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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matters of:

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Ameritech Corporation Telephone Operating Companies' Continuing Property Records Audit	)	
Bell Atlantic (North) Telephone Companies' Continuing Property Records Audit	)	
Bell Atlantic (South) Telephone Companies' Continuing Property Records Audit	)	CC Docket No. 99-117
BellSouth Telecommunications' Continuing Property Records Audit	)	ASD File No. 99-22
Pacific Bell and Nevada Bell Telephone Companies' Continuing Property Records Audit	)	
Southwestern Bell Telephone Company's Continuing Property Records Audit	)	
US West Telephone Companies' Continuing Property Records Audit	)	

BELLSOUTH REPLY COMMENTS

BELLSOUTH CORPORATION AND
BELLSOUTH TELECOMMUNICATIONS, INC.

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BELLSOUTH REPLY COMMENTS

BellSouth Corporation and BellSouth Telecommunications, Inc. ("BellSouth") by and through their attorneys, submit the following reply comments in response to the comments filed relating to the *Notice of Inquiry* released in the above-captioned proceeding.[1]

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[1] *In the Matters of: Ameritech Corporation Telephone Operating Companies' Continuing Property Records Audit, et al.* CC Docket No.99-117, ASD File 99-22, *Notice of Inquiry*, FCC 99-69, released April 7, 1999 ("Notice").

I. Introduction and Summary

The comments filed by AT&T and MCI, the only entities filing comments other than three state public service commissions ("PSCs")[2] and the entities actually being audited,[3] offer nothing insightful regarding the issues the Commission invited comment on in the *Notice*. Indeed, most of the comments offer no concrete factual conclusions, but instead tell the Commission that things are "likely" to have occurred or the alleged missing assets "almost certainly" had a substantial impact on rates. AT&T and MCI ask the Commission to accept on faith what they themselves cannot support. It is therefore imperative that the Commission separate facts from mere speculation. The facts are: (1) the audit was based on a flawed statistical sampling design that cannot yield, no matter how well executed, reliable results; (2) the audit procedures were not properly designed to test for the complex equipment and records maintained by the Bell operating companies ("BOCs"); and (3) the audit results, as flawed as they are, have no material impact on rates. Although AT&T and MCI attempted to obfuscate these issues, nothing in either parties comments persuasively counters the support that BellSouth and others have provided for these facts. Their comments are a Trojan horse sent into this proceeding as a gift for the Commission to support the unsupportable. When analyzed, however, they are quickly revealed as not being what they purport to be.

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[2] The PSC's for Florida, New York, and Illinois filed comments. Florida believed that potential problems could exist in the CPR, but agreed with the BOCs that the statistical sampling was flawed and could not be used to extrapolate and error. New York supported the findings in the audit reports. Illinois stated that it needed more information before it could provide detailed comments.

[3] BellSouth finds compelling that these were the only entities filing comments. For all the publicity surrounding this issue, the lack of comments, *i.e.*, the lack of interest, only confirms that the Commission should not prolong the foolishness of these audits any further.

AT&T and MCI basically ignored the Commission's request for information regarding the issues set forth in the *Notice* and simply used their comments to attack the audited entities. Indeed, a large percentage of the pages filed by AT&T and MCI focused on how the auditors actually scored or re-scored different sampled items for Bell Atlantic. Not one of the issues in the *Notice*, however, asked for comment on the minutia of such matters.[4] While BellSouth certainly disagrees with the scores assigned to some of the sampled items in its audit, arguing[5] over the scoring of particular items misses the point – the audits were not designed to produce the results reported in the audit reports. As BellSouth stated in its response to the staff's audit report and in its comments in this proceeding, the audits were fundamentally flawed in their design. Thus, even if they had been scored perfectly the results would be unacceptable.

Regarding the remainder of AT&T and MCI's comments, it appears the mountain labored and brought forth a mouse. They each devoted space to the sampling design and even found a statistician, who works for AT&T, to agree with the statistical methods and findings of the staff. The statistician, however, could not address the most glaring problem in the sampling results for investment – *a 49% margin of error*. His silence comes as no surprise. Nothing can

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[4] MCI made a Freedom of Information Act ("FOIA") request to see the information used for such scoring and re-scoring of sample items in all of the BOCs audits. The Common Carrier Bureau ("Bureau") granted MCI' request. All of the BOCs, except Bell Atlantic, filed an application for review of the Bureau's release of this highly proprietary information. MCI's entire justification for seeking access to the raw audit data requested is contained in a single sentence: "In order to address the issue of whether the rescoring methodology used by the Bureau auditors was valid and reasonable, interested parties must be able to examine, on an item-by-item basis, the auditors' scoring decisions and the material the RBOCs submitted in support of their requests to 'rescore' an item." Issue No. 2 sought comment on: "The validity and reasonableness of the methodology used by the Bureau's auditors...." *Notice* at 3. Thus, the only issue as to which comment was sought related to the methodology used by the Bureau, not the accuracy of the individual scoring decisions made by the auditors.

[5] The five largest accounting firms in the world, known appropriately as the "Big 5", are Arthur Andersen ("AA"), PricewaterhouseCoopers ("PWC"), E&Y, KPMG Peat Marwick, and Deloitte & Touche.

be said to atone for such an error. Their comments also supplied an affidavit of an individual certified public accountant that discussed the propriety of the audit procedures. His comments, however, must be considered in light of the fact that a majority of the largest accounting firms in the world have gone on record in this proceeding stating that many of the procedures were inadequate and undermine the creditability of the audit process. Significantly, these firms provided their statements in an ex parte letter to the Commission independent of any BOCs' comments. The net sum of AT&T and MCI's comments is they provide nothing substantively new to the information already available to the Commission, nor are they persuasive in their attempt to undermine the BOCs' arguments made throughout the audit process.

Finally, BellSouth implores the Commission to use this proceeding to initiate a rulemaking to forbear from the CPR rules. The environment in which they were created no longer exists. Price cap regulation and increased competition have placed the BOCs in a position that they should be able to manage their assets pursuant to market conditions, not rate of return regulation. The CPR rules, however, are a Procrustean bed that inhibits such management. Accordingly, the Commission should be forward looking and remove these past vestiges of out-of-date regulation.

II. AT&T and MCI Glossed Over the Major Flaws in the Statistical Sampling Plan

From the very beginning stages of the audit reporting process, one of BellSouth's chief criticisms has been the inaccuracy evidenced in the statistical sampling. This inaccuracy was directly the result of four flaws that pervasively infected the sampling results. BellSouth, as did

other BOCs, discussed these flaws and its concerns in detail in its Response[6] and in its comments.[7] Moreover, BellSouth filed a report prepared by Dr. Fritz Scheuren, an internationally distinguished statistician with Ernst & Young ("E&Y"), in which he gave an in-depth analysis of the sampling problems. He concluded that the sampling errors caused "*the conclusions in the report concerning the amount of overstated investment [to be] unsound and cannot be fairly relied upon.*"[8] Nothing in AT&T and MCI's comments support any other conclusion.

AT&T and MCI both attempt to justify the sampling design and technique as having "no material shortcomings."[9] In support of these claims AT&T filed an affidavit of Richard Bell, an AT&T employed statistician, who opined that the sample design, and therefore the main findings of the auditors regarding the amount of alleged missing equipment, was scientifically valid. Bell's affidavit, as well as AT&T and MCI's comments, however, completely ignore the significant problems raised by BellSouth and other BOCs. Most noticeably, neither parties' comments nor Bell's affidavit mention the poor precision in the estimated values of the overstated CPR.

Dr. Scheuren analyzed the Bell affidavit and he provided an affidavit in response to the assertions made by Dr. Bell.[10] Based on his analysis, Dr. Scheuren stated that the affidavits filed

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6 BellSouth filed its Response to the Report of the Audit of the Continuing Property Records ("CPR") of BellSouth Telecommunications, Inc. as of July 31, 1997 ("Response") on January 11, 1999.

7 *See also* Comments of Florida PSC at 3("The [Florida PSC] believes the statistical validity of the sample was compromised, and the extrapolation to the population is not advisable....")

8 E&Y Report at 6 (emphasis added).

9 AT&T Comments at 25.

10 A copy of Dr. Scheuren's affidavit is attached as Exhibit 1 ("Scheuren Affidavit"). Dr. Scheuren's curriculum vitae is attached as Exhibit 2.

by AT&T did not change his previously stated conclusions.[11] Specifically, Dr. Scheuren was critical of the obvious disregard of the estimate's precision. He stated:

> 2.2 We confess some surprise in what, for us, is a major omission in the AT&T filing – the issue of the uncertainty of the estimates of missing plant in the CPR audits.
>
> 2.3 All the submissions lack a candid discussion of the poor precision in the estimated values of the property record audits. Such precision considerations are essential when determining whether the estimates are credible enough to use as a basis to justify action against the RBOCs. It remains our opinion that they are not. (*See* Section 3.)
>
> 3.1 An estimate is just that, an *estimate*, not a *true* value. Before utilizing an estimate, one needs to know how accurate it is. The confidence level and the margin of error are a means of describing the precision. Confidence bounds, in turn, can be used to judge the validity of decisions based on the sample.
>
> 3.2 Dr. Bell would have his readers believe that so long as an estimate is calculated using the right formula out of the right textbook, the estimate is "valid." This is clearly not true. To be a "valid" basis for action, an estimate not only needs to be calculated using an appropriate formula, but the margin of error must be reasonable.
>
> ...
>
> 3.5 The estimates from the property records are too imprecise to be actionable. Decisions based on the audit results should only be made after carefully considering the amount of uncertainty. The lack of precision of the estimates needs to be considered when evaluating the results of the audit.[12]

The Scheuren Affidavit goes on to provide a point-by-point rebuttal of the AT&T response and affidavit. Dr. Scheuren provides ample evidence that the comments and support affidavits do not attenuate the critical statistical sampling flaws identified in BellSouth's Response and comments.

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[11] Scheuren Affidavit ¶ 2.1.

[12] *Id.* ¶¶ 2.2, 2.3, 3.1, 3.2, and 3.5.

III. The Audit Plan and Procedures were Inadequate to Achieve the Audit Objective

BellSouth discussed in its Response and in its comments how the audit procedures were not sufficient to test both rule compliance and investment balances for the plant assets. AT&T and MCI's comments generally dismissed the problems associated with these procedures. They simply recited the audit procedures performed and declared them adequate.[13] As further support AT&T filed the affidavit of an individual certified public accountant ("CPA"), James Loebbecke, that concluded the procedures performed were appropriate for the audit objective. AT&T and MCI, as does the affidavit filed by Mr. Loebbecke, demonstrate a very shallow view of the procedures necessary to achieve the results set forth in the audit reports. BellSouth, the other entities audited and the majority of the largest accounting firms in the world, however, do not share this view.

A. The Majority of the Accounting Industry Agrees that the Audits were Improperly Planned to Achieve the Desired Results

In his affidavit Mr. Loebbecke discussed the audit procedures and professional standards used during the audit.[14] Mr. Loebbecke opined that the procedures used by the auditors were "reasonable in both planning and execution." The majority of the accounting industry, however, does not share Mr. Loebbecke's opinion. Audit partners representing AA, E&Y, and PWC, filed a letter with the Secretary of the Commission on September 22, 1999 ("Big 5 Letter")[15] stating that the procedures used were inadequate. It was their opinion that the inadequacies of the

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[13] *See* AT&T Comments at 13 – 15; MCI Comments at 7 – 10.

[14] The affidavit also provided a brief endorsement for the affidavit of Richard Bell, an AT&T employed statistician, regarding the sampling plan used during the audit. *See* BellSouth's discussion of the sampling plan in section II, above.

[15] A copy of the Big 5 Letter is attached as Exhibit 3.

procedures, along with other problems in the audit,[16] "severely undermine the credibility of the FCC's audit process, findings and recommendations."[17] These audit partners not only represent their respective firms, but also are the primary partners on various major telecommunications clients. Thus, they have a complete understanding of the accounting for the telecommunications industry. With all due respect to Mr. Loebbecke, the Commission should look to the weight of the accounting industry and not to the thoughts of one individual on this matter.

B. Failure to Conduct a Two-Way Audit

The auditors did not attempt to locate items not recorded in the CPR. Normal inventory procedures call for the identification of equipment located on the premises being inventoried and a comparison and reconciliation of the equipment present to the continuing property record of items for that location. The auditors did not even attempt to perform this basic step. AT&T and MCI both discounted this step as unnecessary,[18] yet both contend that the audits were conducted in accordance with professional standards.[19] The two are mutually exclusive. Generally Accepted Auditing Standards ("GAAS") and Generally Accepted Government Auditing Standards ("GAGAS") would require the completion of a two-way audit. GAGAS Field Work Standards for Financial Audits states that "sufficient competent evidential matter is to be obtained through inspection, observation, inquiries, and confirmations to afford a reasonable basis for an opinion regarding the financial statements under audit."[20] Failure to inventory the

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16 Big 5 Letter at 1. Examples include failure to conduct a two-way audit, flawed sampling, failure to consider depreciation in the estimate calculation, and the fact that under price cap regulation any missing assets would not have an impact on rates.

17 Big 5 Letter at 1.

18 *See* AT&T Comments at 10 – 12; MCI Comments at 8.

19 *See* AT&T Comments at 15; MCI Comments at 3.

20 GAGAS Chapter 4 Section 4.2c.

premises under audit in order to identify equipment, which may not appear on the CPR, is a failure to gather "sufficient competent evidential matter" necessary for an opinion regarding the accuracy of financial records at that location. Moreover, in the Big 5 Letter the partners stated:

> [GAAS] and other authoritative standards require the auditor to consider *all appropriate evidence* in reaching a conclusion regarding the fair presentation of an account balance. The FCC staff performed no additional procedures to validate the findings from its physical verification testing.
>
> - The FCC audit reports demonstrate that the FCC staff did not consider all the material documentation submitted by the companies as evidence of the existence of hardwire central office equipment (COE) items the FCC considered 'not found.' The evidence submitted by the companies suggests that the FCC staff should have taken additional steps to verify the information and update the audit findings, if appropriate. ...
> - The FCC's audit procedures were severely biased in that the tests performed could only detect instances of potential overstatement in the plant accounting records. Any tests to determine the possibility of the existence of assets that are not reflected on the accounting records were not performed.[21]

Thus, the logical conclusion of AT&T and MCI's reasoning for not attempting to determine if items existed which were not on the property records would be that auditors of financial statements would only be concerned with overstatement of assets and never understatement. Such asymmetrical testing cannot possibly determine if an account balance is accurately stated. Only by testing for overstatement and understatement and then netting the two results can an auditor determine that an account balance is accurate. The Big 5 Letter is proof positive that any competent auditor would not be willing to certify financial statements, under GAAS or GAGAS, in which assets have only been tested for overstatement.

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[21] Big 5 Letter at 1 (emphasis in original).

Finally, AT&T and MCI's hypothesis that the BOCs have an incentive to include everything on the CPR is inappropriate as an argument against the propriety of a two-way audit. Any alleged incentive cannot excuse incomplete and flawed audit procedures. Errors in record keeping can go in both directions and the staff's audit procedures clearly failed to gather substantial evidence required to support a reasonable conclusion regarding the assets of the companies audited.

C. The Auditor's Professional Performance of Their Duties Will Not Cure Deficient Procedures

AT&T and MCI spent time bolstering the auditors' professionalism. BellSouth has never questioned their professionalism. The auditors performing the field work worked diligently on the tasks assigned to them. The problem was with the tasks themselves and not the performance of those tasks. Improperly designed procedures will not achieve the results desired even if completed in a professional manner. The procedures designed to test the CPR were inadequate, in some cases, to achieve conclusions of whether the assets were actually in existence and the accuracy of the investment amounts associated with those assets.

For example, the audit allowed only for one on-site visit to perform all field work verification. This on-site verification, however, was inadequate for the objective because it did not include a reconciliation. Reconciliation of an inventory is a necessary step in determining the finality and nature of any preliminary error. It requires a thorough researching and understanding of both the associated detailed engineering and billing records. The procedures used in conducting the audits only permitted a blind one-way interaction with auditors after the site visits to attempt to provide and explain often complex or seemingly imperceptive reconciliation results.

It is difficult to conduct a proper reconciliation without a full office inventory (or at least a complete inventory of a class of plant, like switch or circuit). In addition, reconciliation often requires a subsequent re-inventory, site visit, or remote verification by an office technician. A proper understanding of how the investment is actualized in the CPR and adjusted over time is key to performing the required inventory reconciliation. Specific knowledge of equipment, engineering, and billing details is necessary to evaluate the preliminary inventory findings. It is sometimes difficult for trained personnel with on-site access to the records to exercise proper judgment and even more improbable that this would occur with a blind hand-off of selected pieces of documentation. The audit procedures both failed to include these crucial steps and the auditors displayed a lack of understanding in how to interpret the findings and supporting documentation.

IV. Alleged Impacts on Investment and Rates

Both AT&T and MCI make the same argument that the alleged missing assets have had substantial impacts on rates. Their arguments can be reduced to three summary complaints: (1) the alleged missing assets were never placed in service and therefore net assets and depreciation were overstated which caused rates to be overstated; (2) assets were placed in service but were not properly retired which caused depreciation to be overstated; and (3) that both of the above items have been going on since 1990, the year price cap regulation was initiated, therefore the initial rates set for price caps were overstated. None of these claims have merit. Indeed, neither AT&T nor MCI provide any fact supported evidence of any impacts on rates. Most of their allegations are based on speculation and innuendo and lead to subjective conclusions.[22]

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[22] *See* Comments of AT&T at 33 ("These rate impacts are likely to be substantial"); and 34 ("The impact on the price cap LECs' sharing amounts was almost certainly substantial."). *See*

Accordingly, the Commission cannot possibly entertain the enforcement actions that these parties seek.

A. Any Missing Assets are the Result of an Untimely Retirement and Not the Intentional Misstatement of CPR

Both AT&T and MCI claim that part of the alleged missing assets were never placed in service. They make this allegation based on the assumption made in a report by MCI's consultant, Snavely, King, Majoros, O'Connor, and Lee ("Snavely Report" or "Snavely").[23] The Snavely Report assumes that some assets, as a matter of course, will not be placed in service even though they are recorded in the records. Snavely states vendor billing and shipping errors, normal equipment loss, or employee theft causes such loss of assets. Snavely then questions BellSouth's position in its Response that any assets not in actual service are caused only by a failure to properly retire the asset. Of course, the context of the statement clearly indicates that BellSouth was referring to the fact that no assets were intentionally placed in the records without assets being placed in service. BellSouth recognizes that situations described by Snavely may occur, as they may in any business, but if they do, they happen infrequently and would involve extremely small dollar amounts. Moreover, Snavely would have to agree that situations, such as vendor billing and shipping errors, may also occur to cause assets to be placed in service that are not placed in the CPR. Whether these situations occur or not, the point of BellSouth's Response remains the same – no transactions were intentionally created to place assets in the records without actually placing assets in service.

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also Comments of MCI at 38 ("Missing equipment from recent vintages would be almost certain to represent equipment that was never placed at all....").

[23] BellSouth provides a comprehensive analysis of the Snavely Report below.

Though they make no accusations beyond the Snavely Report statements, AT&T and MCI contend that the burden is on the BOCs to prove that the assets were placed in service. Both allege that the BOCs have failed to make such showing and that the Commission must assume the alleged missing assets not to be "associated with assets actually placed in service."[24] BellSouth, however, demonstrated that the assets the auditors listed as not found or unverifiable were actually acquired. It retained PWC to perform proper audit procedures on these items and based on these procedures opined that the items were placed in service. Accordingly, AT&T and MCI's allegations, as directed at BellSouth, are without merit.

B. Untimely Retirements Do Not Impact Rates

BellSouth, as well as other BOCs,[25] have demonstrated to the Commission that delayed retirements have negligible effects on depreciation expense and no impact on net investment. The Snavely Report attempts to support a contrary view. Snavely contends that delayed retirements result in a significant overstatement of depreciation expense and thus revenue requirements.[26]

Snavely attempts to support its theory by analyzing an illustration provided to the Commission by Ameritech to explain the depreciation calculation. Snavely's analysis is faulty. First, the example provided by Ameritech was intended as an example of how the depreciation expense calculation is made. The figures used were overly simplified for ease of calculation and were not intended to be representative of average remaining life, vintage, or percentage of

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24 MCI Comments at 35.

25 *See* William Taylor affidavit filed with USTA's Comments ("Taylor Affidavit"); Ronald White affidavit filed with Bell Atlantic Response.

26 The Snavely Report acknowledges, as BellSouth has stated in its comments, that delayed retirements do not result in a rate base overstatement.

untimely retirements that are alleged in the audit reports.[27] For example, the Ameritech illustration used a delayed retirement amount that was 20% of investment. This is ten times the extrapolated amount of alleged missing investment from the BellSouth audit.[28] Ameritech's calculations are merely a simplistic example which demonstrates the self correcting nature of remaining life depreciation.

Second, Snavely makes unrealistic assumptions regarding important criteria affecting its calculations. Specifically, Snavely used a square survivor curve in its analysis. A square survivor curve assumes that all equipment in a vintage retires at the end of its projected life. In reality, equipment retires every year from multiple vintages and a portion of the investment in a vintage generally survives past the projection life. It is well recognized within the industry that a square survivor curve does not occur. Indeed, Snavely should have been aware that a square curve is unrealistic and would skew its results. In AT&T's Notes for Engineering Economic Courses, which Snavely cites in its Report, AT&T discusses various survivor curves which were developed from actual experience but specifically states that the rectangular curve [which is also known as the square curve] "... is seldom if ever found in real life ...."[29] AT&T explained why the rectangular, or square, curve is not representative in the situation in which Snavely used it saying:

> [The] rectangular curve would not normally be representative of the life characteristics of a large mass of plant, because it assumes that all retirements occur at one point in time. The rectangular survivor curve is

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[27] Ameritech assumed $500 million in investment with a $300 million reserve and an average remaining life of 4 years. Ameritech then assumed $100 million, 20% of the investment, were delayed retirements.

[28] The alleged missing assets based on the extrapolation from the audit report for BellSouth was approximately 2%.

[29] Notes for Engineering Economics Courses, American Telephone and Telegraph Company, Engineering Department, 1966, p. 121.

> usually assumed in an economy study when a single unit of plant is involved, or whenever dispersion is not significant.[30]

Clearly, the equipment audited involved multiple units of plant dispersed over multiple vintages. Accordingly, the historical survival pattern for the accounts in the audit does not follow a square curve and any analysis assuming the square curve will not provide representative results.

Finally, instead of distributing the alleged delayed retirements over multiple vintages, Snavely placed all delayed retirements in early vintages and assumed that the retirement of the entire investment in those vintages would be delayed. Retirements occur over a wide range of vintages.[31] Indeed, Snavely even assumes in its report that "the failure to properly retire plant is a random occurrence...," however, Snavely does not follow this assumption, but instead places all delayed retirements in the earliest vintages.

These overly simplistic numbers, along with the unrealistic assumptions made by Snavely neither of which are representative of BellSouth COE investment, caused Snavely's calculations to be easily manipulated to reach the conclusion that the remaining average life would have increased. An overly simplified academic exercise using unrealistic assumptions, however, does not provide evidence that the alleged delayed retirements of the central office equipment had any impact on the average remaining life or on the depreciation expense of BellSouth or any of the BOCs. As William Taylor stated in is his affidavit filed with USTA's comments:

> In the current case, the asset groups and vintages of plant alleged to be missing are known, but that information is not available, even in principle, for the plant estimated to be missing by extrapolation from the audit sample. It is thus impossible to determine the effect of a delayed retirement on historical asset lives. However, because remaining lives are

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30 Engineering Economy, A Manager's Guide to Economic Decision Making, Third Edition, American Telephone and Telegraph Company, 1977, page 350.

31 For example, the alleged missing assets for BellSouth were in multiple vintages.

> prescribed for groups of assets, it follows that when omitted retirements are small relative to undepreciated plant or when retirements are distributed uniformly across all vintages of equipment, there will be little change in the remaining life of a plant category when retirements are corrected.[32]

Finally, the Commission should not lose sight of the overall depreciation picture. Depreciation expense is merely the expense assignment of a portion of the original cost paid for an asset to particular time periods. The sum of all depreciation expense amounts is limited by the original sum paid for the asset. It is not uncommon for remaining lives and depreciation rates to change over time. This only impacts the timing of depreciation expense, not the overall amount of expense. In addition, when depreciation expense is recognized, the net value of the assets in the rate base is reduced. This means that the timing of depreciation expense will have different impacts on revenue requirements in the current year versus future years. For example, an increase in depreciation expense in the current year increases revenue requirements for the current year, but it reduces rate base and revenue requirements in future years. Therefore, even if delayed retirements had the impact of increasing depreciation expense and revenue requirements in a particular year, future revenue requirements would be decreased.

C. Claims Regarding Initial Price Cap Rates are Incredible

Finally, AT&T and MCI make an argument for the ultimate bootstrap theory -- the audit results of the CPR in July 1997 should be related back to investment balances for July 1, 1990. Even if one accepted the audit results as accurate, which they clearly are not, attempting to suggest that the results could be used to adjust balances seven years previous is ridiculous. Asset investment balances are a snapshot in time. No certified public accountant would issue an

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[32] Taylor Affidavit at 9. *See also* Ronald White affidavit filed as attachment 5 of Bell Atlantic's Response on January 11, 1999, at 7. ("It is also known that the change in remaining

opinion regarding assets balances with one-day difference from the date tested unless he or she could test the transactions that occurred during that one day. Stated differently, if an auditor tested asset balances as of July 31, 19XX but the client wanted the auditors' opinion on the balances as of August 1, 19XX, the auditor would have to perform tests on the transactions between July 31 and August 1. Thus, the auditor cannot have any certainty of the balances except for the day he or she tested.

Moreover, if this theory had any credibility, which it does not, how could it be advanced by AT&T? If AT&T believes that conclusions can be reached about asset balances seven years prior to an audit, then the logical conclusion is that the balances have never been reliable and the same conclusions could be reached about the balances six years prior to 1990 –1984, the year of divestiture. Accordingly, under this theory AT&T does not come to the table with clean hands. AT&T cannot suggest that problems existed in 1990, and in fact suggests that investment problems were probably worse in 1990,[33] but the balances were somehow miraculously accurate prior to 1984. The comments and Responses of the BOCs have attenuated the claims of the audits such that the Commission cannot deign them acceptable for an enforcement action. If the Commission were to accept the audits at face value, however, it cannot possibly assume the results impacted balances in 1990.

V. Undetailed Investment

Both AT&T and MCI make similar arguments regarding Undetailed investment, namely, that the BOCs offer no plausible explanation for its existence, that their claims of its exemption

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life will be insignificant if the omitted retirements are small in relation to the age distribution of surviving plant or the retirements are widely distributed over a broad range of vintages.")

[33] AT&T Comments at 33.

from Commission rules are unfounded, and that it should be treated as "missing" investment. In the case for BellSouth, these claims are spurious.

A. Undetailed Investment is Actively Managed and the Levels are Moderate

BellSouth previously documented in its Response reasonable and supportable explanations for the existence of moderate levels of Undetailed investment. It subdivided this investment into the following categories: (1) pre-1974 investment in existence at the time mechanized, detailed property records were implemented; and (2) post-1973 amounts, which can be further separated into known pending reclassifications and remaining unexplained costs.[34] The following table presents a breakdown of the Undetailed investment by pre-1974 and post-1973 amounts.

Category	7/97 Amount ($000)	% of Total Undetailed	% of Total COE	3/98 Amount ($000)	7/97 to 3/98 % Change
Pre-1974	40,947	29.57%	0.23%	39,783	-2.84%
Post-1973	97,530	70.43%	0.56%	73,179	-24.97%
Pending Reclass	34,000		0.19%		
Unexplained	63,530	45.88%	0.36%		
Total Undetailed	138,477		0.79%	112,962	-18.43%
TOTAL COE	17,496,500				

Approximately $34 million of the post-1973 amount can be attributed to a recent reclassification requiring manual detailing over time. As can be seen from the table above, less

[34] This requires location specific investigation at the account/Vintage level, which is a time-consuming undertaking.

than 50% of the Undetailed investment is unexplained post-1973 costs, representing less than ½ of 1% of the total investment in central office equipment (COE). Moreover, both major categories are being actively managed with measurable reductions in the amounts from July 1997 to March 1998. These reductions occur through a variety of means, i.e., detailing as a result of annuals/reconciliation process, detailing as a result of inventories, reclassifications, ongoing corrections or retirements. It is unconscionable to regard such moderate levels (less than 1% of total COE) as either unreasonable or without explanation.

B. Investment Prior to PICS/DCPR Implementation is Appropriately Recorded

The commentors contend that BellSouth claims exemption from the Commission's property record rules with respect to the pre-existing investment at the time of conversion to the mechanized, detailed CPR (PICS/DCPR) system. On the contrary, BellSouth does not claim exemption from the rules, but rather believes these costs are recorded in accordance with prior established Commission policy. In the December 24, 1968 FCC letter, which approved the AT&T proposal for a new continuing property record plan, the Commission acknowledged that there would be "...two continuing property record plans for central office equipment, viz., the new plan and the continuation of the older type record and the method of operation thereunder...." The detailing of pre-existing equipment into the new system was optional.

Under the old plan, COE investment was maintained in accordance with AT&T Comptrollers M-letter 223, Part 5. M–223 required the investment to be recorded by location, sub-account and vintage. The equipment was not identified by specific location within the central office. Spot checking for existence could only be done at the macro level. For example, one could determine that a Number 5 Crossbar switch was located at the office. The underlying details were available in the office drawings and other supplemental records. Even if detailed, a

significant portion of the investment for these pre-existing items would likely be classified as minor material and respread to the in-place cost of other detailed items within the same vintage.[35]

C. Undetailed Investment is a Necessary and Important Internal Control and Cannot be Capriciously Labeled as Missing

The investment in the CPR is balanced to the investment contained in the accounting records annually. Any differences are investigated and resolved during the annuals/reconciliation process. With the exception of the pre-1974 investment, the Undetailed category primarily represents valid investment pending proper identification as a result of current purchases or from reclassifications. Consequently, it is a necessary accounting and internal control tool.

The audit design did not adequately permit the proper evaluation of this investment category. While it is generally known what equipment comprises this investment in a particular central office, actual verification is not straightforward. It requires a detailed investigation and examination of the engineering records in conjunction with a site visit, an exhaustive one, in the case of older, especially pre-existing equipment. Therefore, no definitive conclusion as to the existence of equipment represented by this investment can be opined.

VI. Future Audits

AT&T contends that the Commission should subject the BOCs to more audits and that these audits should be open to comment by interested parties and that the audit workpapers should be available to the public. AT&T also maintains that the audit cost should be borne by the BOCs.

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[35] In fact, if no detailed CPR identification number exists for any of the costs for a given

A. No Future Audits are Needed

AT&T makes its request even though it has made no showing in its comments for a need for future audits. Outside of offering refutable support for the auditors' conclusions, AT&T's comments present no evidence that BellSouth's, or any other BOCs', investment balances are in error or that future audits are needed. Moreover, as discussed in its Response and comments, BellSouth has established a management control system that conducts a complete physical inventory of all of its central offices over an eight-year period. BellSouth currently has 1,600 central offices, thus it inventories approximately 200 central offices a year – almost one every working day of the year.[36] The Commission must not force the unneeded expense of further audits based on the complaining of AT&T. The record is obvious that their concern is supported only by a phalanx that are concerned more with harming the process, and obtaining financial gain, than accepting the facts about the audit results.

B. Audits Must be Proprietary (FOIA Comments)

Should the Commission ignore the weight of evidence presented in this docket and require further audits, these audits must follow Commission precedent and remain confidential. In an unbroken string of decisions going back a decade, the Commission has consistently refused to release raw audit data, even in response to Freedom of Information Act ("FOIA") requests.[37] The Commission recognized three reasons why audit material should not be released: (1) audit material is exempt from disclosure under the FOIA, so the Commission is under no legal

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vintage of pre-existing equipment, it would not be possible to reclassify it from Undetailed.

[36] There are approximately 240 working days a year (365 days less weekends and holidays).

[37] *See, e.g.*, Scott J. Rafferty, 5 FCC Rcd 4138 (1990); Martha H. Platt, 5 FCC Rcd 5742 (1990); David J. Stoner, 5 FCC Rcd 6458 (1990); National Exchange Carrier Association, 5 FCC Rcd 7`48 (1990); GTE Telephone Operating Companies, 9 FCC Rcd 2588 (1994); The Bell Telephone Operating Companies, 10 FCC Rcd 11541 (1995).

obligation to release audit information; (2) carriers have an expectation of privacy in audit materials, and release of audit information would breach that expectation of privacy; and (3) if the expectation of privacy is breached, the Commission's ability to conduct future audits efficiently will be impaired. In the *rare* case when the Commission has found that the public interest requires the release of audit information, the Commission has limited the information released to only summary information or the audit report itself.

Less than a year ago, the Commission conducted a comprehensive review of its policy concerning treatment of confidential information submitted to the Commission.[38] In that proceeding, the Commission discussed what would constitute a "persuasive showing" justifying the release of confidential information in the possession of the Commission. The Commission stated:

> [T]he Commission generally has exercised its discretion to release publicly information falling within FOIA Exemption 4 only in very limited circumstances, such as where a party has placed its financial condition at issue in a Commission proceeding, or where the Commission has identified a compelling public interest in disclosure.[39]

The Commission reiterated that the "requester of such information should continue to bear the burden of making a persuasive showing as to the reasons for inspection when access to confidential information is sought."[40] With regard to audit information, the Commission reiterated its "longstanding policy of treating information obtained from carriers during audits as confidential."[41] The Commission stated:

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38 *In the Matter of Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission*, GC Docket 96-55, *Report and Order*, FCC 98-184, released August 4, 1998 ("Report and Order").

39 Report and Order ¶ 8.

40 *Id.* ¶ 19.

41 *Id.* ¶ 54.

> Carriers have a legitimate interest in protecting confidential information, and we agree that disclosure could result in competitive injury to those who provide such information to the Commission. This policy is also designed to enhance the efficiency and integrity of our audit process by encouraging carriers to comply in good faith with Commission requests for information. Moreover, the Commission considers audit reports to be internal agency documents that, consistent with FOIA Exemption 5, generally should not be disclosed to the extent they present staff findings and recommendations to assist the Commission in pre-decisional deliberations. Since we are able to make a finding that audit materials received from carriers generally fall within FOIA Exemption 4, and as an indication of the importance we place on upholding the confidentiality of these materials, we will amend Section 0.457 of our rules to indicate that information submitted in connection with audits, investigations and examinations of records will not routinely be made available for public inspection.[42]

Clearly, AT&T's simple request that the information of future audits be open to the public does not meet this standard. The Commission must therefore follow its prior history and continue to keep future audit information proprietary.

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42 *Id.*

VII. Conclusion

Based on the proceeding, the Commission should dismiss this proceeding with no further action.

Respectfully submitted,

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BELLSOUTH TELECOMMUNICATIONS, INC.

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Date: October 25, 1999

CERTIFICATE OF SERVICE

I do hereby certify that I have this 25th day of October, 1999, served the following parties to this action with a copy of the foregoing ***BELLSOUTH REPLY COMMENTS***, reference CC Docket No. 98-117 and ASD File No. 99-22, by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties as set forth on the attached service list.

Lenora Biera-Lewis

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DECLARATION OF FRITZ SCHEUREN AND EDWARD J. MULROW

1 Introduction.

1.1 We are statistical consultants engaged by Bell Atlantic Telephone Companies, BellSouth Telecommunications, and SBC Telecommunications, Inc. (subsequently referred to as "the RBOCs") to evaluate the Continuing Property Records (CPR) audits conducted by FCC staff in 1997.[1,2,3,4,5] The scope of our work was limited, however, to the sampling design employed in the audits and to the statistical aspects of its execution. In carrying out this work we independently examined each client RBOC's data pertaining to the CPR audits. In January of 1999, we publicly filed our opinions on each client RBOC's audit conducted by the FCC. These opinions may be found in the appendices or exhibits of each RBOC's response to the audit of continuing property records.[6,7,8]

1.2 Dr. Scheuren has been a professional mathematical statistician for more

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[1] Federal Communications Commission Common Carrier Bureau Accounting Safeguards Division, *Audit of the Continuing Property Records of the NYNEX Telephone Operating Companies Also Known As Bell Atlantic North As of March 31, 1997*, December 22, 1998

[2] Federal Communications Commission Common Carrier Bureau Accounting Safeguards Division, *Audit of the Continuing Property Records of Bell Atlantic Telephone Operating Companies Also Known As Bell Atlantic (South) As of March 31, 1997*, December 22, 1998

[3] Federal Communications Commission Common Carrier Bureau Accounting Safeguards Division, *Audit of the Continuing Property Records of BellSouth Telecommunications, Inc. As of July 31, 1997*, December 22, 1998

[4] Federal Communications Commission Common Carrier Bureau Accounting Safeguards Division, *Audit of the Continuing Property Records of Southwestern Bell Telephone Company As of June 30*, 1997, December 22, 1998

[5] Federal Communications Commission Common Carrier Bureau Accounting Safeguards Division, *Audit of the Continuing Property Records of the Pacific Bell and Nevada Bell Telephone Companies As of June 30, 1997*, December 22, 1998

[6] *Response to Audit Staff Draft Report of Findings Related to Audit of Continuing Property Records of Bell Atlantic*, January 11, 1999, Appendix A

[7] *BellSouth's Response to Audit of Continuing Property Records of BellSouth Telecommunications As of July 31, 1997*, January 11, 1999, Exhibit 1

[8] *Reply to December 22 1998 Draft Report of the Federal Communications Commission Accounting Safeguards Division Audit of Nevada Bell, Pacific Bell and Southwestern Bell Telephone Company*, January 11, 1999, Attachment B

1.2 Dr. Scheuren has been a professional mathematical statistician for more than 25 years. He is an internationally known sampling expert, and has published widely on survey design and other statistical problems – authoring, co-authoring or editing nearly 150 books, monographs, and papers.

1.3 When the work of evaluating the CPR audits began, Dr. Scheuren was a Principal with Ernst & Young, LLP. He has subsequently taken a position as a Senior Fellow at The Urban Institute. He is currently overseeing the National Survey of America's Families, a large complex survey with a dual frame design. However, he continues to consult with the statistical staff at Ernst & Young LLP.

1.4 Dr. Edward Mulrow is a senior manager with Ernst & Young, LLP. He has overseen all Ernst & Young's work involved in evaluating the CPR audits. He has a Ph.D. in statistics from Colorado State University, and has over 13 years of experience in statistical consulting. His experience in sampling statistics before coming to Ernst and Young, LLP was obtained while working at the Internal Revenue Service (IRS) and for the National Opinion Research Center at the University of Chicago (NORC). There he designed and built a prototype sample system that is used to maintain all NORC's national survey frames.

2 Purpose and Summary of the Affidavit.

2.1 The purpose of this filing is to respond to the statistical issues and concerns raised in affidavits submitted by the AT&T Corporation[9] and its experts Dr. Robert Bell[10] and Mr. James Loebbecke.[11]. It should be said at the outset that none of what we read changes our previously stated conclusions. We continue to believe that –

[9] *Comments of the AT&T Corp. (Public Version) Before the Federal Communications Commission*, Washington, D.C. 20554, CC Docket no 99-117 ASD file No. 99-22, September 23, 1999
[10] *Affidavit of Robert M. Bell, Ph.D. (Public Version) Before the Federal Communications Commission*, Washington, D.C. 20554, CC Docket No. 99-117, ASD File No. 99-22, September 23, 1999
[11] *Affidavit of James K. Loebbecke, CPA (Public Version) Before the Federal Communications Commission*, Washington, D.C. 20554, CC Docket No. 99-117, ASD File No. 99-22, September 23, 1999

The estimates in the FCC's draft audit reports contain biases and are inaccurate.

Given these errors and biases, the amounts reported by the FCC audit staff as overstated investment are unsound and cannot be fairly relied upon.

2.2 We confess some surprise in what, for us, is a major omission in the AT&T filing – the issue of the uncertainty of the estimates of missing plant in the CPR audits.

2.3 All the submissions lack a candid discussion of the poor precision in the estimated values of the property record audits. Such precision considerations are essential when determining whether the estimates are credible enough to use as a basis to justify action against the RBOCs. It remains our opinion that they are not. (See Section 3.)

2.4 The margin of error of an estimate, which is related to its confidence bounds, reflects the precision of an estimate.[12] The degree of precision can be controlled through the design of the sample. A high degree of precision may call for a costly sampling plan, so it is up to the those who are in control of the audit process to determine the trade-offs between sampling cost and the benefits of high precision. For this reason, the staff should assess the amount of alleged overstated property using a lower confidence bound. One of AT&T's own experts agrees (in other writings) that the confidence bound rather than a point estimate is the appropriate measure. (See Sections 4 & 5)

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[12] "Precision" is another term for "margin of error." This is closely linked to the confidence level. Suppose for example, an estimate is reported to be 150 plus or minus a margin of error of 10 at the 95 percent confidence level. Then if you were to add and subtract 10 from 150 you would obtain the interval 140 to 160. This is the confidence interval. To say that there is 95 percent confidence means that if you could repeat the sampling process under identical circumstances using the identical sample design but different random selections, then 95 out of 100 times the true value that is being estimated would fall inside the confidence interval. Five times out of 100, it would not.

2.5 The confidence level is also a factor that effects the margin of error, and hence the precision of the estimate. Choosing a low confidence level will decrease the margin of error, while a high confidence level increases the margin of error.

2.6 In the CPR audits, however, we remain convinced that because of the numerous nonsampling errors and biases introduced during the property record audits, a more conservative choice of a higher confidence level is justified.

2.7 Assessment of nonsampling errors is always difficult, but should not be ignored – especially when they appear excessive as in this case. Such errors certainly add uncertainty into the decision process. Increasing the confidence level for the margin of error is one way to recognize this. We originally suggested that an increase from 95 percent to 99 percent would reasonable. This remains our view. (See Section 6.)

2.8 Dr. Bell and Mr. Loebbecke both address technical aspects important in analyzing the CPR audit data. While we agree in principle with them on many issues, several incorrect statements have been made. The net effect of which is quite misleading. (See Sections 7 - 11)

2.9 Overall, to reiterate, we feel that there are serious weaknesses in the CPR audit estimates. We continue to maintain that the result of these weaknesses is that the precision of the audit estimates is too poor to be of any credible use for any extrapolation to the book value of the RBOCs inventory.

3 Attention to Precision is Needed for Actionable Estimates.

3.1 An estimate is just that, an *estimate*, not a *true* value. Before utilizing an estimate, one needs to know how precise it is. The confidence level and the margin of error are a means of describing the precision. Confidence bounds, in turn, can be used to judge the validity of decisions based on the sample.

3.2 Dr. Bell would have his readers believe that so long as an estimate is calculated using the right formula out of the right textbook, the estimate is "valid." This is clearly not true. To be a "valid" basis for action, an estimate not only needs to be calculated using an appropriate formula, but the margin of error must be reasonable.

3.3 To illustrate this, suppose a population consists of the numbers 0,1,2,3 ..., up to 1000. It can be shown that the true average of this population is 500. Now consider estimating the true average from a sample with only two numbers randomly selected from this population. The formula for estimating the mean from the sample is, of course, the sum of the selected numbers divided by two. In this example, the lowest estimate you could obtain is 0.5 (from selecting "0" and "1") and the highest estimate is 999.5 (from selecting "999" and "1000"). The symmetric margin of error at the 95 percent confidence level will typically be about 400.[13] This large margin of error indicates that estimates from sample to sample will vary significantly. This kind of instability in the possible estimates is completely ignored by Dr. Bell when he argues to use the point estimates without addressing the estimate's precision.

3.4 Similar to the example in 3.3, the property record audits failed to sufficiently control the precision of the estimates for overstated RBOC inventory. Therefore, they failed to provide meaningful estimates from which one can draw a conclusion about the value of the missing inventory.

3.5 The estimates from the property records are too imprecise to be actionable. Decisions based on the audit results should only made after carefully considering the amount of uncertainty. The lack of precision of the estimates needs to be considered when evaluating the results of the audit.

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[13] This calculation is based on the fact that the population of number has a standard deviation of about 289. The standard error of a sample of size two is therefore approximately 204. Multiplying this by 1.96, the

4 A Confidence Bound Should be Used to Determine an Audit's Findings.

4.1 A confidence bound is the result of adding or subtracting the margin of error from the estimate.[14] Such bounds are a means of considering the accuracy of estimates in terms of their confidence and precision. Confidence bounds that are far from their estimates indicate very poor precision (as we saw in 3.3 above). Confidence bounds that are close to their estimates indicate more precise results. Because of the large margins of error of the estimates in the property record audits, the confidence intervals are extremely wide with bounds that are far from the estimated values. These bounds quantify the unreliability of the results obtained.

4.2 Dr. Bell and AT&T argue that the point estimate[15] should be used when considering punitive action against the RBOCs. Mr. Loebbecke is silent on this issue[16] in his affidavit. However, the textbook he co-authored states the contrary:

> "After completing tests of the sample, the auditor is in a position to generalize about the population. It would be wrong to conclude that the population error rate is exactly the same as the sample error rate; [emphasis added] the odds of this being the case are just too low. Instead, the auditor must compute the upper precision

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confidence factor corresponding to a two-sided, 95 percent confidence level, gives the margin of error for the example.

[14] While serviceable in the current context, it should be noted that this statement is not complete. It only deals with a special case. The method described, however, is what is most often written in textbooks. There are other methods for computing these bounds, but we do not believe it is necessary to describe them here. To determine a confidence bound, the variability of an estimate is calculated using an appropriate statistical formula that depends on the sample design used. The square root of this number is multiplied by a constant that depends on the level of confidence, the sample size, and whether one wants one-sided or two-sided bounds. This product is the "margin of error." The margin of error is subtracted from the estimate to obtain the lower confidence bound and added to the estimate for the upper confidence bound. The interval between the lower and upper bounds is called the confidence interval. The more imprecise an estimate is, the larger its margin of error is, and the wider the confidence interval is.

[15] The "point estimate" is single number of the estimated value. It does not incorporate the estimate's confidence and precision.

[16] Point of fact, Loebbecke is silent on most of the major statistical issues in his affidavit, despite the fact that he is a statistical expert and co-authored a book on audit sampling.