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November 1, 2000

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Ms. Blanca S. Bayó, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 000828-TP Sprint's Direct Testimony

Dear Ms. Bayó:

Enclosed for filing is the original and fifteen (15) copies of Direct Testimony of: David T. Rearden, Michael R. Hunsucker, Melissa L. Cloz, Angela Oliver, Mark G. Felton, and James Lenihan.

14180-00 thru 14185-00

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

Sincerely,

Susan S. Masterton

Susan S. Masterton

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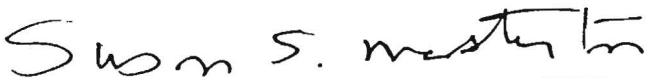
CERTIFICATE OF SERVICE

DOCKET NO. 000828-TP

I hereby certify that U.S. Mail or hand-delivery served a true and correct copy of the foregoing this 1st day of November, 2000 to the following:

Nancy B. White
C/o Nancy H. Sims
BellSouth Telecommunications, Inc.
150 S. Monroe Street, Suite 4000
Tallahassee, Florida 32301-1556

Tim Vaccaro
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850



Susan S. Masterton
Susan S. Masterton

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **DIRECT TESTIMONY**

3 **OF**

4 **DAVID T. REARDEN**

ORIGINAL

5
6
7 **Item 1: Introduction**

8 **Q. Please state your full name, position, and business address.**

9
10 A. My name is David T. Rearden. I am employed by Sprint Communications
11 Company Limited Partnership (Sprint) as a Manager of Regulatory Policy. My
12 business address is 8140 Ward Parkway, Kansas City, Missouri 64114.

13
14 **Q. Please describe your educational background, work experience and present**
15 **responsibilities.**

16
17 A. I received a Ph.D. in economics from the University of Kansas in 1991 with fields
18 of specialization in microeconomics and econometrics and a Bachelor of Arts
19 degree in economics and history from Eastern Illinois University in 1982.

20 I began working for Sprint Communications Company L.P. in January of 1998.
21 Prior to joining Sprint, I was employed on the Staff in the Utilities Division of the
22 Kansas Corporation Commission. I began at the Kansas Commission in June
23 1994 as Managing Research Economist. In the summer of 1996, I was promoted

1 to Chief of the Rate Design Section and Managing Telecommunications
2 Economist. I supervised five tariff analysts and participated in numerous
3 telecommunications proceedings before the Kansas Commission. Before working
4 at the Commission, I taught economics for two years at the University of Kansas.
5 I also taught economics for two years at Cleveland State University. Subjects
6 taught included microeconomics, mathematical economics, public finance, and
7 econometrics.

8 My current responsibilities include the development and advocacy of Sprint's
9 regulatory policy on a wide range of issues including, local market entry, Total
10 Element Long Run Incremental Cost or TELRIC costing and pricing of
11 unbundled network elements (UNEs), universal service, access charges, anti-
12 competitive pricing of interexchange services and Section 271 applications. I have
13 filed testimony and affidavits before the public utility Commissions in the states
14 of California, Georgia, Kansas, Kentucky, Maryland, Nebraska, New York, North
15 Carolina, Vermont, Wisconsin and Wyoming and before the Telecommunications
16 Regulatory Board in Puerto Rico. I have written or contributed to numerous sets
17 of comments filed on behalf of Sprint in several states.

18

19 **Item 2: Purpose, Outline, and Summary of Testimony**

20 **Q. Please provide a brief description of your testimony.**

21

22 A. The purpose of my testimony is to demonstrate that the appropriate mechanism
23 for compensating local exchange carriers (LECs) for terminating traffic to an

1 Internet Service Provider (ISP) is reciprocal compensation. My testimony
2 supports the Florida Public Service Commission (“Commission” or “FPSC”)
3 decisions which have consistently required incumbent local exchange carriers
4 (ILECs) to pay reciprocal compensation for ISP traffic delivered to a alternative
5 local exchange company (ALEC) and requests that the Commission again make
6 the same finding.
7

8 **Q. Does Sprint’s position conform to the FPSC's previous decisions regarding**
9 **the appropriate compensation for terminating traffic to an ISP?**

10
11 A. Yes. Sprint’s position is consistent with the FPSC’s rulings on this issue that
12 reciprocal compensation is due on ISP-bound traffic. In particular, the
13 Commission’s most recent Order on this issue is in Docket No. 991220-TP.
14 Carriers incur significant costs in terminating traffic to ISPs and those carriers
15 should be afforded the opportunity to recover their costs. Reciprocal
16 compensation is the mechanism used to recover costs associated with the
17 termination of all other types of traffic. Termination of ISP-bound traffic ought
18 not to be treated in a discriminatory manner. This Commission has thoroughly
19 examined this same issue several times in the recent past and has concluded in
20 each instance that reciprocal compensation should be paid for ISP-bound traffic.

21 **Q. What is BellSouth’s position regarding the appropriate compensation for**
22 **terminating traffic to an ISP?**

1 A. BellSouth's position is in direct opposition to the Commission's recent rulings on
2 this issue. BellSouth argues that it should not pay to terminate ISP-bound traffic
3 on an ALEC's network. This argument uses the previous jurisdictional finding of
4 the Federal Communications Commission (FCC) in its Declaratory Ruling¹ that
5 ISP-bound traffic is jurisdictionally mixed though largely interstate. As the
6 Commission is well aware, however, this FCC Order has been vacated and
7 remanded by the Court of Appeals for the D.C. Circuit.² Under BellSouth's
8 reasoning, reciprocal compensation rates cannot apply because such rates are for
9 local traffic only under the Telecommunications Act of 1996 (Act). Therefore,
10 according to BellSouth, the reciprocal compensation provisions of the local
11 interconnection agreement should compensate for local, but not for ISP-bound
12 traffic.

13
14 **Q. What are the main conclusions of your testimony regarding reciprocal**
15 **compensation?**

16
17 A. Although I am not an attorney, based upon my review of the FPSC's Orders on
18 this issue, the FCC's Declaratory Ruling, and the U.S. Court of Appeals for the
19 District of Columbia Circuit's ruling, it is clear that BellSouth and Sprint should
20 pay reciprocal compensation for ISP-bound traffic. Therefore, the Commission
21 should adopt Sprint's proposal on this issue.

¹ *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, 14 FCC Rcd 3689 (1999).

² *See Bell Atlantic Telephone Companies v. Federal Communications Commission and United States of America*, 206 F.3d 1 (D.C. Cir. March 24, 2000) ("*Bell Atlantic*")

1

2 **Item 3: Reciprocal Compensation for ISP Traffic –**

3 **(A) The Florida Public Service Commission Has Jurisdiction And Authority To**
4 **Order Reciprocal Compensation For ISP Traffic.**

5

6 **Q. How did the D.C. Circuit Court’s recent ruling impact the FCC’s previous**
7 **finding regarding the mixed jurisdictional nature of Internet traffic?**

8

9 A. On March 24, 2000 the U.S. Court of Appeals for the District of Columbia Circuit
10 vacated the FCC’s Declaratory Ruling. Based upon my understanding of the *Bell*
11 *Atlantic* decision, the Court vacated the FCC’s ruling that ISP-bound traffic is
12 interstate in nature on the basis that the FCC did not justify its use of an “end-to-
13 end” analysis. The *Bell Atlantic* Court also questioned the ruling in light of the
14 FCC’s reaffirmation of its decision to grant ESPs an exemption from paying
15 access charges.³

16 The *Bell Atlantic* Court stated that the FCC’s extension of “end-to-end” analysis
17 from jurisdictional purposes to the ISP context yielded intuitively backward
18 results. Much of my testimony below relates to the FCC’s previous Declaratory
19 Ruling. However, the reasons explained in the Court’s decision to vacate the
20 FCC’s order and remand the issue back to the administrative body only
21 strengthens Sprint’s argument that reciprocal compensation is due for termination
22 of ISP-bound traffic. The *Bell Atlantic* opinion supports the view that a call to an

³ *Bell Atlantic* at 21.

1 ISP is like a call to a local business that then uses the telephone to order products
2 or services. This bolsters the case for reciprocal compensation being due for
3 Internet traffic. Also, as I discuss in more detail below, nothing in the *Bell*
4 *Atlantic* Court decision affects consideration of the fact that ALECs incur real
5 costs in terminating such traffic to ISPs. Such costs should not go
6 uncompensated.

7

8 **Q. In light of the FCC's and D.C. Circuit's rulings, to what extent does the**
9 **Florida Commission have jurisdiction to regulate inter-carrier compensation**
10 **for traffic to Internet Service Providers?**

11

12 A. The Circuit Court's *vacatur* and remand of the FCC's Declaratory Ruling did not
13 consider the FCC's determination in the Declaratory Ruling that state
14 Commissions have the authority to require ILEC payments to ALECs for ISP
15 reciprocal compensation. Further, the FPSC has previously determined that it has
16 jurisdiction over reciprocal compensation for traffic delivered by ALECs to ISPs
17 and has already ruled several times that ILECs must pay ALECs reciprocal
18 compensation for such traffic.

19

20 **Q. Has the Commission previously ruled whether ISP-bound calls are local for**
21 **the purpose of reciprocal compensation?**

22

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A. Yes. In the Global NAPs, Inc. arbitration with BellSouth, the Commission determined that:

...dial-up connections to an ISP, or ISP-bound traffic, shall be treated as local traffic for purposes of reciprocal compensation...⁴

In Docket No. 991946-TP⁵ the Commission granted summary judgement in favor of ITC^DeltaCom. The Commission found that:

The Agreement does not segregate traffic to ISPs from local traffic... and thus ...the plain language of the Agreement calls for the payment of reciprocal compensation for all local traffic, including traffic bound for ISPs.⁶

(B) ALEC Costs by Themselves Justify Implementation of a Mechanism to Compensate ALECs for Terminating Traffic to ISPs.

Q. Do ALECs and ILECs incur costs when they terminate traffic to an ISP?

⁴ Order No. PSC-00-1680-FOF-TP, issued September 19, 2000 in Docket No. 991220-TP In re: Petition by Global NAPs, Inc. for arbitration of interconnection rates, terms and conditions and related relief of proposed agreement with BellSouth Telecommunications, Inc., p. 14.

⁵ In re: Request for arbitration concerning complaint of ITC^DeltaCom Communications, Inc against BellSouth Telecommunications, Inc. for breach of interconnection terms, and request for immediate relief.

⁶ Order No. PSC-00-1540-FOF-TP, issued August 24, 2000. p. 13.

1 A. Yes. Both ALECs and ILECs incur costs for terminating traffic to ISPs.⁷ In the
2 portion of the Declaratory Ruling devoted to the Notice of Proposed Rulemaking,
3 the FCC acknowledged that:

4 No matter what the payment arrangement, LECs incur a
5 cost when delivering traffic to an ISP that originates on
6 another LEC's network. (Declaratory Ruling at ¶ 29).

7

8 **Q. Would the costs be similar for an ISP-bound call originating on Sprint's**
9 **ALEC network and terminating on BellSouth's network?**

10

11 A. Yes, similar costs would be incurred when a Sprint ALEC end user customer
12 places a local call to a dial-up ISP served by BellSouth. The traffic traverses
13 similar portions of BellSouth's network equipment and facilities. To recover its
14 costs, BellSouth charges ALECs full reciprocal compensation rates for
15 terminating ISP-bound traffic on BellSouth's network.

16

17 **Q. Given these factors, how do you suggest the Commission determine the costs**
18 **of connecting a call to an Internet Service Provider?**

19

20 A. The Commission should determine that it is reasonable to use BellSouth's
21 reciprocal compensation rate as a basis upon which to develop rates in this

⁷ I will use the term "terminate" in this testimony in the sense of the delivery of the traffic to the ISP and not with regard to the FCC jurisdictional analysis.

1 interconnection agreement. Sprint proposes to establish a per call charge and a
2 separate per minute charge for local switching. I discuss Sprint's rate structure
3 proposal more fully below.

4
5 **(C) Dial-Up Internet Traffic Should Not Be Segmented Into A Separate Class of**
6 **Traffic.**

7
8 **Q. Does creating a separate class of service for ISP dial-up traffic alleviate the**
9 **concern about uneven traffic flow to ISPs?**

10
11 **A.** No. There are several reasons why a separate class of service should not be
12 created for dial-up Internet traffic. First, it does not appear that technology is
13 sufficiently developed to separate out dial-up Internet traffic from other types of
14 local traffic. Second, there are other types of traffic, besides Internet traffic that
15 tend to generate a disproportionately larger amount of terminating traffic than
16 originating. It is far from clear that Internet traffic should be singled out without
17 examining other types of traffic and their costs. And third, ALECs and data LECs
18 are just in the initial stages of building out their networks. Until their networks
19 are completed, it is difficult to determine their costs of terminating ISP-bound as
20 well as other types of traffic. Given all of these uncertainties, it appears that there
21 is little, if any benefit to segregating dial-up Internet traffic as a separate class.

1 **Q. Can Internet traffic presently be distinguished from other categories of**
2 **telephone calls?**

3

4 A. No. The equipment currently in use does not allow one LEC to positively identify
5 ISP-bound traffic terminating to another LEC. At present, the method an
6 interconnected carrier has for estimating ISP-bound traffic that it is terminating to
7 a ALEC is to compare originating and terminating traffic flows between itself and
8 the ALEC. If the ILEC is terminating significantly more traffic to the ALEC than
9 the ALEC terminates to the ILEC, then the ILEC typically assumes that the traffic
10 terminating to the ALEC is ISP-bound traffic. However, it must be emphasized
11 that the ILEC cannot know a priori whether the traffic to the ALEC is ISP-bound.
12 Rather, the ILEC must conjecture that the traffic is ISP-bound based on
13 terminating traffic ratios or holding times.⁸

14

15 **Q. Is the use of terminating traffic ratios an ironclad method to determine the**
16 **type of traffic being terminated?**

17

18 A. Absolutely not. ALECs and ILECs can have large quantities of terminating
19 traffic for reasons other than terminating traffic to an ISP. There are a number of
20 businesses and public agencies that receive more in-bound traffic than outbound.

⁸ In some instances, ILECs have measured the traffic terminating to an ISP by asking the ALEC to identify ISP-related NXXs. However, such a method is administratively burdensome and largely unworkable. Billing records must be updated frequently to ensure accurate tracking of ISP minutes. Additionally, if an ILEC knows that a ALEC serves only ISP traffic, the ILEC could identify the trunk groups serving that ALEC and measure the traffic flowing over those trunk groups.

1 For example, if the ALEC services a city, county, or state government agency,
2 particularly one that offers call-in help lines, (such as a county extension service)
3 then it will have a larger amount of traffic terminating than originating. An
4 ALEC that provides service to a talk radio station will have a significantly greater
5 amount of terminating traffic. Similarly, an ALEC that provides service to a
6 business office that has a Local Area Network (LAN) and allows its employees to
7 dial-in to the company's LAN and work from a remote location such as the
8 employees' home will have a large amount of terminating traffic. This is
9 particularly true since employees dialing into their LAN will likely log-on and
10 remain on line for the greater part of a day. In fact, if an employee has a second
11 local line at his or her house solely for the purpose of logging onto the company's
12 LAN, the employee may simply leave the computer logged on to the LAN 24
13 hours a day, 7 days a week. As more companies allow their employees to work at
14 home and log into the company's computers from home, this type of traffic has
15 the potential to generate terminating traffic volumes even greater than that
16 generated by dialing into ISPs. Inasmuch as the ILECs still serve the lion's share
17 of the local business market, they are the main beneficiaries of traffic terminating
18 to business LANs. Accordingly, it may be reasonable to review the rates paid for
19 LAN-bound traffic terminating to the ILECs. There are clearly several situations
20 that involve significantly higher relative amounts of terminating traffic in addition
21 to the case of a CLEC delivering traffic to an ISP. High terminating to originating
22 traffic ratios thus do not necessarily imply that the traffic is ISP-bound.

23

1 **Q. How can Internet traffic be distinguished from other categories of telephone**
2 **calls?**

3

4 A. There are no simple methods to separate ISP-bound traffic from voice call traffic
5 at present. Telecommunications markets, technology, and other relevant factors
6 are changing at a fast pace. In the future, it may be technically feasible to
7 uniquely identify ISP traffic from non-ISP traffic. If ISP traffic can be separated
8 and identified, it may be possible to develop specific cost studies.

9

10 **(D) Reciprocal Compensation Rates are the Appropriate Rates to Charge for**
11 **Terminating Traffic to an ISP Pending a Final FCC Rule on Inter-Carrier**
12 **Compensation.**

13

14 **Q. What compensation arrangement or methodology should carriers employ to**
15 **compensate each other for completing a dial-up Internet call?**

16

17 A. Carriers should compensate each other for completing a dial-up Internet call the
18 same as they would for completing any other local call. This is the only
19 mechanism to ensure that carriers are compensated for costs incurred in
20 terminating or delivering traffic.

21

1 **Q. What compensation arrangement or methodology has the FCC suggested for**
2 **carriers to employ to compensate each other for completing a dial-up**
3 **Internet call?**

4

5 A. The FCC has yet to make a final determination regarding the appropriate
6 compensation arrangement or methodology for carriers to use to compensate each
7 other for completing dial-up Internet calls. But the FCC has clearly stated that
8 reciprocal compensation is an acceptable option for the interim period. The FCC
9 declared that state Commissions may order reciprocal compensation be paid for
10 terminating ISP-bound traffic. And the Florida Commission has already ruled
11 that it has the authority to establish reciprocal compensation for Internet traffic. A
12 carrier incurs costs when it terminates a call on its network to an ISP. Principles
13 of economic efficiency dictate that the carriers must be compensated for such
14 traffic.

15

16 **Item 4. Sprint's Reciprocal Compensation Proposal**

17 **Q. How should reciprocal compensation rates be calculated?**

18 A. There is only one refinement to the current rates that is necessary — and this
19 refinement should be applied to all types of local traffic, including both voice
20 calls and calls to ISPs: The reciprocal compensation rate for local switching
21 should be bifurcated into a fixed call set-up charge and a separate per-minute
22 charge. This structure for local switching was recently adopted by the Texas

1 PUC,⁹ and it places local switching cost recovery on a much sounder economic
2 footing. A significant portion of the costs of local switching consists of set-up
3 costs that do not vary with the duration of the call. These costs include the
4 amount of time the switch central processor requires to set up the call, together
5 with some SS7 network costs associated with setting up the trunk required for the
6 call, while the variable switching costs consist primarily of the line and trunk
7 investment portions of the switch. Today, both sets of costs are generally
8 recovered by a single minute of use (MOU) charge. As a result, there is
9 appropriate cost recovery only for calls of average duration. The terminating
10 carrier fails to fully recover its call set-up costs for very short calls, whereas that
11 carrier over-recovers its costs on very long calls.

12
13 **Q. Please give an example that shows how over-recovery of switching occurs on**
14 **long calls.**

15
16 A. Assume, as the Texas PUC found, that the average voice call lasts 3 minutes and
17 the average ISP call is 29 minutes long.^{10,11} Assume also that there is a call set-up
18 rate of \$.0018 per call and a per-minute charge of \$.0010. Under the current
19 approach of using a blended rate, there is a single charge to recover the fixed cost
20 (\$.0018) plus the variable cost for an average duration call of 3 minutes (3 x
21 \$.0010)), or a total cost of \$.0048. This results in a rate for local switching of

⁹ *Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Communications Act of 1996*, Docket No. 21982, Arbitration Award, July 13, 2000, at 49.

¹⁰ *Id.* at 47.

¹¹ In fact many customers — particularly those with second lines — may maintain a call into their ISP for several hours at a time.

1 \$.0016 per MOU. The total local switching cost for a 29-minute ISP call would
2 be \$.0308 ((29 × \$.0010) + \$.0018). However, charging a blended rate of \$.0016
3 per minute for this call would result in a reciprocal compensation payment of
4 \$.0464 — more than 50% above the actual local switching cost.

5

6 **Q. Can local switching costs be readily separated into two elements?**

7

8 A. Yes. The Telecordia SCIS switching cost model widely employed by the industry
9 has a standard output for central processor call set-up costs. Signaling costs are
10 not recovered, in the reciprocal compensation context, by any other charge. Thus,
11 switching costs can be reliably separated into call setup and per MOU amounts.

12

13 **Q. Do billing systems need to be modified?**

14

15 A. Yes. Sprint recognizes that establishing a two-part rate for local switching
16 requires modification of existing billing systems and proposes that the FPSC give
17 the parties a reasonable time (one year should be more than sufficient) to modify
18 their billing systems to accommodate the two-part charge. Alternatively, having
19 different local switching rates for different bands of holding time could
20 satisfactorily approximate the two-part structure. Each interconnected carrier
21 could be assigned to a band based on average hold times for that carrier,
22 determined by traffic studies.

23

1 **Item 5. Summary**

2

3 **Q. Please summarize Sprint's position regarding the appropriate compensation**
4 **for terminating traffic to an ISP.**

5

6 A. The Florida Commission should adopt Sprint's proposal in connection with its
7 interconnection agreement with BellSouth regarding the inclusion of ISP traffic as
8 local traffic for purposes of reciprocal compensation because it is consistent with
9 the FPSC's prior rulings on the subject. Until the FCC adopts a permanent rule
10 concerning such traffic, this Commission's previous rulings on reciprocal
11 compensation for ISP traffic should govern the parties' interconnection
12 Agreement in this regard. Accordingly, the Florida Commission should order
13 BellSouth to pay Sprint at rates that are equivalent to reciprocal compensation
14 rates for terminating traffic to an ISP on Sprint's network using a bifurcated rate
15 structure for switching.

16

17 **Q. Does this conclude your Direct Testimony?**

18

19 A. Yes.