1		REBUTTAL TESTIMONY OF
2		JAMES A. TAMPLIN, JR.
3		ON BEHALF OF AT&T COMMUNICATIONS OF
4		THE SOUTHERN STATES, INC.
5		BEFORE THE
6		FLORIDA PUBLIC SERVICE COMMISSION
7		Docket No. 960633-TP
8		Filed: August 30, 1996
9		
10	Q.	PLEASE STATE YOUR NAME.
11	A.	My name is James A. Tamplin, Jr.
12		
13	Q.	HAVE YOU PREVIOUSLY OFFERED TESTIMONY IN THIS
14		PROCEEDING?
15	A.	Yes. I provided direct testimony on July 31, 1996 and supplemental testimony on
16		August 23, 1996.
17		
18	Q.	WHAT IS THE PURPOSE OF THE TESTIMONY YOU ARE CURRENTLY
19		OFFERING?
20	A.	I am providing rebuttal testimony that responds to the testimony of BellSouth on
21		selected issues. Specifically, I am responding to statements made by Messrs. Scheye,
22		Varner, Atherton and Milner. My rebuttal testimony focuses on appropriate trunking
23		arrangements (issue 8); the provision of unbundled network elements (issue 10(a));
24		and access to unused transmission media (issue 11).
25		
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1	ISSUE	: WHAT ARE THE APPROPRIATE TRUNKING ARRANGEMENTS
2		BETWEEN AT&T AND BELLSOUTH FOR LOCAL INTERCONNECTION?
3		
4	Q.	HAVE YOU REVIEWED THE TESTIMONY SUBMITTED BY
5		BELLSOUTH ON THE ISSUE OF ONE-WAY TRUNKING FOR LOCAL
6		AND INTRALATA TRAFFIC?
7	A.	Yes.
8		
9	Q.	DOES THE TESTIMONY OFFERED BY BELLSOUTH PROVIDE A
10		JUSTIFICATION FOR THEIR REFUSAL TO PROVIDE TWO-WAY
11		TRUNKS?
12	A.	No. Mr. Varner admitted that 47 C.F.R. Section 51.305(f) provides that, if
13		technically feasible, BellSouth must provide two-way trunking upon request. Mr.
l 4		Atherton, however, offered only cost considerations and billing issues as support for
15		BellSouth's refusal to provide two-way trunking arrangements. A determination of
16		technical feasibility does not include consideration of economic, accounting, or billing
17		issues. 47 C.F.R. §51.5 (to be codified).
18		
19		Two-way trunking is technically feasible. BellSouth currently provides AT&T with
20		two-way trunking on AT&T's interLATA access. Moreover, AT&T has conducted
21		studies which demonstrate that two-way trunks provide efficiencies of up to 24%
22		greater than one-way trunks. Accordingly, BellSouth can and should provide two
23		way trunking.
4		
25	ISSUE.	: ARE THE ITEMS SOUGHT BY AT&T CONSIDERED TO BE NETWORK

1		ELEMENTS, CAPABILITIES, OR FUNCTIONS? IF SO, IS IT
2		TECHNICALLY FEASIBLE FOR BELLSOUTH TO PROVIDE AT&T WITH
3		THOSE ELEMENTS?
4		
5	Q.	HAVE YOU REVIEWED THE TESTIMONY SUBMITTED BY
6		BELLSOUTH ON THE ISSUE OF UNBUNDLED NETWORK ELEMENTS?
7	A.	Yes. I have reviewed the testimony of Messrs. Scheye, Milner and Varner.
8		
9	Q.	BASED ON YOUR REVIEW, WHAT ARE THE REMAINING
10		DISAGREEMENTS REGARDING ACCESS TO UNBUNDLED NETWORK
11		ELEMENTS?
12	A.	According to Mr. Varner, BellSouth agrees that, based on the FCC's order, they must
13		provide non-discriminatory access, on an unbundled basis, to the following elements:
14		(1) the local loop, which includes three of AT&T's requested elements, Loop
15		Distribution, Loop Concentrator/Multiplexer, and Loop Feeder; (2) the Network
16		Interface Device ("NID"); (3) switching capability, including both local switching and
17		tandem switching capability; (4) interoffice transmission facilities, which includes
18		both dedicated and common transport; (5) signaling networks (access to service
19		control points through the unbundled STP) and call-related databases; (6) operation
20		support systems functions; and (7) operator services and directory assistance.
21		
22		Various areas of disagreement, however, still exist. First, the Commission must
23		resolve the issue of routing capability. BellSouth maintains that it will provide the
24		local loop, local switching, operator systems, and dedicated and common transport,
25		but it has refused to provide the type of switch changes that are necessary to provide

customized routing for AT&T's customers. Instead, BellSouth contends that customized routing is not technically feasible. Second, there are unsettled issues regarding the nature of access to the NID that BellSouth will allow. Third, this Commission must decide whether it is technically feasible to unbundle the subloop elements to which AT&T seeks access. Fourth, BellSouth wants to provide access to Advanced Intelligence Network ("AIN") triggers only in conjunction with a mediation device. AT&T seeks unmediated access. Finally, AT&T is seeking access to unused transmission media, or dark fiber. BellSouth claims it is not required to provide this access.

CUSTOMIZED ROUTING

A.

13 Q. WHAT IS CUSTOMIZED ROUTING?

Customized routing, what BellSouth calls "selective routing," is the ability of the switch to distinguish between customers for various purposes, including directing a competing LEC's customers' calls to a designated operator system, trunk group or other device. It thus affects access of AT&T's customers to services provided by AT&T, such as the ability of AT&T customers to reach an AT&T operator by dialing "0," and the branding of services.

A.

Q. WHAT NETWORK ELEMENT AFFECTS ROUTING CAPABILITY?

The switch affects routing capability. All that is necessary to provide customized routing is to provision data about AT&T's end user customers on the existing switch.

Q. HOW DO YOU RESPOND TO BELLSOUTH'S CLAIM THAT IT IS NOT

1		TECHNICALLY FEASIBLE TO PROVISION THE SWITCHES BECAUSE
2		THERE IS INSUFFICIENT CAPACITY ON THE SWITCHES TO ENTER
3		THE INFORMATION?
4	A .	A number of other incumbent LECs, including Ameritech, NYNEX, Pacific Bell,
5		SNET and GTE, have agreed that customized routing is technically feasible. In
6		Florida, sufficient capacity exists to provide customized routing by adding line class
7		codes to the switches. This would provide the interim arrangement until the "selectiv
8		routing" feature that Mr. Milner speaks about could be developed and deployed. See
9		e.g., Exhibit WKM-11, attached to Direct Testimony of Keith Milner. Additionally,
10		the industry should consider whether "selective routing" or some other alternative is
11		the appropriate long-term solution.
12		
13	Q.	ON WHAT DO YOU BASE YOUR STATEMENT THAT SUFFICIENT
14		CAPACITY EXISTS ON THE SWITCHES CURRENTLY IN USE TO ADD
15		LINE CLASS CODES?
16	A.	BellSouth utilizes five switches in Florida: the 1AESS, the 2BESS, the 5ESS, the
17		DMS-100, and the EWSD. The IAESS switch uses chart column tables, instead of
18		line class codes, as a routing technique. The capacity is a maximum of 1023. The
19		2BESS has 512 line class codes. The maximum number of line class codes in the
20		5ESS switch is 6000. The Northern Telecom DMS-100 switch employs line
21		attributes that are the equivalent of line class codes, and has a current capacity of
22		1024, with an increase to 2048 in the pending release. This capacity will further
23		increase to 4096 in the second quarter of 1997. The EWSD has a capacity of 4096.
24		This data is summarized in a comprehensive report to the Georgia Public Service
25		Commission, submitted on July 12, 1996. That report is in the record as JC1, Tab

287.

BellSouth currently uses up to 350 line class codes per switch. The Commission should not assume that each competitor entering the market would require the same number of line class codes currently used by BellSouth. One line class code is required for each group of similarly situated customers, in other words, those customers with the same routing/blocking treatment. Conservation of line class codes could ensure that capacity is not exceeded. Further, switch capacity will be expanded by the normal replacement of switches with newer models. Line class code conservation together with switch capacity expansion can be used to allow customized routing for all customers until a permanent industry solution is available. Therefore, all of the customized routing AT&T has requested is technically feasible.

NETWORK INTERFACE DEVICE ("NID")

Q. DOES THE FCC ORDER ADDRESS ACCESS TO THE NID?

A. Yes. The FCC Order assumes that a new entrant, when providing its own facilities, will install its own NID on the customer's premises and interconnect to the customer's inside wiring by an external connection from the new entrant's NID to the existing NID. 47 C.F.R. § 51.319(a) (to be codified); FCC Order No. 96-325, ¶ 377-96, at 187-96. It states, however, that State Commissions should determine whether direct connection between a new entrant's local loop and the LEC's NID is technically feasible in the context of a specific request for such access. FCC Order No. 96-325, ¶ 396 at 196.

1	Q.	HOW WILL THE METHOD ASSUMED BY THE FCC AFFECT
2		COMPETITION?
3	A.	The arrangement in the FCC rule will be a deterrent to competition because many
4		customers will object to defacing their homes by attaching multiple devices, some of
5		which are attached to exposed wires. The exposed wires connecting these devices
6		have the potential to increase service outages for the customer because they are
7		exposed to the elements or could be inadvertently broken. Finally, installing a new
8		NID at each location will increase the labor and material costs to entrants into the
9		market.
10		
11	Q.	DOES THE ARRANGEMENT ASSUMED IN THE FCC ORDER CREATE
12		ANY PRACTICAL CONCERNS?
13	A.	The connection method in the FCC rule assumes that all NIDs look like the one
14		depicted in Exhibit WKM-2 to Mr. Milner's testimony. The drawing in that exhibit
15		represents a recent generation NID. Although the recent generation NIDs have
16		separate chambers for customer wiring and loop connections, many older NIDs do
17		not. The customer's wiring may not be in a separate location from BellSouth's
18		wiring. Accordingly, AT&T must have the right to access the portion of the
19		BellSouth NID that contains the loop connection, even if AT&T provides its own
20		NID.
21		
22	Q.	WHAT WOULD AT&T LIKE THE COMMISSION TO ORDER WITH
23		REGARD TO THE NID?
24	A.	For single residence homes, AT&T would like the opportunity to use any existing
25		capacity on the ILEC NID to directly connect its loops. If no spare terminals are

1		available on the existing device, AT&T would like to directly connect to the
2		BellSouth NID after disconnecting and grounding the BellSouth loop distribution
3		facility. This solution will mitigate BellSouth's concerns regarding bodily harm and
4		property damage because, in all cases, its loops will still be terminated on the existing
5		NID and will have the protection the device provides. This solution also eliminates
6		problems introduced by exposed wiring, and it will reduce the number of cases in
7		which customers will be inconvenienced by multiple devices attached to their homes.
8		
9	Q.	BELLSOUTH HAS STATED A CONCERN THAT PROVIDING
10		UNLIMITED ACCESS TO THE NID WOULD CAUSE A PROBLEM
11		BECAUSE OF ELECTRICAL HAZARDS. HOW WOULD AT&T
12		ADDRESS THAT CONCERN?
13	A.	AT&T understands the grounding requirements for the NID. Properly trained
14		technicians would ensure that all changes to the NID were consistent with the
15		National Electrical Code.
16		
17	Q.	WHAT DOES AT&T WANT THE COMMISSION TO ORDER WITH
18		REGARD TO MULTIPLE DWELLING UNITS AND OFFICE
19		COMPLEXES?
20	A.	Mr. Milner states in his testimony that a wide variety of NIDs are utilized in the
21		business setting, depending on customer requirements. He also noted that the NIDs
22		used in a business setting may not differ from those used in residential settings. If the
23		outside NID is similar to a single residence NID, it should be treated similarly to that

of a single residence. There should be no universal rule barring access to NIDs used

in a business setting. Absent technical or operational concerns specific to the type of

24

1		NID present, access should be allowed.
2		
3		SUBLOOP ELEMENTS
4		
5	Q.	DID THE FCC ORDER REQUIRE UNBUNDLING OF THE SUBLOOP
6		ELEMENTS?
7	A.	The FCC determined that the technical feasibility of subloop unbundling is best
8		addressed at the state level on a case by case basis, and "encourage[d] states to
9		pursue subloop unbundling in response to requests for subloop elements by competing
10		providers." FCC Order No. 96-325, ¶ 391, n.851, at 194.
11		
12	Q.	AT&T HAS REQUESTED THE UNBUNDLING OF THE LOOP
13		DISTRIBUTION, LOOP CONCENTRATOR/MULTIPLEXER, AND LOOP
14		FEEDER. IS THE UNBUNDLING OF THESE ELEMENTS
15		TECHNICALLY FEASIBLE IN THE STATE OF FLORIDA AT THIS
16		TIME?
17	A.	Yes.
18		
19	Q.	PLEASE EXPLAIN BELLSOUTH'S POSITION ON TECHNICAL
20		FEASIBILITY.
21	A.	BellSouth claims that it is not feasible to unbundle loop distribution and the loop
22		feeder because operations and support systems for administration of the loop would
23		be affected, special facilities would be necessary to provide access to the distribution
24		facilities, and establishing a permanent point of interface could constrain BellSouth
25		from altering the feeder/distribution networks or using new technology such as "fiber

in the loop" as a replacement for copper.

A.

Q. WHAT IS AT&T'S RESPONSE?

All of BellSouth's concerns can be addressed through modifications to these network elements. The FCC Order recognizes that obligations imposed by §§ 251(c)(2) and 251(c)(3) include modifications to facilities to the extent necessary to accommodate interconnection or access to network elements. First, BellSouth will be able to administer their system if AT&T connects only to the loop distribution or the loop feeder. Their operations and support systems equipment and monitoring equipment may be located at various points in the line. It need not be located so that it monitors only the entire loop. Additional monitors could be placed at the interfaces on the Feeder Distribution Interconnector (FDI), for example. Second, AT&T is not asking for the unbundling of items that it is infeasible to unbundle such as fiber loops. Seventy percent of BellSouth's loops are copper. Connections to the subloop elements could be made at the NID, at either the feeder side or the distribution side of the FDI and/or at the Main Distribution Frame ("MDF"). Further, the FCC specifically states that it is technically feasible to unbundle Integrated Digital Loop Carriers. FCC Order No. 96-325, ¶ 391, at 194.

ADVANCED INTELLIGENCE NETWORK

Q. BELLSOUTH MAINTAINS THAT IT CANNOT PROVIDE ACCESS TO
THE ADVANCED INTELLIGENCE NETWORK ("AIN") IN CERTAIN
SWITCHES BECAUSE IT IS NOT TECHNICALLY FEASIBLE TO
PROVIDE ACCESS WITH ALL OF THE FEATURES AT&T HAS

REQUESTED. WHAT IS AT&T'S RESPONSE?

A. BellSouth maintains that access can be allowed only through a mediation device and that such mediation device is not currently available. Mediation devices are not necessary and they decrease the quality of the service available to AT&T customers. I have attached as Exhibit JATR-1 a copy of a test report summarizing tests that AT&T and BellSouth conducted on AIN interconnection. See AT&T Integrated Test Network ("ITN") - BellSouth AIN Test Laboratory, Advanced Intelligence Network ("AIN"), Interconnectivity Test Report, Approval Copy, dated November 15, 1995. This report demonstrates that unmediated access to the AIN through the SS7 signaling system is technically feasible.

A.

Q. DID THE FCC ORDER ADDRESS ACCESS TO THE AIN?

The FCC Order concluded that access to AIN Service Control Points ("SCPs") is technically feasible, but noted that such access may present a need for mediation mechanisms to, among other things, protect data in the AIN SCPs and ensure against excessive traffic. FCC Order No. 96-325, ¶ 488, at 240. AT&T does not believe that mediation is necessary. The SS7 already contains safeguards against traffic overload and unauthorized access. If mediation is to be allowed, any mediation must be performed on a non-discriminatory basis. Mediation of only the competing LEC's interchange with the SCPs will create an unfair competitive advantage for the incumbent LECs. Mediation will take time and increase post dial delay, thereby creating a difference between the service offered by the incumbent and the service offered by others. Similarly, any network management controls invoked to protect the SCP from an overload condition must be applied equally for all users of that

1		database, including the LEC.
2		
3	ISSUE	: DO THE PROVISIONS OF SECTIONS 251 AND 252 APPLY TO
4		ACCESS TO UNUSED TRANSMISSION MEDIA (E.G. DARK FIBER)?
5		
6	Q.	BELLSOUTH MAINTAINS THAT DARK FIBER IS NEITHER A
7		NETWORK ELEMENT NOR A RETAIL SERVICE AND, THEREFORE, IT
8		NEED NOT BE PROVIDED. WHAT IS AT&T'S RESPONSE?
9	A.	Dark fiber is a network element that is currently not in use. It is nonetheless a part of
10		the network because it is "a facility or equipment used in the provision of a
11		telecommunications service." 47 C.F.R. § 51.5 (to be codified). The fact that it is
12		not currently in use does not change its purpose: its only use is the provision of
13	·	telecommunications services. Therefore, it is a network element currently in the
14		possession of incumbent LECs which, if provided to new market entrants, could
15		facilitate competition. For example, AT&T will want to deploy SONET rings in
16		certain market areas to create competitive facilities. Building these rings will require
17		the placement of many miles of fiber with the attendant difficulties of obtaining
18		rights-of-way, conduit and pole space, and building permits BellSouth's failure to
19		provide fiber already in place will increase the financial and administrative cost of the
20		telecommunications services AT&T seeks to offer.
21		
22	Q.	WHY WAS DARK FIBER NOT ONE OF THE ORIGINAL TWELVE
23		NETWORK ELEMENTS THAT AT&T REQUESTED?

A. AT&T has always asked for the ability to purchase dark fiber at cost-based rates.
 Our proposed interconnection agreement, however, categorized dark fiber as an

- ancillary function, along with collocation and right-of-way. The categorization does
 not change the need for dark fiber to promote facilities-based competition.
- 4 Q. DOES THAT CONCLUDE YOUR TESTIMONY?
- 5 A. Yes.