revenues. For price cap LECs utilizing internal billing records to report the amount of interstate end-user revenues generated within all three of the price cap baskets, the billing records must correspond to the same period of time for which revenue figures are reported on FCC Form 457.

167. We are unable to verify the source of interstate Trunking basket end-user revenues reported by Aliant, Citizens, GTE, SBC, and U S West for purposes of allocating the universal service obligation to and within that basket, because these companies have failed to provide or identify adequately the time period covered by their Trunking basket internal billing records. We, therefore, require these price cap LECs to submit a summary of company billing records from January 1, 1997 - June 30, 1997, and calculate allocation factors in accordance with the requirements outlined above.

168. As we stated above, price cap LECs that use Form 457 method to allocate the costs associated with their USF obligations must calculate allocations within the trunking basket by filing billing records from the same period of time reported on the most recently filed USF Worksheet used to calculate the universal service obligation. Although Ameritech's Form 457 reports 1997 revenues, it uses trunking billing records from 1996. We, therefore, require Ameritech to reallocate its universal service obligation within the Trunking basket on the basis of January 1, 1997 - June 30, 1997, billing records. Moreover, Frontier and Sprint fail to provide 1997 billing records to justify the intra-Trunking basket allocation of their universal service obligation. We, therefore, require Frontier and Sprint to submit a summary of January 1, 1997, - June 30, 1997, company billing records to justify their intra-Trunking basket allocations.

169. BellSouth used billing records to allocate its universal service obligation. Although BellSouth calculated its universal service obligation using actual billed revenues for the first six month of 1997 summarized on Form 457, it used 1996 billing records to construct interbasket allocation factors. We, therefore, require BellSouth to submit a summary of the relevant January 1, 1997 - June 30, 1997, billing records and to recalculate its interbasket allocation factors using these revenue figures.

170. Aliant's allocation of its USF contribution to the Trunking basket based on total interstate special access revenues is unjust and unreasonable because the Access Charge Reform Order explicitly requires carriers to use only interstate end-user revenues to construct price cap basket recovery allocation factors.\textsuperscript{273} Special access revenues collected from sources other than end-users may not be included in the development of the allocation factors that distribute the USF obligation among price cap baskets. Aliant's inclusion of total special access revenues to allocate the USF contribution to the Trunking basket, therefore, results in an overallocation to the Trunking basket and underallocations to the Common Line and Interexchange baskets. Accordingly, we order Aliant to recalculate its first quarter 1998 USF contribution price cap basket allocation by reallocating its USF obligation among the price cap baskets based strictly on the ratio of interstate end-user revenues within each basket to the total amount of interstate end-user revenues generated by all three price cap baskets and revise its tariffed rates to reflect this adjustment.

171. In the Access Reform Tariffs Designation Order, the Bureau required Citizens to justify allocating a portion of its USF contribution to the Traffic Sensitive basket. On March 16, 1998, Citizens revised its tariff by limiting the allocation of its USF contribution to interstate end-user revenues reported

\textsuperscript{273} Access Charge Reform Order, 12 FCC Rcd at 16147.
in Chart SUM-1 to calculate its USF obligation allocation factors. We find that this revision reasonably reflects the requirements of the Access Charge Reform Order.

172. The Bureau also required Ameritech to justify the discrepancy between the interstate end-user revenue figures Ameritech reported for Trunking basket interstate end-user revenues in two places. On FCC Form 457, Ameritech reported Trunking basket interstate end-user revenues of $1.2 million, while Ameritech's company records show interstate end-user revenues generated within the Trunking basket of $67.7 million. Ameritech explained that it did not include all of the Trunking basket end-user revenues identified in its billing records as end-user revenues on Form 457 because the end-user had an option of whether it or its long distance carrier should receive those bills. This may indicate that Ameritech underreported its end-user revenues in Form 457, and therefore, paid a smaller USF contribution than it should have. This proceeding, however, is limited to determining whether the amount it did contribute was allocated correctly among its price cap baskets. Accordingly, we may initiate a separate proceeding to determine whether Ameritech underreported its USF revenue amount. We find, however, that Ameritech's use of the billing records to allocate the USF contribution among the Trunking basket service categories is reasonable because it is the best available data for making the allocation.

VI. Refund Liability

A. Background

173. In the Access Reform Tariffs Suspension Order, the Bureau put customers on notice that, due to the unusual nature and scope of the Access Charge Reform tariff filings, the rates at issue in this investigation were provisional and might be subject to a special, two-way adjustment. The Bureau stated that if these provisional rates are found at the conclusion of this investigation to be above those permitted by our rules, and thus unreasonably high, we may require the LECs to make refunds to their customers. The Bureau also stated that at the conclusion of this investigation we may in some instances allow carriers prospectively to charge higher rates for some elements to reflect the fact that they were charging less than would have been permitted for those elements during the pendency of the investigation. In addition, the Bureau noted that in cases in which the same customer has paid charges that were found to be too high and charges that could have been higher, refunds could be offset by amounts allowed for recoupment.

B. Discussion

1. Generally

174. In Sections II - V above, we find that certain of the price cap LECs' methods of implementing requirements of the Access Charge Reform Order are unreasonable, and resulted in rates that are higher than justified. We also find that, in some of these cases, these same methods produced other rates that are lower than otherwise would have been permitted. Under Section 204(a) of the Communications Act, as amended, we have authority to impose refund liability on the price cap LECs for overcharges. The

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Commission does not allow carriers, at the end of a Section 204 investigation, to recoup past undercharges or to offset revenues foregone from one rate element against refunds owed for overcharges, absent unusual circumstances and prior notice to customers.\textsuperscript{277} We find that due to the unusual nature and scope of the Access Charge Reform tariff filings, however, we must consider permitting such recoupment, pursuant to our authority under Section 4(i).\textsuperscript{278} As the Bureau noted in the Access Reform Tariffs Suspension Order, the Access Charge Reform Order involved a fundamental restructuring of incumbent LEC interstate switched access service offerings.\textsuperscript{279} The tariff revisions required to implement this restructuring are far more extensive than any that the Commission has ordered since it first instituted its system of tariffed access charges. In addition, most of the changes affect multiple rate elements, price cap baskets, and service categories. We note that in the Access Reform Tariffs Suspension Order, the Bureau put customers on notice that under these unusual circumstances, in which the Commission has ordered a massive restructuring of many interrelated rates, it may not be possible to achieve a fair balance of ratepayer and shareholder interests without also allowing LECs some measure of recoupment, where appropriate.\textsuperscript{280}

175. Thus, for each of the price cap LECs' methods found unreasonable in this Order, we have three options for addressing the resulting provisional rates: (1) order the price cap LECs to make refunds for overcharges; (2) order the price cap LECs to make refunds for overcharges but permit these LECs to offset refunds with amounts allowed for recoupment of rates that were lower than they could have been; or (3) decline to order refunds (and thus no recoupment permitted). In determining which option to select, we will consider for each issue addressed in this Order the following factors: (a) whether the particular price cap LEC method found unreasonable resulted in one rate that is higher than justified and another rate that is lower than it could have been, other than as a result of the constraints generally imposed by the PCIs and SBIs under price cap regulation;\textsuperscript{281} (b) if there are such corresponding high and low rates, whether the same general group of customers were affected by both rates;\textsuperscript{282} (c) the administrative costs of implementing refund plans; and (d) other equities applicable to a particular case.

176. The manner in which we will consider these factors can be illustrated as follows. If the price cap LECs' method simply produces an unreasonably high rate, without a correspondingly low rate, then offsetting compensation is not applicable. In that case, we will require refunds unless administrative costs or other equities weigh in favor of refraining from ordering refunds. On the other hand, if the price cap


\textsuperscript{279} Access Reform Tariffs Suspension Order, 13 FCC Rcd at 166.

\textsuperscript{280} Access Reform Tariffs Suspension Order, 13 FCC Rcd at 166.

\textsuperscript{281} See U S West Direct Case at 12.

\textsuperscript{282} See Bell Atlantic Direct Case at 9.
LECs' method results in one rate that is higher than justified and another rate that is lower than it could have been, we will consider whether the same general group of customers were affected by both rates. If it is the same general group of customers affected by both rates, we may permit the price cap LECs to offset any refunds to a customer to reflect the fact that other charges to that customer were lower than they could have been, unless administrative costs or other equities weigh in favor of refraining from ordering refunds or offsets. If it is not the same general group of customers affected by both rates, we may not require refunds if administrative costs or other equities warrant not requiring refunds, or we may require a refund to one group and permit or deny recoupment from the other. Below, we apply these factors to each issue in this investigation where we have found that price cap LECs must adjust their rates to correct an unreasonable methodology.

177. Each company required to make the refunds specified below must submit plans for issuing refunds to the Common Carrier Bureau for review and approval pursuant to our delegation of authority within 90 days of the release of this Order. Refunds shall be payable with interest on the principal amount owed computed on a daily compounded basis at the underpayment rate(s) established by the U.S. Internal Revenue Service pursuant to section 6621(a)(2) of the Internal Revenue Code of 1986, as amended, 26 U.S.C § 6621(a)(2), for the period between January 1, 1998 until the date of payment. These companies' refund plans must contain full explanations of how they have complied with the findings of this Order.

2. Adjustments based on Our Adoption of a Permitted Revenue Methodology for Exogenous Cost Changes

178. As discussed in Section III, we find that the price cap LECs' use of a revenue requirement methodology to calculate the exogenous cost changes implemented in their January 1, 1998 tariff filings is unreasonable because it does not fully allocate the permitted revenues in price cap baskets. As a result of the price cap LECs' use of a revenue requirement methodology, some rates were higher than justified, such as local switching and the TIC, and other rates were lower than they could have been, such as the CCL, PICCs (for carriers with MLB PICC below the $2.75 cap), and rate elements for end office trunk ports, tandem trunk ports, and multiplexers. Moreover, the rates that were higher than justified and the rates that were lower than they could have been were generally paid by the same group of customers, the IXCs. Because generally the same group of customers that were harmed by unreasonably high rates benefitted from correspondingly lower rates and the Access Charge Reform Order involved a unique and fundamental restructuring of access rates, we find that equity warrants some measure of recoupment to the price cap LECs. Rather than requiring price cap LECs to calculate refunds and a surcharge or offsetting the refunds by the amount of charges that were lower than they could have been, we conclude that the price cap LECs' recoupment should be accomplished by not ordering any refunds. We recognize that for each particular IXC, the additional payment caused by unreasonably high rates did not exactly equal the savings from

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283 For example, the price cap LECs' methodology for calculating the exogenous cost change for line ports resulted in local switching rates that were higher than justified and CCL rates or PICCs (for carriers with MLB PICC below the $2.75 cap) that were lower than the price cap LECs otherwise would have been permitted to charge. In addition, the price cap LECs' methodology for calculating the exogenous cost change for end office trunk ports resulted in local switching rates that were higher than justified and rates for dedicated and shared end office trunk ports that were lower than the price cap LECs otherwise would have been permitted to charge.
correspondingly lower rates.\textsuperscript{284} We find, however, that the significant administrative costs -- both to industry and to the Commission -- of implementing a plan for refunds and either a surcharge or an offset outweigh the benefit that would be gained from determining precisely which particular IXC paid more in some rates than it saved in other rates and which paid less than it saved. Accordingly, we will not order the price cap LECs to make refunds for overcharges resulting from the LECs' use of a revenue requirement methodology to make the exogenous cost changes implemented in their January 1, 1998 tariff filings.

3. Common Line Adjustments

179. Non-Primary Line Counts. As discussed in Section II.A, we find that Pacific Bell and GTE underestimated their non-primary residential line counts. Consequently, during the course of this investigation these price cap LECs assessed upon the end users of some non-primary lines a SLC of $3.50 instead of $5.00. In addition, Pacific Bell and GTE assessed upon the presubscribed IXCs for these non-primary residential lines a $0.53 PICC instead of $1.50 PICC. As a result of these companies' undercount of their non-primary residential lines, any residual charges assessed by these companies were increased.\textsuperscript{285} In the case of Pacific Bell, this undercount produced MLB PICCs, and possibly non-primary residential PICCs, that were higher than our rules permit. In the case of GTE, this undercount produced residual per-minute rates that were higher than our rules permit. We order Pacific Bell and GTE to make refunds for any overcharges in MLB PICCs, non-primary residential PICCs, or residual per-minute rates that resulted from the undercount of their non-primary residential lines. We note that, although IXCs were disadvantaged by these overcharges, they also benefitted by paying the primary residential PICC instead of the higher non-primary residential PICC for those lines that were not correctly identified. It is not possible, however, to determine the amount that any particular IXC saved by paying the primary residential PICC instead of the higher non-primary residential PICC because Pacific Bell and GTE have not identified these lines. Thus, we will not permit Pacific Bell and GTE to offset refunds to an IXC for MLB PICC, non-primary residential PICC, or residual per-minute overcharges by the amount that the IXC saved by paying the primary residential PICC instead of the higher non-primary residential PICC. In addition, we do not permit these price cap LECs to recover from end users the difference between the primary residential SLC and the higher non-primary residential SLC for several reasons. First, the charges are already at their cap. Second, these customers were less likely to be aware of the notice in the Access Reform Tariffs Suspension Order that we might order recoupment. Finally, end users are a different class of customers from the IXCs that were overcharged. As we noted in the 1997 Annual Access Reconsideration Order, our general policy to not allow carriers at the end of a tariff investigation to offset revenues foregone from one rate element against refunds ordered for overcharges absent unusual circumstances and prior notice to customers is particularly applicable where "a different class of customers received the benefits of the low rate from the

\textsuperscript{284} For example, in the case of line ports, the additional payment caused by unreasonably high local switching rates did not exactly equal the savings from correspondingly lower CCL rates because each IXC has a different mix of originating and terminating minutes subject to the CCL rates. In the case of end office trunk ports, the additional payment caused by unreasonably high local switching rates did not exactly equal the savings from correspondingly lower end office trunk port rates because dedicated end office trunk port costs now are recovered through a flat rate, rather than the per-minute local switching rate. Those IXCs with a high number of minutes per dedicated trunk may have paid more in switching than they saved in end office trunk ports, while those IXCs with fewer minutes per dedicated trunk may have paid less than they saved.

one that was subjected to the unlawfully high rate." 286 It was within the control of Pacific Bell and GTE to identify their non-primary residential lines. We find no equities in favor of permitting them to recover foregone revenues from their end users in this instance.

180. **Inward Only Lines.** Ameritech chose not to include inward-only lines in its PICC counts for the January 1, 1998 tariff filing, thus increasing its per-minute residual charges 287 in all jurisdictions except Illinois and its MLB PICC in Illinois. 288 This was a clear violation of our price cap rules. 289 There is no provision in the Access Charge Reform Order that exempts inward-only lines from being included in either the SLC or PICC count. 290 Although Ameritech assesses a SLC on inward-only lines, it chose not to assess an MLB PICC on these lines. Accordingly, we require Ameritech to make refunds to IXCs for overcharges that resulted from Ameritech's failure to include inward-only lines in its PICC counts and to any of its Illinois multi-line business customers that paid the PICC themselves. 291 Presumably, none of the inward-only lines are presubscribed to an IXC. We recognize that customers with inward-only lines could have been assessed a PICC. Ameritech's decision to forego recovery from PICCs on inward-only lines, however, was entirely voluntary. We find no equities that favor permitting Ameritech to recoup their foregone revenues from their inward-only line customers. In the event that there exist some inward-only lines that are presubscribed to an IXC, Ameritech may not recoup any of their foregone revenues from IXCs to whom these lines are presubscribed. We note that, as discussed above, Ameritech filed tariff revisions on March 17, 1998 which recalculated their CCL rates for the period starting April 1, 1998. 292 Thus, Ameritech only is liable for refunds for the period from January 1, 1998 to April 1, 1998, the effective date of Ameritech's tariff revision.

181. **Historic Understatement of BFP.** As discussed in Section II.D, we find that Bell Atlantic, the Sprint LTCs, GTE, SWBT, and U S West historically have understated their BFP. As a result of the underestimation of the BFP, these companies assessed upon IXCs CCL rates that were higher than justified during the course of this investigation. We order Bell Atlantic, the Sprint LTCs, GTE, SWBT, and U S West to refund the difference between the new CCL rate they calculate and the rate that was in effect during this investigation. The correction we have ordered will eliminate the lingering impact of historic underestimation of BFP in CCL rates. Any increase in maximum SLC rates that resulted from the 1997 Annual Access Investigation Order, however, have already been implemented. This Order, therefore, will not result in any increase in the maximum SLC rates that these companies could charge.

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286 1997 Annual Access Reconsideration Order at ¶ 8.


288 In Illinois, Ameritech did not exceed the MLB PICC cap of $2.75.

289 See Section II.C, supra.

290 We note that these lines are assessed a SLC, pursuant to section 69.152(a), which states that a SLC is assessed upon end users that subscribe to local exchange service. See 47 U.S.C. § 69.152(a).

291 See 47 C.F.R. § 69.153(b).

292 Ameritech Transmittal No. 1146, Access Reform Revision, Description and Justification, page 1 (March 17, 1998).
Therefore, no customers were charged less than they might have been, and there is no recoupment issue. Bell Atlantic and U S West argue that if the Commission were to require price cap LECs to make refunds based on an adjustment of CCL rates to eliminate any lingering effect of previous understatements of the BFP, such action would constitute an impermissible retroactive application of a new rule.\(^\text{293}\) As discussed in Section II.D.2 supra, however, our requirement that price cap LECs adjust their CCL rates to eliminate any lingering impact of historic understatements of the BFP does not represent a new rule, but rather an exercise of our authority under Section 201(b) of our rules, 47 U.S.C. § 201(b), to ensure that price cap LEC rates are just and reasonable.

4. Trunking Basket Adjustments

182. As discussed in Section IV, we find that price cap LECs' calculations of the following changes to the trunking basket are unreasonable: (1) the removal of SS7 costs from the TIC; (2) the use of actual minutes as an allocator for the TST common transport rate element; (3) the targeting of productivity factor reductions to the residual TIC; and (4) the allocation of marketing and COE maintenance costs among service categories in the trunking basket. In some cases, these calculations produced rates that were higher than justified, such as the rates for CCL, MLB PICC (for carriers with MLB PICC below the $2.75 cap), local switching, and unbundled signalling. At the same time, these calculations correspondingly produced rates that were lower than they could have been, such as the rates for TST common transport. In some cases, these calculations caused the TIC to be higher than our rules permit, while others resulted in the TIC being less than it otherwise could have been. The rates affected by these calculations generally are paid by the same class of customers, the IXC. Because generally the same class of customers that was harmed by unreasonably high rates benefitted from correspondingly lower rates and the Access Charge Reform Order involved a unique restructuring of access rates, we find that equity warrants some measure of recoupment to the price cap LECs. We conclude that it would not be in the public interest to permit recoupment by requiring price cap LECs to calculate refunds and a surcharge or offsetting the refunds by the amount rates were lower than they could have been. Instead, we find that the price cap LECs recoupment should be accomplished by not ordering refunds. We recognize that for each particular IXC, the additional payment caused by rates that were higher than justified as a result of the calculations at issue did not exactly equal the savings from rates that were lower than they could have been as a result of the calculations at issue. We find, however, that the significant administrative costs -- both to industry and to the Commission -- of implementing a plan for refunds and either a surcharge or an offset outweigh the benefit that would be gained from determining precisely which particular IXC paid more in some rates than it saved in others and which paid less than it saved. Accordingly, we will not order the price cap LECs to make refunds for overcharges resulting from the changes to the trunking basket listed above.

5. USF Adjustments

183. As discussed in Section V, we require some price cap LECs to revise their calculations of the inter-basket allocation of USF recovery. We expect that these revisions will produce only minor changes in the allocation of USF recovery among CCL rates, PICCs (where the MLB PICC is less than the $2.75 cap), the interexchange basket, direct-trunked transport and special access rates. IXC pay rates for CCL, direct-trunked transport, and some special access; end users pay rates for interexchange and some special access. It is not clear at this time which rates will increase and which ones will decrease after the price cap

\(^{293}\) See Bell Atlantic Direct Case at 3; U S West Direct Case at 5-6.
LECs implement the USF revisions that we order. We find that the significant administrative costs to industry and to the Commission of implementing a plan for refunds and either a surcharge or an offset outweighs the benefit that would be gained from determining which customers were affected by overcharges and which ones benefitted from rates that were lower than they could have been, particularly in light of the fact that we expect that the USF revisions required in this Order will have only a minor effect on rates. Accordingly, we will not order the price cap LECs to make refunds to reflect the difference in rates resulting from the revisions that we require in this Order for USF recovery.

VII. Compliance Filings

184. We order Aliant Communications Company, Ameritech Operating Companies, Bell Atlantic Operating Companies, BellSouth Telecommunications, Inc., Cincinnati Bell Telephone Company, Citizens Telecommunications Companies, Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, Pacific Bell, Southern New England Telephone Company, Southwestern Bell Telephone Company, Sprint Local Telephone Companies, and U S West Communications, Inc. to revise their tariffs to establish their rates in accordance with the requirements of this Order. These LECs must submit tariff revisions establishing new rates, effective July 1, 1998. They may file these revisions as a part of their 1998 annual access tariff filings or through separate tariff filings. The tariff revisions filed by these price cap LECs must include full explanations of how they have complied with the requirements of this Order. Their explanations must include complete descriptions of the data, assumptions, and the methodologies used for all adjustments required by this Order. These LECs also must submit, as a part of this documentation, worksheets showing the data and calculations that underlie all adjustments.

VIII. Ordering Clauses

185. Accordingly, IT IS ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), 205, and 405, Pacific Bell, GTE System Telephone Companies, and GTE Telephone Operating Companies SHALL FILE REVISED RATES to be effective July 1, 1998, and SHALL ISSUE REFUNDS, plus interest, for the period from January 1, 1998 through July 1, 1998, reflecting adjustments to their non-primary residential lines as prescribed in Section II.A of this Memorandum Opinion and Order. These companies ARE ORDERED to submit plans for issuing refunds to the Common Carrier Bureau for review and approval pursuant to our delegation of authority under Section 0.291 of the Commission's rules, 47 C.F.R. § 0.291, within 90 days of the release of this Memorandum Opinion and Order. Refunds shall be calculated in accordance with the requirements of Section VI of this Memorandum Opinion and Order.

186. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, BellSouth Telecommunications, Inc. and Southern New England Telephone Company shall revise their tariffs, effective July 1, 1998, to include a new definition of non-primary residential line counts as required by Section II.B of this Memorandum Opinion and Order.

187. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j),
201(b), 202(a), 203(a), 204(b), and 205, that Cincinnati Bell Telephone Company shall revise its tariff, effective July 1, 1998, to exclude the statement that it does not include inward-only lines in its subscriber line and presubscribed interexchange carrier line count as required by Section II.C of this Memorandum Opinion and Order.

188. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that the Ameritech Operating Companies SHALL ISSUE REFUNDS, plus interest, for the period from January 1, 1998 through March 31, 1998, reflecting the inclusion of inward-only lines in its subscriber line and presubscribed interexchange carrier line count as required by Section II.C of this Memorandum Opinion and Order. The Ameritech Operating Companies ARE ORDERED to submit plans for issuing refunds to the Common Carrier Bureau for review and approval pursuant to our delegation of authority under Section 0.291 of the Commission's rules, 47 C.F.R. § 0.291, within 90 days of the release of this Memorandum Opinion and Order. Refunds shall be calculated in accordance with the requirements of Section VI of this Memorandum Opinion and Order.

189. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Bell Atlantic Operating Companies, the Sprint Local Telephone Companies, GTE System Telephone Companies, GTE Telephone Operating Companies, Southwestern Bell Telephone Company, and U S West Communications, Inc. SHALL FILE REVISED CARRIER COMMON LINE RATES to be effective July 1, 1998, and SHALL ISSUE REFUNDS, plus interest, for the period from January 1, 1998 through July 1, 1998, reflecting removal of the past effects that understating their BFP revenue requirements has had on their carrier common line rates as required by Section II.D of this Memorandum Opinion and Order. These companies ARE ORDERED to submit plans for issuing refunds to the Common Carrier Bureau for review and approval pursuant to our delegation of authority under Section 0.291 of the Commission's rules, 47 C.F.R. § 0.291, within 90 days of the release of this Memorandum Opinion and Order. Refunds shall be calculated in accordance with the requirements of Section VI of this Memorandum Opinion and Order.

190. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Aliant Communications Company, Ameritech Operating Companies, Bell Atlantic Operating Companies, BellSouth Telecommunications, Inc., Cincinnati Bell Telephone Company, Citizens Telecommunications Companies, Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, Pacific Bell, Southern New England Telephone Company, Southwestern Bell Telephone Company, Sprint Local Telephone Companies, and U S West Communications, Inc. SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting exogenous adjustments for recovery of reallocations identified in Section III of this Memorandum Opinion and Order and using the permitted revenue methodology as required by Section III.

191. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Aliant Communications Company, Ameritech Operating Companies, Bell Atlantic Operating Companies, BellSouth Telecommunications, Inc., Cincinnati Bell
Telephone Company, Citizens Telecommunications Companies, Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, Pacific Bell, Southern New England Telephone Company, Southwestern Bell Telephone Company, Sprint Local Telephone Companies, and U S West Communications, Inc. SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the methodology for making the exogenous adjustments for recovery of SS7-STP costs as required by Section IV.A of this Memorandum Opinion and Order.

192. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Nevada Bell, Pacific Bell, and Southwestern Bell Telephone Company SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirement in Section IV.A of this Memorandum Opinion and Order that these companies exclude STP port revenues from the calculation of their SS7 exogenous adjustments to the TIC and the Traffic Sensitive basket.

193. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that U S West Communications, Inc. SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirement in Section IV.A of this Memorandum Opinion and Order that the Company exclude SS7-STP costs associated with contracted and separately tariffed STP Services when adjusting its reallocation of the tandem switching revenue requirement.

194. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Aliant Communications Company SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirement in Section IV.B of this Memorandum Opinion and Order that the Company allocate the entire amount of its central office equipment maintenance expense adjustment among all seven Trunking basket service categories on the basis of relative revenues.

195. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Cincinnati Bell Telephone Company SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirement in Section IV.B of this Memorandum Opinion and Order that the Company remove marketing expenses from the transport interconnection charge based on the ratio of transport interconnection charge revenues to total Trunking basket switched access revenues.

196. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Aliant Communications Company, Ameritech Operating Companies, Bell Atlantic Operating Companies, BellSouth Telecommunications, Inc., Cincinnati Bell Telephone Company, Citizens Telecommunications Companies, Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, Pacific Bell, Southern New England Telephone Company, Southwestern Bell Telephone Company, Sprint Local Telephone Companies, and U S West Communications, Inc SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the
requirement of Section IV.C of this Memorandum Opinion and Order that, with the exception of the minutes of use variable, these companies shall use 1993 data for the purpose of making exogenous cost adjustments to the transport interconnection charge and the tandem switched transport category.

197. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, and the Sprint Local Telephone Companies SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirement in Section IV.D of this Memorandum Opinion and Order that these Companies overtargeted their July 1, 1997 "GDP-PI minus X factor" to the non-facilities-based residual transport interconnection charge using the AT&T Worksheet as modified by this Memorandum Opinion and Order.

198. IT IS FURTHER ORDERED, that, pursuant to Sections 4(i), 4(j), 201(b), 202(a), 203(a), 204(a), 205, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201(b), 202(a), 203(a), 204(b), and 205, that Aliant Communications Company, BellSouth Telecommunications, Inc., Citizens Telecommunications Companies, Frontier Communications of Minnesota and Iowa, Frontier Telephone of Rochester, GTE System Telephone Companies, GTE Telephone Operating Companies, Nevada Bell, Pacific Bell, Southwestern Bell Telephone Company, Sprint Local Telephone Companies, and U S West Communications, Inc. SHALL FILE REVISED RATES to be effective July 1, 1998, reflecting the requirements in Section V of this Memorandum Opinion and Order for recovering universal service support obligations.

199. IT IS FURTHER ORDERED, that the investigation and accounting order imposed by the Common Carrier Bureau in CC Docket No. 97-250 with respect to the LECs specified in Appendix A for the designated issues as discussed herein IS TERMINATED.
APPENDIX A

List of Tariffs and Pleadings Filed by Parties

November 26, 1997

Ameritech Operating Companies Transmittal No. 1135
BellSouth Telecommunications, Inc. Transmittal No. 434
GTE System Telephone Companies Transmittal No. 226
GTE Telephone Operating Companies Transmittal No. 1123
Aliant Communications Company Tariff Review Plan
Ameritech Operating Companies Tariff Review Plan
Bell Atlantic Operating Companies Tariff Review Plan
BellSouth Telecommunications, Inc. Tariff Review Plan
Cincinnati Bell Telephone Company Tariff Review Plan
Citizens Telecommunications Companies Tariff Review Plan
Frontier Communications of Minnesota and Iowa Tariff Review Plan
Frontier Telephone of Rochester Tariff Review Plan
GTE System Telephone Companies Tariff Review Plan
GTE Telephone Operating Companies Tariff Review Plan
NYNEX Telephone Companies Tariff Review Plan
Southern New England Telephone Company Tariff Review Plan
Southwestern Bell Telephone Company Tariff Review Plan
Sprint Local Telephone Companies Tariff Review Plan
U S West Communications, Inc. Tariff Review Plan

December 8, 1997

Nevada Bell Tariff Review Plan
Pacific Bell Tariff Review Plan

December 17, 1997

Aliant Communications Company Transmittal No. 10
Ameritech Operating Companies Transmittal No. 1136
Bell Atlantic Operating Companies Transmittal No. 1016
BellSouth Telecommunications, Inc. Transmittal No. 435
Cincinnati Bell Telephone Company Transmittal No. 712
Citizens Telecommunications Companies Transmittal No. 42
Frontier Communications of Minnesota and Iowa Transmittal No. 10
Frontier Telephone of Rochester Transmittal No. 2
GTE System Telephone Companies Transmittal No. 228
GTE Telephone Operating Companies Transmittal No. 1127
Nevada Bell
NYNEX Telephone Companies
Pacific Bell
Puerto Rico Telephone Company
Puerto Rico Telephone Company
Southern New England Telephone Company
Southwestern Bell Telephone Company
Sprint Local Telephone Companies
U S West Communications, Inc.

Transmittal No. 232
Transmittal No. 477
Transmittal No. 1959
Transmittal No. 24
Transmittal No. 25
Transmittal No. 704
Transmittal No. 2678
Transmittal No. 44
Transmittal No. 884

December 19, 1997

Bell Atlantic Telephone Companies
Citizens Telecommunications Companies
GTE System Telephone Companies
GTE Telephone Operating Companies
Nevada Bell
Southern New England Telephone Company
Southwestern Bell Telephone Company

Transmittal No. 1017
Transmittal No. 43
Transmittal No. 230
Transmittal No. 1128
Transmittal No. 233
Transmittal No. 705
Transmittal No. 2679

December 23, 1997

NYNEX Telephone Companies
U S West Communications, Inc.

Amended Transmittal No. 477
Transmittal No. 885

December 29, 1997

Bell Atlantic Telephone Companies

Amended Transmittal No. 1016

December 30, 1997

Sprint Local Telephone Companies
U S West Communications, Inc.

Transmittal No. 46
Transmittal No. 886

January 20, 1998

Aliant Communications Company
Ameritech Operating Companies
Bell Atlantic Operating Companies
Cincinnati Bell Telephone Company
Citizens Telecommunications Companies
Nevada Bell
NYNEX Telephone Companies
Pacific Bell
Puerto Rico Telephone Company
Southwestern Bell Telephone Company

Transmittal No. 12
Transmittal No. 1139
Transmittal No. 1023
Transmittal No. 714
Transmittal No. 45
Transmittal No. 235
Transmittal No. 479
Transmittal No. 1966
Transmittal No. 27
Transmittal No. 2684
U S West Communications, Inc. Transmittal No. 890
January 21, 1998

GTE System Telephone Companies Transmittal No. 232
GTE Telephone Operating Companies Transmittal No. 1131
January 22, 1998

Nevada Bell Transmittal No. 236
Pacific Bell Transmittal No. 1967
Southwestern Bell Telephone Company Transmittal No. 2686
January 29, 1998

NYNEX Telephone Companies Transmittal No. 481
February 2, 1998

GTE Telephone Operating Companies Transmittal No. 1132
February 5, 1998

Southern New England Telephone Company Transmittal No. 707
March 3, 1998

NYNEX Telephone Companies Transmittal No. 488
Bell Atlantic Operating Companies Transmittal No. 1033
March 9, 1998

BellSouth Telecommunications, Inc. Transmittal No. 446
March 13, 1998

U S West Communications, Inc. Transmittal No. 900
March 16, 1998

Citizens Telecommunications Companies Transmittal No. 47
March 17, 1998

Ameritech Operating Companies Transmittal No. 1146
Bell Atlantic Operating Companies Transmittal No. 1035
The following parties filed petitions and comments against the January 1, 1998 Tariff Filings. The names in parentheses are used for these parties throughout the Order.

**AT&T Corp. (AT&T)**
- December 11, 1997 Comments and Petition
- December 23, 1997 Petition on Rate-of-Return LECs
- December 23, 1997 Petition
- December 23, 1997 Comments on Pacific Bell and Nevada Bell

**MCI Telecommunications Corporation (MCI)**
- December 10, 1997 Petition
- December 10, 1997 Comments
- December 23, 1997 Petition

**Sprint Communications Company, L.P. (Sprint)**
- December 10, 1997 Comments
- December 23, 1997 Petition

**Teleport Communications Group Inc. (TCG)**
- December 23, 1997 Petition

**Replies**

**Aliant Communications Company**
- December 17, 1997 Reply
- December 29, 1997 Reply

**Ameritech Operating Companies**
- December 17, 1997 Reply
- December 29, 1997 Reply

**Bell Atlantic Operating Companies**
- December 18, 1997 Reply
- December 29, 1997 Reply
BellSouth Telecommunications, Inc.
   December 17, 1997 Reply
   December 29, 1997 Reply
Cincinnati Bell Telephone Company
   December 17, 1997 Reply
   December 29, 1997 Reply
Citizens Telecommunications Companies
   December 29, 1997 Reply
Frontier Telephone Companies [Frontier Communications of Minnesota and Iowa, and Frontier Telephone of Rochester]
   December 17, 1997 Reply
   December 29, 1997 Reply
GTE Telephone Operating Companies and GTE Systems Telephone Companies
   December 17, 1997 Reply
   December 29, 1997 Reply
Puerto Rico Telephone Company
   December 29, 1997 Reply
Southern New England Telephone Company
   December 17, 1997 Reply
   December 29, 1997 Reply
Southwestern Bell Telephone Company, Pacific Bell and Nevada Bell
   December 17, 1997 Reply
   December 29, 1997 Reply
Sprint Local Telephone Companies
   December 17, 1997 Reply
   December 29, 1997 Reply
U S West Communications, Inc.
   December 17, 1997 Reply
   December 29, 1997 Reply

Direct Cases and Replies Filed by Local Exchange Companies

Aliant Communications Company
   February 27, 1998 Direct Case
   March 23, 1998 Reply
Ameritech Operating Companies
   February 27, 1998 Direct Case
   March 23, 1998 Reply
Bell Atlantic Operating Companies
   February 27, 1998 Direct Case
   March 23, 1998 Reply
   April 8, 1998
BellSouth Telecommunications, Inc.
   February 27, 1998 Direct Case
   March 23, 1998 Reply
Cincinnati Bell Telephone Company
February 27, 1998 Direct Case  
March 23, 1998 Reply  
Citizens Telecommunications Companies  
February 27, 1998 Direct Case  
Frontier Telephone Companies [Frontier Communications of Minnesota and Iowa, and Frontier Telephone of Rochester]  
February 27, 1998 Direct Case  
March 23, 1998 Reply  
April 8, 1998 Reply  
GTE Telephone Operating Companies and GTE Systems Telephone Companies  
February 27, 1998 Direct Case  
March 23, 1998 Reply  
Southern New England Telephone Company  
February 27, 1998 Direct Case  
Southwestern Bell Telephone Company, Pacific Bell and Nevada Bell  
February 27, 1998 Direct Case  
March 23, 1998 Reply  
Sprint Local Telephone Companies  
February 27, 1998 Direct Case  
March 23, 1998 Reply  
US West Communications, Inc.  
February 27, 1998 Direct Case  
March 23, 1998 Reply  

Comments and Oppositions to the Direct Cases  
AT&T Corp. (AT&T)  
March 16, 1998 Comments  
April 2, 1998 Comments  
MCI Telecommunications Corporation (MCI)  
March 16, 1998 Comments  
April 2, 1998 Comments  
ITC DeltaCom  
March 16, 1998 Comments
## Table B - 1
Direct Case Residential and Single Line Business Line Counts (Actual Loops Times Twelve)

<table>
<thead>
<tr>
<th></th>
<th>Col. 1</th>
<th>Col. 2</th>
<th>Col. 3</th>
<th>Col. 4</th>
<th>Col. 5</th>
<th>Col. 6</th>
<th>Col. 7</th>
<th>Col. 8</th>
<th>Col. 9</th>
<th>Col. 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRICE CAP LEC</strong></td>
<td>PRIMARY RESIDENTIAL LINES</td>
<td>LIFE LINE LINES*</td>
<td>SINGLE LINE BUSINESS</td>
<td>PRIMARY RESIDENTIAL LINES + LIFE LINE LINES</td>
<td>TOTAL PRL &amp; LIFELINE LINES</td>
<td>NON-PRIMARY RESIDENTIAL LINES</td>
<td>BRI-ISDN LINES</td>
<td>TOTAL NON-PRIMARY RESIDENTIAL LINES</td>
<td>TOTAL PRL &amp; LIFELINE LINES</td>
<td>TOTAL PRNL &amp; LI LINES</td>
</tr>
<tr>
<td><strong>BELL ATLANTIC</strong></td>
<td>140,050,374</td>
<td>515,982</td>
<td>4,535,808</td>
<td>140,566,356</td>
<td>145,102,164</td>
<td>16,317,516</td>
<td>2,189,736</td>
<td>156,883,872</td>
<td>161,419,680</td>
<td></td>
</tr>
<tr>
<td><strong>NYNEX</strong></td>
<td>114,665,434</td>
<td>11,982,847</td>
<td>6,903,934</td>
<td>126,648,281</td>
<td>133,552,215</td>
<td>8,891,924</td>
<td>1,229,234</td>
<td>136,769,439</td>
<td>143,673,373</td>
<td></td>
</tr>
<tr>
<td><strong>BELL SOUTH</strong></td>
<td>135,203,568</td>
<td>2,965,743</td>
<td>6,237,476</td>
<td>131,753,228</td>
<td>140,339,659</td>
<td>15,541,466</td>
<td>426,424</td>
<td>148,937,744</td>
<td>155,137,384</td>
<td></td>
</tr>
<tr>
<td><strong>AMERITECH</strong></td>
<td>129,841,679</td>
<td>1,911,549</td>
<td>8,586,431</td>
<td>131,753,228</td>
<td>140,339,659</td>
<td>15,541,466</td>
<td>426,424</td>
<td>148,937,744</td>
<td>155,137,384</td>
<td></td>
</tr>
<tr>
<td><strong>PACBELL</strong></td>
<td>103,661,796</td>
<td>2,265,840</td>
<td>4,152,828</td>
<td>105,927,636</td>
<td>116,300,563</td>
<td>121,063,914</td>
<td>2,373,481</td>
<td>126,444,492</td>
<td>130,842,492</td>
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<tr>
<td><strong>US WEST</strong></td>
<td>7,169,279</td>
<td>299,427</td>
<td>4,544,796</td>
<td>7,490,355</td>
<td>7,984,502</td>
<td>8,528,567</td>
<td>285,536</td>
<td>8,314,098</td>
<td>8,724,732</td>
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</tr>
<tr>
<td><strong>SPRINT LTC'S</strong></td>
<td>59,856,072</td>
<td>577,320</td>
<td>3,942,996</td>
<td>60,433,392</td>
<td>64,376,388</td>
<td>6,031,368</td>
<td>73,908</td>
<td>66,538,668</td>
<td>70,481,664</td>
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<tr>
<td><strong>SNET</strong></td>
<td>15,381,848</td>
<td>757,400</td>
<td>487,048</td>
<td>16,139,248</td>
<td>16,626,296</td>
<td>1,037,964</td>
<td>34,891</td>
<td>1,072,855</td>
<td>17,212,103</td>
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<tr>
<td><strong>CITIZENS</strong></td>
<td>7,451,155</td>
<td>29,527</td>
<td>1,265,368</td>
<td>7,480,682</td>
<td>8,746,050</td>
<td>234,151</td>
<td>528</td>
<td>7,715,361</td>
<td>8,980,729</td>
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</tr>
<tr>
<td><strong>FRONTIER</strong></td>
<td>7,169,279</td>
<td>309,427</td>
<td>545,796</td>
<td>7,478,206</td>
<td>8,024,502</td>
<td>335,566</td>
<td>76,598</td>
<td>7,890,870</td>
<td>8,436,666</td>
<td></td>
</tr>
<tr>
<td><strong>CBT</strong></td>
<td>7,418,161</td>
<td>0</td>
<td>322,351</td>
<td>7,418,161</td>
<td>7,418,161</td>
<td>477,199</td>
<td>28,536</td>
<td>7,923,866</td>
<td>8,464,247</td>
<td></td>
</tr>
<tr>
<td><strong>ALIANT</strong></td>
<td>2,066,181</td>
<td>61,184</td>
<td>80,995</td>
<td>2,127,365</td>
<td>2,208,360</td>
<td>161,748</td>
<td>11,715</td>
<td>173,463</td>
<td>2,381,823</td>
<td></td>
</tr>
<tr>
<td><strong>NEV BELL</strong></td>
<td>2,075,620</td>
<td>0</td>
<td>98,914</td>
<td>2,075,620</td>
<td>2,075,620</td>
<td>99,713</td>
<td>0</td>
<td>99,713</td>
<td>2,274,247</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL LECS</strong></td>
<td>1,083,853,278</td>
<td>60,202,743</td>
<td>54,974,976</td>
<td>1,144,056,021</td>
<td>1,199,030,997</td>
<td>94,177,009</td>
<td>7,266,821</td>
<td>1,245,499,851</td>
<td>1,300,474,827</td>
<td></td>
</tr>
</tbody>
</table>

* Lifeline Lines taken from CAP-1 forms from December 17, 1997 Tariff Filings
** Sprint LTC figures taken from revised tariff filing.
## Table B - 2
### Direct Case Line Count Data Search and Sorting Criteria

<table>
<thead>
<tr>
<th>SORTING CRITERIA</th>
<th>PRIMARY AND NON-PRIMARY RESIDENTIAL LINES</th>
<th>SINGLE LINE BUSINESS &amp; BRI - ISDN LINES</th>
<th>HYPOThETICAL EXERCISE LINE COUNTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price Cap LEC</strong></td>
<td><strong>First Sort Order</strong></td>
<td><strong>Second</strong></td>
<td><strong>Third</strong></td>
</tr>
<tr>
<td>BELL ATLANTIC</td>
<td>Res Address-location units</td>
<td>Customer - Full Name</td>
<td>Account No. - date</td>
</tr>
<tr>
<td>NYNEX</td>
<td>Res Address-location units</td>
<td>Customer - Full Name</td>
<td>Account No. - date</td>
</tr>
<tr>
<td>BELL SOUTH</td>
<td>Res Address-location units</td>
<td>All res lines-date/order</td>
<td>USOC</td>
</tr>
<tr>
<td>GTE</td>
<td>Bill/Account No-Date/order</td>
<td>Customer - Full Name</td>
<td>Field Indicator</td>
</tr>
<tr>
<td>AMERITECH</td>
<td>Field Indicator - subtraction</td>
<td>Field Indicator</td>
<td>FID maps Acct-date/ord</td>
</tr>
<tr>
<td>PACBELL</td>
<td>Field Indicator</td>
<td>Field Indicator</td>
<td>Field Indicator</td>
</tr>
<tr>
<td>US WEST</td>
<td>Res Address-location units</td>
<td>Field Indicator</td>
<td>Field Indicator</td>
</tr>
<tr>
<td>SWIT</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>SPRINT LPCS</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>SNET</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>CITIZENS</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>FRONTIER</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>CBT</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>NEV BELL</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
<tr>
<td>ALIANT</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
</tr>
</tbody>
</table>

### DATA SOURCES

<table>
<thead>
<tr>
<th><strong>Price Cap LEC</strong></th>
<th><strong>Primary Residential Lines</strong></th>
<th><strong>Non-Primary Res. Lines</strong></th>
<th><strong>Single-Line Bus.</strong></th>
<th><strong>BRI-ISDN</strong></th>
<th><strong>SEARCH (Line Count)</strong></th>
<th><strong>COLLECTION</strong></th>
<th><strong>TIME PERIOD</strong></th>
<th><strong>COMMENTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>BELL SOUTH</td>
<td>Billing Records</td>
<td>Billing Records and Study</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>Annual 1996</td>
<td>NT &amp; lower level USOC for ISDN</td>
</tr>
<tr>
<td>GTE</td>
<td>Billing Records</td>
<td>Field Indicator</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>B &amp; L 96(SLB/ISDN), 1996(SLB/ISDN)</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>US WEST</td>
<td>Billing Records</td>
<td>Field Indicator</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>Average (PRL/SLB)</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>SWIT</td>
<td>Billing Records</td>
<td>Field Indicator</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>94/96(PRL/SLB)</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>SPRING LPCS</td>
<td>Billing Records/Study</td>
<td>Billing Records/Study</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>SNET</td>
<td>Billing Records</td>
<td>Field Indicator</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>CITIZENS</td>
<td>Billing &amp; Account No-Date</td>
<td>Billing &amp; Account No-Date</td>
<td>Billing &amp; Account No-Date</td>
<td>Billing &amp; Account No-Date</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>FRONTIER</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>CBT</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>NEV BELL</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
<tr>
<td>ALIANT</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Billing Records</td>
<td>Cost Ind Lines/Sample</td>
<td>Per State</td>
<td>End of month</td>
<td>No time pd specified</td>
</tr>
</tbody>
</table>

**BRI-business residence indicator, NPRL-non-primary residential line, PRL-primary residential line, SLB-secondary line balance, SLC-secondary line count, USOC-universal service obligation, ISDN-integrated services digital network, LEC-local exchange carrier.**
## TIC Recalculation

### Current TIC (6/30/97 Sum-1, line 171b)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOS/STP SS7 Link</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Tandem Switch Trunk Port</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Tandem SS7 Signaling</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Tandem Switch Revenue</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Switch Host/Remote</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>Actual Versus 9,000 Reinitialization</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>Zone Differentiation</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>Marketing</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>COE Maintenance</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>EO/Tandem Switched Mux</td>
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<tr>
<td>GSF &amp; Weighted Dem</td>
<td>XXX,XXX,XXX</td>
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<tr>
<td>Total TIC Removal Costs (sum ln 200...ln 292)</td>
<td>XXX,XXX,XXX</td>
</tr>
</tbody>
</table>

### TIC Removal Costs**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted Revenue Differential (sum PCI-1, line 237c, columns (A), (B), and (C))</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>TIC Revenue Change (Sum-1, line 171, column E)</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>TIC Revenue Change Excluding Targeted Revenue Differential (ln 296-ln 297)</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Recalculated TIC (ln 100-ln 295+ln 298)</td>
<td>XXX,XXX,XXX</td>
</tr>
</tbody>
</table>

### Other Changes To The TIC***

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>Targeted Revenue Differential (sum PCI-1, line 237c, columns (A), (B), and (C))</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Excess Targeted TIC (If ln 600-cln 500, then 0; otherwise ln 600-cln 500)</td>
<td>XXX,XXX,XXX</td>
</tr>
</tbody>
</table>

### Facilities Based Portion Of TIC **

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>Unitary Transport Price Restructure</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>2/3 Tandem Switch Reallocation</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Total Facilities Based Portion Of TIC (In 400-ln 410)</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>New Residual TIC (In 300-ln 430)</td>
<td>XXX,XXX,XXX</td>
</tr>
<tr>
<td>Targeted Revenue Differential (sum PCI-1, line 237c, columns (A), (B), and (C))</td>
<td>XXX,XXX,XXX</td>
</tr>
</tbody>
</table>

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*The values XX.XXXX,XXX represent amounts in dollars.*