## ORIGINAL

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF G. DAVID CUNNINGHAM
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKETS NO. 960833-TP, 960846-TP, 960757-TP, 971140-TP
5		December 9, 1997
6		
7	Q.	PLEASE STATE YOUR NAME, ADDRESS AND POSITION WITH
8		BELLSOUTH TELECOMMUNICATIONS, INC. (HEREINAFTER
9		REFERRED TO AS "BELLSOUTH" OR "THE COMPANY").
10		
11	A.	My name is G. David Cunningham and my business address is 3535
12		Colonnade Parkway, Birmingham, Alabama 35243. My position is
13		Director in the Finance Department of BellSouth.
14		
15	Q.	PLEASE GIVE A BRIEF DESCRIPTION OF YOUR EDUCATIONAL
16		BACKGROUND AND BUSINESS EXPERIENCE IN THE
17		TELECOMMUNICATIONS INDUSTRY.
18		
19	A.	I graduated from Morehead State University, Morehead, Kentucky in
20		1971 with a Bachelor of Arts Degree in Economics. I was employed by
21		South Central Bell in 1972 and held various staff and line assignments
22		in the Kentucky Network Operations Department until mid-1983. In
23		July of 1983, I moved to Birmingham, Alabama with BellSouth
24		Services, Inc., holding positions in the Corporate Affairs Department
25		and later in the Regulatory Department. My current assignment

1		includes responsibility for Regulatory and Depreciation concerns within
2		the Finance organization.
3		
4	Q.	WHAT ARE YOUR CURRENT JOB DUTIES AND
5		RESPONSIBILITIES?
6		
7	A.	I am responsible for the preparation of depreciation studies for the nine
8		states comprising BellSouth to determine appropriate depreciation
9		parameters and depreciation rates for booking purposes and to meet
10		regulatory requirements as necessary.
11		
12	Q.	HAVE YOU PREVIOUSLY APPEARED IN REGULATORY
13		PROCEEDINGS REGARDING DEPRECIATION ISSUES?
14		
15	A.	Yes. I have testified, been deposed, and also participated in
16		workshops before various state commissions regarding depreciation.
17		have served as BellSouth's chief representative on several occasions
18		in negotiations with the Federal Communications Commission (FCC)
19		and the various state commissions in depreciation represcription
20		meetings.
21		
22	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
23		
24	<b>A</b> .	The purpose of my testimony in this proceeding is to respond to the
25		direct testimony of Michael J. Majoros, representing AT&T and MCI,

1		regarding the economic lives used in BellSouth's cost studies. My
2		testimony will demonstrate the appropriateness of the depreciation lives
3		developed by BellSouth's Depreciation organization and provided for
4		use in the cost studies.
5		
6	Q.	WHAT IS THE BASIS OF THE LIVES THAT MR. MAJOROS
7		RECOMMENDS FOR USE IN THE COST STUDIES?
8		
9	A.	Mr. Majoros recommends that the projection lives last prescribed by the
10		FCC in 1995 for booking depreciation expense on an interstate basis
11		be used in the Florida cost studies.
12		
13	Q.	DO YOU AGREE THAT THESE LIVES ARE APPROPRIATE FOR
14		THIS APPLICATION?
15		
16	A.	No, I do not.
17		
18	Q.	WHY ARE THE LIVES LAST PRESCRIBED BY THE FCC IN 1995
19		FOR INTERSTATE DEPRECIATION PURPOSES NOT
20		APPROPRIATE FOR USE IN THE BELLSOUTH COST STUDIES?
21		
22	A.	The lives last prescribed by the FCC in 1995 for interstate purposes,
23		particularly for the technology-sensitive accounts, are much too long.
24		They are based on the old regulatory paradigm in which plant lives
25		were artificially lengthened beyond their true economic lives so that the

investment in that plant would be recovered in smaller year-to-year increments over longer periods of time. The assumption under this paradigm was always that BellSouth was entitled to and would recover all of its investments, but over a longer period of time, thus reducing the amount the customer paid in the short term.

In today's competitive environment, however, the marketplace is not likely to allow BellSouth to recover investment based on lives that are inappropriately long. The rapid changes in technology, which BellSouth must embrace in order to stay competitive, shorten asset lives significantly beyond what the FCC has prescribed. BellSouth has emphasized to the FCC that substantially more progress is needed in moving to lives that adequately reflect the current pace of technology and competitive changes.

Q. HAS THE FCC GIVEN ANY INDICATION THAT CHANGES MAY
NEED TO BE MADE TO ITS PRACTICES CONCERNING
DETERMINATION OF PLANT LIVES?

20 A. Yes. The FCC has acknowledged the need to examine its depreciation
21 practices in today's environment. On several occasions, including a
22 reference in the FCC's Notice of Proposed Rulemaking released
23 December 24, 1996, regarding Access Reform and other issues (FCC
24 Docket No. 96-488), the FCC has stated that it has plans to initiate a

1		separate proceeding to undertake a comprehensive review of its
2		depreciation rules.
3		
4	Q.	WHAT LIVES DOES BELLSOUTH CONSIDER TO BE APPROPRIATE
5		FOR USE IN THE COST STUDIES?
6		
7	A.	The asset lives that were developed and provided for use in the cost
8		studies are included in Exhibit GDC-1.
9		
10	Q.	WHAT IS THE SOURCE OF THE LIVES USED IN THE COST
11		STUDIES?
12		
13	A.	The source of the lives provided for use in the cost studies is the 1995
14		and 1996 BellSouth Depreciation Studies, attached to this testimony as
15		Exhibit GDC-2. The lives used in the cost studies were determined by
16		calculating a simple average of the proposed lives for the nine states
17		proposed in these two studies. Although this is not a depreciation
18		proceeding, the depreciation studies included as Exhibit GDC-2 are
19		being provided to demonstrate the appropriateness of the data.
20		
21		BellSouth prepared the detailed depreciation studies in this exhibit,
22		analyzing the various asset accounts to determine appropriate
23		depreciation parameters for each account. The studies provide
24		explanations of methodology, data and analysis that support the asset
25		

1		lives and other depreciation parameters that are presented in the
2		studies.
3		
4	Q.	PLEASE SUMMARIZE BELLSOUTH'S APPROACH IN DETERMINING
5		THE ASSET LIVES USED IN THE COST STUDIES.
6		
7	A.	As demonstrated in the attached depreciation studies, numerous
8		methods are utilized to determine the appropriate economic lives of the
9		different asset accounts. One factor used in determining the
0		appropriate lives of all accounts is an analysis of Company planning
1		data. This data is useful in assessing the near term portion of the life
2		cycles of most assets, and is particularly useful when the technology is
3		near the end of its life cycle.
4		
5		A second factor used in assessing the life of an account is normal
6		mortality, i.e., wear and tear with usage, deterioration with age and
7		accidental removal, breakage, or damage. The technique used to
8		assess normal mortality is called Historical Mortality Analysis. For
9		some accounts, like poles, Company planning data and normal
20		mortality alone are the major considerations in determining the life. In
1:1		these cases, the Company does not expect that the future
22		characteristics of this type of plant will differ significantly from the past.
23		
4		In cases where a newer technology is substituting for an established
5		embedded technology, use of Company planning data and the

Historical Mortality Analysis alone to assess the life will generally result in an inappropriately long life. Over the long term, the substitution of a new technology for the old is the primary force driving the displacement of the old technology. Therefore, in the later stages of deployment, life analysis techniques that take into account the technological substitution must also be used. These technology-sensitive accounts (that is, Digital Electronic Switching, Circuit-Digital, Circuit-Analog, Aerial Metallic Cable, Underground Metallic Cable, Buried Metallic Cable) comprise over 70% of BellSouth's total plant investment.

Q. MR. MAJOROS STATES THAT THE PROJECTION LIVES
PRESCRIBED BY THE FCC ARE FORWARD-LOOKING AND
APPROPRIATE FOR USE IN BELLSOUTH'S COST STUDIES. DO
YOU AGREE?

Α.

No, I do not. It is clear that forward-looking lives should be used for depreciation purposes and for the cost studies. However, BellSouth believes that the FCC has not properly assessed the impact of technological evolution and increasing competition to determine appropriate forward-looking lives. BellSouth's depreciation studies, as demonstrated in Exhibit GDC-2, provide detailed analysis to support forward-looking lives significantly below those prescribed by the FCC, particularly for the technology-sensitive accounts.

In considering whether FCC prescribed lives are appropriately forward-looking, it is of interest to examine Exhibit GDC-3, which compares the lives used in BellSouth's cost studies for the major technology sensitive accounts with the lives that the FCC prescribed in 1994 for AT&T, on whose behalf Mr. Majoros is appearing in this proceeding. As shown in this comparison, AT&T's depreciation life for Digital Electronic Switching, for example, is 9.7 years. The life that BellSouth uses in its cost studies for this account is 10 years. Mr. Majoros supports an unrealistically long life of 16 years. The comparison in this exhibit demonstrates that, for all the major technology sensitive accounts, the lives used in BellSouth's cost studies are comparable or conservative when compared to AT&T's lives.

Q. HOW DO THE ECONOMIC LIVES USED IN THE COST STUDIES
COMPARE TO THE PROJECTION LIVES USED TO DETERMINE
THE DEPRECIATION RATES THAT BELLSOUTH IS CURRENTLY
BOOKING IN FLORIDA FOR INTRASTATE DEPRECIATION
PURPOSES?

A. As shown in Exhibit GDC-4, the economic lives used in BellSouth's cost studies are similar to the projection lives used to determine the intrastate depreciation rates that BellSouth is currently booking. The Florida PSC has historically been quite progressive in its determination of appropriate asset lives for depreciation purposes.

1	Q.	HOW DO YOU RESPOND TO MR. MAJOROS'S STATEMENT THAT
2		BELLSOUTH'S CURRENT INTRASTATE DEPRECIATION RATES
3		ARE BASED ON REMAINING LIVES, NOT PROJECTION LIVES, AND
4		THAT THESE RATES ARE INAPPROPRIATE FOR FORWARD-
5		LOOKING COST STUDIES?
6		
7	A.	While the Florida PSC has actually prescribed Average Remaining
8		Lives for depreciation rates calculations, corresponding Projection
9		Lives for each account can be determined. These projection lives are
10		shown in Exhibit GDC-4.
11		
12		BellSouth agrees that depreciation rates used for booking purposes are
13		not appropriate to use in the cost studies. BellSouth's booked
14		depreciation rates include a component for the depreciation reserve,
15		that is, the accumulated depreciation. Including the reserve in the
16		calculation of depreciation rates adjusts for the level of past
17		depreciation expense on the embedded investment. In addition, the
18		depreciation rates used for booking purposes are calculated by
19		allocating the net book investment less anticipated future net salvage
20		over the average remaining life of the investment. The average
21		remaining life represents an estimate of the number of years, on
22		average, that the current investment in a given account will live.
23		
24		The depreciation rates used in the cost studies do not include a
25		depreciation reserve component. Further, these rates are calculated

1		by allocating the investment less anticipated future her salvage over the
2		projection life, not average remaining life, of the assets. The projection
3		life represents the average life expectancy of new additions to plant.
4		Therefore, the depreciation rates used in the cost studies are not
5		impacted by past unrecovered investment. They are appropriate for
6		use in BellSouth's forward-looking cost studies.
7		
8	Q.	HOW DO THE ECONOMIC LIVES USED IN THE COST STUDIES
9		COMPARE TO THE LIVES USED TO DETERMINE THE
0		DEPRECIATION RATES THAT BELLSOUTH IS CURRENTLY
1		BOOKING IN FLORIDA FOR EXTERNAL REPORTING PURPOSES?
2		
3	A.	The economic lives used in the cost studies are generally consistent
4	·	with those used to determine the depreciation rates currently being
5		booked in Florida for external reporting purposes.
6		
7	Q.	IS THERE ANY MERIT TO A CONCERN RAISED IN OTHER
8		JURISDICTIONS THAT LIVES USED FOR EXTERNAL REPORTING
9		PURPOSES ARE INAPPROPRIATE FOR USE IN COST STUDIES
20		DUE TO THE "CONSERVATISM" PRINCIPLE OF GAAP?
21		
22	A.	No. The "conservatism" principle of GAAP does not determine
23		BellSouth's lives. BellSouth's economic lives, used for external
24		reporting purposes and in BellSouth's cost studies, are determined by
25		the approaches described earlier in this testimony and detailed in

1		Exhibit GDC-2. These lives are used to determine depreciation rates
2		that appropriately allocate the cost of BellSouth's assets over their
3		estimated useful lives in a systematic and rational manner.
4		
5	Q.	MR. MAJOROS FOCUSES ON HISTORICAL RETIREMENT
6		PATTERNS FOR SOME OF BELLSOUTH'S TECHNOLOGY
7		SENSITIVE ACCOUNTS, AND ATTEMPTS TO LINK LIFE
8		PROJECTIONS TO THIS INFORMATION. WHAT COMMENTS DO
9		YOU HAVE REGARDING THIS APPROACH?
10		
11	A.	BellSouth does not believe that simply looking at the past can possibly
12		indicate what will happen in the future with equipment that is sensitive
13		to rapid changes in technology. This rear-view mirror approach is
14		clearly not appropriate for projecting the future of this equipment.
15		Emphasis on historical retirement patterns is an indication that one
16		expects the future not to vary significantly from the past. Even a casua
17		observance of the telecommunications industry today leaves no doubt
18		that there is an evolution taking place that cannot help but have a majo
19		effect on telecommunications assets.
20		
21		Retirements, particularly for the technology sensitive accounts, lag well
22		behind the decline in economic value of the assets. Experience with
23		technologies that have been displaced in the past, such as Step-by-
24		Step and Crossbar Switching, shows that the bulk of retirements are

most often concentrated at the end of the life span of a technology.

These retirements are not captured for the technologies that are currently being displaced by simply focusing on historical retirement rates. Life estimates based on these past retirement patterns are much too long for these accounts. The lives used in the Florida cost studies result from BellSouth's analysis of how future events will impact these asset lives.

Q.

MR. MAJOROS POINTS TO AN INCREASE IN THE DEPRECIATION
RESERVE OVER TIME AS EVIDENCE THAT FCC-PRESCRIBED
LIVES HAVE BEEN FORWARD-LOOKING. HOW DO YOU
RESPOND TO HIS STATEMENTS?

Α.

The fact that the reserve has grown over time is not an indication that the reserve is at the appropriate level. The depreciation reserve is the accumulation of all past depreciation accruals, reduced by plant retirements. In an environment in which one technology is rapidly displacing another technology, it is obvious that the depreciation reserve must be built up by appropriate accruals to a level high enough to handle the inevitable asset retirements. Today, we have two situations in which a major technology displacement is occurring, specifically, digital is replacing analog and fiber is replacing copper. Never in the history of this industry has technology displacement been so pronounced. Huge retirements of these old technologies are expected in bulk at the end of the technologies' life span. Depreciation accruals over the years have not been high enough, due to

1		inappropriately long prescribed lives for copper and analog related
2		assets, to position the depreciation reserve for the avalanche of
3		retirements that will soon come.
4		
5		Mr. Majoros contends that a rising reserve percent indicates that the
6		depreciation process is working well. It is obvious that the critical issue
7		here is not just that the reserve has increased over the past few
8		decades. The issue is whether the reserve has increased enough to
9		handle retirements caused by the dramatic paradigm shift that has
0		occurred in the telecommunications industry.
1		
2	Q.	HOW DOES ONE DETERMINE WHAT THE APPROPRIATE
3		DEPRECIATION RESERVE LEVEL SHOULD BE AT A PARTICULAR
4		POINT IN TIME?
5		
6	A.	BellSouth uses the theoretical reserve requirement for this purpose.
7		The theoretical reserve requirement determines in theory what the book
8		reserve level should be at any point of an asset account's life. For
9		example, if the investment has lived 55% of its expected life, the book
0		reserve level should be 55%. If the book reserve is less than the
1		theoretical reserve requirement, then a reserve deficiency may exist.
22		
23	Q.	DOES BELLSOUTH CURRENTLY HAVE A RESERVE DEFICIENCY
24		ON AN FCC BASIS?

1	A.	Yes. In BellSouth's Comments filed in the FCC Access Reform
2		proceeding (Docket No. 96-262), BellSouth estimated its theoretical
3		reserve requirement at 1/1/97 to be 54.6%, and its book reserve to be
4		only 48.6%. This results in a \$2.6B reserve deficiency in total for
5		BellSouth.
6		
7	Q.	HAS THE FCC EVER ACKNOWLEDGED THAT BELLSOUTH HAD A
8		RESERVE DEFICIENCY?
9		
10	A.	Yes. In the late 1980s, the FCC ordered a large reserve deficiency
11		amortization for the local exchange carriers for which it prescribed
12		depreciation rates. This occurred even though the FCC had made
13		some positive changes to its depreciation practices in the 1980s, such
14		as allowing Equal Life Group methodology and the Remaining Life
15		Depreciation Rate formula. Results of these changes did not indicate,
16		as Mr. Majoros states in his testimony on page 6, "that the FCC's
17		projection life estimates have been forward-looking and unbiased."
18		Rather it shows that asset lives had been so inappropriately long that a
19		large reserve deficiency existed despite changes in depreciation
20		methodology.
21		
22	Q.	WHAT SPECIFIC ACTION HAS BELLSOUTH TAKEN THAT
23		INDICATES THAT THE FCC PRESCRIBED LIVES HAVE BEEN
24		INADEQUATE?

1	A.	The most dramatic indication of the inadequacy of prescribed asset
2		lives was demonstrated by the action taken when BellSouth
3		discontinued use of the regulated Financial Accounting Standard (FAS)
4		71 in favor of the nonregulated FAS 101 in 1995. The Company's
5		obligation to show the true value of its assets caused BellSouth to write
6		up the depreciation reserve by approximately \$4.9B for financial
7		reporting purposes. Much of this increase was due to inappropriately
8		long asset lives as prescribed by the FCC.
9		
10	Q.	MR. MAJOROS REFERENCES A STREAMLINED DEPRECIATION
11		RATE-SETTING PROCESS DEVELOPED BY THE FCC. HE GOES
12		SO FAR AS TO SAY THAT THE STREAMLINED APPROACH
13		ASSURES THE DEVELOPMENT OF FORWARD-LOOKING LIVES.
14		WHAT EXACTLY IS THIS STREAMLINED PROCESS AND WHAT IS
15		ITS PURPOSE?
16		
17	A.	As part of CC Docket No. 92-296, the FCC issued a Notice of Proposed
18		Rulemaking in which it stated that it was continuing its "efforts to reduce
19		unnecessary regulatory burdens and their associated costs by
20		undertaking simplification of our depreciation prescription process."
21		The FCC's approach to simplification was to set up ranges of projection
22		life and future net salvage estimates for most of the asset accounts.
23		Under this procedure, if a company meeting certain predetermined
24		criteria proposes to use projection lives or future net salvage estimates
25		from within these ranges, the company need not submit the

1		voluminous, detailed supporting data otherwise required. Thus, the
2		main purpose of this simplification effort was merely to lessen
3		paperwork and the cost of unnecessary regulation. Simplification was
4		not designed to assure forward-looking lives.
5		
6	Q.	WHAT WAS THE BASIS FOR THE PROJECTION LIVES AND
7		FUTURE NET SALVAGE PERCENTAGES THAT WERE USED TO
8		ESTABLISH THESE FCC RANGES?
9		
10	A.	The FCC's ranges were generally developed by nothing more than
11		taking one standard deviation around the mean of the lives and salvage
12		values that the FCC had prescribed most recently for the various
13		accounts for the local exchange carriers. For the first set of accounts
14		for which the FCC ordered ranges, the ranges were based on 1990-
15		1992 represcriptions, and have not been updated since. Lives
16		prescribed in 1990-1992 could hardly be considered forward-looking
17		today.
18		
19	Q.	SOME CONCERN HAS BEEN EXPRESSED IN OTHER
20		JURISDICTIONS AS TO THE APPROPRIATENESS OF THE LIVES
21		USED IN BELLSOUTH'S COST STUDIES FOR A NARROWBAND
22		NETWORK. DO YOU HAVE COMMENTS REGARDING THESE
23		CONCERNS?
24		
25		

Yes. The lives used in BellSouth's cost studies are based on the economics of providing traditional telecommunications services, and would be appropriate even if the only services BellSouth ever provided in the future were narrowband, traditional telephony services. Our existing network can be described as narrowband, and fiber deployment in the feeder is already at a significant penetration level. This is due to the advantages of fiber's high capacity, low maintenance and reliability. Deployment of fiber in the distribution will also be driven by these advantages. Fiber deployment in the feeder is greater than that in the distribution because traffic in the feeder can be aggregated and carried more efficiently in larger "pipes". Increasingly, the economics of fiber deployment make it desirable further and further out in the network (closer and closer to customer premises).

1 A.

It should be pointed out that many customers use modems that operate at 28,800 bits per second (bps) and greater over our narrowband, voice grade network. Data transmission at these rates meet the current needs of most residential customers. However, customer needs are expanding, and BellSouth is designing today's network to meet customers' growing needs. Today's customers are requesting services that require higher bandwidth, but this is a long way from broadband, cable TV capability. Replacement of today's network will occur due to normal mortality and technological obsolescence, that is, when the current technology is not the most efficient means of providing narrowband service in the future.

Two other characteristics of fiber which are closely related are reliability and maintainability. Customer needs for reliability, which are increasing, can be met through the use of fiber in our network.

Maintenance expense, which the Company is always seeking ways to reduce, can also be improved through the use of fiber. Both factors add to the economic attractiveness of fiber for a narrowband, voice grade network.

As stated above, the lives used in BellSouth's cost studies are based on the economics of providing traditional telecommunications services. They do not include future demands for emerging digital and multimedia services, nor do they include the impact of a paradigm shift to a totally competitive marketplace. Including these impacts would likely result in a reduction of lives below the Company's current recommendations.

18 Q. ARE THE LIVES USED IN BELLSOUTH'S COST STUDIES SPECIFIC19 TO FLORIDA?

Α.

BellSouth regional lives are used in the cost studies, but BellSouth's life projections do not vary significantly among states. As can be seen in BellSouth's 1995 and 1996 Depreciation Studies included as Exhibit GDC-2, BellSouth's lives for the major technology-sensitive accounts are the same in all nine BellSouth states. In addition, in BellSouth's

1		most recent represcription by the FCC (that is, prescription of asset
2		lives for the states of Florida, Georgia, North Carolina and South
3		Carolina in 1995), the FCC prescribed projection lives that were
4		identical among these four states for 18 of the 29 accounts that it
5		prescribed, including large technology accounts such as Aerial and
6		Buried Metallic Cable, all Circuit equipment, and General Purpose
7		Computers. The FCC never expressed concern that these lives were
8		the same for all states.
9		
10	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
11		
12	A.	BellSouth's Depreciation organization has provided economic lives for
13		use in the cost studies, that were developed by performing detailed
14		analyses of each asset account. The BellSouth Depreciation Studies,
15		which document this analysis, are attached to this testimony as Exhibi
16		GDC-2. These lives are appropriate for use in BellSouth's cost studies
17		Lives prescribed by the FCC for depreciation purposes are
18		inappropriately long, particularly for the technology-sensitive accounts
19		
20	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
21		
22	A.	Yes, it does.
23		
24		