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October 8, 1996

Ms. Blanca Bayo, Director

Division of Records and Reporting

Room 110, Easley Building

Florida Public Service Commission

2540 Shumard Oak Blvd. Tallahassee, Florida 32399-0850

Re: Dock

Docket No. 961169-TP

Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Direct Testimony of Dr. Marvin H. Kahn, the Direct Testimony of Richard Robertson and the Direct Testimony of C. William Stipe, III on behalf of American Communications Services, Inc. in the above-referenced docket.

Please indicate receipt of this document by stamping the enclosed extra copy of this letter.

Thank you for your assistance in this matter.

Sincerely,

Floyd R. Self

FRS/amb Enclosures

cc:

James Falvey, Esq.

Parties of Record

Kahn 10778-96 Robertson 10779-96 Stipe 10780-96

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Direct Testimony of Dr. Marvin H. Kahn, the Direct Testimony of Richard Robertson, and the Direct Testimony of C. William Stipe, III on behalf of American Communications Services, Inc. in Docket No. 961169-TP has been furnished by Hand Delivery (*) and/or Overnight Delivery (**) on this 8th day of October, 1996 to the following parties of record:

Donna Canzano, Esq.*
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Blvd., Room 370
Tallahassee, FL 32399-0850

Mr. Ken Waters* GTE Florida, Inc. 106 E. College Avenue, Suite 1440 Tallahassee, FL 32301

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Floyd R. Self, Esq.

DIRECT TESTIMONY

OF

C. WILLIAM STIPE III

ON BEHALF OF

AMERICAN COMMUNICATIONS SERVICES, INC.

October 8, 1996

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DIRECT TESTIMONY OF

C. WILLIAM STIPE III

1	I.	BACKGROUND AND QUALIFICATIONS
2	Q.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS
4		ADDRESS.
5	Α.	My name is C. William Stipe III and I am Vice President - Switched
6		Engineering and Operations. My business address is 131 National Business
7		Parkway, Suite 100, Annapolis Junction, Maryland 20701.
8		
9	Q.	PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE AND
10		BACKGROUND.
11	A.	1 joined ACSI in 1996 and serve as Vice President - Switched Engineering
12		and Operations. Prior to joining ACSI, I had twenty-four years of
13		experience in the telecommunications industry working for Bell Atlantic
14		Corporation. I have held a number of positions with Bell Atlantic, and
15		most recently, since 1994, as Director - Financial Systems. From 1991 to
16		1994, I served as Director - Product Profitability and Transfer Pricing and
17		operated and enhanced a Product Profitability reporting system. I also
18		developed and implemented a Transfer Pricing process for Line of
19		Business financial reporting. From 1987 to 1991, I was the Director -
20		Customer Business Services, responsible for pricing and costing multi-year
21		service contracts in competitive proposals to Bell Atlantic's largest

commercial and government customers. From 1972 to 1987, I held a variety of engineering and management positions of increasing responsibility. I received my Bachelor of Science in Electrical Engineering from Virginia Tech in 1972, and my M.B.A. from Virginia Commonwealth University in 1984.

O. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

8 A. No.

A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

The purpose of my testimony is to provide technical background to the testimony filed by other ACSI witnesses. First, I will describe: a) from a technical standpoint, what is (and is not) required to unbundle a local loop; and, b) the technical differences between the simple unbundled loop requested by ACSI and the special access type services upon which GTE seems to be basing its proposed unbundled loop pricing. Second, I will supplement testimony offered by Mr. Richard Robertson of ACSI in support of ACSI's request that a "bill and keep" system be employed for reciprocal compensation for the transport and termination of local traffic exchanged between the parties. My testimony describes why the services provided are properly regarded as reciprocal. Third, I will respond to GTE's position that it will not provide a cross-connection between two collocated carriers. Finally, I will comment on GTE's refusal to allow

1		ACSI to include Remote Switching Modules ("RSMs") in its central office
2		collocating arrangement.
3		
4	II.	PRICING OF THE UNBUNDLED LOOP
5	Q.	DO GTE'S NON-RECURRING CHARGES FOR THE UNBUNDLED
6		LOOP SEEM REASONABLE FOR THE WORK REQUIRED?
7	A.	They may be reasonable if the expectation is that a new facility must be
8		designed and built for each request for service of that type of facility.
9		They are very unreasonable when all ACSI desires is that the customer's
10		existing service just be unbundled and the existing copper loop be
11		connected to ACSI.
12		
13	Q.	WHAT IS THE PHYSICAL WORK REQUIRED TO ACHIEVE THE
14		UNBUNDLING YOU DESIRE?
15	A.	The physical work required to achieve the unbundling of the local loop
16		should be clearly understood and should not be exaggerated. It is
17		merely removing the wire cross-connect in the GTE office which
8		connects the loop facility to the central office and replacing it with one
9		to ACSI's collocated equipment interface. In other words, unbundling
20		the local loop does not require the installation of an entirely new loop.
21		

1	Q.	HOW DOES THIS COMPARE TO THE SPECIAL ACCESS
2		SERVICE UPON WHICH GTE APPEARS TO HAVE BASED ITS
3		UNBUNDLED LOOP PRICING?
4	A.	GTE's special access service is not an unbundled loop at all. GTE has
5		offered an existing tariff for a special access service instead of
6		unbundling its loop plant as required by the FCC.
7		
8	Q.	WHAT ARE THE PHYSICAL CHARACTERISTICS OF SPECIAL
9		ACCESS SERVICE?
10	A.	It is a digital 64 kilobit channel, capable of transmitting voice or data or
11		a combination of the two with the appropriate customer-provided
12		terminal equipment.
13		
14	Q.	IS THIS THE FACILITY GTE USES TO PROVIDE LOCAL
15		EXCHANGE SERVICE TO ITS CUSTOMERS?
16	A.	Not at all. The vast majority of GTE's network access lines use
17		ordinary two wire cable facilities. Most of those have no active or
18		passive electrical endorsement at all. Some (probably less than 20%)
19		require passive induction coils, commonly called loop coils, for
20		customers beyond 18 kft from GTE's switching office and an even
21		smaller percentage (probably less than 5%) require electronics to extend
22		the switches signaling capability for loops whose resistance exceed 1300
23		or 1500 ohms. I can only estimate these percentages at this time

1		because only GTE has the information that would be required to
2		calculate precise percentages.
3		
4	Q.	DOES GTE SERVE ALL OF ITS NETWORK ACCESS LINES
5		SERVICE VIA THE COPPER LOOP FACILITIES YOU HAVE
6		DESCRIBED?
7	A.	No. Some percentage is served via pair gain devices such as digital
8		subscriber loop carrier ("DLC"). Again, I do not have access to GTE
9		data on the amount of such facilities in its plant, but I would be
10		surprised if it is more than 15 percent of the total.
11		
12	Q.	CAN YOU DESCRIBE THIS DIGITAL LOOP CARRIER?
13	A.	Yes. It is digital multiplexing equipment which creates voice grade
14		equivalent facilities in multiples of 24 channel DS-1 facilities which can
15		ride over either optical or conditioned copper facilities and is returned to
16		an analog state in the GTE loop plant near (typically less than 12KF or
17		900 ohms) the GTE network access line customer.
18		
19	Q.	HOW IS THE GTE NETWORK ACCESS LINE SERVICE
20		CONNECTED TO ITS CUSTOMER FROM THE REMOTE DLC
21		TERMINAL EQUIPMENT?
22	A.	It is connected to a copper facility just like the one I described earlier.
23		I should explain that the use of DLC is not driven by the need to

1		provide a digital capability to the customer, but by the economic trade
2		offs of expanding copper loop facilities and its supporting conduit and
3		pole line structures versus the cost of the DLC. The customer receives
4		the same 3KHz voice compatible service either way.
5		
6	Q.	YOU MEAN THAT GTE HAS PRICED THE UNBUNDLED LOOP
7		AS A DIGITAL SERVICE THAT PROVIDES 64 KBITS OF
8		CAPACITY WHILE IT USES ANALOG COPPER VOICE GRADE
9		PAIRS TO PROVIDE ITS OWN LOOP SERVICES?
10	A.	Exactly.
11		
12	Q.	WHAT SORT OF PROBLEMS DOES THIS CREATE FOR ACSI IN
13		ATTEMPTING TO COMPETE WITH GTE FOR CUSTOMERS?
14	A.	It causes ACSI multiple problems. The most obvious problem is cost,
15		which Mr. Richard Robertson has addressed in his Testimony.
16		Both the recurring and non-recurring charges are set to recover
17		costs which ACSI will not cause GTE to incur. This in turn, will
18		artificially increase ACSI's rates for both installation and service,
19		making it exceedingly difficult to compete effectively.
20		
21	Q.	DOES ACSI HAVE ANY NEED FOR THE TYPE OF FACILITY
22		GTE OFFERED AS AN "UNBUNDLED LOOP"?

1		A. Tes, but only in instances where it desires to provide data and other
2		specifically designed services to its customers. It does not need this
3		sophisticated facility to provide most basic local exchange services,
4		which it expects to be the majority of its service over GTE's bottleneck
5		facilities.
6		
7	III.	MUTUAL TRAFFIC EXCHANGE
8	Q.	IN A MUTUAL TRAFFIC EXCHANGE SITUATION, DOES ACSI'S
9		NETWORK PERFORM EQUIVALENT FUNCTIONS AS GTE'S
10		TANDEM SWITCH?
11	A.	Yes. From a functional perspective, ACSI's network will provide the
12		same service as is provided by GTE's tandem switched network.
13		Although ACSI's network design relies upon a different engineering
14		strategy, functionally the service it provides is the same as ACSI
15		receives through access to GTE's tandem. That is, both GTE and ACS
16		offer to the other calling area-wide access through a single facility.
17		ACSI finds it most efficient to provision a single switch and then
18		connect to its subscribers through a wide-area distribution system, while
19		GTE relies upon a multiple switch, tiered network connected to smaller
20		area distribution systems. The difference in design is dictated by
21		economic considerations, but does not result in a different functionality
22		for the two services.

23

1	Q.	DOES ACSI'S SWITCH ALSO SERVE THE SAME GEOGRAPHIC
2		AREAS AS GTE'S TANDEM SWITCHES?
3	A.	Yes. ACSI's network will cover the same geographic scope as is
4		reached by GTE's tandem switches. ACSI will compete for customers
5		located throughout the areas served by GTE's tandem switches.
6		Moreover, it is ACSI's intention, at least initially, to define local calling
7		areas that coincide with GTE's. Accordingly, ACSI will engineer its
8		network to be able to reach the same geographic area as reached by
9		GTE's tandem switching.
10		
11	Q.	DO YOU HAVE ANY REASON TO BELIEVE THAT THE
12		AMOUNT OF TRAFFIC EXCHANGED BETWEEN ACSI AND GTE
13		WILL BE SUBSTANTIALLY OUT OF BALANCE ONE WAY OR
14		ANOTHER?
15	A.	No.
16		
17	IV.	CO-CARRIER CROSS-CONNECT
18	Q.	FROM A TECHNICAL PERSPECTIVE, IS THERE ANY REASON
19		CO-CARRIER CROSS-CONNECTIONS NEED TO BE ROUTED
20		THROUGH GTE'S NETWORK?
21	Α.	No. In fact, it will be least costly and therefore most beneficial to
22		consumers for two CLECs collocated at the same GTE premises for
23		purposes of interconnection with GTE's network also to connect directly

1		with each other, without using GTE's network at all. There simply is
2		no technical reason why a third party GTE must be involved in the
3		exchange of traffic between two other carriers collocated at the same
4		GTE's premises.
5		
6	Q.	IF COLLOCATED CARRIERS DO NOT USE GTE'S NETWORK,
7		HOW WOULD A CROSS-CONNECTION BE ESTABLISHED?
8	A.	Assuming that the carriers are collocated in nearby spaces on the GTE
9		premises, they should be able to establish a cross-connection by pulling
10		cables through the two collocation cages. Each end of the cable would
11		be connected to one collocated carriers' interconnection equipment, and
12		traffic exchanged between the carriers would pass through this
13		connection. In this scenario, no GTE involvement is necessary at all.
14		
15	Q.	ARE THERE ANY SCENARIOS WHERE THE PARTICIPATION OF
16		GTE WOULD BE NEEDED TO ESTABLISH A CROSS-
17		CONNECTION?
18	A.	Only one. If the collocation spaces of the two carriers wishing to
19		establish a cross connection were located in non-adjacent spaces (e.g. on
20		different floors of a building, or on different sides of GTE exclusive
21		areas), then it might be necessary to seek the assistance of GTE
22		personnel. This assistance, however, would be necessary only for
23		purposes of installing connecting cables between the collocation spaces

1		of the two carriers. GTE's network still need not be transited. Of
2		course, GTE should be compensated on a time and materials basis for
3		this installation assistance. However, once the installation is completed
4		no other GTE assistance would be necessary.
5		
6	v.	COLLOCATION OF REMOTE SWITCHING MODULES
7	Q.	WHAT IS THE NATURE OF THE DISPUTE CONCERNING
8		REMOTE SWITCHING MODULES?
9	A.	ASCI requested during negotiations that it be permitted to install
10		Remote Switching Modules ("RSMs") in its collocation spaces at GTE
11		central offices. GTE refused this request.
12		
13	Q.	WHAT IS A REMOTE SWITCHING MODULE?
14	A.	A RSM is a device used to connect a larger, "host" switch with local
15		exchange loops running to end user locations. An RSM aggregates a
16		number of loops and connects them with a high-capacity DS-1 or
17		similar feeder channel. It also performs limited switching functions at
18		the direction of the host switch.
19		
20	Q.	IS IT TECHNICALLY FEASIBLE TO CONNECT RSMS TO
21		UNBUNDLED LOOPS OBTAINED FROM AN ILEC?
22	A.	Yes. An RSM may be connected directly to unbundled loops ACSI
23		may purchase from an ILEC.

1	Q.	WHY DOES ACSI WANT TO COLLOCATE ITS RSMS AT ILEC
2		FACILITIES?
3	A.	Collocation of RSMs is the most efficient way for ACSI to use its
4		network architecture in higher volume end offices. Essentially, an RSM
5		replaces other types of concentration equipment, such as a Digital Loop
6		Carrier, that ACSI would otherwise have to install at the ILEC's
7		facilities to aggregate unbundled loops. In addition, however, an RSM
8		is capable of performing limited switching functions at the direction of
9		the host switch. Thus, ACSI gains the functionality of a Digital Loop
10		Carrier and saves on unnecessary backhauling to the host switch.
11		
12	Q.	DOES COLLOCATION OF AN RSM, AS OPPOSED TO OTHER
13		TYPES OF COLLOCATION EQUIPMENT, CREATE ADDITIONAL
14		SPACE, TECHNICAL OR RELIABILITY CONCERNS?
15	A.	No. An RSM replaces other types of aggregating equipment, so it will
16		not require any more space than other equipment would. Similarly, the
17		technical and network reliability concerns with collocation of RSMs are
8		identical to those that would exist if ACSI chose to collocate other
9		equipment instead.
20		
21	Q.	HAVE OTHER ILECS AGREED TO ALLOW ACSI TO INSTALL
22		RSMS IN THEIR CENTRAL OFFICES?

1	A.	Yes. BellSouth, Southwestern Bell and US West all have agreed to
2		permit ACSI to install RSMs in its collocated space in their central
3		offices. No ILEC other than GTE (with which ACSI has concluded its
4		interconnection negotiations) has refused to allow ACSI to install such
5		RSMs.
6		
7	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
0	Α.	Vac