

ORIGINAL

e.spire Exhibit _____
Revised Testimony of C. William Stipe, III

**BEFORE THE
STATE OF FLORIDA
PUBLIC SERVICE COMMISSION**

In the Matter of)
)
Petition by E.SPIRE COMMUNICATIONS, INC.,)
and ACSI LOCAL SWITCHED SERVICES, INC.,)
AMERICAN COMMUNICATION SERVICES,)
OF TAMPA, INC., and AMERICAN COMMUNICATION)
SERVICES OF JACKSONVILLE, INC.)
for Arbitration of an Interconnection Agreement)
with BELL SOUTH TELECOMMUNICATIONS,)
INC. Pursuant to Section 252(b) of the)
Telecommunications Act of 1996)

Docket No. 981745-TP

**REVISED
DIRECT TESTIMONY
OF C. WILLIAM STIPE, III
ON BEHALF OF
E.SPIRE COMMUNICATIONS, INC.**

FEBRUARY 4, 1999*

**Resubmitted on February 19, 1999 with cross-references to the Florida Issues List as it appears in e.spire's February 18, 1999 Issues List Letter. Text that pertained exclusively to settled issues has been deleted.*

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FPSC-RECORDS/REPORTING

1 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

2 A. My name is C. William Stipe III and I am Vice President - Network Engineering for
3 e.spire Communications, Inc. ("e.spire"). My business address is 12701 Fair Lakes
4 Circle, Suite 800, Fairfax, Virginia 22033.

5 **Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE AND BACKGROUND.**

6 A. Since joining e.spire more than two years ago, I have been responsible for switch
7 engineering and have overseen the company's installation of its first Lucent 5ESS switch
8 and more than 20 others. For the past eight months, I also have been responsible for
9 e.spire's SONET and network backbone electronics engineering. Prior to joining e.spire
10 in 1996, I had twenty-three years of experience in the telecommunications industry
11 working for Bell Atlantic Corporation. I held a number of positions with Bell Atlantic,
12 and most recently, since 1994, was Director - Financial Systems. From 1991 to 1994, I
13 served as Director - Product Profitability and Transfer Pricing and operated and enhanced
14 a Product Profitability reporting system. I also developed and implemented a Transfer
15 Pricing process for Line of Business financial reporting. From 1987 to 1991, I was the
16 Director - Customer Business Services, responsible for pricing and costing multi-year
17 service contracts in competitive proposals to Bell Atlantic's largest commercial and
18 government customers. From 1972 to 1987, I held a variety of engineering and
19 management positions of increasing responsibility. I received my Bachelor of Science in
20 Electrical Engineering from Virginia Tech in 1972, and my M.B.A. from Virginia
21 Commonwealth University in 1984.

22 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

23 A. Yes. I testified in e.spire's first arbitration with BellSouth (Docket No. 960916-TP).

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE OTHER STATE PUBLIC**
2 **UTILITY COMMISSIONS?**

3 A. Yes. I have testified before numerous Commissions, including Commissions in the
4 BellSouth, Bell Atlantic, and U S West regions.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The purpose of my testimony is to explain the types and functionality of unbundled local
7 loops ("ULLs") and other unbundled network elements ("UNEs") e.spire is interested in
8 obtaining from BellSouth. During the course of negotiations that led to this arbitration
9 proceeding, BellSouth already has agreed to provide some of the UNEs requested.
10 However, even where BellSouth agreed to provide UNEs, in some cases, it often failed to
11 propose rates, relied on interim rates, proposed rates that could not have a reasonable
12 relation to cost, or proposed to limit the offering in a way that would deny e.spire the
13 ability to use the UNE as intended.

14 **Q. PLEASE SET FORTH THE NETWORK ELEMENTS TO WHICH E.SPIRE HAS**
15 **REQUESTED BELL SOUTH TO PROVIDE UNBUNDLED ACCESS. [ISSUES 1,**
16 **3, 12, 20]**

17 A. e.spire has requested access from BellSouth to various ULLs, including:

- 18 • 2-Wire Analog Voice Grade;
- 19 • 4-Wire Analog Voice Grade;
- 20 • 2-Wire ISDN Digital Grade;
- 21 • 4-Wire DS-1-Compatible;
- 22 • 2-Wire HDSL-Compatible;
- 23 • 2-Wire ADSL-Compatible;

- 1 • 2-Wire ADSL -Equipped;
- 2 • 4-Wire HDSL-Equipped;
- 3 • 56/64 kbps digital grade;
- 4 • DS-3;
- 5 • OC-3;
- 6 • OC-12; and
- 7 • OC-48.

8 **e.spire also has requested unbundled access to Enhanced Extended Links**
9 **("EELs"), with no limits on the types of loops and transport that can be incorporated into**
10 **an EEL; Dark Fiber loop plant; and a Bit-Stream Loop UNE.**

11 **So that e.spire can begin its roll-out of xDSL-based advanced services, e.spire**
12 **also has requested unbundled access to xDSL-compatible (or "clean copper") loops,**
13 **"loop conditioning", loop conditioning operations support systems ("OSS"), and "loop**
14 **spectrum unbundling".**

15 **Where technically feasible, e.spire also has requested unbundled access to sub-**
16 **loop elements. These sub-loop elements include:**

- 17 • the network interface device ("NID");
- 18 • loop concentration equipment inside and outside the central office
19 (including sub-loop concentration equipment and digital loop carriers
20 of all kinds);
- 21 • feeder plant;
- 22 • distribution plant;

- 1 • dark fiber in the loop plant; and
- 2 • network terminating wires.

3 To ensure access to these sub-loop elements, e.spire also has requested BellSouth
4 to provide access to remote terminals for collocation with and interconnection to
5 equipment located in such remote terminals.

6 To complement its own switching capabilities, e.spire also has requested
7 unbundled access to local switching, tandem switching and frame relay packet switching,
8 including user-to-network interface ("UNI") and network-to-network interface ("NNI")
9 switch ports.

10 e.spire also has requested unbundled access to a variety of unbundled transport
11 options. These include shared transport and dedicated transport in various capacity
12 levels, including DS-0, DS-1, DS-3, OC-3, OC-12, OC-48, OC-96 and SONET. e.spire
13 also has requested unbundled access to dark fiber transport facilities on which it will
14 supply its own electronics.

15 e.spire also has requested unbundled access to a host of other network elements,
16 including digital cross-connect system ("DCS"), operator services and directory
17 assistance, signaling, OSS and databases.

18 Finally, e.spire has requested unbundled access to a number of UNE
19 combinations. These combinations include:

- 20 • an unbundled loop combination consisting of a loop, dedicated
21 transport, STPs, signaling link transport, and service control
22 points/databases;

- 1 • **an unbundled loop/network combination consisting of a loop, shared**
2 **transport, dedicated transport, STPs, signaling link transport, and**
3 **service control points/databases;**
- 4 • **a switching combination referred to as "Switching Combination #1"**
5 **which includes a NID, local switching, operator systems, dedicated**
6 **transport, SS7 message transfer and connection control, signaling link**
7 **transport, service control points/databases and tandem switching;**
- 8 • **a switching combination referred to as "Switching Combination #2"**
9 **which includes a NID, local switching, shared transport, dedicated**
10 **transport, SS7 message transfer and connection control, signaling link**
11 **transport, service control points/databases, and tandem switching;**
- 12 • **a switching combination referred to as "Switching Combination #3"**
13 **which includes a NID, local switching, operator systems, shared**
14 **transport, dedicated transport, SS7 message transfer and connection**
15 **control, signaling link transport, service control points/databases, and**
16 **tandem switching;**
- 17 • **a switched data services combination which includes a NID, local**
18 **switching, shared transport, dedicated transport and tandem switching;**
- 19 • **an unbundled loop with interoffice transport combination comprising**
20 **a loop, cross-connect, and dedicated transport or an entrance facility;**
- 21 • **an unbundled element platform without operator services and**
22 **directory assistance composed of a loop, local switching, shared**

1 transport, dedicated transport, STPs, signaling link transport, service
2 control points/databases, and tandem switching; and
3 • a frame relay combination consisting of a loop, dedicated transport,
4 and frame relay switching.

5 **Q. HAS E.SPIRE PROPOSED DESCRIPTIONS OF THE UNEs THAT IT WISHES**
6 **TO ACCEPT? [ISSUES 1, 3, 12, 20]**

7 **A. Yes. The technical descriptions are introduced in Attachment 2 of the draft agreement.**
8 **We ask that the Commission require BellSouth to make available to e.spire now each**
9 **such UNE – at pre-designated TELRIC-based rates.**

10 **Q. DOES E.SPIRE HAVE A PARTICULAR OBJECTION TO BELLSOUTH'S**
11 **PROPOSALS RELATING TO LOOP PROVISIONING? [ISSUES 2, 21]**

12 **A. Yes. e.spire believes that BellSouth's proposed intervals are unreasonably lengthy, and**
13 **its nonrecurring charges ("NRCs") are unreasonably high.**

14 **Q. IS PROVISIONING A LOOP A COMPLICATED AND TIME CONSUMING**
15 **UNDERTAKING? [ISSUES 2, 21]**

16 **A. No, actually, it is a rather simple task that can be completed in a few minutes or less. To**
17 **provision a loop, all that is required is that a technician must attach "jumper cables" from**
18 **BellSouth's point of termination bay ("POT bay") to e.spire's terminating equipment in**
19 **e.spire's collocation space. (e.spire will provide a demonstration of this task at the**
20 **hearing in this proceeding.) The loop cutover is analogous to the activity in turning up a**
21 **BellSouth end user – it is the same function that BellSouth technicians have been**
22 **performing every day, many times a day, for years. Indeed, BellSouth's own data**
23 **submitted in support of its second Federal Communications Commission ("FCC")**

1 Section 271 application for Louisiana suggests that BellSouth can complete coordinated
2 loop cutovers in less than four and a half (4½) minutes. Despite this, BellSouth
3 apparently bases its cost studies on the presumption that 15 minutes of frame work is
4 involved. This assumption, however, cannot be supported by time and motion studies.
5 Ordinarily, running jumper cables to cutover a loop should take roughly two minutes.

6 **Q. IS IT IMPORTANT FOR COORDINATED CUTOVERS TO BE PERFORMED**
7 **WITHIN A CERTAIN PERIOD OF TIME? [ISSUE 21]**

8 A. Yes. It is important that coordinated cutovers be performed as quickly as possible
9 because the interval during which they are performed represents the time the customer is
10 without phone service. Thus, if, as BellSouth claims, it is able to perform coordinated
11 cutovers, on average, in under four and a half (4½) minutes, that means e.spire's new
12 customers typically experience a period of service outage of that duration while their
13 line(s) are switched from BellSouth to e.spire.

14 **Q. HAVE E.SPIRE AND BELL SOUTH AGREED ON A LOOP CUTOVER**
15 **INTERVAL? [ISSUE 21]**

16 A. No. e.spire proposes, and BellSouth refuses, to incorporate terms from its original
17 interconnection agreement with BellSouth regarding loop cutover intervals. Thus, e.spire
18 proposes to renew provisions which call for a five minute cutover interval, penalties in
19 the event that BellSouth misses the target interval, and a 30 minute window during which
20 the five minute cutover must take place. BellSouth has responded with a complicated
21 SL1/SL2 loop proposal which, as best I can tell, is designed to inflate competitors' costs
22 rather than meet their unbundling requests and needs.

23 **[Q&A DELETED]**

1 **Q. ARE THERE OTHER BELLSOUTH RATES WHICH RAISE AN ISSUE – AT**
2 **LEAST FROM A TECHNICAL STANDPOINT? [ISSUE 2]**

3 **A.** Yes. For example, BellSouth proposes to charge considerably more for DS-3 and DS-1
4 cross-connects than for a DS-0 cross connect. Although the circuit equipment itself
5 might vary slightly, there is no actual difference in the work that is performed. As is the
6 case in provisioning loops, it is simply a matter of connecting jumper cables from the
7 point of termination bay to e.spire's collocated facilities. Thus, a substantial difference in
8 cross-connect NRCs cannot be justified – at least from a technical standpoint. In fact, it
9 appears that BellSouth's cross-connect rates appear to be reverse engineered so that the
10 resulting UNE transport rates begin to approximate BellSouth's subsidy-laden special
11 access tariff rates. Such an approach has no technical basis nor, as I understand it, does it
12 have any foundation in the 1996 Act.

13 **Q. ARE THERE OTHER RATES THAT CAN BE QUESTIONED, AT LEAST**
14 **FROM A TECHNICAL PERSPECTIVE? [ISSUE 2]**

15 **A.** Yes. As Mr. Falvey describes in his testimony, the difference between original and first
16 NRCs proposed by BellSouth does not appear to consistently reflect the efficiencies
17 realized by BellSouth when a competitive local exchange carrier, such as e.spire, orders
18 multiple UNEs. Indeed, there can be dramatic savings in time realized in back office
19 "paper pushing" or computer entry functions. There also can be time savings in
20 provisioning multiple UNEs pursuant to the same service order.

1 **Q. ARE ANY OF E.SPIRE'S COLLOCATION PROPOSALS TECHNICALLY**
2 **INFEASIBLE? [ISSUES 7, 9]**

3 **A. No. e.spire has requested solutions like shared space, small space/small increment, and**
4 **adjacent collocation to reduce the cost and delay associated with physical collocation**
5 **with BellSouth. None of these proposals – including adjacent collocation – raise any**
6 **significant technical obstacles.**

7 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

8 **A. Yes, although I do not waive an opportunity, if afforded one by the Commission, to file**
9 **supplemental direct testimony.**