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August 22, 2001

Mrs. Blanca S. Bayó
Director, Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 010098-TP (Florida Digital)

Dear Ms. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Late Filed Exhibit No. 12 for Tommy Williams, which we ask that you file in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,



Patrick W. Turner (KA)

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White

DOCUMENT NUMBER-DATE
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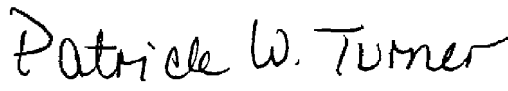
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**CERTIFICATE OF SERVICE
DOCKET NO. 010098-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via Electronic Mail and Federal Express this 22nd day of August, 2001 to the following:

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Patrick W. Turner (KA)

**(+) Signed Protective/Non Disclosure
Agreement**

BELLSOUTH TELECOMMUNICATIONS, INC.
FLORIDA DIGITAL NETWORKS (FDN) ARBITRATION
DOCKET NO. 010098-TP
Tommy Williams' Late Filed Exhibit No. 12

Regarding the Deployment of Remote Site DSLAMs

At the hearing of this matter, the Florida Public Service Commission ("Commission") requested information concerning the expense of deploying DSLAM equipment in remote sites. This information is intended to provide the Commission additional information concerning remote terminal (RT) DSLAM deployment. It is not BellSouth's intent in providing this information to tell Florida Digital Network, Inc. ("FDN") or any other ALEC how to employ equipment for its data network.

To be fiscally prudent in deploying xDSL services, one must first fully understand the technologies as well as the environment. High-speed data service using xDSL technology requires unloaded, dedicated copper loops. Generally, acceptable copper loops are shorter than 18,000 feet (which often are already unloaded).

In the BellSouth network a large number of BellSouth's analog voice-grade loops are served over digital loop carrier (DLC), which has either fiber or multiplexed copper feeder to the Central Office ("CO"). Accordingly, to accommodate xDSL service in this environment and "overcome" the presence of fiber or multiplexed copper feeder, two (2) DSLAMs are recommended: one at the RT and one at the CO.

Acknowledging the specifics of the BellSouth environment, and to minimize the initial capital outlay to establish service at RTs, BellSouth made the decision to begin offering its Wholesale ADSL with a CO based solution in targeted areas. BellSouth and its Internet Service Provider (ISP) partners initially sold **BellSouth ADSL Service** to end users served by dedicated, unloaded copper loops from the CO to the end user.

As BellSouth successfully deployed CO-based DSLAM solutions, it was simultaneously establishing half of a future RT solution by having the DSLAMs already in place in the CO. After operating in a pure CO DSLAM environment for a period of time, a determination was made to place RT based DSLAMs at locations that served neighborhoods with a higher propensity to buy ADSL Service. Thus, BellSouth targeted remote terminals with the most potential for ADSL service.

The first remote solutions deployed by BellSouth were 8-port Mini-Rams manufactured by Alcatel. These remote solutions were designed to be compatible with the existing CO based DSLAMs also manufactured by Alcatel. These CO DSLAMs had "triple duty". In addition to serving end users with ADSL over unloaded copper loops, the arrangement allowed the Mini-Rams to "hub" off the CO DSLAM, which eliminated the need for an ATM switch in

each CO. Finally, the CO DSLAM also serves as a hub for the feeder DS1s from the remote Mini-Rams to a DS3 interoffice channel, which transports the data to the ATM switch at a central location. After the Mini-Ram was deployed at the RT, the ADSL end users served by the RT were converted to the remote solution. By moving the DSLAM closer to the end users and further into the network, additional end users could be served with unloaded distribution sub-loops.

BellSouth and its ISPs that purchase BellSouth's tariffed DSL service use BellSouth's loop qualification system (LQS) to determine if loops are qualified for BellSouth's ADSL service. LQS is intended to qualify loops for BellSouth ADSL Service. ALECs may also use LQS to determine if loops are qualified for ADSL; however, the presence of a BellSouth remote solution will indicate that the loop will support DSL, while the loop may or may not support DSL with a CO based DSLAM. Therefore, LQS is not adequate for an ALEC to determine if a loop will support its data service. A better source of information for ALECs to determine a loop's characteristics is BellSouth's loop makeup (LMU) service. LMU is a pre-ordering tool and is available in a manual (FAX) or electronic version. LMU allows ALECs to obtain information about its end user's loops, including the medium (i.e., copper, fiber), gauge, length of gauge, presence of load coils, location of load coils, address of the RT, RT CLLI code, etc. Because different equipment may have different loop requirements, the decision of the 'suitability' of a loop is left up to the ALEC. Additional information concerning LMU is available on the BellSouth Interconnection web site at:

<http://www.interconnection.bellsouth.com/guides/unedocs/bstlmulmu.pdf>

FDN and other ALECs could take an approach similar to the one BellSouth has taken and begin "collecting" DSL customers with CO based DSLAMs.

The following example shows what an ALEC's estimated cost would be if the ALEC were to collocate a DSLAM at one of BellSouth's RT sites located in the state of Florida. This example should not be interpreted as an endorsement or recommendation of any particular supplier but rather, an example of the available technology and its associated costs. The current BellSouth supplier for remote solutions is Inovia Telecom, a subsidiary of ECI Telecom. Inovia supplies a line of compact DSLAMs. The MicroRam 1100 is an 8-port DSLAM with a list price of \$6,095. The MicroRam 1100 fits into a 19" or 23" rack in an RT cabinet. The product is 1¾" X 17" X 12". The MicroRam 1400 is a 16-port DSLAM with a list price of \$12,200 and also fits into a 19" or 23" rack. An ALEC may be able to obtain a discount based upon volume and perhaps other criteria. Estimates of the cost to establish RT collocation, equip the collocation space with a MicroRam 1100 and a UNE DS1 feeder sub-loop are as follows:

<u>Item</u>	<u>Recurring</u>	<u>Non-recurring 1st</u>	<u>Non-recurring Add'l</u>
Remote Terminal			
Collocation Application Fee		\$ 874.14	
Security Access System		\$ 26.20	
DS1 Feeder Termination*		\$ 522.41	\$ 11.32
Cabinet Space and Power	\$ 232.50		
4-Wire DS1 Feeder*	\$ 43.64	\$ 120.61	\$ 70.34
MicroRam 1100**		\$ 6,095.00	
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	\$ 276.14	\$ 7,638.36	\$ 81.66

* This rate is based on a preliminary cost study. It was not part of the Florida Generic UNE Order (Docket No. 990649-TP), because it was developed after the cost study was submitted.

** Manufacturer's List Price for a quantity of one (1) MicroRam 1100.