

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of Southern Bell Telephone and Telegraph Company's Capital Recovery Position) DOCKET NO. 890256-TL
) ORDER NO. 22725
) ISSUED: 3/23/90
)

Pursuant to Notice, a Prehearing Conference was held on March 5, 1990, in Tallahassee, Florida, before Commissioner John T. Herndon, as Prehearing Officer.

APPEARANCES:

LEN S. ANTHONY, 4300 Southern Bell Center, 675 West Peachtree Street, Atlanta, Georgia 30375, and JOHN P. FONS, Ausley, McMullen, McGehee, Carothers & Proctor, 227 Calhoun Street, P.O. Box 391, Tallahassee, Florida 32302, on behalf of Southern Bell Telephone and Telegraph Company.

JOSEPH A. MCGLOTHLIN, Lawson, McWhirter, Grandoff and Reeves, 522 East Park Avenue, Suite 200, Tallahassee, Florida 32301, and BRUCE W. RENARD, Messer, Vickers, Caparello, French, Madsen and Lewis, P.A., 215 South Monroe Street, Suite 701, Post Office Box 1876, Tallahassee, Florida 32302-1876, on behalf of Florida Cable Television Association.

JACK SHREVE, Public Counsel, and CHARLES J. BECK, Assistant Public Counsel, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Room 812, Tallahassee, Florida 32399-1400, on behalf of Citizens of the State of Florida.

DONALD L. CROSBY, Florida Public Service Commission, 101 E. Gaines Street, Tallahassee, Florida 32399-0863, on behalf of the Commission Staff.

PRENTICE P. PRUITT, Florida Public Service Commission, 101 E. Gaines Street, Tallahassee, Florida 32399-0862, on behalf of the Commissioners.

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PREHEARING ORDER

I. BACKGROUND

By Order No. 20162, issued October 13, 1988, in Dockets Nos. 880069-TL and 870832-TL (the Rate Stabilization Proceeding), we ordered Southern Bell Telephone and Telegraph Company (Bell) to collect certain revenues, \$17,114,281 for 1989 and \$147,743,082 for 1990, subject to disposition in 1989 when the company files its next triennial depreciation study. The order states that, if Bell justifies a need for additional depreciation expense, these revenues can be applied to that purpose, but if the need for depreciation is not proven, they can be disposed of otherwise.

Usually, a docket to address reprscription is not opened until a company files its triennial depreciation study. Our Staff opened Docket No. 890256-TL on February 17, 1989, for that purpose because the Office of the Public Counsel (OPC) began its discovery regarding this issue before the anticipated study was filed. In Order No. 20850, issued on March 3, 1989, intervention was acknowledged for OPC in this docket.

On May 12, 1989, OPC filed two motions: the first (the Motion to Close) sought to close Docket No. 890256-TL and to address appropriate depreciation rates for Bell in Docket No. 880069-TL; and the second (the Implementation Motion) sought to require a January 1, 1989 implementation date for any new depreciation rates and recovery schedules, or in the alternative, to refund the money held subject to disposition in 1989. Bell filed responses in opposition to both of OPC's motions on May 24, 1989.

On May 1, 1989, Bell filed an updated capital recovery schedule (the Analog Schedule) for its analog switching equipment slated for retirement in 1989, 1990, and 1991, with a proposed implementation date of January 1, 1989. A complete depreciation study addressing all accounts was filed on May 22, 1989 (the Study), with a proposed implementation date of January 1, 1990.

On June 16, 1989, the Florida Cable Television Association (FCTA) moved to intervene and filed a request for hearing. Bell responded on July 6, 1989, asking us to deny FCTA's

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request for hearing but not opposing FCTA's intervention. In Order No. 21651, issued on August 1, 1989, intervention was authorized for FCTA.

By Order No. 21941, issued September 25, 1989, we denied the Motion to Close. We further held that Docket No. 890256-TL was appropriately opened in accordance with our normal practice dealing with re-prescriptions. We found no language in Order No. 20162 indicating that Bell's re-prescription will be considered as part of the Rate Stabilization Proceeding. Rather, that order held open the question of how we should dispose of potential excess revenues calculated for 1989 and 1990 until we complete our re-prescription. In Order No. 21941, we concluded that proper depreciation rates and recovery schedules must be prescribed before we can deal with the revenues being collected subject to disposition. A decision on the Implementation Motion was deferred until we take final action on the Study. Finally, in Order No. 21941, we granted FCTA's request for a hearing in this Docket.

In Order No. 22471, issued January 25, 1990, the Prehearing Officer established the prehearing procedure to govern this proceeding and adopted a tentative list of eleven issues to be addressed. On February 16, 1990, prehearing statements were filed by Bell, FCTA, OPC and our Staff.

II. TESTIMONY AND EXHIBITS

Upon insertion of a witness's testimony, exhibits appended thereto may be marked for identification. After opportunity for opposing parties to object and cross-examine, the document may be moved into the record. All other exhibits will be similarly identified and entered at the appropriate time during hearing. Exhibits shall be moved into the record by exhibit number at the conclusion of a witness's testimony.

Witnesses are reminded that on cross-examination, responses to questions calling for a yes or no answer shall be answered yes or no first, after which the witness may explain the answer.

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III. ORDER OF WITNESSES

<u>Witness</u>	<u>Appearing For</u>	<u>Date</u>	<u>Issues</u>
<u>Direct</u>			
Prophitt	Bell	3/27/90	1, 3 & 11 & portions of 4 & 6
Hight	Bell	"	2, 8 & 10 & portions of 4, 5 & 6
Snelling	Bell	"	7 & portions of 5 & 7
Davidson	Bell	"	5 & 9
Lohman	Bell	"	
Cornell	FCTA	3/29/90	All Issues
Mercer	FCTA	"	All Issues
Majoros	OPC	3/27/90	The Study and two alternative recommendations
Wilkerson	Staff	"	1, 2, 3, 4, portions of 5-7 and 11
Walls	OPC (Hostile)	"	
<u>Rebuttal</u>			
Prophitt	Bell	3/27/90	1, 3 & 11 & portions of 4 & 6
Hight	Bell	"	2, 8 & 10 & portions of 4, 5 & 6
Frame	Bell	"	2 & 6
Shumate	Bell	"	2, 5, 6 & 7

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<u>Witness</u>	<u>Appearing For</u>	<u>Date</u>	<u>Issues</u>
<u>Rebuttal</u>			
Cornell	FCTA	3/29/90	All Issues
Mercer	FCTA	"	All Issues
<u>Surrebuttal</u>			
Majoros	OPC	3/27/90	

IV. BASIC POSITIONS

BELL'S BASIC POSITION: It is imperative that the Florida Public Service Commission grant Southern Bell adequate capital recovery. Capital recovery provides Southern Bell with the funds necessary to replace facilities which have reached the end of their economic lives, thus allowing Southern Bell to continue furnishing high quality telephone service to the ratepayers of Florida at the lowest possible cost. The consequences of failing to prescribe adequate capital recovery rates are severe. These consequences include: an inflated rate base; an inflated earnings requirement; a slower rate of modernization; higher operating costs; degraded service; a competitive disadvantage vis-a-vis other states in attracting industry; and reserve deficiencies.

The purpose of depreciation expense is to provide a utility a reasonable opportunity for full recovery of prudently invested capital at the rate the capital is consumed. This is accomplished by ratably allocating the cost of an asset (less net salvage) over the economic life of the asset. The cost of an asset is easily determined; it is simply the installed price. The principal difficulty arises in attempting to forecast the economic life of an asset because the economic life of the asset is affected by numerous variables, such as: technological obsolescence; growth (i.e. facility exhaust), damage or destruction; public requirements (i.e. road moves); or maintenance costs. Of these factors, technological obsolescence and growth have the greatest effect upon the majority of Southern Bell's plant in Florida.

Advances in technology have greatly affected the economic lives of Southern Bell's facilities. Digital switches have rendered analog switches obsolete due to their lower cost per access line and greater service capabilities. Advancements in

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fiber optic technology are shortening the lives of Southern Bell's copper cables because fiber cables have virtually unlimited capacity, better transmission quality, are less susceptible to damage from water and lightning, are not affected by electromagnetic induction and have lower maintenance cost. In addition, the first cost of fiber optic cable and electronics, in the next few years, will become less than that of copper for all of Southern Bell's outside plant. The developments in fiber optic facilities are especially important given that this is the first time a technological substitute for copper facilities has arisen since the beginning of the telephone industry.

The Commission recognized the effects of fiber optic technology on Southern Bell's metallic cable accounts in 1986 in Docket No. 861618-TL, Order No. 18029. In this Order the Commission stated that:

Increasing installation of fiber optic facilities is also expected to have an effect on the investment on these accounts (metallic cable-exchange and toll). To date, fiber optics have been installed in trunks and feeder cable routes within the exchange and intraLATA toll areas. The cost of the new technology has decreased to the point that it is now more economical to install fiber for these high density and heavy usage routes than copper. A question remains as to when fiber will be installed as a replacement for copper in the existing distribution network. With the exception of broadband data services, copper facilities are able to provide the same services as fiber facilities. On the other hand, with the conversion of feeder and trunk routes to fiber, the continued use of copper facilities in the distribution network may not be economical.

The Commission then found that Southern Bell had a \$156.6 million reserve deficiency for the three metallic cable accounts because fiber optic equipment had had a "greater impact (upon these accounts) than was projected during the last (1983) represcription."

As explained in Southern Bell's Depreciation Study and in the testimony of Gary Hight and Gerald Prophitt the cost of fiber optic equipment continues to decrease, thus further

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shortening the life of the existing copper cables. A failure to recognize this occurrence can only result in further reserve deficiencies and the severe consequences outlined above.

Importantly, contrary to the assertions of opposing parties, the only time Southern Bell utilizes any new technology is when it is more efficient and more economical than the existing technology. This is the test Southern Bell has used in the past and it is the test Southern Bell will use in the future. As a result, Southern Bell will only place a digital switch or a fiber optic facility when it is the most economical means of providing existing tariffed services. Fiber optic facilities are not being placed in order for Southern Bell to provide cable television transport or programming or any other broadband type service. However, the fact that these facilities, which are the most economical and efficient means of providing telephone service, also possess the capability of transporting video signals is an additional reason supporting their use. Every additional service which Southern Bell can provide over these facilities represents an additional source of revenue to help Southern Bell cover its common cost and help further the Commission's goal of universal service. It would be fiscally imprudent for Southern Bell not to use these facilities to provide as many services as possible, including video services.

A fiber based digital telecommunications infrastructure will be automatic, self-healing, telephone company programmable, customer controlled, integrated services digital network, and intelligent. These capabilities will allow Southern Bell to provide "instant dial tone", thus avoiding the time and expense of dispatching a service technician. It will greatly reduce service interruptions which is extremely important in today's information dependent society. It will allow Southern Bell's customers to gain access and control over the services they need, reducing service order charges and enhancing our customers' ability to obtain the telecommunication services they need. Finally, Southern Bell will be less dependent upon switch manufacturers enabling it to quickly add new features to its central office switches in order to meet its customers' needs. All of these benefits result in lower costs and greater customer satisfaction.

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In summary, Southern Bell's Depreciation Study and testimony fully justify and support Southern Bell's modernization program and the proposed depreciation rates. These plant modernizations are the most efficient and economical means of providing telephone service to the ratepayers of Florida. In addition to their being the most efficient and economical means of providing service they also position Southern Bell and the State of Florida to offer information age services if and when the demand arises. Therefore, there can be no question but that these network modifications should and must be performed. Likewise, there can be no question but that the depreciation rates proposed by the Company should be granted at this time.

FCTA'S BASIC POSITION: This case is not about whether Southern Bell should replace the existing telephone network with new technologies. It is free to do so, so long as the risks are appropriately placed. The docket is instead about who should finance that replacement if Southern Bell goes forward with the proposed modifications. Before requiring customers of existing monopoly telephone services to finance (through higher depreciation rates) the construction of the technology which will replace the facilities that now serve them, Southern Bell must demonstrate that telephone customers would benefit from the substitution through lower costs for those existing services, recognizing the cost of the undepreciated investment in existing facilities as a cost of the replacement decision. Otherwise, increasing depreciation expense would require present monopoly telephone customers to subsidize the new services which the replacement technology is designed to make possible in the future. This principle was not created anew by FCTA; it was articulated by this Commission in Southern Bell's 1983 depreciation case (Order No. 12290, at 4) (July 22, 1983).

Southern Bell proposes to: increase the depreciation expense associated with existing copper cable by \$70 million annually on the premise it will be shortly replaced by fiber; increase depreciation accruals for existing asynchronous circuit equipment by about \$50 million annually to reflect Bell's desire to replace existing facilities with new synchronous equipment; and increase the depreciation expense for recently deployed digital switches by \$5.5 million per year to pave the way for quick replacement by future generation broadband switches.

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This broadband transformation would provide network-wide capability for switched high speed data transmission and full motion video. Inasmuch as the vast majority of customers don't need massive data transmission capabilities, and those few who do are well served by presently available DS-3 dedicated fiber pipes or emerging narrow band ISDN, this broadband transformation proposal essentially amounts to nothing more than a "video strategy," and the strategy is to have monopoly telephone customers subsidize Southern Bell's entry into the video business.

Southern Bell has not demonstrated that the economics of the application of these new technologies to existing monopoly telephone services would shorten the economic lives of existing equipment. This is not surprising, since Southern Bell needs fiber in the loop to deliver video, not for basic telephone services. Fiber has correctly been deployed in certain high volume longer haul routes, where it is well suited. However, fiber in the distribution portion of the local loop has proceeded only to the stage of early, experimental field trials. Many technical problems have not been resolved; the most desirable architecture has not been settled upon; the ultimate costs are unknown. Even in the feeder portion, fiber has been shown to be economic only in certain new growth applications, not as a universal replacement for existing copper.

As with fiber distribution, optical switches are necessary for switched video, not basic telephone services, which highly touted, fresh-out-of-the-carton digital switches now efficiently provide. A new generation of broadband switches has not even emerged from the laboratory. Again, costs are unknown, as is the timing of commercial feasibility.

Synchronous circuit equipment is proposed to enhance the development of broadband standards and advance broadband evolution, not to provide basic telephone services, which are transmitted by existing asynchronous equipment. Southern Bell acknowledges it has made no studies showing the economics of replacing existing asynchronous with proposed synchronous technologies.

It is clear that these three categories of equipment comprise the heart of Southern Bell's broadband/video ambitions, and also constitute the lion's share of the

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depreciation expense increase sought in the case. However, the dearth of economic justification for each cannot be cured by the "study's" speculative references to the potential for new services. Because the proposals have not been shown to be cost beneficial to customers of existing telephone services, Southern Bell's proposals for regulated rates to fund the speeding up of retirement of its investment in existing copper, digital switches, and circuit equipment should be flatly denied. If Southern Bell elects to proceed based on the perceived demand for the new services Bell wants to offer, shareholders, not ratepayers, must bear the risk to finance the construction of these new technologies, and the extra costs must be recovered through prices charged for the new services Southern Bell wants to provide.

Accordingly, in the context of the current proceeding, Southern Bell's accelerated depreciation request for these accounts must be denied. Going forward, the Commission must also impose adequate accounting requirements and review construction plans to ensure that Southern Bell does not attempt to improperly shift the risk of speculative broadband/video ventures to the customers of monopoly telephone services in future rate case or pricing proposals.

OPC'S BASIC POSITION: Southern Bell's depreciation proposals vastly overstate its need for depreciation. The studies implicitly require Southern Bell's present regulated ratepayers to pay for costs caused by Southern Bell's plans to build a broadband integrated services digital network (BISDN). Southern Bell believes that BISDN reduces the expected lives of today's plant, thus resulting in higher depreciation expenses which it expects to collect from current ratepayers.

The company's own documents show that it anticipates substantial additional revenues from BISDN. By the time those revenues begin, Southern Bell expects profit or rate of return regulation to no longer exist. The company will therefore be able to keep its CATV transport and information services profits (including programming profits).

The company plans to incur a low level of incremental costs to provide the BISDN services in the future because present customers would pay all of the primary costs (i.e. the investment). Their proposal to collect higher depreciation expense now -- caused by their plans to build a broadband

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integrated services digital network -- mismatches revenues with costs. The cause of Southern Bell's claimed costs (the anticipation of BISDN service revenues) should be matched with the costs.

The economic justification submitted by Southern Bell for the early retirement of 17 analog switches fails to comply with the economic test described by the Commission in its Order No. 12290 issued July 22, 1983. Specifically, Southern Bell fails to account for the cost of amortizing remaining investment in its studies. Their studies contain other defects in addition to this basic one.

The Citizens submit two proposals to the Commission. One assumes the Commission accepts Southern Bell's claim regarding its anticipated broadband integrated services digital network but recognizes that the cost of that network should be matched to its anticipated revenues. This recommendation results in a \$22 million decrease in Southern Bell's currently approved depreciation and amortization expense. An alternative recommendation is based upon a traditional analysis of Southern Bell's depreciation rates and results in a \$19 million decrease in Southern Bell's currently approved depreciation and amortization expense.

STAFF'S BASIC POSITION: Staff believes that currently-prescribed depreciation rates and recovery schedules should be revised for those accounts where the company has furnished adequate justification for its proposals or where we have modifications to propose and should be retained for all other accounts. Our position on each account is explained under Issue 1. The implementation of the recovery of analog switchers and their associated circuit equipment which are expected to retire in the 1989-1991 period should be January 1, 1989. The implementation of new depreciation rates and any other amortization or recovery schedules should be January 1, 1990.

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V. ISSUES AND POSITIONS:

ISSUE 1: Are Southern Bell's currently prescribed depreciation lives, salvage values, depreciation rates and recovery schedules correct, appropriate and reasonable for the time period 1989 through 1991? If not, what changes need to be made and why?

BELL: Southern Bell's current depreciation rates and recovery schedules are no longer correct, appropriate or reasonable because they do not reflect the rapid rate of technological change being experienced by the telecommunications industry, the tremendous growth occurring in Florida, or the Company's network plans developed in response thereto. Therefore, Southern Bell's currently described depreciation rates and capital recovery schedules must be revised.

The recovery schedules and depreciation rates proposed by Southern Bell in its Depreciation Study (Exhibit 1 to the testimony of Gerald Prophitt) must be adopted to allow Southern Bell adequate capital recovery. These depreciation rates and schedules are derived from economic life estimates that are based upon Southern Bell's short-term, mid-term and long-term network deployment plans which in turn are based on customers' needs and technological changes. These plans indicate that the economic lives of Southern Bell's metallic cable facilities, analog electronic switchers, analog-related circuit equipment, and digital electronic switches are shorter than the lives prescribed in 1986 and must be changed.

FCTA: The burden is upon Southern Bell to prove the need for the changes in depreciation it proposes. The standard it must meet is that which the Commission articulated in 1983: to justify replacing a facility, Southern Bell must prove the substitution lowers total costs, recognizing the undepreciated remaining investment in the existing asset as a cost of the replacement decision. Otherwise, the replacement technology has not shortened the economic life of the existing facility, and to increase depreciation would be to require present customers to subsidize the replacement technology. Southern Bell has failed to demonstrate in its current depreciation study why there should be any changes in depreciation accruals for metallic cable, digital switching, or asynchronous circuit equipment. The great bulk of the requested depreciation hike is to fund deployment of Southern Bell's video strategy and

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should not be subsidized by monopoly rates. FCTA is aware that other parties have challenged additional accounts and reserves the right to adopt their positions upon full review.

OPC: Southern Bell's currently prescribed depreciation lives, salvage values, depreciation rates and recovery schedules are incorrect, inappropriate, and unreasonable for the time period 1989 through 1991. The Citizens submitted two alternative recommendations to Southern Bell's proposal.

The first recommendation assumes that the Commission accepts Southern Bell's claim regarding its anticipated broadband integrated services digital network, but recognizes that the cost of that network should be matched with the anticipated revenues from it. This recommendation results in a \$22 million decrease in Southern Bell's currently approved depreciation and amortization expense.

The alternative recommendation is based on a traditional analysis of Southern Bell's depreciation rates and results in a \$19 million decrease in Southern Bell's currently approved depreciation and amortization expense.

STAFF: With respect to proposed depreciation rates, we believe that the company's proposed lives, salvages and resultant rates for the following accounts are reasonable and justified: (1) Special Purpose Vehicles, (2) Additions to Motor Vehicles, (3) Tools and Other Work Equipment, (4) Furniture, (5) Office Equipment, (6) Computers, (7) Radios, (8) Public Telephone Equipment, (9) Information Origination/ Termination Equipment, (10) Poles, (11) Buried Cable-Fiber, (12) Submarine Cable-Fiber, and (13) Conduit.

We believe that the company has not justified its proposed rates for the following accounts due to problems with investments, reserves, age distributions and/or functional separation: (1) Buildings, (2) Circuit, (3) Digital Switching, (4) Operator Systems, and (5) Metallic Aerial, Underground and Buried Cable. For these accounts, we believe that the currently-prescribed rates should be maintained.

We also believe that the company has not justified its proposed rates for the remaining accounts. For the Motor Vehicle Account, we believe a 3-year amortization schedule is

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appropriate. For the balance of the accounts, we believe the following depreciation factors and rates are appropriate:

	<u>ARL</u>	<u>NS</u>	<u>Reserve</u>	<u>Rate</u>
Electronic Analog	6.6	4	40.4	8.4
Sub. Metallic Cable	13.3	(2)	46.3	4.2
Aerial Cable-Fiber	20**	(5)	N/A	5.3*
Under. Cable-Fiber	16.7	(5)	21.8	5.0
Intra. Cable-Fiber	20**	(5)	N/A	5.3*
Intra. Cable-Metal	16.4	(15)	36.8	4.8
Aerial Wire	5.9	(20)	106.4	2.3

**Denotes Average service life

*Denotes whole life rate

With respect to proposed recovery schedules, we believe that the company's proposed recovery schedule addressing 1989-1991 planned retirements of analog switchers should be modified to include 1992 planned analog switcher retirements as well as any associated circuit equipment retiring during 1989-1992.

ISSUE 2: What changes does Southern Bell propose to its current network to transform the present asynchronous analog copper network into a synchronous digital broadband fiber network utilizing fiber optics to the home?

BELL: It must be emphasized that a synchronous digital network composed of fiber optic facilities is neither inherently broadband nor narrowband. The bandwidth of a transmission is determined by the electronics used. Initially, this network will be narrowband just like today's copper network. Only after demand for broadband services develops to a sufficient level to economically justify the installation of broadband electronics will such services be generally deployed. However, there can be little doubt that public demand for these services will develop.

In order for Southern Bell to transform its asynchronous analog copper network into a synchronous digital fiber network it obviously must deploy such synchronous circuit equipment, digital switches and fiber optic facilities. The reason Southern Bell wishes to deploy these new technologies is the same reason Southern Bell has deployed any new technology in the past, that is, the new technology is more efficient and more economical than the existing technology.

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Digital switches are less expensive on a per line basis than analog switches and can provide more services. Digital switches alleviate the need for costly analog-to-digital conversions when digital loop carrier systems are used. Fiber optic facilities require less maintenance than copper facilities and are less susceptible to electromagnetic interference and damage from corrosion, water and lightning. In addition, fiber optic cables possess virtually unlimited capacity; therefore, additional circuits can be deployed without placing new cable or dispatching a technician. This results in much less maintenance expense and provides a higher quality of service with fewer service interruptions. Synchronous equipment allows Southern Bell the flexibility to use whatever type of equipment is best for a particular purpose, rather than being tied to a single manufacturer or small group of manufacturers.

All of the equipment described above is needed for Southern Bell to provide currently tariffed services in the most economical and efficient manner possible. These changes will not occur "overnight." However, basic economics and intelligent planning dictate that they will be required to serve the needs of Southern Bell's ratepayers in Florida.

FCTA: Southern Bell proposes to replace its current copper wire distribution plant with fiber optic cables, to replace digital switches with broadband optical switching systems, and to replace existing asynchronous with new synchronous circuit equipment to produce a universal switched optical broadband network. Southern Bell proposes to significantly shorten depreciation lives of metallic cable, circuit equipment, and electrical digital switching equipment accounts to effect this change-over. In addition to these actions, Bell's broadband system will involve other network and customer premises modifications of significant proportion, including deployment of optical conversion and power devices on each and every customer premise.

OPC: Southern Bell intends to replace all of its existing analog electronic offices with digital switches by the year 2000 and to replace all of its current circuit equipment by the year 2003. Additionally, it proposes to accelerate the replacement of its copper cable facilities with fiber optic plant so that all copper cable will have been retired or left in place as redundant facilities by 2010.

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The economic justification submitted by Southern Bell fails to comply with the economic test set forth by the Commission in its Order No. 12290 issued July 22, 1983. From the ratepayers' vantage point, the company's proposals are economically unjustified.

STAFF: Southern Bell's proposed changes are detailed in its current depreciation study in these locations:

- "Introduction" - pp.4-11
- "General - Electronic Switching" - page 1, pp.3-6
- "General - Circuit" - pp.2-18
- "General - Cable" - pp.6-13

ISSUE 3: What is the impact of these network planning changes on Southern Bell's represcription proposal?

BELL: The network modification plans described in Southern Bell's Position on Issue 2 are the principal basis for Southern Bell's represcription proposal. These plans result in shorter lives for Southern Bell's existing plant because the new technology is more economical than the old for providing telephone service. The resulting shorter lives for copper plant translate into higher depreciation rates for that plant.

FCTA: The impact of Southern Bell's network planning changes to implement a universal switched broadband fiber network, in the context of the current case, amount to approximately \$125 million of the \$152 million yearly in expense increases in annual depreciation accrual increases for which Southern Bell is seeking approval in this case. Accordingly, the short term impact of Southern Bell's proposal is to increase rates or deprive telephone customers of rate reductions or refunds to which they would otherwise be entitled, but for Southern Bell's broadband video deployment. In a longer term sense, prospective financial burdens will be placed on ratepayers each year to fund Southern Bell's represcription proposal in the form of higher rates or missed refunds.

OPC: These network planning changes increase the cost Southern Bell would recover from its present customers.

The company's planning documents show that if it can recover these costs from present customers, it will be able to offer services later at a low level of incremental costs when

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it expects profit or rate of return regulation to no longer exist. The company's documents show that it anticipates being able to keep CATV transport and other information service profits because of the scenario it foresees.

STAFF: Possibly \$50 to \$70 million of the Company-proposed \$211.2 million increase in annual expenses is associated with "fiber to the home."

ISSUE 4: What timetable does Southern Bell propose for these network planning changes? Is this timetable appropriate?

BELL: Southern Bell anticipates that it will have all digital switching equipment by the year 2000, all synchronous circuit equipment conforming to international standards by the year 2000 to 2005, and all fiber optic facilities by the year 2010.

It would be incorrect to conclude that the availability of all fiber optic facilities by the year 2010 is a network planning change. Rather it is an evolution to an all fiber network in which copper cable will be replaced only when it is economically feasible to do so. Copper will not be taken out of service before the end of its useful life. The evolution will take place gradually, but certainly.

Southern Bell placed its first fiber optic trunk cable in October of 1979. A rapid transition from metallic facilities to fiber facilities occurred in the interoffice network during the following three years. By 1983 single mode fiber cables were being placed for all new interoffice facility requirements.

As technology advanced and costs decreased, by the mid-1980s fiber cable had replaced copper cable as the most economic transport facility from a central office to a remote terminal (that is, the feeder portion of Southern Bell's network). Recent developments in digital loop carrier technology and further decreases in fiber optic equipment prices indicate that fiber will soon become the economic choice for the transport facility from a remote terminal to or near a customer's premise (i.e. the distribution portion of the network).

Again, it must be emphasized that the use of fiber optic facilities is not itself a network plan, rather it is a consequence of the network strategy that requires Southern Bell

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to meet the needs of its customers as efficiently and economically as possible. As fiber becomes more economical than embedded copper, fiber will be substituted for copper in new installations, replacements for growth purposes and moves and relocations, and ultimately when the copper plant can no longer be maintained economically. It is anticipated that this crossover point will occur in the mid 1990's. This is the basis of Southern Bell's forecast that Southern Bell's network will be totally fiber by the year 2010. It must be emphasized that Southern Bell paces the rate of network modification to align with telephone service economics.

As explained earlier, analog switching equipment is basically obsolete and Southern Bell is in the midst of replacing this equipment with digital switches. The circuit equipment associated with the analog switches will be replaced during the same time period.

FCTA: Southern Bell's date of 2011 for replacement of copper is inappropriate. For distribution, Southern Bell assumed "broadband stimulus" would allow it to reach that result -- an irrelevant and speculative consideration. The date should also be rejected for feeder, in that fiber is used there currently only for new applications, rendering speculative any attempt to gauge when it will overcome the economic hurdles involved with meeting the replacement standard. Inasmuch as there is no cost experience with either broadband switches or synchronous equipment, and both are clearly driven by broadband, not POTS considerations, the proposed timing is wholly unsupported and inappropriate.

OPC: See Issue 3.

STAFF: The timetable Southern Bell is proposing for these network planning changes is from the present to about year 2011. The timetable of about 2020, or the early 2020's, is more in line with the usual industry estimates of complete retirement of the presently embedded metallic distribution plant.

ISSUE 5: What benefits (e.g., improved network capabilities, new service offering, lower costs) are derived as a result of these proposed network planning changes?

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BELL: As explained in Southern Bell's response to Issue 2, digital switches, fiber optic facilities and synchronous circuit equipment all produce cost benefits as well as service quality enhancements. Digital switches are superior to analog switches, in particular the No. 1A ESS, for the following reasons:

1. The digital switch has the ability to interface directly with Digital Loop Carrier (DLC) systems. This eliminates the need for a costly central office terminal which is required to provide an analog to digital conversion for each DLC-derived loop. An analog switch simply cannot do this;
2. Eventually, the integration of digital loop carrier with the digital switch will allow the elimination of the main distribution frame which will reduce maintenance and administration costs through the elimination of wiring changes due to service orders and routine or extraordinary maintenance on the frame in general;
3. Digital switches require less administration and maintenance which translates into force reduction savings;
4. Digital switches can offer more services than analog switches, in particular Digital ESSXsm;
5. ISDN can be provided more economically and efficiently through a digital switch; and
6. AT&T, the manufacturer of the 1A ESS switch, does not plan any additional software upgrades, which means no additional capabilities will be supported and manufacturing economies of scale will be lost.

In addition to these service benefits it is also anticipated that the cost trend for digital switching will only be +1% as opposed to +5% for analog switches.

Fiber optic facilities require less maintenance than copper facilities and are less susceptible to damage from corrosion, water, lightning and electromagnetic interference. In addition, fiber optic cable possesses virtually unlimited

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capacity and, therefore, additional circuits can be deployed without placing new cable or dispatching a technician. Thus, fiber optic facilities require less maintenance and provide higher quality service with less trouble. In addition, fiber optic facilities do not require regenerators every 5000 feet as do metallic facilities. These regenerators must be kept dry, ventilated and powered and spare regenerators maintained in the event of a failure. Fiber optic facilities also require less conduit space than their metallic counterparts and, therefore, help alleviate the need for the placement of additional conduit in order to accommodate growth. Finally, fiber optics can be repaired more quickly and easily than their metallic counterparts (for example, it takes much longer to splice a 1500 pair cable back together as opposed to two fiber optic pairs equipped to provide similar capacities).

As explained earlier, fiber optic facilities have steadily migrated from the interoffice trunking portion of the network to the feeder portion as the most cost effective means of providing telephone service. In the very near future fiber is expected to expand into the distribution portion of the network. Over the past few years the capacity of fiber optic cables has drastically increased while the price of the facilities continue to decrease. Early fiber optic rates were 45 megabits per second (mds) and were capable of transmitting 672 simultaneous telephone conversations over two fibers. Today, fiber optics can travel at rates of 1.2 gigabits (gbs) and a fiber pair is capable of transmitting 16,128 simultaneous conversations. It would take a 1500 pair digital metallic cable to provide the same capacity as two fiber optic pairs.

The price of fiber optic cable has decreased precipitously over the past few years dropping from 60 cents per meter to 20 cents per meter. During the years 1986, 1987, 1988, and 1989 fiber cable prices decreased 20%, 10%, 22% and 5% respectively, an additional decrease of 15% is expected for the year 1990 based on vendor bids Southern Bell has received in response to a Request for Quotes. Fiber optic electronics have experienced similar price decreases.

Synchronous network equipment will allow Southern Bell the flexibility to use whichever manufacturer is best for a particular purpose rather than being required to use a single or a small group of manufacturers' product in order to avoid compatibility problems.

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As mentioned in Southern Bell's Position on Issue 2, a modern network utilizing these facilities will be automatic, self-healing, telephone company programmable, customer controlled, ISDN, and intelligent. These capabilities translate into cost savings and higher quality service. The customer will experience fewer service outages, have greater control over his telephone services, enjoy "instant dial tone" and additional service offerings. Southern Bell will thus experience cost savings and will be able to respond to a customer's needs more efficiently and expeditiously.

These network modification plans will also help Southern Bell accommodate the substantial growth which is occurring in Florida in a cost effective manner. Over the past three years Southern Bell has added over 600,000 access lines which translate into approximately 600 new lines per day.

Importantly, this network will allow Southern Bell to remain competitive in the telecommunications market and at the same time attract business and industry to the state. Southern Bell faces competition from interexchange carriers, alternative access providers, private networks, customer owned networks, and foreign teleport type telecommunications providers. All of these competitors will erode traditional sources of support for basic local exchange service. New sources must therefore be developed. The network modernization proposed by Southern Bell will help fill this void.

In a similar fashion, the State of Florida competes with other states and countries for business. The quality of a state's telecommunications infrastructure is one of the key factors considered by businesses when deciding where to locate their operations.

Local residential rates are supported by toll and access revenues. Each time a business customer leaves Southern Bell's network, either to use a competing network or to relocate to another state, Southern Bell loses business, toll and access revenues. This loss of revenues detrimentally impacts the provision of basic residential exchange service. A modern telecommunications network will encourage business customers to remain in the state, continue using Southern Bell's network and will attract new business and industry to the State of Florida.

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FCTA: The only significant network capability or new service offering that Southern Bell's broadband network plans would allow is the provision of video service. All other known voice and data applications can be handled without the universal broadband switched fiber network sought by Bell. In fact, by committing so many resources in the wrong places, Southern Bell would jeopardize its ability to meet the legitimate needs of its customers.

Moreover, Southern Bell has failed to demonstrate that replacing existing copper, digital switches, and circuit equipment would lower costs for POTS; the evidence is that the costs of replacement are unknown but would be very expensive. It follows that the new service offerings would also be expensive unless subsidized by POTS customers. In this regard, it is clear that Southern Bell's envisioned network will be much more costly, rather than less costly, for consumers -- resulting in a "fiber to the rich" network and the economic exclusion of many ratepayers from the Information Age allegedly sought by Southern Bell. It is not possible from the specific depreciation information presently in the record to ascertain the total cost of Southern Bell's proposed network changes. In the context of the current proceeding, however, approximately \$125 million dollars a year in additional expenses is the annual cost added for depreciation acceleration to support Bell's broadband program. It is clear, that current telephone ratepayers should not be burdened with the cost and associated risks of such a deployment strategy. Rather, those future ratepayers that will actually utilize the broadband services should be required to pay for those services. Any deployment of the new broadband network should be funded in the interim by Southern Bell shareholders who must appropriately bear the risk associated with this new and risky venture. If the Commission fails to provide proper safeguard mechanisms to address these concerns, current ratepayers will be asked to fund through higher telephone rates deployment of network capabilities which they may neither need nor want.

OPC: According to Southern Bell's documents, the benefit resulting from the proposed network planning changes is to give the company the ability to provide CATV transport and other information services at a low level of incremental cost in the future when it foresees it will no longer be tied to profit or rate of return regulation.

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STAFF: The proposed network planning changes offer the benefits of improved network capabilities, new service offerings, and lower costs. Fiber cable offers improved network capabilities by offering high-speed transmission with higher speed upgrades as needed as well as increased capacity. Fiber allows new service offerings through the transmission capabilities for broadband services. Lower costs due to fiber cable are through the ease of installation due to its smaller size, the ease of maintenance with a higher quality of service, and the need for fewer regenerators. Digital switching provides improved network capabilities through its immediate connectivity and modular upgrades. Digital switching has greater flexibility with software installation to offer new services (e.g., Digital Essx, ISDN, LightGate, and SynchroNet). The digital switching modularity and self-healing and self-diagnostics for ease of maintenance lead to lower costs.

ISSUE 6: What are the anticipated total costs of these proposed changes? How would or should the current ratepayers be affected? How would or should future ratepayers be affected?

BELL: At this time it is not possible to calculate the total costs of implementing the network modification plans described in Southern Bell's Study and its testimony. The equipment which will be placed in the future and the cost of such equipment cannot presently be determined. It must be remembered that the network is not static; it is always growing, wearing out or being relocated. Over the next several decades all of the current plant would have been replaced anyway with copper. Now, however, with the demonstrated qualities and economy of fiber, instead of using copper the Company will use fiber. Based upon current cost trends, it is safe to say that substituting fiber for copper will significantly reduce the cost of the network from what it would otherwise have been in 2010.

As explained earlier, digital switches offer substantial cost savings over analog switches. Therefore, the cost of transforming an analog central office into a digital central office will be less than the cost of continuing to use the analog switch to provide telephone service. Similarly, as stated in Southern Bell's Position on Issues 2 and 5, Southern Bell will not deploy fiber optic facilities until they are more economic than existing copper facilities for the provision of

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telephone service. Thus, when fiber optic facilities are deployed, the cost incurred to do so will be less than the cost of using copper facilities. With the approval of international transmission standards, all of the world's telecommunications equipment manufacturers will produce equipment that conform to these standards. Thus, future SONET compatible circuit equipment will cost less than asynchronous circuit equipment. As a result, although an exact cost cannot be calculated the total cost will be less than the cost of continuing to serve Florida's ratepayers using existing technology.

Both current and future ratepayers will benefit from these network modifications because the network will have been constructed to provide all presently tariffed services in the most economical manner possible. It is imperative that the depreciation rates prescribed by this Commission reflect the effect of these network modifications on the existing plant. Failure to do so will result in an inflated rate base, inflated earnings requirement, a slower rate of modernization, higher operating costs, substandard service, place Florida at a competitive disadvantage vis-a-vis other states in attracting business and industry, and reserve deficiencies which cause a future generation of ratepayers to pay for the cost of assets consumed by a previous generation of ratepayers.

FCTA: In the context of the current proceeding, the Southern Bell proposed network changes would result in a approximately \$125 million per year in increased depreciation expense associated with existing investment. The purpose is to enable the replacement by new technologies which are not proven to be cost effective for POTS. There are also enormous but as yet unquantified costs associated with construction and plant deployment not directly included in the pending depreciation represcription. Current ratepayers are being asked to subsidize and fund Southern Bell's deployment of future broadband services. The Commission should assure that telephone ratepayers do not pay for Southern Bell's strategy for entering the video business, and the depreciation request should be denied. Southern Bell's shareholders should pay for the replacement of the currently more than adequate telephone network, and rates for new services made possible by the new network configuration should be set to assure full recovery of all related investments and expenses in deploying those capabilities. Those future ratepayers using those future

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non-basic telephone services should pay for those services in future rates; current basic telephone customers should not foot the bill.

OPC: Southern Bell's depreciation study proposes a \$174 million increase in depreciation expense resulting primarily from changes in depreciation believes. It includes \$98 million of additional amortization relating to its 1989-1991 analog ESS retirement plans (including the related circuit retirements). Much, if not all, of the increase can be directly attributed to Southern Bell's anticipation of revenues to be derived from services which can only be provided by a broadband integrated services digital network (BISDN).

The Commission should match the costs caused by Southern Bell's plans with the revenues it anticipates.

STAFF: The total costs of proposed changes to improve the capabilities of the network are not known. Both current and future ratepayers must bear the cost of the network to the extent of their benefits from the network. Those benefits and associated network allocations should be determined at a time when earnings are determined.

ISSUE 7: After weighing the anticipated costs and benefits of these proposed network planning changes, are the changes in the depreciation rates proposed by Southern Bell appropriate and necessary?

BELL: The information contained in Southern Bell's testimony and its 1989 Depreciation Study conclusively establishes that the network modifications and improvements proposed by Southern Bell are the most economical means of providing Southern Bell's existing tariffed services. The depreciation rates and recovery schedules proposed by Southern Bell accurately reflect the effects these modifications and improvements will have on Southern Bell's existing assets and must be adopted.

As explained in the Company's Position on Issues 2 and 5, the replacement of analog switches with digital switches and copper cables with fiber optic facilities is the most economical means of providing the telecommunications infrastructure required to meet the needs of the ratepayers of Florida.

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Importantly, while Southern Bell's network modification plans and depreciation studies are not based upon a desire to provide cable TV transport or information services, the fact that these facilities are capable of providing broadband services are further justification for their deployment as potential providers of significant contribution to the support of telephone service. Southern Bell will continue to modernize its network and place facilities in order to provide telephone service as economically as possible. The fact that these facilities can also provide a platform for future services, adds even more value to the overall network. Thus, the benefits of substituting fiber for copper and digital switches for analog switches outweigh the associated costs and the depreciation rates and recovery schedules proposed by Southern Bell are appropriate and necessary.

FCTA: No. Until Southern Bell demonstrates that total costs--including any undepreciated investments in existing equipment--would be lower for POTS with replacement, Southern Bell should not be allowed to increase regulated telephone rates through depreciation acceleration to fund its proposed broadband/video network. The added costs and risks associated with Southern Bell's foray into broadband video delivery should be placed on the shoulder of the shareholders and not the telephone ratepayers. Southern Bell's current depreciation rates are appropriate and adequate to provide telephone service to its customers in Florida. Higher depreciation should not be used to finance Bell's proposed forays into new businesses, where those ventures are not cost effective for telephone customers.

OPC: No. The Commission should match the costs with anticipated revenues.

STAFF: Many of the changes proposed by Southern Bell have not been supported or justified. Other changes proposed appear appropriate. See our position on Issue 1.

ISSUE 8: If Southern Bell fails to demonstrate that its proposed broadband network modifications are cost effective for providing POTS, should the Commission institute accounting and ratemaking treatment to monitor subsequent investments in a synchronous digital fiber broadband network utilizing fiber technology? If so, what accounting and ratemaking treatment

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should be instituted, and to what extent should telephone customers bear the cost of such investments in subsequent depreciation and/or ratemaking decisions?

BELL: As fully explained in Southern Bell's Position on Issues 2, 5 and 6, the network modifications proposed by Southern Bell are the most economical means of providing telephone service. Therefore, there is no need for the Commission to institute any accounting and/or rate making treatment to monitor subsequent investments in the facilities discussed above.

As explained earlier, the network modifications proposed by Southern Bell are not being made in order to provide broadband services. The reason Southern Bell must make these network modifications is to meet its franchise service obligations as economically and efficiently as possible. The placement of digital switches and fiber optic equipment does not instantly produce a broadband network. Fiber optic facilities and digital central offices are not inherently broadband. Initially, the network will be narrowband just like today's copper network. Only after the demand for broadband services develops to a sufficient level to economically justify the installation of incremental broadband electronics, will they be generally deployed.

However, the fact that these facilities possess the capability to expand to broadband services is just another reason why it is prudent for Southern Bell to install them now. Fiber optic facilities are cost effective for providing telephone service and they have the flexibility and capacity to provide broadband services as customer demand grows. The new services these facilities will allow Southern Bell to provide will generate additional revenues to help Southern Bell cover its common costs.

FCTA: Yes, that demonstration is a prerequisite to the imposition of higher depreciation expense associated with existing facilities on monopoly service ratepayers. Absent such a showing, the danger exists that Southern Bell may again attempt to force telephone customers to subsidize those investments, as it has done in this case. The Commission should institute accounting and ratemaking systems to track and assure that investments in switched broadband network capabilities are thoroughly identified and segregated. This is necessary to assure that basic telephone rates and regulated

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operations do not fund such activity and to assure that the rates ultimately charged by Southern Bell for the provision of broadband network capabilities are priced to recover their full costs and overhead. The Commission should require Southern Bell to provide a detailed accounting of all present and future planned investments and expenses related to deployment of a synchronous digital fiber broadband network which should be available for inspection and use by the Commission and affected parties on an ongoing basis. Customers should pay, through depreciation, prices for services and return on ratebase no more than the most cost effective means of supplying their needs. Extra costs must be paid for by new services or absorbed by stockholders.

OPC: Yes, the Commission should institute accounting and ratemaking treatment to monitor subsequent investments in a synchronous digital fiber broadband network. The Commission should adopt the accounting requirements described in the prefiled testimony of Dr. Nina W. Cornell.

STAFF: The current accounting system and records provide for the accumulation of adequate investment and expense data on which the Commission can make future decisions. The ratemaking treatment should be decided in an earnings proceeding.

ISSUE 9: How is the term "plain old telephone service" (POTS) to be defined for the purposes of this proceeding?

BELL: For the purpose of this docket, the term "POTS" should be defined to mean existing tariffed telephone service provided by Southern Bell, in contrast to the normal concept of POTS as simply an access line. Southern Bell is required to provide its tariffed services to all customers on demand, to the extent Southern Bell has facilities available to do so. Thus, Southern Bell must construct its network to provide all of these services, in the aggregate, as economically as possible. It should be emphasized that the definition of POTS is evolving and expanding throughout Southern Bell's region, and around the world, as customers demand additional services.

FCTA: Plain old telephone service for purposes of this proceeding, is ubiquitous two-way switched voice communications. However, in terms of preventing subsidization, FCTA's position is that existing services should not subsidize new services.

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OPC: "Plain old telephone service" need not be defined for the purpose of this proceeding. However, it could be defined to include those regulated services of Southern Bell likely to remain regulated over the remaining life of Southern Bell's current assets.

STAFF: We do not believe that the definition of "plain old telephone service" (POTS) is necessary in this proceeding in order for the Commission to re prescribe this company's depreciation rates.

ISSUE 10: Are Southern Bell's plans for retiring certain central office equipment within the 1989-1992 period prudent? Are the 1989-1992 planned additions for the central office equipment which are scheduled for retirement during this same time period prudent?

BELL: Yes. When it becomes necessary to expand or replace an existing analog central office Southern Bell has basically three choices: 1) expand the existing analog switch; 2) employ a "digital cap"; or 3) replace the analog switch with a digital switch. As stated in Southern Bell's Position on Issues 2 and 5, a digital switch offers substantial cost savings over an analog switch, can provide all of the services presently offered by an analog switch and can offer numerous new services. Thus, when faced with the choice of expanding the analog switch or replacing it with a digital switch the economically prudent decision is replacement. Southern Bell's economic analyses are developed on a case-by-case basis to insure that the appropriate choice is made.

Although the placement of a digital cap (i.e. place a digital switch along side an existing analog switch and let the digital switch handle new growth and demand) has superficial appeal, there are a number of penalties which occur in the management of a dual entity central office which cause this solution to be uneconomic. The advantages of digital switches cannot be fully implemented throughout the central office and, therefore, significant savings are not realized. In addition, Southern Bell must maintain two separate technologies in the same central office. The maintenance expense and service disadvantages associated with this situation make the use of a digital cap imprudent.

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As a result, the analog central offices Southern Bell plans to retire during the 1989-1991 time frame are prudent.

FCTA: Any retirements or additions geared to deployment of a fiber broadband digital network should not be considered prudent for basic telephone service and should not be reflected in regulated rates, including underlying depreciation rates. The Commission should identify those portions of the proposed additions and retirements in this category and disallow any such actions for ratemaking purposes.

OPC: Southern Bell has not shown these retirements to be prudent. Its 17 studies contain flaws in design so fundamental that the results provide no basis to decide for or against the early replacement of the analog switches study.

The effect of the identifiable, conceptional, and material flaws in the studies biases the results in favor of early replacement of the analog switches. It is probable that properly conducted discounted cash flow analyses of the early replacement of the 17 switches would demonstrate that the economics do not favor early replacement of most, if not all, of the 17 switches.

Southern Bell has not met its burden of proof supporting the increased amortization it wishes to impose upon its ratepayers.

STAFF: Staff considers Southern Bell's plans for the retirement and addition of central office and circuit equipment for 1988 to 1992 as prudent.

ISSUE 11: What should be the implementation date of any revised depreciation rates and recovery schedules?

BELL: The implementation dates of revised depreciation rates and capital recovery schedules should be those proposed by Southern Bell in its May 1, 1989, and May 22, 1989 filings with the Commission. These dates are January 1, 1989, and January 1, 1990, respectively.

FCTA: The implementation date of any revised schedules and rates should be based on the need for greater expense rather

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than tied to the amount of money held subject to refund in Docket No. 880069-TL. Therefore, the appropriate effective date for any change is January 1, 1989.

OPC: January 1, 1989.

STAFF: A January 1, 1989 implementation date is appropriate for the recovery schedules relating to analog switchers and their associated circuit equipment which are projected as retiring in the 1989-1991 period. Implementation of new depreciation rates, and any other amortization or recovery schedules, which are justified as being appropriate should be as of January 1, 1990.

VI. EXHIBIT LIST

<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Prophitt	Bell	HGP-1	Southern Bell's 1989 Depreciation Rate Study and Revised Analog Electronic Switching Equipment Capital Recovery Schedule
		HGP-2	Summary-Principal Findings of Southern Bell's Depreciation Study
		HGP-3	Summary-Principal Reasons For Revising Depreciation Rates
		HGP-4	Florida Reserve Ratios
		HGP-5	S-Shaped Learning Curve
		HGP-6	Rensselaer Polytechnic Institute Fisher/Pry Analysis
		HGP-7	Hough Charts

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>	
Prophitt	Bell	HGP-8	1979 Fisher/Pry Substitution Model	
		HGP-9	1980-1989 Substitution of Electronic for Electromechanical Switching	
		HGP-10	Reported Reuse Salvage As A Percent of Reported Gross Salvage	
		HGP-11	Reported Salvage Adjusted By Extracting Estimated Reuse Salvage	
		HGP-12	Composite Future Net Salvage	
		HGP-13	Equivalent Current Economic Effect of Amortization an Unamortized Balance Over 5 Years and Over 10 Years	
		Staff	HGP-14	Bell's Supplemental Response to Staff's Interrog. No. 12
			HGP-15	Bell's Response to Staff's Interrog. No. 15
	HGP-16		Bell's Response to Staff's Interrog. No. 27	
	HGP-17		Bell's Response to Staff's Interrog. No. 29	
	HGP-18		Ps. 1-3 of Bell's Response to Staff's Interrog. No. 30	

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Prophitt	Staff	HGP-19	Bell's Response to Staff's Interrog. No. 32
		HGP-20	Bell's Response to Staff's Interrog. No. 34 A, B, C, D, E & Supplemental Response to A
		HGP-21	Bell's Response to Staff's Interrog. No. 35 A, B, C, D
		HGP-22	Bell's Response to Staff's Interrog. No. 36
		HGP-23	Bell's Response to Staff's Interrog. No. 38
		HGP-24	Bell's Response to Staff's Interrog. No. 40
		HGP-25	Bell's Response to Staff's Interrog. No. 43
		HGP-26	Bell's Response to Staff's Interrog. No. 44
		HGP-27	Bell's Response to Staff's Interrog. No. 45
		HGP-28	Bell's Response to Staff's Interrog. No. 48
		HGP-29	Bell's Response to OPC's Interrog. No. 1
		HGP-30	P.27, "General Cable Narrative," of Bell's 1989 Interstate Depreciation Study filed with the FCC

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Prophitt	Staff	HGP-31	Technology Futures, Inc.: "Technological Substitution in Transmission Facilities for Local Communications"
		HGP-32	Late-Filed Deposition Exhibit No. 1
		HGP-33	Late-Filed Deposition Exhibit No. 3
		HGP-34	Late-Filed Deposition Exhibit No. 4
		HGP-35	Portion of Frame's Late-Filed Deposition Exhibit No. 1
Hight	Bell	GWH-1	1AESS Costs 2BESS Costs
		GWH-2	Ratio of 1AESS to Digital Ratio of 2BESS to Digital Development of Ratios of Line Cost Based on Costs per Line (4 pages)
		GWH-3	BellSouth Maintenance Cost Models for Local Switching Systems (8 pages)
		GWH-4	Annual Maintenance Ratios Development of Maintenance Ratios
		GWH-5	Present Worth of Future Amount

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>	
Hight	Bell	GWH-6	Documents Produced for Inspection by Public Counsel in FPSC Docket No. 890256-TL	
		Staff	GWH-7	Bell's Response to Staff's Interrog. No. 39
			GWH-8	Bell's Response to Staff's Interrog. No. 41
			GWH-9	Bell's Response to OPC's Interrog. No. 6
			GWH-10	Bell's Response to OPC's Interrog. No. 24
Frame	Bell	MGF-1	Asynchronous Central Office	
		MGF-2	Fiber Center Using Fiberworld	
		MGF-3	Northern Telecom's Commitment for Fiber to Home	
		MGF-4	Portion of Late-Filed Deposition Exhibit No. 1	
Davidson	Bell	WHD-1	Network Evolution and Customer Services	
		WHD-2	Depreciation Rates and Lives	
		WHD-3	Capital Expenditures Per Access Line	

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Lohman	Staff	TFL-1	Bell's Supplemental Response to Staff's Interrog. No. 12
		TFL-2	Bell's Response to Staff's Interrog. No. 14
		TFL-3	P. 1 of Bell's Response to Staff's Interrog. No. 17
		TFL-4	P. 1 of Bell's Response to Staff's Interrog. No. 25
		TFL-5	P. 1 of Bell's Response to Staff's Interrog. No. 26
		TFL-6	Bell's Response to Staff's POD No. 6
		TFL-7	Bell's Response to Staff's Interrog. No. 34 A, B, C, D, E & Supplemental Response to A
		TFL-8	Bell's Response to Staff's Interrog. No. 35 A, B, C, D
Lohman	Staff	TFL-9	Bell's Response to Staff's Interrog. No. 47
		TFL-10	Late-Filed Deposition Exhibit No. 3
		TFL-11	Ps. 1 & 2 of Bell's Response to Staff's Interrog. No. 22

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Cornell	FCTA	NWC-1	Biography of Nina W. Cornell -Direct
		NWC-2	CATV Business Plan - Direct
		NWC-3	Hypothetical Taxicab Example - Rebuttal
Majoros	OPC	MJM-1	Two page letter obtained from Southern Bell through discovery
		MJM-2	Depreciation study of Southern Bell's property
		MJM-3	Review and Analyzes Southern Bell's discounted cash flow (CUCRIT) studies of retirement plans for 17 analog switches
		Appendix A	Education & Work Background
Wilkerson	Staff	MCW-1	Bell's 1983 IntraState Depreciation Study: P.6 General O.S.P. narrative, P.3, Aer. Ca. Exch, P.3 U.G. Ca. Exch, P.3 Bur. Ca. Exch, P.8 General O.S.P. narrative, P.11 Aer. Ca. Exch, P.8 Aer. Ca. Toll, P.10 U.G. Ca. Exch, P.8 U.G. Ca. Toll, P.9 Bur. Ca. Exch, P.8 Bur. Ca. Toll

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<u>Witness</u>	<u>Proferring Party</u>	<u>Exh. No.</u>	<u>Title</u>
Wilkerson	Staff	MCW-2	P.4 of the Executive Summary of "Status of Competition in the Telecommunications Industry," a report to the Florida Legislature by the Commission dated December 1, 1989
		MCW-3	Analog Switchers Retiring in 1989
		MCW-4	Circuit Equipment Projected for Retirement with Analog Switchers (1990-1992)

VII. STIPULATIONS:

Bell, FCTA, OPC and Staff are not aware of any issues that have been stipulated at this time.

VIII. PENDING MOTIONS:

(1) On January 26, 1990, OPC submitted the Testimony of Michael J. Majoros, Jr., and Exhibits MJM-2 and MJM-3 to that testimony which contains information classified as confidential by Order No. 22116, issued October 31, 1989. These three documents were assigned Documents Nos. 815-90, 816-90 and 817-90. On February 13, 1990, OPC submitted corrected pages to this testimony and to these exhibits, and we assigned them Documents Nos. 1403-90 and 1404-90, respectively. At the Prehearing Conference on March 5, 1990, OPC moved that Bell be compelled to request confidentiality of those portions of these documents for which Bell believes such treatment is appropriate. The Prehearing Officer deferred a ruling on this motion until an attempt is made at the hearing to introduce or discuss this material.

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(2) On January 26, 1990, FCTA submitted Exhibit NWC-2 to the Testimony of Nina Cornell which contains information classified as confidential by Order No. 22116, issued October 31, 1989. This document was assigned Document No. 842-90.

(3) On March 12, 1990, Bell submitted Attachments A, C and E which are responses to OPC's Request for Production of Documents served on February 9, 1990. Attachment A, assigned Document No. 2255-90, involves the company's CATV Business Plan. Attachment C, assigned Document No. 2256-90, involves the company's CATV Transport Approach. Attachment E, assigned Document No. 2257-90, involves the company's CATV Services Impact. On that day, Bell filed a motion for a protective order covering the portions of these documents for which it requests confidential treatment.

IX. RULINGS:

(1) By Order No. 21930, issued September 21, 1989, the Prehearing Officer issued a Temporary Order on Confidentiality which held that portions of certain materials submitted by Bell were confidential information. By Order No. 22116, issued October 31, 1989, the Prehearing Officer issued an Order on Confidentiality that finally determined the confidentiality on these materials.

(2) By Order No. 22636, issued March 5, 1990, the Prehearing Officer denied a Motion to Compel filed by Bell on February 9, 1990, which sought an order compelling FCTA to answer Bell's First Set of Interrogatories served August 18, 1989, and certain questions in its Seventh Set of Interrogatories served January 26, 1990. At the March 20, 1990 Agenda Conference, the Commission denied Bell's Motion for Full Commission Review of Order No. 22636.

(3) By Order No. 22662, issued March 12, 1990, the Prehearing Officer issued a Second Order on Confidentiality which held that portions of certain additional materials submitted by Bell were confidential information.

(4) At the Prehearing Conference on March 5, 1990, the Prehearing Officer granted OPC's Motion for Leave to File Surrebuttal Testimony of Michael J. Majoros, Jr., filed on that day.

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X. PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION:

In the event it becomes necessary to handle confidential information, the following procedure will be followed:

1. The Party utilizing the confidential material during cross examination shall provide copies to the Commissioners and the Court Reporter in envelopes clearly marked with the nature of the contents. Any party wishing to examine the confidential material shall be provided a copy in the same fashion as provided to the Commissioners subject to execution of any appropriate protective agreement with the owner of the material.
2. Counsel and witnesses should state when a question or answer contains confidential information.
3. Counsel and witnesses should make a reasonable attempt to avoid verbalizing confidential information and, if possible, should make only indirect reference to the confidential information.
4. Confidential information should be presented by written exhibit when reasonably convenient to do so.
5. At the conclusion of that portion of the hearing that involves confidential information, all copies of confidential exhibits shall be returned to the owner of the information. If a confidential exhibit has been admitted into evidence, the copy provided to the Court Reporter shall be retained in the Commission Clerk's confidential files.

If it is necessary to discuss confidential information during the hearing the following procedure shall be utilized.

After a ruling has been made assigning confidential status to material to be used or admitted into evidence, it is suggested that the presiding Commissioner read into the record a statement such as the following:

The testimony and evidence we are about to receive is proprietary confidential business information and shall be kept confidential pursuant to Section 364.093, Florida Statutes. The testimony and evidence shall be received by the Commissioners in executive session with only the following persons present:

- a) The Commissioners
- b) The Counsel for the Commissioners
- c) The Public Service Commission staff and staff counsel
- d) Representatives from the office of public counsel and the court reporter
- e) Counsel for the parties
- f) The necessary witnesses for the parties
- g) Counsel for all intervenors and all necessary witnesses for the intervenors.

All other persons must leave the hearing room at this time. I will be cutting off the telephone ties to the testimony presented in this room. The doors to this chamber are to be locked to the outside. No one is to enter or leave this room without the consent of the chairman.

The transcript of this portion of the hearing and the discussion related thereto shall be prepared and filed under seal, to be opened only by order of this Commission. The transcript is and shall be non-public record exempt from Section 119.07(1), Florida Statutes. Only the attorneys for the participating parties, Public Counsel, the Commission staff and the Commissioners shall receive a copy of the sealed transcript.

(AFTER THE ROOM HAS BEEN CLOSED)

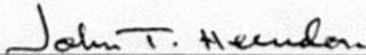
Everyone remaining in this room is instructed that the testimony and evidence that is about to be received is proprietary confidential business information, which shall be kept confidential. No one is to reveal the contents or substance of this testimony or evidence to anyone not present in this room at this time. The court reporter shall now record the names and affiliations of all persons present in the hearing room at this time.

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It is therefore,

ORDERED by Commissioner JOHN T. HERNDON, as Prehearing Officer, that this Prehearing Order shall govern the conduct of these proceedings as set forth above unless modified by the Commission.

By ORDER of Commissioner JOHN T. HERNDON, as Prehearing Officer, this 23rd day of MARCH, 1990.



JOHN T. HERNDON, Commissioner
and Prehearing Officer

(S E A L)

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