ORIGINAL

Sprint

**Susan S. Masterton**
Attorney

**Law/External Affairs**
Post Office Box 2214
1313 Blair Stone Road
Tallahassee, FL 32316-2214
Mailstop FLTLH00107
Voice 850 599 1560
Fax 850 878 0777
susan.masterton@mail.sprint.com

February 4, 2003

Ms. Blanca Bayo', Director
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RECEIVED-FPSC
03 FEB -4 PM 4:50
COMMISSION
CLERK

RE: Docket Nos. 981834 & 990321-TP

Dear Ms. Bayo':

Enclosed for filing are the original and 15 copies of the following:

1. Direct Testimony of Jimmy R. Davis 01148-03
2. Direct Testimony of Edward Fox, including Exhibits EBF-1 & EBF-2 01149-03
3. Sprint's Request for Confidential Classification 01150-03

In addition, pursuant to staff's direction, Sprint is filing the following:

4. Two redacted hard copies of Exhibit JRD-2 and one CD-ROM containing the redacted Exhibit JRD-2. 01151-03

Hard copies and CD-ROMs containing the nonredacted version of Exhibit JRD-2 (Collocation Cost Study) are being transmitted separately under seal this same day. Copies are being served on the parties in this docket, pursuant to the attached Certificate of Service. Parties that have executed a nondisclosure agreement will receive nonredacted versions of Exhibit JRD-2. All other parties will receive redacted versions.

Please acknowledge receipt of this filing by stamping and initialing a copy of this letter and returning same to the courier. If you have any questions, please do not hesitate to call me at 850/599-1560.

Sincerely,

Susan S. Masterton

Enclosures

AUS
CAF
CMP Fulwood
COM Sitlor
CTR
ECR
GCL 1
OPC
MMS
SEC 1
OTH

RECEIVED & FILED

FPSC-BUREAU OF RECORDS

**CERTIFICATE OF SERVICE**
**DOCKET NO. 981834-TP & 990321-TP**

I HEREBY CERTIFY that a true and correct copy of the Redacted or Non-redacted+ Exhibit JRD-2 (Collocation Cost Study) was served by U.S. Mail or Hand Delivery* this 4th day of February, 2003 to the following:

Wayne Knight, Esq.* +
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0870

Nancy B. White
c/o Nancy H. Sims
BellSouth Telecommunications, Inc.
150 S. Monroe Street Suite 400
Tallahassee, Florida 32301-1556

Alltel Communications Services, Inc.
Bettye Willis
One Allied Drive
Little Rock, AR 72203-2177

Hopping Law Firm
Rick Melson
Post Office Box 6526
Tallahassee, Florida 32314

Pennington Law Firm
Peter Dunbar/Marc W. Dunbar
Post Office Box 1009
Tallahassee, Florida 32302

Florida Cable Telecommunications Association, Incorporated
Michael A. Gross
310 North Monroe Street
Tallahassee, Florida 32301

Time Warner Telecom
Carolyn Marek
233 Bramerton Court
Franklin, TN 37069

FCCA
c/o McWhirter Law Firm
Vicki Kaufman
117 S. Gadsden Street
Tallahassee, Florida 32301

Ausley Law Firm
Jeff Wahlen
Post Office Box 391
Tallahassee, Florida 32302

MCI WorldCom Communications, Inc.
Donna McNulty
1203 Governors Square Blvd. Suite 201
Tallahassee, Florida 32301-2960

Messer Law Firm
Floyd Self/Norman Horton
Post Office Box 1876
Tallahassee, Florida 32302

MediaOne Florida Telecommunications, Inc.
c/o Laura L. Gallagher, P.A.
101 E. College Ave., Suite 302
Tallahassee, Florida 32301

AT&T Communications of the
Southern States, Inc.
Tracy W. Hatch +
1200 Peachtree Street, NE Suite 8100
Atlanta, GA 30309

Katz, Kutter Law Firm
Charles Pellegrini/Patrick Wiggins
12th Floor
106 East College Avenue
Tallahassee, Florida 32301

Supra Telecommunications &
Information Systems, Inc.
Mark E. Buechele
2620 S.W. 27th Avenue
Miami, FL 33133

Verizon-Florida, Incorporated
Michelle Robinson
P.O. Box 110, FLTC0007
Tampa, FL 33601-0110

ITC^DeltaCom Communications, Inc.
Nanette Edwards
Messer, Caparello & Self
Post Office Box 1876
Tallahassee, Florida 32302-1876

Network Telephone Corporation
Brent E. McMahan
815 South Palafox Street
Pensacola, FL 32501-5937

KMC Telecom, Inc.
Mr. John D. McLaughlin, Jr.
1755 North Brown Road
Lawrenceville, GA 30043-8119

Florida Digital Network, Inc.
Matthew Feil, Esq.
390 North Orange Ave., Suite 2000
Orlando, FL 32801

Susan S. Masterton

+ Non-redacted copies will be provided up execution of the appropriate non-disclosure agreement.

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**DIRECT TESTIMONY OF**

**JIMMY R. DAVIS**

**Q. Please state your name, place of employment, and business address.**

A. My name is Jimmy R. Davis. I am employed by Sprint/United Management Company as a Senior Manager – Network Costing at 6450 Sprint Parkway, Overland Park, Kansas 66251. I am testifying on behalf of Sprint-Florida, Incorporated and Sprint Communications Company Limited Partnership (hereafter collectively referred to as "Sprint" or the "Company").

**Q. Are you the same Jimmy Davis who previously filed direct testimony and rebuttal testimony in this case?**

A. Yes.

**Q. What is the purpose of this direct testimony?**

A. I will address Issues 9A and 9B as identified on Attachment A of this Commission's Procedural Order dated November 4, 2002.

**ISSUE 9A. FOR WHICH COLLOCATION ELEMENTS SHOULD RATES BE SET FOR EACH ILEC?**

**Q. For which collocation elements has Sprint filed rates in this proceeding?**

A. Sprint's list of elements and their proposed rates appear on page 5 of Exhibit JRD-2 filed with this testimony. This list of rate elements is based on examinations of actual collocation arrangements in Sprint central office buildings coupled with FCC and Florida PSC requirements.

**Q. Did Sprint make any revisions to its list of collocation elements since the previous list that was published as page 33 of the November 4, 2002 Procedural Order?**

A. Yes. Sprint has made five changes to the November 4, 2002 element list.

First, the title of the Application Fee (line 1, page 33 of Procedural Order) has been changed to "New Collocation – Application Fee". This was done to clarify that this fee only applies to new collocations.

Second, engineering & project management fees for new collocation as well as minor and major augments (lines 2, 5 & 6, page 33 of Procedural Order) have been reworked. Originally, these fees were to include engineering time for all collocation elements (power, transmission, land and building, and outside plant) on a weighted basis. Sprint decided to move engineering time to each specific collocation element it is associated with to provide a better matching of costs incurred to costs recovered. Power engineering is now included in "Power Costs

– Connection to Power Plant 100 Amps" and "Power Costs – Connection to Power Plant 200 Amps" (lines 17 & 18, page 5, Exhibit JRD-2 attached). Land & buildings engineering is now included in a new element, "Security Cage Construction – Engineering" (line 11, page 5, Exhibit JRD-2 attached). Outside plant engineering is now included in "Internal Cable – 48 Fiber" and "Internal Cable – 100-Pr Copper Stub Cable" (lines 31 & 32, page 5, Exhibit JRD-2 attached). Transmission engineering remains as part of the more clearly defined "New Collocation – Administrative, Project Management, and Transmission Engineering Fee" because a transmission engineer is always involved in a new collocation. Transmission engineers are needed for cross-connect cabling and DC power cable feeds (60 amps or less). Augmentations to existing collocations do not always involve adding these elements; therefore, Sprint is proposing separate rate elements for transmission engineering for both minor and major augments. These two rate elements, "Minor Augment – Transmission Engineering Fee" and "Major Augment – Transmission Engineering Fee" (lines 6 & 9, page 5, Exhibit JRD-2 attached), are only applied when cross connects and/or DC power cables (60 amps or less) are added to existing collocations.

The third change in Sprint's November 4, 2002 element list is that pricing for "Power Costs – Connection to Power Plant 100 Amps" and "Power Costs – Connection to Power Plant 200 Amps" now include incremental charges for linear footage in excess of 110 feet. While DC power cable feeds of 60 amps or less are terminated onto a battery distribution fuse bay (BDFB), DC power cabling feeds larger than 60 amps are terminated directly onto the main power board located

with or in very close proximity to the remaining DC power plant equipment. Due to distances between DC power equipment and collocation space, DC power feeds greater than 60 amps can be quite lengthy. The longer the feed, the larger (in diameter) the cable has to be to carry the load. In addition, extra installation crewmembers are needed as cables get larger and longer. This approach of costing longer DC power feeds on a per foot basis most fairly charges ALECs and compensates ILECs for those instances where additional DC power cable costs are incurred to satisfy the ALEC order.

The fourth change in Sprint's November 4, 2002 element list is that "Dedicated AC Circuit Connection" and "Dedicated AC Circuit Consumption" (lines 17 & 18, page 33 of Procedural Order), have been deleted from the element list. These elements are unnecessary for the reasons discussed in Sprint Witness Mr. Ed Fox's Direct Testimony under Issue 7, telephone equipment used in collocation "requires DC power" (Fox Direct, page 18, line 4); therefore, major sources of AC power are unnecessary.

Finally, Internal Cable – 24 Fiber (line 29, page 33 of Procedural Order) has been changed to Internal Cable – 48 Fiber (line 31, page 5, Exhibit JRD-2 attached). Further analysis after November 4, 2002 reveals that ALECs most often requested 48 fibers.

**Q. What are the major categories of collocation elements presented in Exhibit JRD-2?**

A. The ten major categories presented in Exhibit JRD-2 are: Administrative, Engineering and Project Administration Fees; Security Cage Construction; Floor Space; DC Power; AC Power; Cross Connect Facilities; Security Card; additional Labor Charges; Adjacent On-Site Collocation (shown as ICB); and Remote Terminal Collocation (shown as ICB). Detailed narratives of individual elements under these main categories are included in Exhibit JRD-2.

**Q. Do Sprint's rates apply to both physical and virtual collocation?**

A. Yes. Virtual and physical collocation are the same except that under virtual collocation, the ILEC is involved with maintaining the ALEC's equipment. The cost of maintaining the ALEC's equipment will be recovered through Sprint's additional labor charges on a per occurrence basis.

**Q. Please briefly explain each major rate category.**

A. Administrative, Engineering and Project Management Fees include administrative, project management and engineering evaluation charges for processing applications for new collocation, augments, and space reports (pursuant to 47CFR §51.321 (h)). These charges are assessed up front because the associated costs are immediately incurred by the ILEC. This category also includes administrative, engineering and project management NRC's for work done after the ALEC makes a firm order commitment and during the build out phase.

Security Cage Construction charges include land & buildings engineering charges and per linear foot construction charges for installing an enclosure for use in caged collocation.

Floor Space charges (per square foot) cover the ALEC's use of the equipment area requested in its application for new collocation. Floor space charges apply to caged, cageless and virtual collocation. Floor space investment includes the costs of erecting a telephone central office building. Also included in floor space are charges for supporting infrastructure such as HVAC plant, common areas in the central office used by both Sprint and the ALEC, and extending a ground bar to the ALEC area of the central office.

DC Power includes charges for use of the DC power plant along with the commercial AC power that is converted to DC power. The DC power category also includes separate charges for the ALEC's DC power cable connections from the main power board or BDFB to its collocation space. The rate structure for DC power cable connections of 100 and 200-amps includes a base charge for connections up to a 110 linear feet and a per foot additive cable runs in excess of 110 feet.

AC Power charges include elements for installing electric outlets and overhead lights at the request of the ALEC.

Cross-Connect Facilities include cross-connects between the ALEC's equipment and Sprint's equipment for the ALEC's purposes of providing local telephone services to end-users. An ALEC-ALEC cross-connect option is offered for each type of electronic cross-connect and optical cross-connect. Cross-connect options are provided for 100-pair DS0, 1 DS1, 1 DS3 and 4-fiber optical connections. Also included in this category are internal cable space elements for both fiber and copper entrance cables. Internal cable space includes a portion of manhole, conduit, vault and riser infrastructure. Entrance cable collocation elements are also offered for both 48-fiber and 100-pair copper. These elements are offered to collocators who desire to lease a cable from Sprint.

The Security Card element covers the cost of providing an ID card / access key to ALEC technicians for purposes of entering Sprint central offices.

Additional Labor charges provide for situations in which stand-alone labor charges apply. As previously mentioned, one such situation is maintenance on an ALEC's equipment under a virtual collocation arrangement. Labor charges are provided in ¼ hour increments for regular, overtime and premium rates. Labor charges are provided for central office technicians, central office engineers, outside plant technicians and outside plant engineers.

Sprint's rate list also has categories for Adjacent On-Site Collocation and Remote Terminal Collocation. To date, Sprint has not had any orders for either adjacent collocation or for collocation at a remote terminal housed in a weatherproof

cabinet. These collocation arrangements are not common nor are they standard and therefore do not lend themselves to developing accurate generic rates. To that end, Sprint will provide rates for adjacent and remote terminal collocation on an individual case basis.

**ISSUE 9B. FOR THOSE COLLOCATION ELEMENTS FOR WHICH RATES SHOULD BE SET, WHAT ARE THE PROPER RATES AND THE APPROPRIATE APPLICATION OF THOSE RATES?**

**Q. What rates is Sprint submitting for the collocation elements covered under Issue 9A?**

A. Page 5 of Exhibit JRD-2, filed with this testimony, contains a list of collocation elements and associated recurring and nonrecurring charges.

**Q. Please provide a brief overview of the rest of Exhibit JRD-2.**

A. Exhibit JRD-2 is Sprint's collocation cost study. Beginning on page 6 is a detailed narrative for each of the ten collocation cost categories (described earlier). Each collocation cost category narrative contains a detail description of each collocation element using headings like "Purpose", "Introduction", (costing) "Assumptions", and (costing) "Methodology". Following each collocation category narrative is an exhibit showing the core NRC and MRC cost calculations behind each element appearing on the "Rate List" (page 5). Detailed "Work

Papers" and "Input Sheets" support the various cost calculation exhibits. All costing exhibits, work papers, inputs and the element list are cross-referenced to facilitate review of the study. The narratives and exhibits reveal the supporting documentation (i.e. work order analysis, vendor quotes, actual material cost, etc.) for each collocation element.

**Q. What guiding principles does Sprint employ in its cost studies?**

A. Sprint's cost studies comply with TELRIC principles in that they are forward looking with no inclusion of embedded costs. For example, current material costs are combined with work times supported by recent collocation installations of cross connects and smaller DC power feeds (60 amps or less). Other costs are supported by up-to-date building construction costs (floor space element) or very recent vendor quotes (for DC power plants and large power cables).

**Q. What underlying supporting documentation was used in the cost studies which determined the collocation rates presented in Exhibit JRD-2?**

A. Where possible, study costs were determined based on analysis of recent collocation work activities performed in Sprint-Florida central office buildings. The following costs are either partially or totally supported by work activities: transmission engineering fees, cage engineering and construction cost, connections to power plant of 30, 60, and 100-amps, AC outlet, overhead lighting, cross-connects of all band widths, and internal cable. In all, our costing team

examined over 190 work activities with more than 95% of those involving collocations in the state of Florida.

Other costs are supported by current vendor quotes. Vendor quotes either partially or totally support the DC power consumption element and "Connections to Power Plant 100 and 200-Amps".

This use of very recent and current Florida specific cost data is the best verifiable data for predicting forward looking collocation costs in Sprint-Florida central offices.

Sprint's floor space MRC is based on forward-looking central office building investment costs. Building investment (including architectural, engineering, and construction project management fees) is based on data from the 2003 version of RS Means Costworks software. Using RS Means, Sprint's forward looking building investments are determined as though its central office buildings, which house conditioned transmission space, are newly constructed all at one time.

Manhole and conduit costs included in the internal cable space element were taken from structure studies in Sprint's UNE cost study in Docket No. 990649B-TP.

Work times developed by subject matter experts were used to develop nonrecurring costs for application fees, augment fees and project management fees.

Annual charge factors (ACF) were determined based on the capital structure, debt and equity costs and tax rates ordered for Sprint by the Florida Public Service Commission on January 8, 2003 in Docket No. 990649B-TP. The common cost factor applied to collocation rate elements is also consistent with the Commission's order in Docket No. 990649B-TP.

**Q. How did Sprint determine its cost structure in terms of which elements would be recovered with nonrecurring charges (NRC's) verses monthly recurring charges (MRC's)?**

A. Sprint's cost structure (NRC's verses MRC's) was determined through meetings with subject matter experts (SME's) in the areas of Costing, CLEC operations, Network Operations, and Wholesale Markets. Collocation arrangements present unique challenges to the ILEC in its efforts to recover its cost. Collocation arrangements exist so multiple providers can compete to serve the same end customer. Work to process an application for a new collocation or an existing collocation (augment) only benefits the ALEC who has made the application at the time the application is made. Space availability including assignments of interfaces to Sprint's network changes continuously which means that work performed on an application or a space availability report on behalf of one ALEC

will not benefit future applicants for collocation. Each collocation arrangement is unique and is built based on specifics contained on the ALEC's application. Power and cross connect cables are ran to a specific collocation arrangement reserved by the ALEC. These elements are provisioned to the specific quantities of power and cross-connects (for varying bandwidths of DS0, DS1, DS3, OCC) ordered by that ALEC. It is highly unlikely that any other ALEC will need the same quantities of power and cross-connect elements used by a previous ALEC. Given these factors, Sprint predominately uses NRCs for collocation to match cost recovery with the timing of when the costs are incurred. Due to Sprint's experience with abandoned and unclaimed collocation arrangements coupled with a sharp decline in collocation applications, the continuance of NRCs to recover our costs as they are incurred is warranted.

**Q. How were rates determined in the study presented in Exhibit JRD-2?**

A. Non-recurring charges (NRCs) were determined by applying common cost to the sum of labor, materials, sales tax and freight. Some collocation elements (e.g., power and internal cabling) charged as NRCs have an accompanying monthly recurring charge (MRC) to cover the ongoing cost of maintenance and other applicable carrying charges.

Rates for elements recovered strictly through MRCs were determined by applying the appropriate annual charge factor (ACF) to the sum of labor, materials, sales

tax and freight to determine the annual cost for the investment. The common cost factor was applied to the annual cost to determine the total MRC.

**Q. What is the proper application of these rates?**

A. As mentioned previously in this testimony and covered under Sprint Witness, Mr. Ed Fox's Direct testimony and by my rebuttal testimony under issues 1A, "New Collocation – Application", "Minor Augment", "Major Augment", and "Space Report" fees are applied and collected at the time the ALEC submits an application for collocation or requests a space report. Fifty percent of all remaining NRC's are appropriately applied and collected after receiving a firm order from the ALEC and prior to the beginning of construction of the requested collocation elements. The remaining 50% of the NRCs are appropriately applied and collected within 30 days (allowing for the billing cycle) of acceptance of the collocation arrangement by the ALEC. Also as covered by Sprint Witness Fox in his direct testimony and by myself in my rebuttal testimony under issue 1B, the MRC's are properly applied following the acceptance of the collocation arrangement with billing beginning within 30 days.

**Q. Does this conclude your direct testimony on issues 9A and 9B?**

A. Yes.