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December 19, 2002

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

Re: Docket Nos. 981834-TP & 990321-TP Direct Testimony of Edward Fox and Jimmy R. Davis

Dear Ms. Bayó:

Enclosed for filing is the original and fifteen (15) copies of the Direct Testimony of

1. Edward Fox 13852-07 2. Jimmy R. Davis 13853-02

Copies of this have been served pursuant to the attached Certificate of Service.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning the same to this writer.

Thank you for your assistance in this matter.

Sincerely,

Shan S. Masterton

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

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by U.S. Mail or Hand Delivery\* this 19th day of December, 2002 to the following:

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

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AT&T Ms. Lisa A. Riley 1200 Peachtree Street, N.E., Ste 8066 Atlanta, GA 30309-3528

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AT&T Communications of the Southern States, Inc. Ms. Rhonda P. Merritt 101 North Monroe Street, Suite #700 Tallahassee, Florida 32301-1549

CompTel Terry Monroe 1900 M Street, NW, Suite 800 Washington, DC 20036

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

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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. Virginia C. Tate 1200 Peachtree Street, NE Suite 8100 Atlanta, GA 30309

Development Specialists, Inc. Norton Cutler c/o Steve Victor 70 West Madison Street, Suite 2300 Chicago, IL 60602-4250

Katz, Kutter Law Firm Charles Pellegrini/Patrick Wiggins 12<sup>th</sup> Floor 106 East College Avenue Tallahassee, Florida 32301 Mpower Communications Corp. Mr. David Woodsmall 175 Sully's Trail, Suite 300 Pittsford, NY 14534-4558

Shook, Hardy & Bacon LLP Rodney L. Joyce 600 14<sup>th</sup> Street, NW, Suite 800 Washington, DC 20005-2004

Telecommunications Resellers Association Andrew Isar c/o Miller Isar, Inc. 7901 Skansie Avenue, Suite 240 Gig Harbor, WA 98335

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Network Access Solutions Corporation Mr. Don Sussman Three Dulles Tech Center 13650 Dulles Technology Drive Herndon, VA 20171-4602

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

Verizon Select Services Inc. Kimberly Caswell P.O. Box 110, FLTC0007 Tampa, FL 33601-0110



Susan S. Masterton

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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## DIRECT TESTIMONY OF

### Jimmy R. Davis

| 1  | Q. | Please state your name, place of employment, position and business address.      |
|----|----|--|
| 2  |    |  |
| 3  | A. | My name is Jimmy R. Davis. I am employed by Sprint/United Management             |
| 4  |    | Company as a Senior Manager – Network Costing at 6450 Sprint Parkway,            |
| 5  |    | Overland Park, Kansas 66251. I am testifying on behalf of Sprint – Florida,      |
| 6  |    | Incorporated and Sprint Communications Limited Partnership (hereafter referred   |
| 7  |    | to as "Sprint" or the "Company").  |
| 8  |    |  |
| 9  | Q. | What is your educational background?   |
| 10 |    |  |
| 11 | A. | In 1979, I received a Bachelor of Science Degree in Civil Engineering from North |
| 12 |    | Carolina State University in Raleigh, North Carolina. In 1990, I received a      |
| 13 |    | Master of Business Administration Degree from East Carolina University, in       |
| 14 |    | Greenville, North Carolina. I have also received telephony related continuing    |
| 15 |    | education through company sponsored technical training in Planning, Network,     |
| 16 |    | and Field Operations.  |
| 17 |    |  |
| 18 | Q. | What is your work experience?  |
| 19 |    |  |
| 20 | A. | In 1979, I began my career with Sprint – Carolina Telephone as a Project         |
| 21 |    | Engineer in the Building Engineering section of Network. After a two-year tour   |

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in Building Engineering, I transferred to the Network Planning Department of 1 Sprint - Carolina Telephone in Tarboro, North Carolina where I had 2 responsibility for that Company's Capital Recovery Program. There my job 3 4 functions involved statistically based mortality studies of telephone physical property, depreciation expense budgeting, property valuations, and cost studies 5 including capital planning. From 1989 to 1993, I served as Sprint-Carolina 6 Telephone's Technical Training Manager where I had responsibility for providing 7 network related technical skills training to that Company's craft and lower level 8 9 management employees. After a two-year assignment in the Corporate Training Organization, I was assigned, in 1995, to a Customer Services Manager Position 10 11 in Jacksonville, North Carolina. There I was responsible for the turn up and 12 maintenance of Network and Outside Plant for approximately 115,000 access 13 lines. I was also responsible for installation and maintenance of residential and 14 small business services including high-speed data (special) services. In 1998, I 15 transferred to Kansas City where I continued to work in the Customer Services 16 Organization spending the majority of that time as a Standards and Process Manager responsible for the Sprint Local Telephone Division's National Standard 17 18 Methods and Procedures for Outside Plant Construction and Maintenance Operations. I then transferred to my current position in June of 2001 where I am 19 responsible for network costing of both non-recurring and recurring charges for 20 21 collocation as well as costing for non-recurring charges for connections to 22 Sprint's network.

23

### 24 Q. What is the purpose of your testimony in this proceeding?

| 2  | A.   | The purpose of my testimony is to address in part technical issue 1C along with  |
|----|------|--|
| 3  |      | technical issues 5 and 6 (A, B, and C) as identified on Attachment A of the      |
| 4  |      | Commission's Procedural Order dated November 4, 2002. Mr. Edward Fox will        |
| 5  |      | address technical issues 1A through 4 (also including 1C), 7 and 8 in his Direct |
| 6  |      | Testimony also filed today.  |
| 7  |      |  |
| 8  | Q.   | Have you previously testified before a state regulatory commission?              |
| 9  |      |  |
| 10 | A.   | Yes. I have testified in Florida associated with UNE Docket 990649-TP. I have    |
| 11 |      | also testified in the state of Missouri.   |
| 12 |      |  |
| 13 | Q.   | Does Sprint operate as an ALEC as well as an ILEC?                               |
| 14 |      |  |
| 15 | А.   | Yes. As discussed on page 2 of Sprint witness Edward Fox's Direct Testimony,     |
| 16 |      | Sprint operates as both an ALEC and an ILEC in the state of Florida.             |
| 17 |      |  |
| 18 | ISSU | E 1C. WHAT CANCELLATION CHARGES SHOULD APPLY IF AN ALEC                          |
| 19 | CAN  | CELS ITS REQUEST FOR COLLOCATION SPACE?  |
| 20 |      |  |
| 21 | Q.   | How does Sprint distinguish between cancellation of a request for collocation    |
| 22 |      | space verses the decommissioning of a collocation space?                         |
| 23 |      |  |

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| 1  | A. | As explained by Sprint witness Edward Fox in his Direct Testimony on pages 5      |
|----|----|---|
| 2  |    | and 6, cancellation of a "request" for collocation space could occur prior to the |
| 3  |    | completion and acceptance of the space while decommissioning would be             |
| 4  |    | involved if the space has been completed and accepted. Please refer to Mr. Fox's  |
| 5  |    | Direct Testimony on page 5 for comments on applicable charges when a              |
| 6  |    | collocation request is cancelled.   |
| 7  |    |   |
| 8  | Q. | When an ALEC decommissions it collocation space, what charges should              |
| 9  |    | apply?  |
| 10 |    |   |
| 11 | A. | To decommission a previously completed and accepted collocation space, the        |
| 12 |    | ALEC should submit a new application requesting the decommissioning along         |
| 13 |    | with remittance for the appropriate application and project management fees.      |
| 14 |    |   |
| 15 | Q. | Please provide examples of the activities covered by these fees.                  |
| 16 |    |   |
| 17 | Α. | Along with processing the application itself, these fees cover activities like:   |
| 18 |    | engineering work associated with discontinuing DC power and cross connects        |
| 19 |    | serving the collocation space, work associated with updating records which        |
| 20 |    | represent the current use of space, work associated with updating records and     |
| 21 |    | documentation used to communicate the availability of collocation space,          |
| 22 |    | updating billing systems, and coordination with the ALEC on the removal of their  |
| 23 |    | equipment.  |

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| 1  | <u>ISST</u> | JE 5. SHOULD AN ILEC BE REQUIRED TO OFFER, AT A MINIMUM,                         |
|----|-------------|--|
| 2  | POV         | VER IN STANDARDIZED INCREMENTS? IF SO, WHAT SHOULD THE                           |
| 3  | STA         | NDARDIZED POWER INCREMENTS BE?   |
| 4  |             |  |
| 5  | Q.          | How is DC power sold to an ALEC for collocation?                                 |
| 6  |             |  |
| 7  | А.          | There are two components to DC Power. Power consumption is the amount of         |
| 8  |             | DC Power, measured in amps, used on a monthly basis. DC power cable              |
| 9  |             | connections involve the placement and maintenance of cabling required to deliver |
| 10 |             | DC power to an ALEC's collocation space.   |
| 11 |             |  |
| 12 | Q.          | Should an ILEC be required to offer DC Power <u>consumption</u> in standardized  |
| 13 |             | increments?  |
| 14 |             |  |
| 15 | A.          | No. ILECs should offer DC Power consumption on a load amp basis in single        |
| 16 |             | amp increments in an amount equal to what an ALEC needs/orders. Sprint uses      |
| 17 |             | "load amp" to refer to the specific power needs of the equipment using the DC    |
| 18 |             | power.   |
| 19 |             |  |
| 20 | Q.          | How does load amp differ from fused amp?   |
| 21 |             |  |
| 22 | A.          | While load amp refers to the power needs of equipment, fused amp refers to the   |
| 23 |             | "fused" capacity of the DC power cable connection which feeds DC power from      |
| 24 |             | the ILEC DC power generation equipment to the ALEC's equipment.                  |

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### 2 Q. How does Sprint size and fuse DC power cable connections?

- A. Sprint sizes DC power cable based on the load amps ordered by the ALEC. DC
  power fuses, which come in standard sizes, are added for safety reasons. Fuse
  sizes exceed the amps ordered by a factor of 1.25 to 1.33.
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### 8 Q. What size increments should be used for DC power cable connections?

- 9
- A. Through actual cost analysis of material and labor, Sprint has found that DC power connection charges can fairly and reasonably be offered in standard increments. Sprint offers DC power cable connections for fuse sizes of 30 amps and below, for fuse sizes between 35 and 60 amps, for fuse sizes between 70 and 100 amps, and for fuse sizes between 125 and 200 amps.
- 15

### 16 Q. What is redundancy as it relates to DC power cable connections?

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A. Redundancy refers to the fact that there are two leads (A and B) installed to provide DC power to telephone equipment. Each of the two leads is sized to carry the full load of DC power needed by the equipment it serves. That way, if one lead should fail, the other lead can carry the full load and keep the equipment fully powered.

| 1  | Q.   | Does Sprint offer redundancy as part of its DC power cable connection              |
|----|------|--|
| 2  |      | offering?  |
| 3  |      |  |
| 4  | A.   | Yes. Sprint's DC power cable connections provide two leads as described above.     |
| 5  |      | As a part of Sprint's offering, the entire load ordered by the ALEC is to be drawn |
| 6  |      | on the "A" lead. The "B" lead is to be held in reserve in the event the "A" lead   |
| 7  |      | fails.   |
| 8  |      |  |
| 9  | Q.   | How does redundancy affect the pricing and costing of DC power?                    |
| 10 |      |  |
| 11 | A.   | The non-recurring and recurring charges for DC power cable connections include     |
| 12 |      | the material, labor and maintenance for both leads; however, the charges for DC    |
| 13 |      | power usage is based on what the ALEC declares it needs on its application. This   |
| 14 |      | is further explained as part of Sprint's response to Issue 6A below.               |
| 15 |      |  |
| 16 | ISSU | E 6A. SHOULD AN ILEC'S PER AMPERE (AMP) RATE FOR THE                               |
| 17 | PRO  | VISIONING OF DC POWER TO AN ALEC'S COLLOCATION SPACE                               |
| 18 | APPI | LY TO AMPS USED OR FUSED CAPACITY?   |
| 19 |      |  |
| 20 | Q.   | For the purpose of billing DC power, how should an ILEC determine the              |
| 21 |      | quantity of power to bill for?   |
| 22 |      |  |
| 23 | A.   | The most feasible method of billing for DC power consumption is to bill based on   |
| 24 |      | the amount of power the ALEC declares on its application that it needs to power    |

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| 1  |             | its equipment in the collocation space. This approach equates to billing on the |
|----|-------------|---|
| 2  |             | basis of amps "used" without the added cost for the ILEC to meter or otherwise  |
| 3  |             | estimate power usage on a monthly basis. DC power metering, a procedure that    |
| 4  |             | Sprint does not perform for its own operations, would be a costly and           |
| 5  |             | cumbersome process, the cost of which would have to be passed on to the ALEC    |
| 6  |             | in the form of a higher DC power consumption rate.                              |
| 7  |             |   |
| 8  | Q.          | Why is offering of DC Power Consumption based on load amps ordered              |
| 9  |             | superior to "amps fused"?   |
| 10 |             |   |
| 11 | A.          | Billing based on the number of load amps ordered by the ALEC erases any         |
| 12 |             | concerns the ALEC may have that it could be paying for more power than its      |
| 13 |             | equipment could use. This is a commonly raised issue related to fused and       |
| 14 |             | redundant capacity billing.   |
| 15 |             |   |
| 16 | <u>ISSU</u> | E 6B. IF POWER IS CHARGED ON A PER-AMP-USED BASIS OR ON A                       |
| 17 | FUSI        | ED CAPACITY BASIS, HOW SHOULD THE CHARGE BE CALCULATED                          |
| 18 | AND         | APPLIED?  |
| 19 |             |   |
| 20 | Q:          | How should the charge that Sprint is recommending for DC power                  |
| 21 |             | consumption based on load amps ordered be calculated and applied?               |
| 22 |             |   |
| 23 | A:          | A monthly recurring charge representing the ILEC's cost to produce one load amp |
| 24 |             | of DC power should be applied to load amps ordered. The cost of a load amp is   |

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comprised of two components. The first component is the cost of the DC power
 plant itself, including the cost of a generator for providing backup power. The
 second component is the cost of the commercial AC power, which is converted to
 DC power within the power plant.

5 <u>Power Plant Cost</u>

6 The cost of the DC power plant should be determined on a TELRIC basis. That 7 is, it should be a forward-looking cost, based on current least cost most efficient technology, equipment prices, and installation costs, and should assume that the 8 9 power plant is built to satisfy all current demand for DC power. Sprint's cost methodology incorporates variable sizes and costs of power plants due to the 10 realities of widely varying DC power requirements for different size central 11 offices (telephone network facilities). A unit (per amp) investment is determined 12 by dividing the total forward-looking investments in all necessary power plants by 13 14 the total load (in amps) borne by those plants. A unit cost is determined by multiplying the unit investment by an annual charge factor for power equipment. 15 The annual charge factor provides for depreciation, cost of money, income taxes, 16 17 property taxes, maintenance and other recurring expenses.

18 <u>Commercial AC Power Cost</u>

The cost of commercial AC power per DC amp can be determined from the ILEC's recently paid utility bills for powering central offices, which are recorded in FCC Account 6531. The sum of the bills' total charges can be divided by the bills' total kilowatt-hours to yield an average cost per kilowatt-hour. The average cost per kilowatt-hour can then be converted by formula to an average commercial power cost per DC amp.

1 <u>DC Power Cost Per Load Amp</u> DC power cost per load amp is determined by adding the per amp cost of the 2 3 power plant to the per amp cost of commercial AC power. Last, common costs are added to the sum of the power plant and commercial AC power cost to arrive 4 5 at a total cost. Common costs consist of Corporate Operations Expenses (Accts 6 6710 & 6720) and the annual costs of certain General Support Assets (Acct 2110). 7 8 **ISSUE 6C. WHEN SHOULD AN ILEC BE ALLOWED TO BEGIN BILLING AN** 9 **ALEC FOR POWER?** 10 11 **Q**: When should the ILEC begin billing for power? 12 13 A. An ILEC should be allowed to begin billing an ALEC for power after acceptance 14 of the collocation space, the same as for any other collocation element. On that 15 date, the ALEC has the capability of drawing power. 16 Why should billing begin upon acceptance of the space, rather than when the 17 **Q**. 18 power is actually used? 19 20 A. At the time of acceptance of the collocation space, power plant capacity has in 21 effect been placed in service for the ALEC's use. Accordingly, the ILEC is 22 entitled to a return on the investment it has made available to the ALEC. 23 Beginning to bill at the time the space is accepted is consistent with how the costs 24 have been incurred.

- 1
- Q: Does this conclude your testimony?
- 3

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4 A: Yes.