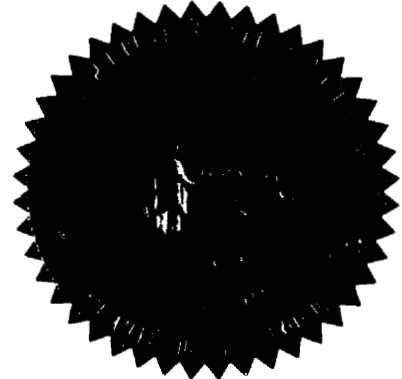


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 000075-TP (PHASE II)

In the Matter of

INVESTIGATION INTO APPROPRIATE
METHODS TO COMPENSATE CARRIERS
FOR EXCHANGE OF TRAFFIC SUBJECT
TO SECTION 251 OF THE
TELECOMMUNICATIONS ACT OF 1966.



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VOLUME 4

Pages 587 through 747

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN E. LEON JACOBS, JR.
COMMISSIONER J. TERRY DEASON
COMMISSIONER LILA A. JABER
COMMISSIONER BRAULIO L. BAEZ
COMMISSIONER MICHAEL A. PALECKI

DATE: Friday, July 6, 2001

TIME: Commenced at 9:00 a.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: JANE FAUROT, RPR
Chief, Office of Hearing Reporter
Services
FPSC Division of Commission Clerk and
Administrative Services

Appearances: (As heretofore noted.)

DOCUMENT NUMBER-DATE

FLORIDA PUBLIC SERVICE COMMISSION 08863 JUL 20 2001

FPSC-COMMISSION CLERK

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NAME:

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593

705

CERTIFICATE OF REPORTER

747

P R O C E E D I N G S

1
2 CHAIRMAN JACOBS: We will go back on the record. I
3 show the next is Doctor Selwyn.

4 MR. HOFFMAN: Thank you, Mr. Chairman. Doctor
5 Selwyn, have you been sworn?

6 THE WITNESS: No, I was cooling my heels in Atlanta
7 when everyone was, I think.

8 (Witness sworn.)

9 LEE. L. SELWYN

10 was called as a witness on behalf of AT&T Communications of the
11 Southern States, Inc., TCG of South Florida, Allegiance Telecom
12 of Florida, Inc., MediaOne Florida Telecommunications, Inc.,
13 Level 3 Communications, LLC, and US LEC of Florida, Inc., and,
14 having been duly sworn, testified as follows:

D I R E C T E X A M I N A T I O N

15
16 BY MR. HOFFMAN:

17 Q Will you please state your name and business address?

18 A Yes. My name is Lee L. Selwyn. My business address
19 is 2 Center Plaza, Boston, Massachusetts 02108.

20 Q And by whom are you employed?

21 A I am employed by Economics and Technology
22 Incorporated, and I am the president of the firm.

23 Q Doctor Selwyn, have you prepared and caused to be
24 filed 58 pages of prefiled direct testimony in this proceeding?

25 A Yes.

1 Q And you have filed both your direct testimony and
2 your rebuttal testimony on behalf of a number of ALECs in this
3 state?

4 A Yes.

5 Q And those ALECs are listed on the title pages of your
6 testimony?

7 A And in the text itself, yes.

8 Q Okay. At this time, Doctor Selwyn, do you have any
9 changes or revisions to your prefiled direct testimony?

10 A Yes.

11 Q Could you outline those?

12 A I have one change which appears at Page 1, Line 7.
13 Subsequent to filing this testimony, my address changed, so 1
14 Washington Mall should be stricken and replaced with 2 Center
15 Plaza.

16 The second correction, and I'm not sure if correction
17 is quite the right word, I would just call the Commission's
18 attention to the text that begins at Page 49, which can best be
19 described as a word processing event. There is a question that
20 begins at the very top of the left-hand side of the diagram on
21 Page 49 and continues on to Page 50, and I think just for the
22 record what I would like to do is read the words, if I can,
23 that I had intended to have at the beginning of the question
24 which then carries over again. There is no change here. The
25 question is what if you were to eliminate the condition that a

1 point of -- and then the question continues, interconnection,
2 et cetera. And I apologize for that.

3 Q The change that you just made there or the
4 clarification is the beginning of the question that leads to
5 the answer that is shown on Page 50, Line 28?

6 A That is correct.

7 Q With that clarification, or those clarifications,
8 Doctor Selwyn, if I asked you the same questions contained in
9 your prefiled direct testimony this afternoon, would your
10 answers be the same?

11 A They would.

12 MR. HOFFMAN: Mr. Chairman, I will would ask that
13 Doctor Selwyn's prefiled direct testimony be inserted into the
14 record as though read.

15 CHAIRMAN JACOBS: Without objection, show the
16 testimonies of Doctor Selwyn entered into the record as though
17 read.

18 BY MR. HOFFMAN:

19 Q Doctor Selwyn, have you also prepared and caused to
20 be filed 28 pages of prefiled rebuttal testimony in this
21 proceeding?

22 A Yes.

23 Q Do you have any changes or revisions to your rebuttal
24 testimony?

25 A Yes.

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RECIPROCAL COMPENSATION

Introduction

Q. Please state your name, position and business address.

A. My name is Lee L. Selwyn; my business address is ~~One Washington Mall,~~ *2 Center Plaza*
Boston, Massachusetts 02108. I am President of Economics and Technology,
Inc.

Q. Are you the same Lee L. Selwyn who submitted Direct Testimony in this proceeding on December 1, 2000?

A. Yes, I am.

Q. What is the purpose of the additional testimony that you are offering at this time?

A. This testimony addresses Issues Number 11 through 15 and 17 - 18 that the Commission has designated for consideration in this phase of this proceeding.

1 **The ILECs continue to reflect their long history as franchise monopoly**
2 **service providers in the massive scale and ubiquity of their local exchange**
3 **networks, whereas ALECs tend to design their networks to more closely**
4 **accommodate current and anticipated demand in an evolutionary, flexible**
5 **manner.**

6
7
8 *Issue 11. What types of local network architectures are currently*
9 *employed by ILECs and ALECs, and what factors affect their*
10 *choice of architecture? (Informational issue)*

11
12 Q. Are there major differences between the architectural features of ILEC and
13 ALEC networks?

14
15 A. Yes. I have already described the major architectural features of ILEC and
16 ALEC networks at pages 54-59 of my December 1, 2000 Direct Testimony,
17 in the context of explaining the reasons why ILEC and ALEC networks tend
18 to have different cost characteristics. In addition, pages 39-46 of that
19 testimony supplied more detail concerning how ILEC and ALEC networks
20 process calls, in order to demonstrate that an ISP-bound call generally is not
21 handled differently from any other type of locally-rated call completed by
22 either an ILEC or an ALEC.

23
24 Q. Is a LEC's choice of network architectures influenced by the level of traffic
25 volumes that it serves or anticipates serving?

26

1 A. Yes, of course. The network design choices of the ALECs are particularly
2 sensitive to anticipated demand conditions. To understand this, we must first
3 consider the factors that drove the development of the ILEC networks. The
4 design of the ILECs' contemporary networks generally reflects their
5 traditional role as monopoly service providers serving all potential telephone
6 service subscribers within their assigned operating areas. Under those
7 conditions, the efficient network design tended to require an essentially
8 ubiquitous deployment of distribution facilities, including distribution cables
9 placed down virtually every street and extending to every business office
10 park, high-rise building, and the like – whereupon traffic from those facilities
11 was aggregated into higher-capacity feeder cables and transported back to a
12 relatively high number of local, end-office switches and (other than intra-
13 switch calls) was switched onto the interoffice transmission network for the
14 transport of each call to its intended destination. Because ILECs serve close
15 to 100% of the local service market, there is in each community sufficient
16 demand to support at least one, and often several, central office switches or
17 “remote service units” (“RSUs”). Consequently, the geographic areas served
18 by individual central office switches (or wire centers, in cases where switches
19 for several “exchanges” have been consolidated) tend to be relatively small
20 and the lengths of subscriber loops connecting the wire center with the
21 customer’s premises tend to be relatively short.

22

1 In contrast, a typical ALEC serves only a small fraction of the total customer
 2 base in any single community. Because the demand is so much smaller than
 3 for ILEC services, it would be extremely inefficient and costly for an ALEC
 4 to deploy a switch or even an RSU in each local community it wishes to
 5 serve. Instead, an ALEC will typically use one switch to serve a broad
 6 geographic area, providing transport *on the line side of the switch* where the
 7 ILEC would normally provide such transport *on the trunk side of its*
 8 *individual end office switches*. An ALEC will design its network to
 9 accommodate the actual locations of its customers and their actual demand
 10 characteristics under an architecture that can be expanded in a flexible
 11 manner as demand for the ALEC's services grows. At pages 58-59 of my
 12 earlier Direct Testimony, I described in more detail how an ALEC could use
 13 a combination of leased unbundled network elements (UNEs), high-capacity
 14 transport facilities, and switching resources to accommodate this type of
 15 service-provisioning arrangement.

16

17 **An ALEC should be compensated at the ILEC's tandem interconnection rate**
 18 **when the ALEC network provides transport and termination of ILEC-**
 19 **originated traffic over a geographic area comparable to that served by the**
 20 **ILEC's tandem switches, or otherwise performs typical tandem functions**
 21 **including traffic aggregation over a wide geographic area.**

22

23

24 *Issue 12: Pursuant to the Act and FCC's rules and orders:*

- 25 (a) *Under what condition(s), if any, is an ALEC entitled to be*
 26 *compensated at the ILEC's tandem interconnection rate?*
 27 (b) *Under either a one-prong test or two-prong test:*
 28 (i) *What is "similar functionality?"*
 29 (ii) *What is "comparable geographic area?"*

1

2

3 Q. What criteria has the FCC established concerning when an ALEC is entitled
4 to be compensated at the ILEC's tandem interconnection rate?

5

6 A. In the Local Competition Order, the FCC set forth two criteria governing
7 when an ALEC can charge the ILEC's tandem interconnection rate for
8 transport and termination of traffic delivered by an ILEC for completion by
9 the ALEC. The FCC concluded that "where the interconnecting carrier's
10 switch serves a geographic area comparable to that served by the incumbent
11 LEC's tandem switch, the appropriate proxy for the interconnecting carrier's
12 additional costs is the LEC tandem interconnection rate."¹ This provision
13 (with slightly different terminology) was adopted explicitly in the FCC rules
14 governing reciprocal compensation.² An ILEC network will typically consist
15 of a hierarchy of switches, with the tandem providing connectivity to and
16 among all of the end office switches that subtend it. Thus, when an ALEC
17 establishes a single point of interconnection at the ILEC tandem, it obtains
18 connectivity to the entire array of end office switches that the tandem serves.
19 An ALEC, on the other hand, would typically deploy only one switching

1. Local Competition Order, at para. 1090.

2. 47 CFR 51.711(a)(3) reads: "Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate."

1 entity to serve a geographic area that is roughly comparable to the entire
2 geographic area that is served by the ILEC tandem. Thus, by establishing a
3 single point of interconnection at that ALEC switch, the ILEC can obtain
4 geographic connectivity that is fully comparable to the geographic coverage
5 that an ALEC gets when it connects at an ILEC tandem.

6

7 Q. Is there an alternative to basing eligibility for tandem treatment solely on the
8 switch's geographic coverage?

9

10 A. Yes. In addition, the FCC directed state regulators to "consider whether new
11 technologies (e.g., fiber ring or wireless networks) perform functions similar
12 to those performed by the incumbent LEC's tandem switch and thus, whether
13 some or all calls terminating on the new entrant's network should be priced
14 the same as the sum of transport and termination via the incumbent LEC's
15 tandem switch."³

16

17 Q. How should this Commission interpret the term "similar functionality" in this
18 context?

19

20 A. In this context, "similar functionality" must refer to the degree to which the
21 ALEC network is able to perform the functions that are typically performed

3. Local Competition Order, at para. 1090.

1 by a tandem switch in an ILEC network. In an ILEC network architecture, a
2 tandem switch typically performs the following functions:

3

4 • It aggregates traffic originated from/terminated to multiple exchange
5 areas, so that traffic between customers calling outside of their own local
6 exchange can be switched and transported efficiently;

7

8 • It routes IXC-bound traffic directly to the interexchange carrier handling
9 the call;

10

11 • It serves as the interconnection point for operator services facilities, so
12 that calls requiring operator services can be routed in aggregate to the
13 operator services bureau(s);

14

15 • It measures and records traffic detail for billing purposes.

16

17 As long as an ALEC's network provides these functions, then it is providing
18 "similar functionality," whether or not the network includes an actual tandem
19 switch. The FCC adopted the "similar functionality" criterion precisely in
20 order to allow for the possibility that some ALECs would *not* deploy tandem
21 switches, or otherwise design their networks in the same manner as do
22 ILECs, and yet preserve the ability of ALECs to be compensated (via

1 reciprocal compensation arrangements) on a par with ILECs as long as their
2 networks provide the same kind of call transport and termination services.

3

4 Q. Does this type of comparison in terms of functional equivalence also underlie
5 the FCC's "comparable geographic area" criterion?

6

7 A. Yes, it does. Accordingly, in this context, the term "comparable geographic
8 area" should be defined as the degree to which the geographic area in which
9 the ALEC network affords call transport and termination for ILEC-originated
10 traffic is similar to the geographic area in which the ILEC's tandem switch
11 provides transport and termination.

12

13 Q. Why is comparison of the geographic coverage area appropriate for
14 determining whether ALEC-supplied transport and termination qualifies for
15 the compensation at the ILEC's tandem switching rate?

16

17 A. As with the "similar functionality" criterion, comparison in terms of
18 geographic coverage area is appropriate because it takes into account
19 potential differences between the architectures of ILEC and ALEC networks.

20 When a call is terminated to an ILEC, the point of interconnection (POI)
21 where the handoff of traffic occurs is typically at a tandem switch, from
22 which the ILEC can route the call to individual end offices and then on to the
23 ultimate recipient.

1 However, consider what happens when an ALEC deploys a network that
2 contains only one or at most a handful of central offices covering a wide
3 geographic area. In that case, the transport function is carried out on the "line
4 side" of the switch, sometimes over considerable distances, until it reaches its
5 final destination. Nonetheless, by delivering the traffic to the POI, the
6 originating carrier can have the call terminated to anywhere within the area
7 served by its switch, since the ALEC's single switch may provide the same
8 geographic coverage as a dozen or more ILEC switches. In those
9 circumstances, the ALEC may have adopted a network design that is quite
10 different from that of an ILEC serving the same territory, but that is most
11 efficient given the ALEC's size and the technology available to it at the time
12 that its network was initially laid out. Moreover, the ALEC network would
13 provide the same transport and termination as does an ILEC network
14 containing a tandem. Accordingly, the ALEC's choice of network design
15 should have no effect, one way or the other, upon the price that the ILEC
16 pays the ALEC for call terminations. As long as the ALEC provides the
17 same tandem functionality and does so over a geographic area that is roughly
18 comparable to that served by the ILEC, the ALEC should properly be
19 compensated at the tandem rate for reciprocal compensation purposes.

20

21 Note, however, that there is no requirement that the geographic area being
22 served by the ALEC's switch be *identical* to the area subtending the ILEC
23 tandem, because there is no requirement that the ALEC's service area be

1 identical to the ILEC's service area. The relevant test is whether the ALEC's
2 network is designed so that the ILEC (and any other carriers) can establish a
3 single point of interconnection with the ALEC that will offer connectivity to
4 all of the communities that the ALEC serves out of that switch.

5

6 Q. What factors should the Commission consider in determining when an ALEC
7 is entitled to the tandem rate for traffic it terminates, as opposed to the end
8 office rate?

9

10 A. As I understand the FCC's rules and rulings, the Commission should consider
11 the geographic coverage area of an ALEC's switch, or the particular
12 functionality offered by interconnection at that switch, in determining
13 whether an ALEC should receive the tandem rate or an end office rate.

14

15 Q. On what do you base this view?

16

17 A. I start with what the FCC has itself said. The FCC confronted this issue in
18 1996 when it was developing its rules and policies for the administration of
19 the then-new 1996 Act. The FCC realized, correctly, that a new entrant
20 constructing a network would not likely find it sensible to simply copy the
21 network architecture of the incumbent. A classic example was a competitive
22 access provider, or CAP, that might have an extensive fiber network
23 throughout much of a LATA, but control access to that fiber network via a

1 single switch. If the CAP becomes an ALEC using its existing network, the
2 combination of switch-plus-fiber-network performs essentially the same
3 functions, and covers essentially the same area, as an ILEC tandem switch.
4 And the FCC correctly concluded that, as long as the ALEC switch has these
5 attributes, the ALEC should receive the tandem rate:

6
7 Here is what the FCC said, in its *Local Competition Order* from August
8 1996, at paragraph 1090. The FCC first considered the situation as it related
9 to a traditional tandem-end office architecture:

10
11 We find that the ‘additional costs’ incurred by a LEC when
12 transporting and terminating a call that originated on a competing
13 carrier’s network are likely to vary depending on whether tandem
14 switching is involved. We, therefore, conclude that states may
15 establish transport and termination rates in the arbitration process
16 that vary according to whether the traffic is routed through a tandem
17 switch or directly to the end-office switch.
18

19 But the FCC did not stop there. To the contrary, it expressly recognized that
20 an ALEC might have a network that, in effect, does the same thing that the
21 ILEC’s network does, but does it in a different way. Paragraph 1090 of the
22 *Local Competition Order* continues:

23
24 In such event [that is, if a state establishes a separate tandem rate for
25 the ILEC], states shall also consider whether new technologies (*e.g.*,
26 fiber ring or wireless networks) perform functions similar to those
27 performed by an [ILEC’s] tandem switch and thus, whether some or
28 all calls terminating on the new entrant’s network should be priced
29 at the sum of transport and termination via the [ILEC’s] tandem
30 switch. Where the interconnecting carrier’s switch serves a

1 geographic area comparable to that served by the incumbent LEC's
2 tandem switch, the appropriate proxy for the interconnecting
3 carrier's additional costs is the LEC tandem interconnection rate.

4

5 Q. What do you understand this discussion from the FCC to imply for state
6 commissions in determining what rate to apply to ILEC-to-ALEC traffic?

7

8 A. One rule is simple. If an ALEC's switch covers an area of essentially the
9 same size as that served by an ILEC's tandem switch, then the tandem rate
10 applies to ILEC-to-ALEC traffic. If the geographic reach of the ALEC's
11 switch is not identical to that of the ILEC tandem but still affords the ILEC
12 the ability to reach all of subscribers served by the ALEC in that same
13 general area via a single point of interconnection, the tandem rate will also
14 apply. Beyond that, however, the FCC took care not to limit its rules to the
15 specific technical and economic arrangements that were in place in August
16 1996. As a result, the FCC directed states to "consider whether new
17 technologies ... *perform functions similar to*" those performed by ILEC
18 tandems. The FCC did not specify what such functions might be, but it did
19 seem to offer the possibility that such matters could be considered where the
20 "geographic area" test is not exactly met. Based upon my experience in the
21 industry, I would suggest that capabilities such as billing and recording, as
22 well as the convenience offered by having a single point of interconnection
23 for an entire network, constitute such functions. But the FCC's ruling by its
24 nature precludes creating an all-inclusive list of what such functions might

1 be. Instead, where the geographic area test is not exactly met, ALECs must
2 be permitted to explain how the actual functionalities of their switches and
3 network architectures are sufficiently “similar to” the traditional ILEC
4 tandem-end-office architecture to warrant receiving the higher tandem rate for
5 incoming calls.

6

7 Q. Doesn’t this create a situation where it is possible for an ALEC to get a
8 higher tandem rate even though the costs it incurs to perform the “similar”
9 functionalities are actually below the costs the ILEC incurs?

10

11 A. Not only is that possible, it is a good thing if it does happen. One of the
12 purposes of establishing the symmetry rule is that, by tying an ALEC’s
13 compensation to rates based upon the ILEC’s costs, the ALEC obtains a
14 strong incentive to “minimize its own costs of termination, because its
15 termination revenues do not vary directly with changes in its own costs.”⁴
16 Once that incentive is created — and creating it is clearly a good idea from a
17 public policy perspective — one would expect that one or more innovative
18 ALECs would figure out ways to perform similar functions at less cost. It
19 would obliterate that incentive if the effect of a CLEC becoming more
20 efficient is a loss in revenues designed to offset the decline in costs.

21

4. *Local Competition Order*, at para. 1086.

1 **An ALEC has the right to interconnect with the ILEC at any technically**
2 **feasible point on the ILEC's network, and is not required to establish more**
3 **than one Point of Interconnection in any LATA in order to obtain LATA-**
4 **wide coverage via that interconnection arrangement.**
5

6 *Issue 13. How should a "local calling area" be defined, for purposes of*
7 *determining the applicability of reciprocal compensation?*
8

9 Q. Dr. Selwyn, Issue 13 asks the parties to provide the Commission with input
10 as to how a "local calling area" should be defined for purposes of determining
11 the applicability of reciprocal compensation. What, exactly, is a "local
12 calling area?"
13

14 A. A "local calling area" generally consists of one or more individual
15 "exchanges" (sometimes referred to as "rate centers") to which customers
16 may place calls without a toll charge ("outward local calling area") or from
17 which customers may receive incoming calls without the calling party being
18 subject to a toll charge for such calls ("inward local calling area"). An
19 "exchange" or "rate center" is an administrative definition of a geographic
20 area within which all customers receive identical rating and rate treatment
21 with respect to both outgoing and incoming calls. In non-metropolitan areas,
22 an exchange usually corresponds to the area served by a single "wire center"
23 or central office switch. In metropolitan areas, an "exchange" may include an
24 area served by more than one "wire center" or central office switch.
25

1 The precise definition of a “local calling area” with respect to BellSouth in
2 Florida is a bit more complex. BellSouth's tariffs specify Local Calling
3 Areas, which include Extended Area Service (EAS) exchanges and Extended
4 Calling Service (ECS) exchanges. Calls placed to points located within the
5 EAS exchanges are provided without additional charge to Flat Rate and
6 Message Rate Service subscribers (both residential and business customers).
7 For example, the Local Calling Area for the West Palm Beach exchange
8 includes, in addition to West Palm Beach, the nearby EAS exchanges of
9 Boynton Beach and Jupiter, which can be accessed without incurring any
10 additional charges.⁵ Several more exchanges classified as “ECS,” namely
11 Belle Glade, Boca Raton, Delray Beach, Hobe Sound, Jensen Beach,
12 Pahokee, Port St. Lucie, and Stuart,⁶ can be accessed from the West Palm
13 Beach exchange for an untimed per-message charge of 25 cents.⁷ For
14 purposes of jurisdictional separations and application of intrastate switched
15 access charges, these “25 cent” calls are also classified as “local.” Hence, for
16 BellSouth Florida, one could interpret the “local calling area” as embracing
17 those additional ECS exchanges. For purposes of our present discussion,
18 however, I will use the term “local calling area” to refer to the local calling

5. BellSouth Telecommunications, Inc. Florida, General Subscriber Service Tariff, Section A.3, page 16 (revision 4), effective October 20, 1997.

6. *Id.*

7. *Id.*, Section A3, page 42 (first revision), effective October 7, 1997.

1 area in which no such additional per-call charges apply, i.e., the home
2 exchange and EAS exchanges.

3

4 Q. Are “outward local calling areas” and “inward local calling areas” always the
5 same, with respect to the specific exchanges included within each?

6

7 A. Usually, but not necessarily. A customer in exchange “A” may be able to call
8 customers in exchanges “B,” “C,” “D” and “E” on a local call basis (i.e.,
9 without a toll charge) but the outward local calling area for exchange “D,” for
10 example, might not necessarily include exchange “A.” In that circumstance,
11 a customer in “A” could call a customer in “D” without paying a toll charge,
12 but a customer in “D” calling a customer in “A” would be subject to a toll
13 charge for the call. Thus, in this example, the outward local calling area for
14 exchange “A” would be more extensive than its inward local calling area.

15

16 Q. How does the telephone company determine, for any given call, whether it is
17 a local call or if a toll charge (or, in the case of BellSouth, a 25 cent message
18 charge) applies?

19

20 A. The area code (NPA) and central office code (NXX) of a telephone number
21 (NPA-NXX) are, with limited exceptions, mapped specifically to a particular
22 exchange or rate center. For example, the 850-224 NPA-NXX uniquely
23 specifies the Tallahassee exchange. There may be, and (particularly for urban

1 areas usually are) more than one NPA-NXX code associated with an
2 exchange; since the onset of local telephone service competition, some of the
3 NPA-NXX codes may be “held” by the incumbent LEC while others may be
4 assigned to (“held by”) one or more ALECs. When a call is placed, the
5 dialed number is examined by the originating central office switch to
6 determine whether to route the call directly to the central office serving the
7 dialed NPA-NXX or whether to route the call through an intermediate
8 switching entity known as a tandem switch. The central office thus
9 “translates” the dialed number into a routing for the call. It may also
10 determine, through a lookup in a reference table maintained in the switch
11 itself, whether, based upon the dialed NPA-NXX code, the call is to be rated
12 as “local” or “toll.” In some cases, this determination may affect the dialing
13 sequence that the customer is required to use in order to place the call.⁸ The
14 rating of the call *for billing purposes* is also based upon the dialed NPA-
15 NXX, with the billing software looking to reference tables for the treatment
16 and applicable rate for a call originated at one NPA-NXX and terminated at
17 another NPA-NXX.⁹

8. Generally, local calls placed to NXX codes within the calling party's NPA may be dialed on a 7-digit basis, whereas toll calls, even those placed to NXX codes that are also within the calling party's NPA, will typically require an 11-digit dialing pattern, consisting of 1+NPA+seven digit telephone number.

9. The dialed number is also used to make several other routing and rating determinations. First, it is used to determine whether or not the call is to a “toll-free” Service Access Code (800, 888, 877, 866) in which case the call must be processed in a specific way so as to assure that it is routed to the interexchange

(continued...)

1 Q. What exchanges are typically included within a local calling area?

2

3 A. Traditionally, local calling areas have consisted of the subscriber's "home"

4 exchange, adjacent (contiguous) exchanges and, in some cases, nearby

5 exchanges that are not contiguous with the calling party's exchange.

6 However, that situation is currently undergoing substantial changes. For

7 example, wireless carriers typically offer a larger local calling area than their

8 wireline counterparts and, in some instances, include the entire United States

9 within the wireless subscriber's local calling area, and ALECs may compete

10 directly with the ILEC and with each other by offering customers local

11 calling areas that differ from that being offered by the ILEC.

12

9. (...continued)

carrier (IXC) selected by the toll-free service *customer* rather than the calling party. If the call is not a toll-free call (i.e., it is a "sent-paid" call), then the dialed NPA-NXX is used to determine whether the call is intraLATA or interLATA (the latter always requiring a hand-off to the IXC designated by the calling party and the former requiring such a hand-off where the calling party has designated a carrier other than the ILEC as his or her "presubscribed interexchange carrier" ("PIC") or where a 101-XXXX carrier access code has been dialed by the calling party). The dialed NPA-NXX is also used to identify the *jurisdiction* of the call (intrastate vs. interstate). Some toll tariffs, including the intraLATA toll tariff in use by BellSouth in Florida, still apply a *distance-sensitive* charge for toll calls (see General Subscriber Services Tariff, Section A.18, page 5, third revision, effective July 20, 2000). In this case, an additional translation is required in the preparation of monthly bills, wherein the dialed NPA-NXX is associated with geographical location coordinates (known as V-H coordinates) that, together with the V-H coordinate of the calling party, are used to calculate the distance over which the call will travel from the "originating rate center" to the "terminating rate center."

1 In fact, the extent of the local calling area is itself becoming something that
2 some ALECs see as an opportunity to differentiate their products from those
3 being offered by the ILEC. An ALEC might, for example, offer its customers
4 a larger local calling area than that being offered by the ILEC as a means for
5 attracting customers or, alternatively, might choose to offer a *smaller* local
6 calling area than the ILEC's service provides, at a correspondingly lower
7 price. ILECs themselves are also changing the definition of "local calling
8 area" by introducing optional calling plans that provide for extended area
9 local calling including, in some cases, all exchanges within the subscriber's
10 LATA.

11

12 Q. Is it appropriate for competing carriers to adopt local calling area definitions
13 that differ from those of the ILEC?

14

15 A. Indeed it is. One of the primary public policy goals of introducing
16 competition into the local telecommunications market has been specifically to
17 encourage and stimulate innovation in the nature of the services that are being
18 offered. ALECs should not be limited to competing solely with respect to
19 *price*, nor should they be expected to become mere "clones" of the ILEC with
20 respect to the services they offer. For example, an ALEC might offer a local
21 service "package" that includes one or more vertical service features, such as
22 call waiting, three-way calling, and/or caller ID, features that ILECs typically
23 offer separately from the dial tone access line, at often substantial additional

1 charge. Newer wireless (PCS) carriers, competing against the incumbent 800
2 mHz cellular service providers, began to offer such feature bundles almost
3 from the outset of their operations, frequently forcing the incumbent cellular
4 carriers to mimic their service offerings with similar “packages” of their
5 own.¹⁰ Prior to the entry of PCS competition, cellular carriers offered very
6 limited local calling areas (often replicating precisely the local calling area
7 defined by the ILEC for the exchange in which a particular cell phone was
8 rated), and also imposed high “roaming” charges for outward calls that were
9 originated outside of the customers “home” service territory (even where the
10 call was originated from another service territory controlled by the same
11 cellular carrier). As PCS carriers came into the market, they began to offer
12 extended, sometimes *nationwide*, local calling, and have also introduced
13 calling plans that eliminate most or all roaming charges.

14
15 Q. Will this happen in the landline local market as well?

16
17 A. There is every reason to expect that it will, over time. This is not to say that
18 establishing larger local calling areas – whether inward or outward -- will
19 necessarily be the optimal competitive strategy for all ALECs, or even for the
20 ILEC. One of the effects of decades of tight regulation of ILEC local service
21 plans has been that we don’t really know what combinations of price,

10. AT&T Wireless Services and Sprint PCS, for example, typically include Call Waiting, Three-Way Calling, Call Forwarding, Caller ID, and Voice Mail as integral parts of their wireless service offerings, at no additional charge.

1 inward/outward calling areas, and other features will appeal to different
2 segments of the market. So, for an initial period – in fact, likely lasting for
3 several years – I would expect to see different ALECs experimenting with
4 different service plans.

5

6 Q. Is the public interest served by permitting and encouraging this type of
7 diversity among ALEC calling plans?

8

9 A. Absolutely. The entire premise of local competition is that the individual
10 choices of competitors in the marketplace trying to meet consumer demand
11 will provide a better result overall than dictating particular results by means
12 of tops-down regulation. So I would expect to see some ALECs offering
13 services that are very similar to those offered by the ILEC – on the theory that
14 customers are already familiar with those services – and hoping to make a
15 profit by operating in one or more respects more efficiently than the ILEC.
16 But at the same time, I would also expect to see some ALECs offering very
17 different calling plans – in terms of price, features, and inward/outward
18 calling areas – than those currently being offered by the ILEC.

19

20 It is difficult, if not impossible, to predict which of these different ALEC
21 strategies will prove most successful over time. I would expect, however,
22 that different approaches will appeal to different market segments.

23 Consequently, I would expect that, if competition is allowed to flourish, a

1 number of different ALECs will offer a number of different calling plans,
2 serving different market segments, but co-existing within the broader “local
3 exchange” market.

4

5 What is most important from a policy perspective, in these circumstances, is
6 to ensure that ALECs have the flexibility to devise and change their calling
7 plans as they see fit to respond to consumer demand.

8

9 Q. Do ALECs have the necessary flexibility today?

10

11 A. No, not really.

12

13 Q. Please explain.

14

15 A. ALECs have some flexibility with respect to outward calling plans. That is,
16 an ALEC may declare that it will not assess toll charges on its customers for
17 calls they make to any given set of NPA-NXX codes. The problem in this
18 context arises if the ALEC is required to pay the ILEC access charges for
19 outbound calls solely on the basis that those calls cross the ILEC’s
20 monopoly-era local calling area boundaries. That is, with respect to *outward*
21 calls (i.e., calls originated by the ALEC’s own customers over an ALEC dial
22 tone access line), the ALEC can include any given rate center for local call
23 treatment merely by designating all of the NPA-NXX codes associated with

1 that rate center within the appropriate routing and billing reference tables
2 (databases). So even if the ILEC's local calling area for exchange "A" is
3 limited to include only exchanges "A," "B" and "C," the ALEC could add
4 "D" and "E" to *its customers'* outward local calling areas simply by inserting
5 the NPA-NXX codes assigned to "D" and "E" as "local calls" in its rating
6 tables.

7
8 It would be preferable, however, if the ALEC did not have to pay access
9 charges on any intraLATA outbound call handed off to an ILEC. I note that
10 this is the rule today in New York and Massachusetts. This arrangement
11 would not compel any ALEC (or, for that matter, the ILEC) to make any
12 particular choices with regard to local calling areas; what it *would* do is
13 eliminate economic pressure on ALECS to conform to ILEC local calling
14 areas. As I noted above, conforming to those areas may be a perfectly
15 rational strategy, and some ALECs will certainly pursue it. But they should
16 not be *forced* to pursue it.

17

18 Q. What about incoming calls?

19

20 A. In the case of incoming calls, the local calling area applicable to the *calling*
21 *party* (who we can assume is most likely to be an ILEC customer) will
22 necessarily govern the rate treatment for the call. Whereas (referring to the
23 example above) the ALEC may choose to include rate centers "D" and "E"

1 within the *outward* local calling area for “A,” the *ILEC* may not include “A”
2 within the outward local calling areas for “D” or “E,” thus making calls by its
3 customers in those two exchanges to customers in rate center “A” — whether
4 served by the *ILEC* or by an *ALEC* — subject to toll rate treatment.

5

6 Q. Why is this the case?

7

8 A. Recall from our earlier discussion that the determination as to whether a
9 particular call is to be rated as local or toll will be based upon the NPA-NXX
10 code of the called telephone number. Just because the *ALEC* places the
11 NPA-NXX codes for exchanges “D” and “E” in its (outward) local rating
12 table for exchange “A” does not, under current rules, compel the *ILEC* to
13 symmetrically place the NPA-NXX codes associated with “A” (or even just
14 the *ALEC*'s NPA-NXX code(s) for “A”) within the local rate tables at the
15 *ILEC* switches serving “D” and “E”.

16

17 Q. Is there anything that the *ALEC* can do to establish an inward local calling
18 area that is larger than that being offered by the *ILEC*?

19

20 A. Yes. An *ALEC* can designate an NPA-NXX code in each of a number of
21 specific rate centers such that calls to that NPA-NXX will be rated as local if
22 placed from any *ILEC* telephone within the local calling area of the rate
23 center to which the *ALEC*'s NPA-NXX is assigned. If an *ALEC* customer

1 wanted inward local calling from anywhere within, for example, the same
2 three southeast Florida counties noted above, it would need to have assigned
3 to it a telephone number in each of a sufficient number of rate centers such
4 that at least one of its numbers would be reachable as a local call from
5 anywhere within the three counties.

6

7 Q. Would it be necessary for the customer (or, for that matter, the ALEC) to
8 have an NPA-NXX “presence” in every rate center in the area for which it
9 desired to establish inward local rate treatment?

10

11 A. No, because typically any given NPA-NXX code can be dialed as a local call
12 from several different exchanges. For example, the West Palm Beach
13 exchange can be reached on a local call basis from telephones in the
14 exchanges of West Palm Beach (the “home” exchange), Boynton Beach, and
15 Jupiter.¹¹ An ALEC could offer inward local calling from all of those
16 exchanges by establishing an NPA-NXX code in the West Palm Beach
17 exchange. However, most of the other exchanges in the Southeast LATA do
18 not have local call access to West Palm Beach. For example, Fort Lauderdale

11. Boynton Beach and Jupiter list West Palm Beach as an EAS exchange; West Palm Beach can be accessed on an ECS basis (i.e., incurring the \$0.25 per call charge) from the following additional exchanges: Belle Glade, Boca Raton, Boynton Beach, Delray Beach, Hobe Sound, Jensen Beach, Jupiter, Pahokee, Port St. Lucie, and Stuart. See BellSouth Telecommunications, Inc. Florida, General Subscriber Service Tariff, Section A.3, pages 3-16.

1 does not.¹² Hence, in order for the ALEC and its customers to obtain local
2 call access from Fort Lauderdale, it would need to define *another* NPA-NXX
3 in an exchange from which Fort Lauderdale is a local call, such as Fort
4 Lauderdale itself, or Boca Raton, Coral Springs, Miami, etc.¹³

5
6 Note that all of these different NPA-NXXs would be physically “based” in
7 the same ALEC switch, and that they would all be reached, for traffic routing
8 purposes, by means of the same ALEC point of interconnection (“POI”).

9 These issues are discussed more fully below, in connection with Issue Nos.
10 14 and 15. For now it suffices to note that an inevitable consequence of the
11 introduction of local competition is that the very different network
12 architectures deployed by ALECs affect the traditional concepts of
13 “exchange,” “rate center” and “local calling area.”

14
15 Q. Given the differences between ALEC and ILEC network architectures, is
16 there any way to map traditional monopoly notions of “exchange” and “rate
17 center” directly from ILEC operations to an ALEC?

18
19 A. No. The only way a one-to-one mapping could occur would be if an ALEC
20 actually duplicated the ILEC’s network. That obviously is not going to
21 happen for many, many years, if it ever does. So, these traditional notions

12. *Id.*, page 7 (sixth revision), effective August 1, 2000.

13. *Id.*, pages 3-16.

1 must be applied flexibly in a competitive environment to accommodate the
2 fact that new competitors will use different network architectures and
3 technologies to offer their services.

4

5 Q. When was the concept of an “exchange” or “rate center” first introduced, and
6 what was its purpose at that time?

7

8 A. Exchanges and rate centers have been around since the earliest days of the
9 telephone industry. Originally, an “exchange” generally referred to the
10 geographic area served by a manual switchboard to which all of the telephone
11 lines within that exchange were connected. An operator would complete
12 “local” calls by physically “plugging” the calling party’s line into the called
13 party’s line using a patch cord. If the call was destined to a customer served
14 by a different switchboard (i.e., in a different exchange), the operator would
15 signal the terminating switchboard and instruct the operator at that location as
16 to which phone line the call was to be connected. Generally, such “inter-
17 exchange” calls were rated as “toll” and additional charges for the call would
18 apply. For calls to nearby exchanges, direct “trunks” would interconnect the
19 individual switchboards; however, for longer distances, one or more
20 intermediate switchboards would be involved in interconnecting trunks so as
21 to achieve the desired end-to-end connection. Distance was thus a major
22 factor in both the complexity and the cost of individual calls.

23

1 The overall cost (in terms of network resources involved) in completing an
2 interexchange call was thus significantly greater than for an intra-exchange
3 local call and, in addition, the overall cost was influenced heavily by the
4 *distance* over which the call would travel. In addition to the costs of the
5 transmission facilities themselves (whose costs were highly sensitive to
6 distance), calls of longer distances often required the intervention of multiple
7 operators in order to establish the desired routing.

8
9 As the number of telephone lines increased and mechanized switches
10 replaced cord switchboards, the “exchange” began to take on more
11 *administrative* properties rather than the *physical* properties associated with
12 individual switchboards. Multiple central office switches could – and did –
13 serve the same “exchange,” and local calling was extended to include nearby
14 as well as the subscriber’s “home” exchange.¹⁴ Because calls still needed to
15 be differentiated as between “local” and “toll” and because toll calls still
16 needed to be priced on the basis of distance, the concept of a “rate center”

14. Prior to the introduction of mechanized billing, all “toll” calls had to be manually “ticketed” and posted to the customer’s account for billing purposes. This often proved to be more costly than the call itself, particularly for intraexchange calls and for calls to nearby exchanges that were connected on a direct trunk basis, both situations in which relatively large volumes of calls were common. In such cases, the telephone company would voluntarily expand its local calling areas to avoid billing costs, and would often increase the local rate to recapture the toll revenues that it claimed were rightfully its “due,” even though in practical economic terms it was not worth the telephone company’s while to track and bill them. The telephone company’s ability to impose such costs on customers, of course, was simply a reflection of its status as a monopolist.

1 was introduced, assigning geographic Vertical and Horizontal (“V-H”)
2 coordinates to each exchange and permitting distance calculation to be made
3 so that the appropriate rate could be assigned to each individual call.
4

5 Q. Besides their cost differences and any differences with respect to their
6 respective routing, was there any other reason to preserve the distinction
7 between “local” and “toll” calls?
8

9 A. Yes. For more than one hundred years, the prevailing view of telephone
10 service pricing was that rates should be set on the basis of “value of service”
11 and that toll calls were “more valuable” than local calls and should thus make
12 a disproportionate contribution to what were seen as the “joint costs” of
13 providing telephone service overall. The largest component of such “joint
14 costs” was the individual subscriber loop, the pair of wires dedicated to a
15 specific customer and running continuously from the telephone company
16 central office to the customer's premises. Because the same loop was used to
17 provide both local and toll calling, its “non-traffic-sensitive” costs were
18 apportioned in some manner as between local call and long distance calls and,
19 although such costs were in any event fixed with respect to the *volume* of
20 traffic carried over the loop, they were to be recovered in *usage-based*
21 *charges* applicable for toll (and for some local) calls.
22

1 The *effect* of this policy was to shift the burden of cost recovery for the
2 subscriber loop from the customer for whose specific benefit the loop had
3 been provided to customers who made the greatest use of the long distance
4 network. As a result, the basic monthly rate for purely *local* service
5 recovered only a fraction of the cost of the subscriber loop, making it possible
6 for the basic residential access line rate to be relatively inexpensive, with the
7 shortfall being made up through usage-based long distance rates set at levels
8 well in excess of their corresponding usage-sensitive cost.

9

10 Q. Is the concept of a “rate center” or “exchange” still relevant in the
11 telecommunications marketplace of today and tomorrow?

12

13 A. In the short run – probably at least for the next several years – it is highly
14 likely that the ILEC will want to retain its existing structure of local and toll
15 rates. In this sense – since the ILEC will remain the “900 pound gorilla” in
16 the local exchange market for some time – “rate centers” and “exchanges” are
17 certainly relevant. The challenge for policy makers, however, is to establish
18 rules and policies that permit, but do not require, ALECs to conform to the
19 traditional, monopolistic mold.

20

21 Q. In this regard, are the cost and policy rationales that originally supported the
22 “rate centers” and “exchanges” that the monopoly ILEC established still valid
23 today?

1 A. No, and for several important reasons.

2

3 • First, the explosion in telecommunications technology over the past two
4 decades has both reduced the cost of telephone calls to a mere fraction of
5 a cent per minute, has made any physical distinction that may have once
6 existed as between “local” and “toll” calls all but obsolete, and has
7 essentially eliminated *distance* as a cost-driver for all telephone calls.

8

9 • Second, US telecommunications policy, most recently codified in the
10 federal *Telecommunications Act of 1996*, calls for all
11 telecommunications services to be priced on the basis of their cost with
12 all implicit subsidies eliminated.¹⁵ The recovery of fixed (non-traffic-
13 sensitive) costs associated with the subscriber loop from usage-based toll
14 rates is considered to be an example of this type of implicit subsidy.
15 Even before the enactment of the 1996 legislation, the FCC had
16 embarked upon a policy of shifting recovery of non-traffic-sensitive
17 costs away from usage-based toll (and switched access) charges in favor
18 of fixed monthly fees imposed upon the end user.¹⁶

19

15. *In the Matter of Federal-State Joint Board on Universal Service*, 13 FCC Rcd 11501 (1998), *Report to Congress*, at para. 8, citing 47 U.S.C. 254(d),(e).

16. *MTS and WATS Market Structure*, CC Docket No. 78-72, *Third Report and Order (Phase I)*, 93 FCC 2nd 241 (1983).

1 The significant decrease in the cost of telephone usage, coupled with the
2 elimination of distance as a cost driver, makes the local/toll distinction
3 largely obsolete as a technical matter. It certainly eliminates the traditional
4 cost basis for using “rate centers” as a device for calculating the (no-longer-
5 technically-required) distance attribute. The persistence of rate centers in
6 today's and tomorrow's telecommunications market is thus an *anachronism*, a
7 holdover from the past that is neither required nor appropriate in the modern
8 telecommunications market environment.

9
10 This is not to say, of course, that all toll calling should disappear. As noted
11 above, the point of introducing local exchange competition is to allow the
12 market, as opposed to regulators, to decide what combinations of calling
13 features (including price and inward/outward local calling areas) best serve
14 the needs of various market segments. This *is* to say, however, that it would
15 be a mistake for policy makers to retain or enforce regulatory rules that are
16 designed to preserve or protect traditional monopoly rate center and exchange
17 definitions.

18
19 Q. Has distance in fact ceased to be a basis for pricing in those sectors of the
20 telecommunications industry that are now or that have become robustly
21 competitive?

22

1 A. Yes. It is now widely recognized that both the long distance and wireless
2 service markets are characterized by intense competition. Distance has all but
3 disappeared entirely in interstate long distance pricing structures. The price
4 of a 140-mile interstate call from Jacksonville to Savannah is exactly the same
5 as the price of a call from Miami to Nome, Alaska. Distance-based charges
6 have also disappeared in the *international* long distance market as well,
7 although country-specific price differences, based upon factors *other than*
8 *distance*, persist.

9
10 Wireless carriers have also largely eliminated distance as a pricing element.
11 Both Sprint PCS and AT&T Wireless Services have been offering standard
12 calling plans that make no distinction as between “local” and “long distance”
13 calls or otherwise charge on the basis of distance. Competitive pressure from
14 these companies has forced incumbent cellular carriers such as Verizon
15 Wireless or Cingular Wireless (the new entity produced by the merger of
16 SBC’s and BellSouth’s wireless operations) to adopt similar distance-
17 insensitive pricing plans. For example, Cingular Wireless offers an array of
18 “Cingular Nation” calling plans that are marketed as having “no roaming or
19 long distance charges” for calling anywhere within the 50 states.¹⁷

20

17. The plans offer varying levels of usage for a flat fee, beyond which a distance-insensitive charge of \$0.35 per-minute applies. See http://www.cingular.com/cingular/products_services/local_plans, accessed 2/26/01.

1 Perhaps the best example of all can be found in the case of the fiercely
2 competitive Internet service business, where distance has been completely
3 eliminated as a pricing element, and – while usage-based plans are available –
4 the overwhelming consumer preference seems to be for flat-rated.

5

6 In fact, the *only* segment of the telecommunications industry where distance-
7 based pricing (in the form of local/toll distinctions and/or mileage-based
8 rates) persists is in the largely noncompetitive *local* telecommunications
9 sector; indeed, the fact that this pricing remnant of a monopoly era persists in
10 the case of local telephone services serves to *confirm* the utter lack of
11 effective competition in this sector.

12

13 Q. Given that transport costs have been falling rapidly and that distance is no
14 longer a cost-driver, is there any basis at this time for preserving the rate
15 center construct?

16

17 A. Certainly not as a mandatory feature of ALEC operations or ALEC-ILEC
18 interconnection. In fact, there may be compelling reasons to eliminate it over
19 time. The proliferation of numerous geographically small rating areas is
20 probably the single most important factor contributing to the exhaust of NXX
21 codes within NPAs and the eventual exhaust of NPAs within the existing 10-
22 digit North American Numbering Plan, which is currently projected to occur
23 by the end of this decade unless drastic changes are made to the manner in

1 which telephone numbers and NXX codes are assigned. The FCC is actively
2 considering mandating “rate center consolidation” to try to deal with this
3 problem.

4
5 As noted above, as competition is slowly introduced into the local exchange
6 market (and a slow introduction is all we have even begun to see to date), one
7 would expect different ALECs to approach the market in different ways,
8 reflecting their network architectures, marketing plans, and simply different
9 business judgments about how to take on a hundred-year-old monopoly. That
10 said, over time, the cost characteristics of telecommunications have changed
11 so much from the time the existing structure was established that I would
12 expect, once real competition materializes in the local telephone market, it
13 will be almost certain to drive out whatever remnants of rate center-based
14 pricing may still remain, just as it has done in the case of long distance,
15 wireless and Internet services. It is clearly in the public interest now to allow
16 ALECs to operate, to the maximum extent possible, without the constraint of
17 traditional rate centers hampering their ability to offer innovative calling
18 plans. This will allow the marketplace to operate that much more quickly to
19 communicate to service providers what type of calling plan is actually best
20 suited to today’s telecommunications needs, using today’s
21 telecommunications. The Commission should initiate steps aimed at
22 eliminating this remnant of the telephone industry's monopoly past as soon
23 as possible.

1 **An ILEC's costs are entirely unaffected by the location at which the ALEC**
2 **delivers an ILEC-originated call to the ALEC's end user customer.**
3

4 *Issue 14. (a) What are the responsibilities of an originating local carrier*
5 *to transport its traffic to another local carrier?*
6

7 *(b) For each responsibility identified in part (a), what form of*
8 *compensation, if any, should apply?*
9

10 Q. Does the FCC's implementation of the interconnection requirements of the
11 *Telecommunications Act* define the basic framework within which the
12 Commission should consider Issue 14(a)?
13

14 A. Yes, it does. The issue of the originating local carrier's responsibility has to
15 be analyzed in the context of the obligations borne by two interconnected
16 local carriers, which largely has been spelled out in the *Telecommunications*
17 *Act* and the FCC's implementation of its local interconnection provisions. As
18 a threshold matter, it is important to understand that the interconnection
19 requirements adopted in the *Telecommunications Act* and developed in the
20 FCC's *Interconnection Order* do not require or provide for symmetric
21 treatment of ILECs and ALECs. Section 251(c)(2) *obligates* ILECs to
22 interconnect with ALECs at any technically feasible point on the ILEC's
23 network "(A) for the transmission and routing of telephone exchange service
24 and exchange access; (B) at any technically feasible point within the carrier's
25 network; (C) that is at least equal in quality to that provided by the local
26 exchange carrier to itself or to any subsidiary, affiliate, or any other party to

1 which the carrier provides interconnection; and (D) on rates, terms, and
 2 conditions that are just, reasonable, and nondiscriminatory ...”; by contrast,
 3 Sections 251(a)(1) confers upon all telecommunications carriers the duty “to
 4 interconnect directly or indirectly with the facilities and equipment of other
 5 telecommunications carriers” but contains none of the specifics that the
 6 statute applies to *incumbent* LECs.

7

8 Q. Why is the lack of symmetry between ILECs and ALECs with respect to their
 9 interconnection obligations important?

10

11 A. Relative to Issue 14(a), the key point of this asymmetry is that both the
 12 *Telecommunications Act* as well as FCC Rules hold that, in order to
 13 interconnect with an ILEC, an ALEC need establish only one (1) point of
 14 interconnection (“POI”) with an ILEC at any technically feasible point
 15 *anywhere* in each LATA. The *Telecommunications Act* and FCC Rules thus
 16 *obligate* each ILEC to allow such interconnection by an ALEC at *any*
 17 technically feasible point that is designated by the ALEC.¹⁸ Moreover, FCC
 18 regulations do not grant the ILEC the right to designate the point at which the
 19 other party must “pick up” the ILEC’s traffic. In its *Local Competition*
 20 *Order*, the FCC explained:

21

22 The interconnection obligation of section 251(c)(2), discussed
 23 in this section, allows *competing carriers to choose* the most

18. Rule 51.305(a)(2).

1 efficient points at which to exchange traffic with incumbent
2 LECs, thereby lowering *the competing carriers'* costs of, among
3 other things, transport and termination of traffic.¹⁹
4

5 The FCC identified the *Act* as the source of these differing obligations.²⁰
6

7 Q. Is there any prohibition against ILECs determining technically feasible
8 interconnection points and imposing those determinations upon
9 interconnecting ALECs?
10

11 A. I am not aware of any provision of the *Act* that says, in so many words,
12 “ILECs may not designate the locations at which ALECs must interconnect.”
13 But that is the only rational way to understand what the statute says and what
14 the FCC says about it. As noted above, the interconnection obligations of
15 LECs and ILECs are specifically identified in the *Act*, and ILECs’ obligations
16 are different and more extensive than those of ALECs. An ILEC may not
17 assume some authority that is not provided for in the *Act*.
18

19 Q. Can you cite any specific actions taken by the FCC that support your
20 interpretation of the *Act* with respect to this issue?
21

19. FCC *Local Competition Order* at ¶ 172, emphasis supplied.

20. *Id.*, at para. 220.

1 A. Yes. First, the FCC promulgated Rule 51.223(a), which specifically forbids
2 states from imposing upon ALECs the obligations that Section 251(c)
3 imposes upon ILECs. Section 251(c)(2) requires ILECs to allow
4 interconnection at any technically feasible point on their networks. Rule
5 51.223(a) indicates that ILECs have no similar right to dictate where they
6 will interconnect with ALECs' networks. In fact, the FCC reiterated its
7 reasoning in connection with an interconnection dispute in Oregon, where the
8 FCC intervened and urged the court to reject US West's argument that the *Act*
9 requires competing carriers to interconnect in the same local exchange in
10 which it provides local service. The FCC explained:

11
12 Nothing in the 1996 Act or binding FCC regulations require a new
13 entrant to interconnect at multiple locations within a single LATA.
14 Indeed, *such a requirement could be so costly to new entrants that it*
15 *would thwart the Act's fundamental goal of opening local markets to*
16 *competition.*²¹
17

18 More recently, in its order on SBC's Section 271 application for Texas, the
19 FCC made clear its view that under the *Telecommunication Act*, ALECs have
20 the legal right to designate the most efficient point *from the ALEC's*
21 *perspective* at which to exchange traffic. As the FCC explained:

22 New entrants may select the most efficient points at which to
23 exchange traffic with incumbent LECs, thereby lowering the

21. Memorandum of the FCC as *Armucus Curiae* at 20-21, *US West Communications Inc. v. AT&T Communications of the Pacific Northwest, Inc.*, (D. Or. 1998) (No. CV 97-1575- JE), emphasis supplied.

1 competing carriers' cost of, among other things, transport and
2 termination.²²
3

4 The FCC was very specific:

5
6 Section 251, and our implementing rules, require an incumbent LEC
7 to allow a competitive LEC to interconnect at any technically
8 feasible point. *This means that a competitive LEC has the option to*
9 *interconnect at only one technically feasible point in each LATA.*²³
10

11 ALECs are thus *entitled* as a matter of law to designate one and only one
12 location at any technically feasible point within a LATA as their POI for that
13 LATA, and the ILEC is *required* as a matter of law to transport traffic to be
14 interchanged with the ALEC between the ILEC's end office switches and that
15 POI, with the ALEC assuming the obligation to transport the traffic between
16 the POI and the ALEC's end office switches. Nowhere is there any provision,
17 either in the statute or in FCC rules, that would permit an ILEC to force
18 interconnecting ALECs to establish a POI within each ILEC local calling area
19 or to limit ILEC's obligations with respect to reciprocal compensation to only
20 those situations in which the POI is physically located within the ILEC local
21 calling area associated with the ILEC customer who originated the call or to
22 whom the call is to be terminated. And clearly, the respective transport

22. Memorandum Report and Order, *Application of SBC Communications Inc., Southwestern Bell Telephone Company and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance, Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region InterLATA Services in Texas*, CC Docket No. 00-65 at ¶ 78 (June 30, 2000).

23. *Id.*, at ¶ 78.

1 obligations of the ILEC and the ALEC on either side of their POI must
2 encompass *financial* responsibility for the associated costs of their transport
3 as well as the physical transport activity itself.

4
5 I would note that I am not a lawyer and am not trying to opine as to what the
6 *Act* “means” in a legal sense. But as a policy matter, it is unquestionable that
7 the overriding purpose of the *Act* is to encourage local exchange competition.
8 That purpose would be frustrated if the ILEC could directly or indirectly
9 force ALECs to incur costs to, in effect, duplicate the ILEC’s ubiquitous
10 embedded network. This anticompetitive result, however, is exactly what
11 would occur if ALECs were forced to pick up traffic from the ILECs in
12 multiple locations. It would also amount to the same thing, and have equally
13 anticompetitive consequences, if the ILEC was able to shift financial
14 responsibility for some or all of the transport costs incurred on its side of the
15 POI to the ALEC, which is responsible for the transport that occurs on its
16 side of the POI.

17

18 Q. What principle do you derive from these interconnection obligations relative
19 to a local carrier’s responsibility to transport originating traffic that is
20 destined to another interconnected local carrier?

21

22 A. These interconnection obligations lead to the principle that a local carrier
23 should be responsible for the costs of transport from the point at which the

1 call originates on its network to the POI. This principle must apply whether
2 or not that transport will extend beyond the originating caller's local calling
3 area. Any other proposed assignment of financial responsibility for transport,
4 e.g. to attempt to require the terminating carrier to pay for transport that is
5 beyond the originating caller's local calling area, but nevertheless on the
6 originating carrier's side of the POI, would perforce violate those established
7 interconnection obligations, and must be rejected.

8

9 Q. Have you been advised that any Florida local carrier has attempted to shift
10 financial responsibility for its originating transport in that manner?

11

12 A. Yes. My understanding is that BellSouth sought to impose precisely this type
13 of anti-competitive requirement on Level 3 Communications during their
14 ongoing arbitration case, Florida PSC Docket No. 000907-TP. According to
15 the Staff's recent memorandum to the Commission in that case, BellSouth
16 proposed that (in Staff's words) "while Level 3 can have a single Point of
17 Interconnection (POI) in a LATA if it chooses, it remains responsible to pay
18 for the facilities necessary to carry calls originated by BellSouth customers in
19 distant local calling areas to that single Point of Interconnection."²⁴

20

21 Q. What was Staff's recommendation concerning that proposal?

24. See February 22, 2001 *Memorandum* from Florida PSC Staff (Division of Competitive Services and Division of Legal Services), re: Docket No. 000907-TP, at page 4.

1 A. Staff has recommended that the Commission reject BellSouth's position, after
 2 concluding that "the FCC's orders, rules, and decisions vest in competitive
 3 local exchange companies the right to designate interconnection points for the
 4 mutual exchange of telecommunications traffic."²⁵ Thus, Staff appears to
 5 concur with my conclusion that the originating local carrier bears full
 6 responsibility, including financial responsibility, for transport up to the
 7 designated POI, regardless of whether any of that transport extends beyond
 8 the originating caller's local calling area.

9

10 **The Commission should allow ALECs to assign NPA/NXX codes to end users**
 11 **outside the rate center in which the NPA/NXX is homed and still receive**
 12 **reciprocal compensation, because the ILEC's costs do not vary depending**
 13 **upon the location at which the ALEC delivers traffic to its end user**
 14 **customers.**

15

16 *Issue 15. (a) Under what conditions, if any, should carriers be permitted*
 17 *to assign telephone numbers to end users who are*
 18 *physically located outside the rate center in which the*
 19 *telephone number is homed?*

20

21 *(b) Should the intercarrier compensation mechanism for calls*
 22 *to these telephone numbers be based upon the physical*
 23 *location of the customer, the rate center to which the*
 24 *telephone number is homed, or some other criterion?*

25

26 Q. Dr. Selwyn, Issue 15 in the Commission's Supplemental Order asks "[u]nder
 27 what circumstances, if any, should carriers be permitted to assign NPA/NXX
 28 codes to end users outside the rate center in which the NPA/NXX is homed,"

25. *Id.*, at pages 12-15.

1 and “[s]hould the intercarrier compensation mechanism for calls to these
2 NPA/NXXs be based upon the physical location of the customer, the rate
3 center to which the NPA/NXX is homed, or some other criterion?” What are
4 your views on the Commission's questions?

5

6 A. Carriers — ILECs and ALECs — should be allowed to define both their
7 outward and inward local calling areas and, more specifically, ALECs should
8 be allowed to offer customers competitive alternatives to the local calling
9 areas that are embodied in the ILEC's services. As I shall demonstrate, the
10 costs that the ILEC incurs in carrying and handing off originating traffic to
11 ALECs is entirely unaffected by the location at which the ALEC delivers the
12 call to the ALEC's end user customer. As long as the ALEC establishes a
13 POI within the LATA, it should be allowed to offer service in any rate center
14 in the LATA and to terminate calls dialed to that rate center at any location it
15 wishes. It is entirely reasonable and appropriate that ALECs “be permitted to
16 assign NPA/NXX codes to end users outside the rate center in which the
17 NPA/NXX is homed” and still be entitled to full reciprocal compensation
18 with respect to such calls.

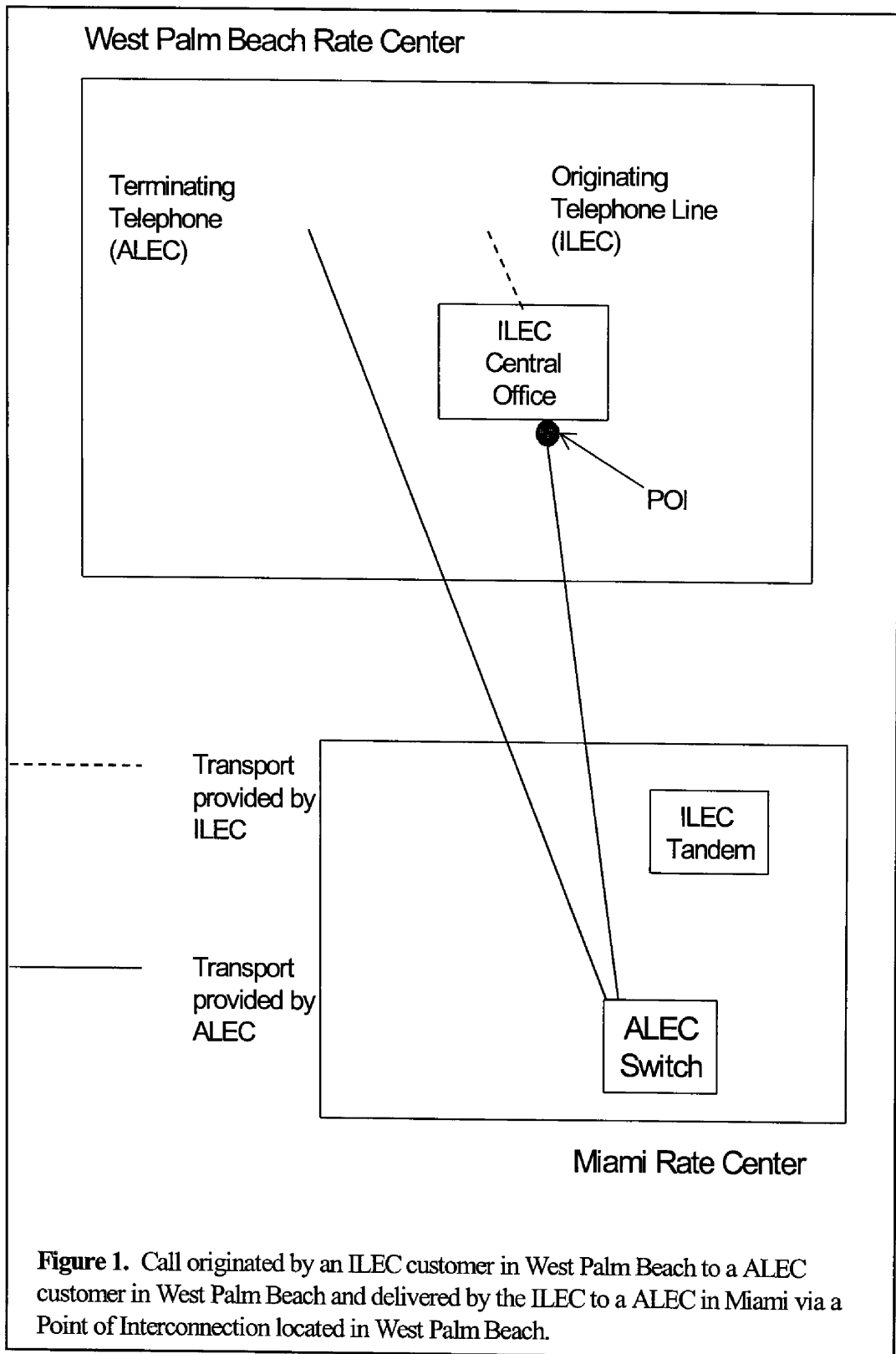
19

20 Moreover, an ILEC's *costs* are not affected by the location at which the
21 ALEC delivers traffic to *its* end user customers. To be sure, the ILEC's
22 *revenues* may well be affected by, for example, an ALEC's decision to offer a
23 larger local calling area than that being offered by the ILEC, but that impact

1 is a *competitive loss* to the ILEC to which it has ample opportunity to respond
2 competitively, for example, by offering its own customers expanded inward
3 (and perhaps outward as well) local calling. An ILEC should not be
4 permitted to escape the financial consequences of its failure to successfully
5 compete by refusing to compensate other competing carriers for work that
6 they have legitimately performed, nor should it be permitted to prevent its
7 competitors from introducing new and innovative services that amount to
8 more than merely parroting of the ILECs traditional offerings.

9
10 Q. How is the cost to the ILEC not affected by the location at which the ALEC
11 delivers traffic to its customers?

12
13 A. Perhaps the best way to explain this point is by way of examples. Please
14 refer to Figure 1 below. In this example, the call is originated by an ILEC
15 customer in West Palm Beach and is delivered by the ILEC to an ALEC in
16 Miami via a Point of Interconnection located in West Palm Beach. The
17 ALEC's customer to whom the call was directed is also located in West Palm
18 Beach, and so the ALEC needs to transport the call back to the delivery point
19 in West Palm Beach. In this example, both of the ILEC's conditions for
20 reciprocal compensation have been met, i.e., the POI is located within the
21 local calling area of the originating ILEC access line, and the call is
22 terminated to an ALEC customer who is also located within the local calling
23 area of the originating ILEC access line.



1 Now let's change the facts of this example so as to violate one of the two
2 assumed conditions for reciprocal compensation. Here, the ILEC's West
3 Palm Beach customer still dials a West Palm Beach telephone number (i.e.,
4 an ALEC NPA-NXX that is rated to West Palm Beach), but instead of the
5 ALEC delivering the call to an ALEC customer in West Palm Beach as in the
6 previous example, the ALEC delivers the call to an ALEC customer
7 physically located in Miami. Note that the POI at which ILEC hands off the
8 call to the ALEC is still in West Palm Beach, i.e., still within the local calling
9 area of the ILEC access line that originated the call. In this circumstance, the
10 physical location of the point of delivery is not within the local calling area of
11 the originating ILEC telephone and, as I understand it, an ILEC placing such
12 limits on reciprocal compensation would argue that this is not a "local" call
13 and that no reciprocal compensation is required in this case.

14

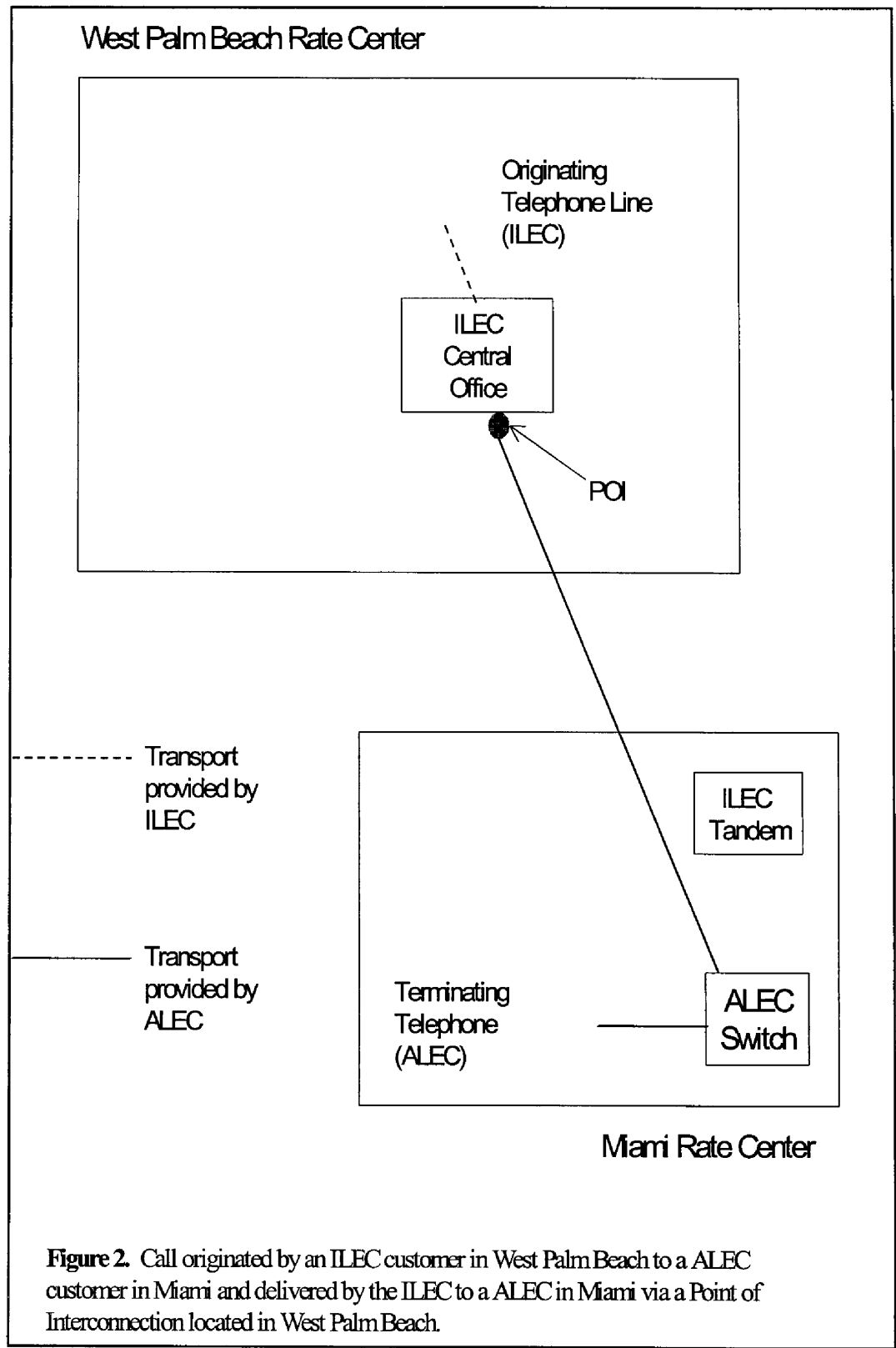
15 Q. Is there any difference in the work that ILEC would be required to perform in
16 handing off the originated call to the ALEC as between these two examples?

17

18 A. No, and that is the essential point of these examples: In both of these cases,
19 ILEC's work — and its costs — are absolutely identical. The sole distinction
20 between the two examples lies in what the *ALEC* does once it receives the
21 call from ILEC at the POI. In the first case (Figure 1), the ALEC hauls
22 (transports) the call all the way back to West Palm Beach; in the second case
23 (Figure 2), the ALEC delivers the call to a customer located near its Miami

1 switch. In both of these cases, ILEC carries the call from the originating
2 telephone to the West Palm Beach POI, and its work is entirely unaffected by
3 where the ALEC ultimately delivers the call.

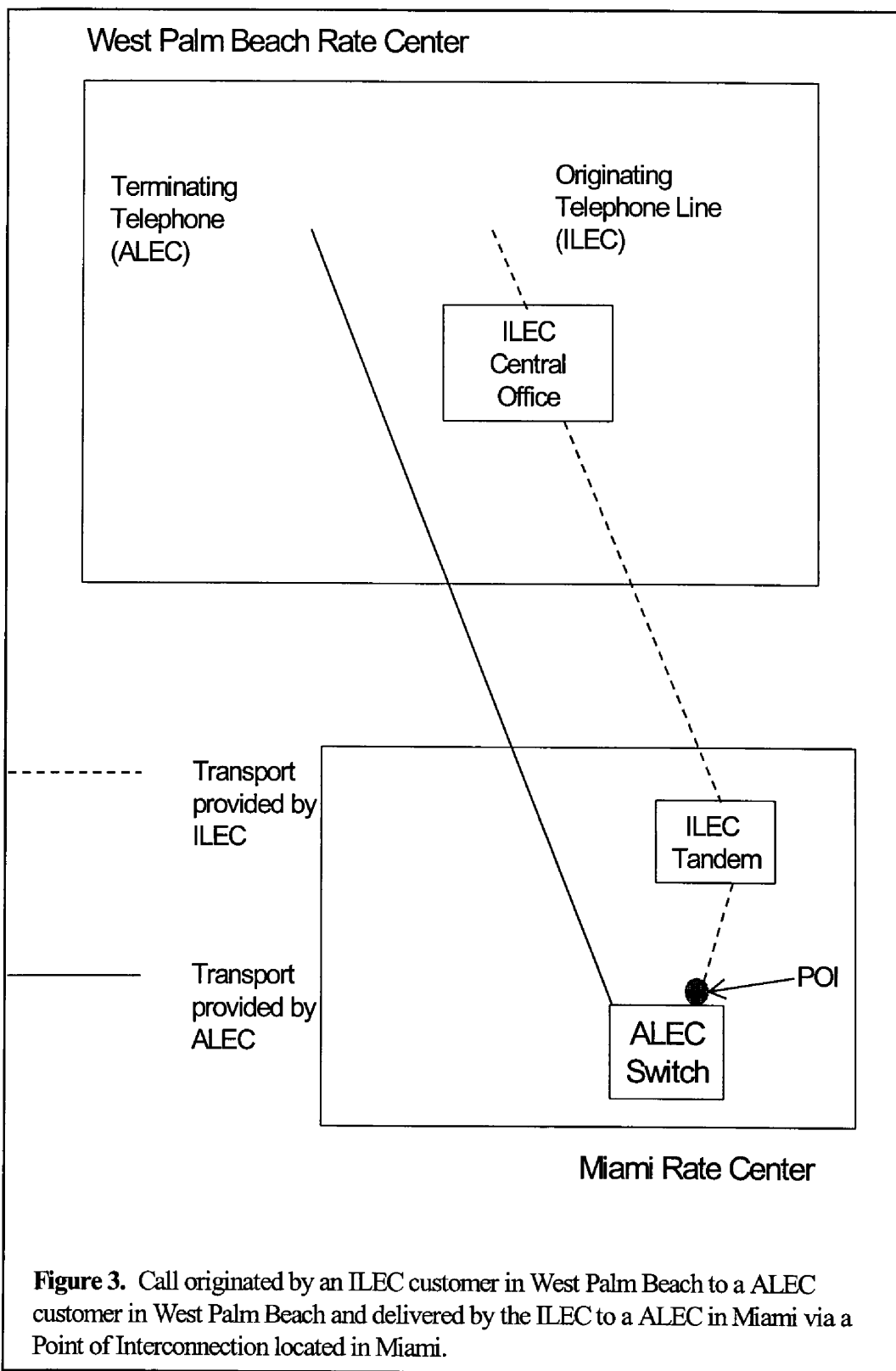
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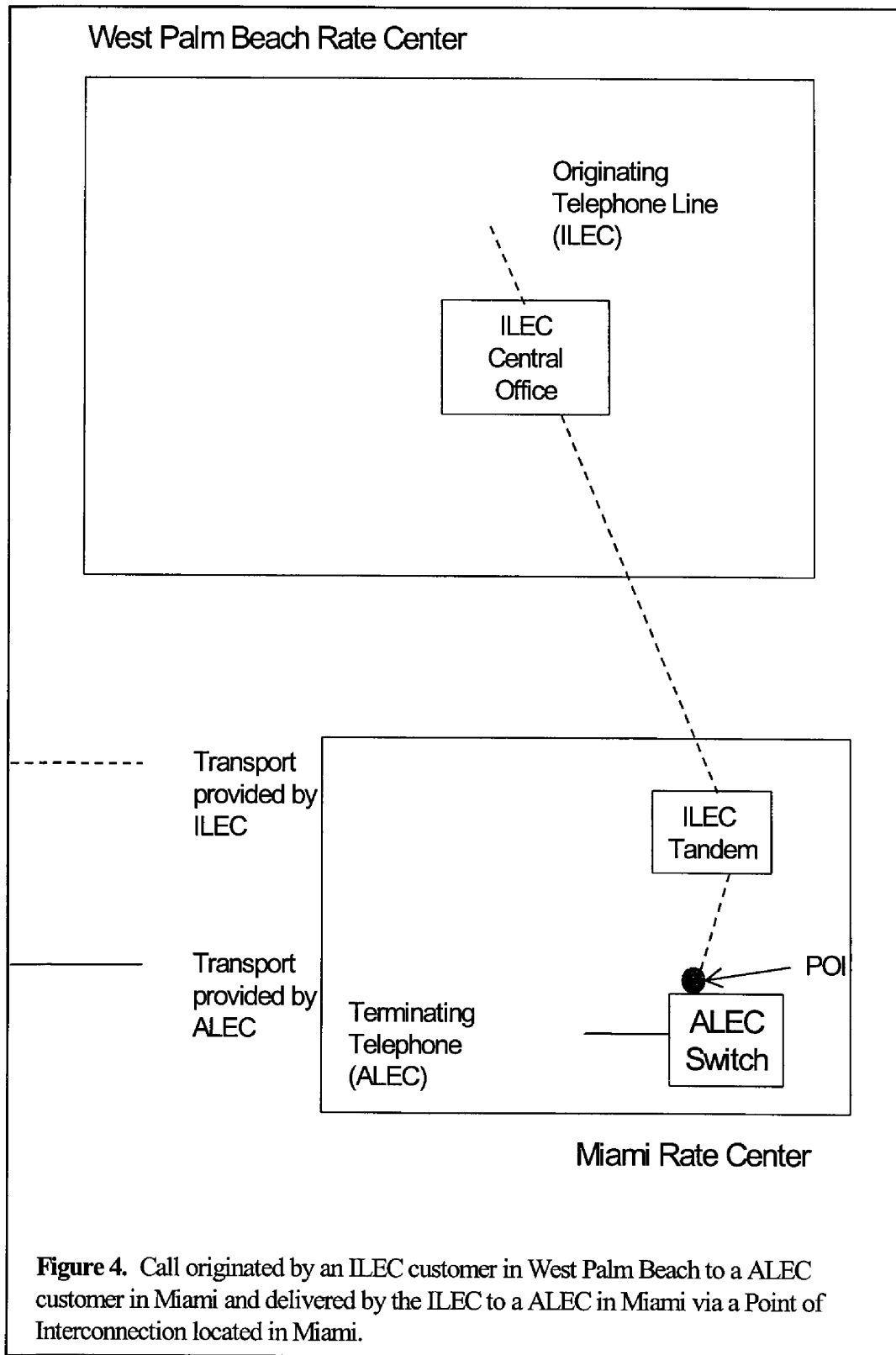


24 Interconnection must be established in each local calling area. Does the location
25 of the point of delivery by the ALEC to its end user customer then affect ILEC's
26 costs?

27

28 A. No, it does not. To see why, please refer to Figures 3 and 4 below, which
29 correspond with Figures 1 and 2, respectively, except that in these two cases I
30 am assuming that the POI is located in Miami. In Figure 3, the ILEC
31 customer in West Palm Beach dials an ALEC number rated to West Palm
32 Beach. Because the POI is in Miami, the ILEC is required to transport the
33 call over its network to Miami, where it is handed off to the ALEC. As in
34 Figure 1, the ALEC then transports the call *over the ALEC's network* back to
35 West Palm Beach for delivery to its customer. In Figure 4, the ILEC
36 customer in West Palm Beach also dials an ALEC number rated to West
37 Palm Beach, and ILEC transports the call to the POI in Miami. However, as
38 in Figure 2, the call is then delivered by the ALEC to an ALEC customer in
39 Miami rather than in West Palm Beach. As was the case as between Figures
40 1 and 2, there is absolutely no difference in the work that ILEC is called upon
41 to perform as between Figures 3 and 4. In both of these cases, the ILEC
42 transports the originating call from its West Palm Beach customer to the
43 ALEC POI in Miami; *the location where the ALEC ultimately delivers the*
44 *call has no effect whatsoever upon ILEC's work or its costs.*





- 1 Q. You have suggested that the only impact upon an ILEC arising out of the
2 ALEC's decision as to the point of delivery of a given call lies in the
3 possibility that the ILEC might sustain a competitive loss. Please elaborate
4 on this point.
5
- 6 A. When an ALEC establishes an NPA-NXX code in one rate center but delivers
7 the call to its customer physically located in a different rate center, it is
8 providing what some ILECs have described as a “virtual foreign exchange”
9 (“virtual FX”) type of service. Mechanically that is more or less what the
10 ALEC is doing. The calling party dials a number rated to one particular
11 exchange and the call is then delivered to an ALEC customer in a different
12 exchange. Suppose that, under an ILEC's tariff, a toll charge (or, in certain
13 cases, a 25 cent message charge) may apply for calls beyond a certain
14 distance or between non-contiguous exchanges, whereas an ALEC, in an
15 effort to differentiate its service from that of the ILEC and also to offer
16 potential customers some additional service features that are not being
17 offered by the ILEC, treats some or these calls as “local” and thus imposes no
18 specific charge for the call. If, as a result of the ALEC's offering, some of the
19 ILEC's customers are persuaded to switch over to the ALEC's service, the
20 ILEC will sustain a loss of both local and toll revenue. *Such a loss of*
21 *business is a direct and inescapable outcome of competition;* the ILEC can
22 either respond by reducing or eliminating its own (toll) charge for these calls
23 (thereby sustaining some revenue loss), or risk losing customers to the less

1 expensive ALEC service (thereby also sustaining some revenue loss). The
2 issue here is entirely one of *pricing and competitive response*, not one of
3 policy. In many cases, however, even that potential loss of revenue can be
4 overcome if the ILEC adopts a more competitively rational pricing metric.

5

6 Q. You stated that in some cases the ILEC may sustain a loss of toll revenue.
7 Why would that not arise in *all* cases where the ALEC provides “free”
8 service over a route for which the incumbent imposes a charge?

9

10 A. This is because in many cases where the incumbent imposes a charge the
11 customer does not use the service at all. For example, many customers reach
12 their Internet Service Provider (“ISP”) by dialing an ALEC number rated in
13 the customer's home community that the ALEC ultimately delivers to the ISP
14 at a distant point. In the examples we were discussing earlier and that are
15 illustrated in Figures 1 through 4, suppose that the ISP customer takes local
16 telephone service from BellSouth in West Palm Beach, and that the call is
17 handed off to an ALEC, who then delivers the call to an ISP in Miami. One
18 might argue that this arrangement deprives BellSouth of the 25 cents per call
19 revenue it would otherwise have received were this virtual FX arrangement
20 not in place. In reality, the West Palm Beach customer would have been
21 unlikely to have called the Miami ISP on a toll call basis in the first place,
22 and would have either selected a different ISP with a West Palm Beach
23 presence, or simply not used the Internet at all. Either way, BellSouth would

1 not have received any toll (or 25 cent “local”) revenue. Hence, in this
2 circumstance, the only “revenue loss” to BellSouth is a theoretical one based
3 upon the “what might have been” rather than the “what actually was.”
4

5 Q. Finally, Dr. Selwyn, our discussion has thus far been based upon your
6 assumption that for purposes of this issue the term “local calling area” refers
7 specifically to the *flat-rate* local calling area as defined for each exchange
8 within an ILEC’s Florida tariff, rather than to the area including both flat-
9 rated and 25 cent per-message calls, or perhaps even the entire LATA. If in
10 fact an ILEC means to define its local calling areas as embracing the entire
11 LATA and will thus agree to pay reciprocal compensation on any intraLATA
12 call as long as the POI is located within the LATA, would you still conclude
13 that an ILEC policy of requiring that ALECs maintain one POI in each local
14 calling area would be anticompetitive and unlawful?
15

16 A. No, in that event, an ALEC would be able to satisfy such a requirement by
17 establishing a POI anywhere within a LATA, and would be entitled to
18 reciprocal compensation on calls handed off to it so long as both the
19 originating and terminating lines are located within the same LATA. I
20 would, however, be very surprised if the ILECs' position is that the relevant
21 local calling area for purposes of reciprocal compensation embraces the entire
22 LATA.
23

1 **The appropriate inter-carrier compensation for the termination and**
 2 **transport of local traffic is a symmetric rate based upon the ILEC's**
 3 **prevailing TELRIC cost level, which creates incentives for continual**
 4 **reductions in the costs of call termination services and harms neither ILECs**
 5 **nor end users.**
 6

7 *Issue 17. Should the Commission establish compensation mechanisms*
 8 *governing the transport and delivery or termination of traffic*
 9 *subject to Section 251 of the Act to be used in the absence of the*
 10 *parties reaching an agreement or negotiating a compensation*
 11 *mechanism? If so, what should be the mechanisms?*
 12

13 Q. What should be the default compensation mechanism, if any, for the
 14 Commission to apply for reciprocal compensation?
 15

16 A. Issue 17 in this phase of the proceeding is closely related to Issue 9 in Phase
 17 I. I addressed this question in my December 1, 2000 Direct Testimony, pages
 18 63-68.
 19

20 **The Commission should adopt an expedited, streamlined procedure so that**
 21 **those carriers that cannot agree on how to implement the Commission's**
 22 **rulings in this proceeding on reciprocal compensation and tandem**
 23 **compensation in the context of their existing business and contractual**
 24 **relationships may do so without protracted litigation.**
 25

26 *Issue 18. How should policies in this docket be implemented?*

27 *-impact on existing agreements*
 28 *-expedited procedures*
 29
 30

1 Q. Issue 18 asks how the policies established in this docket should be
2 implemented. Why is this question an important one for the Commission to
3 resolve?

4

5 A. Regulatory uncertainty is anathema to the operation of regulated companies.
6 Indeed, one need look no further than the business section of the newspaper
7 to see the effect that regulatory uncertainty is having, along with other
8 factors, on the competitive local telecommunications industry. Ideally, the
9 Commission's rulings in this case could be applied by ILECs and ALECs
10 immediately within the context of their existing business and contractual
11 relationships. The Commission would well serve the industry by establishing
12 rules that can be implemented by all carriers in an efficiently and rapidly,
13 without recourse to additional protracted litigation.

14

15 Q. How do you propose that the Commission accomplish this?

16

17 A. The parties will no doubt argue this issue in detail in their briefs, and I
18 personally cannot speak to the specifics of Commission procedure. I do note
19 that the issue of ALEC entitlement to reciprocal compensation for transport
20 and termination of ISP-bound traffic, as well as that of ALEC entitlement to
21 receive tandem compensation, have both been hotly contested by ILECs for
22 some time. Some of the parties to this case have litigated these issues before
23 the Commission and some have not. Clearly all parties in this case have an

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REBUTTAL TESTIMONY

Introduction

Q. Please state your name, position and business address.

A. My name is Lee L. Selwyn; my business address is ~~One Washington Mall,~~ *Two Center Plaza*
Boston, Massachusetts 02108. I am President of Economics and Technology,
Inc.

Q. Are you the same Lee L. Selwyn who submitted Direct Testimony and
Rebuttal Testimony in Phase 1 of this proceeding on December 1, 2000 and
January 10, 2001, respectively, and Direct Testimony in Phase 2 of this
proceeding on March 12, 2001?

A. Yes, I am.

Q. What is the purpose of the additional testimony that you are offering at this
time?

A. This testimony responds generally to the direct testimony submitted by
BellSouth witness John A. Ruscilli and Verizon-Florida witnesses Terry
Haynes, Howard Lee Jones, Elizabeth A. Geddes, and Edward C. Beauvais,
with respect to Issues Number 11 through 15 that the Commission has
designated for consideration in this phase of this proceeding.

1 I would note at the outset, however, that the positions of BellSouth and
2 Verizon-Florida, as expressed in the above-referenced direct testimony, were
3 anticipated and thus were thoroughly addressed in the prefiled direct
4 testimony submitted in this Phase by myself and by Gregory R. Follensbee
5 on behalf of AT&T, TCG and MediaOne. Accordingly, I will not reiterate or
6 repeat the discussion of these issues that I have already submitted, but will
7 attempt in this brief rebuttal testimony to explore the fundamental policy
8 conflict between the ILEC and ALEC positions.

9

10 **Faced with the prospect of growing competition and technological innovation**
11 **of a type and scale without precedent in the telecommunications industry, the**
12 **ILECs are asking this Commission to force ALECs to operate under the**
13 **antiquated and technologically obsolete business model that the ILECs had**
14 **created during a century of protected monopoly status.**
15

16 Q. Dr. Selwyn, in reviewing the BellSouth and Verizon direct testimony in this
17 Phase of the proceeding, have you been able to identify a common theme that
18 underlies the various positions being advanced by these two ILECs on each
19 of the issues that have been identified by the Commission for consideration in
20 this Phase of the proceeding?

21

22 A. Yes. Reduced to its essence, BellSouth and Verizon are asking that the
23 Commission adopt measures whose effect will be to insulate and protect them
24 from innovations both with respect to technology and service development by
25 their ALEC rivals, by either penalizing the ALECs for deviating from the

1 traditional ILEC business model or by constraining the ALECs' ability to
 2 develop and introduce new services, pricing plans, and other market-
 3 responsive initiatives.

4

5 **As long as an ALEC enables the ILEC to access all of the ALEC's customers**
 6 **within a LATA via a single point of interconnection with the ALEC, the**
 7 **ALEC should be entitled to the tandem reciprocal compensation rate and**
 8 **should not be penalized by its failure to adopt an ILEC type of multi-level**
 9 **network architecture.**

10

11 Q. Please review each of the major Phase 2 issues and, as you discuss each of
 12 them, identify specifically where and how the ILECs' position amounts to the
 13 type of market protection that you have just described. First, please address
 14 the matter of network architecture and its relationship to the issue of
 15 "tandem" vs. "end office" reciprocal compensation. Can you summarize and
 16 discuss your understanding of the ILEC and ALEC positions on this issue?

17

18 A. Yes. Issues 11 and 12 state as follows:

19

20 *Issue 11. What types of local network architectures are currently*
 21 *employed by ILECs and ALECs, and what factors affect their*
 22 *choice of architecture? (Informational issue)*

23

24 *Issue 12: Pursuant to the Act and FCC's rules and orders:*

25

26

27

28

29

30

(a) *Under what condition(s), if any, is an ALEC entitled to be
 compensated at the ILEC's tandem interconnection rate?*

(b) *Under either a one-prong test or two-prong test:*

(i) *What is "similar functionality?"*

(ii) *What is "comparable geographic area?"*

1 Much of both the ILEC and ALEC testimony underscored the key difference
2 between the design of traditional ILEC networks and that which is commonly
3 adopted by ALECs. ILEC networks consist of a relatively large number of
4 individual switching entities. Most of these serve end users (“end office
5 switches”) and are deployed in close geographic proximity to the customers
6 they serve, making the length of subscriber lines (“loops”) connecting the
7 central office with the customers’ premises relatively short. ILEC end office
8 switches are interconnected with one another either directly or via a “tandem
9 switch,” the former approach being used when the volume of traffic between
10 two specific switches is sufficiently high that direct interoffice trunking is
11 more economical than the use of an intermediate switching operation.

12 Exhibit ____ (GRF-1) to Mr. Follensbee’s direct testimony provides an
13 illustration of the ILEC network configuration.

14
15 ALEC networks, on the other hand, generally consist of a relatively small
16 number of switches (e.g., one in each LATA) that serve a large geographic
17 area (e.g., the entire LATA or a significant portion thereof). Exhibit ____
18 (GRF-2) to Mr. Follensbee’s direct testimony illustrates this type of
19 architecture.

20
21 It has long been understood in the telecommunications industry that there are
22 clear economic tradeoffs between the relative quantities of transmission vs.
23 switching facilities in a network. ILEC networks employ many switches so

1 as to minimize the need for transmission facilities; ALEC networks employ
2 extensive transmission or other substitute facilities so as to minimize the need
3 for switching. There are several reasons why ILECs and ALECs have
4 reached these fundamentally different conclusions with respect to this
5 tradeoff, but they largely boil down to two factors – *scale* and *relative cost*.
6 At the time that ILEC networks were built, transmission facilities –
7 particularly over large distances – were fairly expensive, and those costs
8 could be minimized by deploying switches in close proximity to customers
9 and by routing most interoffice traffic via tandem switches. Additionally, the
10 capacities of the electromechanical switches that were used by ILECs until
11 the early 1980s were fairly limited, so there wasn't much benefit in terms of
12 switch costs in placing, say, ten switches in one building to serve a large area
13 (with long subscriber lines) vs. placing those same ten switches in ten
14 different buildings each much closer to the customers they would serve,
15 thereby saving on transmission costs.

16
17 The technology and the associated cost relationships had changed
18 dramatically by the time ALEC networks were being designed and built,
19 beginning in the mid- to late-1990s. Switch capacities had grown and,
20 because an ALEC typically serves only a small fraction of the number of
21 customers that are served by an ILEC, in most cases an ALEC's switching
22 needs for an entire LATA (sometimes even several LATAs) could be
23 satisfied by one switch. At the same time, transmission costs have decreased

1 by orders of magnitude and by now have fallen to the point where they are
2 today just a tiny fraction of what they were when the ILECs began to build
3 out their infrastructure. Put in its simplest terms, the key difference between
4 an ILEC and an ALEC network is that the ILEC network provides transport
5 *on the trunk side* of its switches, whereas the ALEC network provides any
6 necessary transport *on the line side* of its (usually one) switch.

7

8 Q. Don't ILECs today confront the same technological and cost conditions as do
9 the ALECs?

10

11 A. Yes, and to a limited extent ILECs have begun to consolidate smaller
12 switches into so-called "host/remote" configurations that take advantage of
13 the larger capacities and lower costs characteristic of modern digital
14 switching systems. However, the basic network design philosophy that the
15 ILECs have been following for more than a century remains firmly
16 entrenched in their business practices, and continues to dictate not only the
17 ways in which ILECs deploy switching and transmission systems, but also
18 the way they package, price and offer their various local and interexchange
19 services.

20

21 The economic and business choices facing the ILECs are quite different from
22 those confronting ALECs. Whereas ALECs ask, "what is the most efficient
23 design of a *new* network," ILECs ask, "what modifications can efficiently be

1 made to an *existing* network?” Even if we assume that ILECs and ALECs
2 face the same resource costs and relative prices, their networks will still look
3 very different for many years (or even decades) into the future as a
4 consequence of their different starting points.

5
6 Q. Why does the nature of the ALEC’s choice of network architecture matter to
7 the ILEC with respect to the issue of the interchange of traffic between the
8 two carriers?

9
10 A. It doesn’t, or at least it shouldn’t. By delivering traffic to an ILEC tandem,
11 the ALEC is able to reach all of the areas subtending that tandem via a single
12 physical interconnection. Indeed, due to tandem-to-tandem connections, an
13 ALEC link to a single ILEC tandem should suffice for connectivity to the
14 entire LATA. Similarly, by delivering traffic to the ALEC’s switch, the
15 ILEC is also afforded the ability to reach all of the ALEC’s customers via a
16 single physical connection. The fact that an ILEC tandem is capable of
17 making “trunk-to-trunk” connections whereas an ALEC switch may
18 sometimes only be capable of making “trunk-to-line” connections is
19 immaterial, irrelevant and, most importantly, *entirely transparent to the*
20 *ILEC.*

21

- 1 Q. So what is the source of the ILECs' argument that where no literal "tandem
2 functionality" is being provided by the ALEC, the ALEC is then entitled to
3 reciprocal compensation only at the "end office" rate?
4
- 5 A. What the ILECs' position amounts to is an attempt to penalize ALECs for
6 adopting a technology and network arrangement that is not precisely identical
7 to that being used by the ILEC, in effect, to *protect* the ILEC from having to
8 compete with entrants who have been able to achieve efficiencies that may
9 not have been available to the ILEC when, under its protected monopoly
10 status, it designed and built out its network and that, for whatever reason, the
11 ILEC chooses not to pursue now and in the future. Penalizing ALECs for
12 adopting alternative but functionally equivalent solutions amounts to nothing
13 less than asking them to compete with their hands tied behind their backs.
14 Such a policy is fundamentally antithetical to the development of
15 economically efficient competition, and the Commission should resist and
16 reject outright the ILECs' attempts to use the Commission's regulatory
17 machinery to insulate themselves from the efficiencies and innovations that a
18 competitive marketplace is *expected* to foster.
19

1 **ALECs should not be forced to conform to monopoly-era ILEC local/toll**
 2 **pricing distinctions and local calling area definitions, and should be**
 3 **permitted to offer their customers the same type of “virtual presence” in a**
 4 **distant ILEC local calling area as ILECs themselves offer their customers via**
 5 **Foreign Exchange and Remote Call Forwarding services.**
 6

7 Q. I would like to turn next to the issues of the “local calling area” and the
 8 related issues of so-called “virtual NXX codes” and the responsibility for the
 9 costs of transport. Please summarize your understanding of the ILEC and
 10 ALEC positions on these issues.

11

12 A. Issues 13, 14 and 15 state as follows:

13

14 *Issue 13. How should a “local calling area” be defined, for purposes of*
 15 *determining the applicability of reciprocal compensation?*
 16

17

18 *Issue 14. (a) What are the responsibilities of an originating local carrier*
 19 *to transport its traffic to another local carrier?*
 20

21

22 *(b) For each responsibility identified in part (a), what form of*
 23 *compensation, if any, should apply?*
 24

25

26 *Issue 15. (a) Under what conditions, if any, should carriers be permitted*
 27 *to assign telephone numbers to end users who are*
 28 *physically located outside the rate center in which the*
 29 *telephone numbers is homed?*

30

31 *(b) Should the intercarrier compensation mechanism for calls*
 32 *to these telephone numbers be based upon the physical*
 33 *location of the customer, the rate center to which the*
 34 *telephone number is homed, or some other criterion?*

1 The ILECs seem to be taking the position that *their* definitions of local
2 calling areas should generally apply to all local carriers, although Mr.
3 Ruscilli (for BellSouth) is somewhat confusing on this point. At page 12 of
4 his testimony, he states that “[f]or purposes of determining the applicability
5 of reciprocal compensation, a ‘local calling area’ can be defined as mutually
6 agreed to by the parties and pursuant to the terms and conditions contained in
7 the parties’ negotiated interconnection agreement” and that “[t]he
8 Commission should allow each party to establish their [sic] own local calling
9 area for reciprocal compensation purposes.” However, at page 27, Mr.
10 Ruscilli explains that “BellSouth’s position is that regardless of the numbers
11 an ALEC assigns to its end users, BellSouth should only pay reciprocal
12 compensation on calls that originate and terminate within the same local
13 calling area.” Read in the broader context of his testimony, the “same local
14 calling area” to which he refers is the one as defined and established by
15 BellSouth. Mr. Haynes for Verizon appears to adopt substantially the same
16 view as BellSouth.

17
18 Specifically, both BellSouth and Verizon argue that, while the ALEC should
19 be free to define its own local calling area with respect to *outgoing* calls
20 placed by its customers, it should not be permitted to trump the ILECs’
21 definitions by, for example, defining a “virtual NXX” code within an ILEC
22 local calling area that is distant from the location at which calls to that
23 number will be terminated.

1 Q. At first glance, that position doesn't seem all that unreasonable. In what
2 respects do you find it objectionable?

3

4 A. The ILECs would have the Commission believe that the idea that the rate
5 center in which the dialed number is homed might differ from the rate center
6 in which the call is actually terminated is something that the ALECs
7 invented, yet that is certainly not true. In fact, ILECs have been offering
8 foreign exchange ("FX") service for decades, and FX service accomplishes
9 essentially the same result, although it is provisioned in a different way.

10

11 Q. Please explain.

12

13 A. In the case of FX service, a customer located in exchange A might want a
14 local telephone number presence in exchange B, from which exchange A
15 would otherwise be a toll call. A caller in exchange B dials the FX number as
16 a local call to exchange B, yet the call is physically delivered to the FX
17 customer located in exchange A. That's pretty much what happens under the
18 "virtual NXX" approach that is used by some ALECs.

19

20 Q. How is the FX service physically provisioned?

21

22 A. Usually, but not always, the FX service involves a leased line connecting the
23 central offices in the two exchanges. The FX customer pays for the dial tone

1 line in exchange B and pays for the leased line between exchange B and
2 exchange A. Sometimes, the ILEC may elect to provision the FX service via
3 a switched rather than a dedicated interexchange connection. Such an
4 arrangement, if used, is (supposed to be) transparent to the customer, who
5 will still be charged a flat monthly rate for the leased line.

6
7 Another means for accomplishing the customer's objective (of having a local
8 number presence in exchange B) is through the use of "Remote Call
9 Forwarding" ("RCF") service. Instead of using and paying for a leased
10 channel between exchange A and exchange B, calls placed to the exchange B
11 phone number are forwarded by the central office switch in exchange B to the
12 customer's phone number in exchange A. The calling party (in exchange B)
13 still sees the call as a local call, while the exchange A RCF customer pays the
14 toll charge for the call from B to A. In both of these cases, the exchange A
15 customer's *inward* local calling area has been expanded to include exchange
16 B.

17
18 Q. But, as Mr. Ruscilli has specifically noted, where FX service is provided,
19 "[t]he reason the originating end user is not billed for a toll call [to the FX
20 number] is that the receiving end user has already paid for the charges from
21 the real NPA/NXX office to the FX office. There are charges for this
22 function and they are being paid by the customer that is benefiting [sic] from

1 the FX service.”¹ Why isn’t that a fully sufficient explanation as to why
2 BellSouth’s FX service is acceptable while an ALEC’s use of a “virtual
3 NXX” code to accomplish a similar functionality for its customer is not?
4

5 A. Mr. Ruscilli is describing how BellSouth has elected to *price* its foreign
6 exchange service offering; i.e., on a distance-sensitive basis as a toll-
7 replacing service alternative. BellSouth obviously has the right to price this
8 service in any way that it wishes (and that the Commission approves), but
9 what BellSouth does not have the right to do is to force ALECs to adopt its
10 pricing model and strategy.

11
12 Q. Can’t ALECs provide the same types of FX and RCF services as do ILECs?
13

14 A. No. Recall from our earlier discussion that while a typical ILEC network
15 consists of numerous local end office switches each one of which is in close
16 physical proximity to the customers it serves, a typical ALEC network
17 consists of only one switch. Both FX and RCF provisioning arrangements
18 require the physical presence of a switch within the “foreign” rate center,
19 something that simply does not exist under the ALEC network architecture.
20 Put another way, the ILEC is able to create a virtual presence for its exchange
21 A customer in exchange B because it owns switches in both exchanges. As
22 both Mr. Follensbee and I have discussed in our respective direct testimony,

1. Ruscilli (BellSouth), at 31.

1 the *Telecommunications Act* (“TA-96”) requires that ALECs not be
2 handicapped with respect to the nature of the services they can offer merely
3 as a result of their lack of ubiquity. ALECs must be afforded the opportunity
4 to compete with ILECs in the market for FX-type services, and ILECs should
5 not be allowed to escape such competition solely because their infrastructures
6 are more extensive than those of the new entrants.

7
8 Q. Well, if the ALEC does not own switching and transmission facilities in each
9 ILEC local calling area, doesn’t that simply mean that ALECs can’t be in the
10 FX/RCF business?

11
12 A. No, not at all. What it means is that the ALEC will need to develop an
13 alternative means for accomplishing the equivalent functionality from the
14 perspective of its customers. And that alternative to the ILECs’ creation of a
15 virtual presence for their FX customers in the “foreign exchange” is for the
16 ALECs to use NXX codes rated in exchanges other than the one at which the
17 incoming call will ultimately be delivered – which is exactly the same as
18 what happens in the case of an ILEC FX or RCF call.

19
20 Q. So why has this become an issue?

21
22 A. It basically boils down to one of pricing. As I discussed both in my direct
23 testimony and here as well, the costs of transport have been dropping at an

1 enormous rate in recent years. This point is highlighted in an article
 2 appearing in the January 2001 issue of *Scientific American*, “The Triumph of
 3 the Light” by Gary Stix. I have reproduced a copy of this article as Exhibit
 4 ____ (LLS-1) to my rebuttal testimony.

5
 6 The article reports that “the number of bits a second (a measure of fiber
 7 performance) doubles every nine months for every dollar spent on the
 8 technology.” In other words, the cost per unit of transport is cut by 50%
 9 every nine months. Put another way, over the past five years, the cost per unit
 10 of telecommunications transport has fallen by more than 98%!

11

12 Q. What has happened to the prices that BellSouth and Verizon charge for toll
 13 and FX services over that same period?

14

15 A. Not very much. BellSouth’s Basic residential intraLATA toll rates in Florida
 16 have decreased by about 25% over the period, but basic business toll rates
 17 have actually increased by about 20%.² Verizon’s toll rates decreased by
 18 about 10% over the same period.³ FX rates for both BellSouth and Verizon

2. *Compare* Southern Bell Telephone and Telegraph Company–Florida General Subscriber Service Tariff, A18. Long Distance Message Telecommunications Service, A18.3.1, Service Between Land Wire Telephones, Third Revised Page 4.1, Issued June 1, 1995, Effective September 9, 1995, with Third Revised Page 5, Issued July 5, 2000, Effective July 20, 2000 (current tariff).

3. *Compare* GTE Florida Incorporated–Florida General Services Tariff, A18.
 (continued...)

1 did not change at all over the past five years.⁴ Obviously, if this market were
2 competitive, we would have seen far greater price decreases than actually
3 took place.

4

5 Q. Should the Commission permit ALECs to compete for ILEC FX and RCF
6 customers by using “virtual NXX” codes?

7

8 A. Yes, because to prohibit their use would be to penalize the ALECs for their
9 lack of ubiquity while at the same time permitting ILECs to continue to offer
10 their customers a “virtual presence” in an existing ILEC NXX code, thus
11 protecting the ILECs from ALEC incursions into the FX/RCF market
12 segment.

13

3. (...continued)

Long Distance Message Telecommunications Service, A18.5.1, Service Between Land Wire Telephones, Third Revised Page 8, Issued October 5, 1995, Effective December 4, 1995, *with* Fourth Revised Page 8, Issued May 13, 1997, Effective June 2, 1997 (current tariff).

4. *Compare* Southern Bell Telephone and Telegraph Company–Florida General Subscriber Service Tariff, A9. Foreign Exchange Service and Foreign Central Office Service, A9.1.6, Rates and Charges, Second Revised Page 1.5, Issued June 5, 1991, Effective February 10, 1992, *with* Original Page 7, Issued July 1, 1996, Effective July 15, 1996 (currently effective tariff); *Compare* GTE Florida Incorporated–Florida General Services Tariff, A9. Foreign Exchange Service and Foreign Central Office Service, A9.1.10, Rates and Charges, Second Revised Page 2.4, Issued January 5, 1994, Effective February 10, 1994, *with* Third Revised Page 2.4, Issued September 26, 1997, Effective October 15, 1997 (currently effective tariff).

1 Q. But isn't one of the reasons why ALECs are able to provide these pseudo FX
2 services to their customers at the same price they charge for "local" service is
3 because, at least according to the ILECs, the ALECs are not currently paying
4 the ILECs for the interexchange transport that the ILECs provide between the
5 point of origin of the call to the point of interconnection with the ALEC?

6
7 A. I do not necessarily agree with the ILECs' contention that ALECs are not
8 paying for this supposed interexchange transport. While it is true that there
9 is, for the most part, no distance-sensitive element in ALEC/ILEC
10 interconnection agreements, it is also the case that distance sensitive costs of
11 interoffice and interexchange transport are extremely small and may well be
12 fully embraced within existing non-distance-sensitive compensation
13 arrangements.

14

15

16 Q. Please explain.

17

18 A. At page 23 of his direct testimony, Mr. Ruscilli states that "[i]n the Lake
19 City example, reciprocal compensation would only apply for the use of
20 BellSouth's facilities within the Lake City local calling area. That is,
21 reciprocal compensation would apply to the facilities BellSouth used within
22 its Lake City local network to transport and switch an ALEC originated call.
23 Reciprocal compensation does not include the facilities to haul the traffic

1 from Lake City to Jacksonville.” And at page 24, he states that “[c]learly, the
2 FCC expects ALECs to pay the *additional costs* that it [sic] causes BellSouth
3 to incur” (emphasis supplied).

4

5 So what are these “additional costs” that Mr. Ruscilli believes that ALECs
6 should pay? He describes them at page 25 of his direct testimony:

7

8 The appropriate rates for the use of BellSouth’s facilities to haul
9 calls back and forth between the ALEC’s point of interconnection
10 and the local calling area of the originating and terminating points of
11 the call are the interconnection rates for dedicated DS1 interoffice
12 transport (per mile) and the facility termination charges. ... in the
13 generic UNE cost docket (Docket No. 990649-TP), BellSouth
14 proposed a rate of \$.20 per mile and \$92.62 per facility termination
15 for dedicated DS1 interoffice transport.

16

17 Q. Do you agree that (assuming these rates are ultimately adopted) these
18 represent the “additional costs” of transport beyond a BellSouth local calling
19 area?

20

21 A. No. Assuming that the *average* per-minute rate for transport and termination
22 does not already cover LATA-wide transport distances, then at the very most,
23 only the per-mile charge would apply, since a facility termination is required
24 for a dedicated interoffice transport facility whether it is wholly confined
25 within a single local calling area or runs between two different local calling
26 areas. Hence, the facility termination is in no sense an “additional” transport

1 cost. Second, Mr. Ruscilli has quoted the rate for a DS1 facility rather than
2 for a DS3 facility, which ALECs are probably more likely to use. In the same
3 UNE cost docket, BellSouth proposed a monthly per-mile DS3 rate of \$4.17.

4

5 Q. What does that translate into when expressed on a per-minute of use basis?

6

7 A. A DS3 facility has a capacity of 672 DS0 (voice-equivalent) channels. When
8 used for common carrier interconnection, each channel likely carries
9 something in the range of 12,000 minutes per month. Hence, a fully-loaded
10 DS3 would be capable of carrying about 8-million minutes per month. At
11 \$4.17 per mile, that works out to \$0.000000517 per mile per minute (that's
12 about 5 one-hundred-thousandths of a penny per mile per minute). As for
13 Mr. Ruscilli's concern about who will pay for the cost of hauling traffic over
14 the 60 or so miles from Lake City to Jacksonville, the cost per minute for that
15 traffic would work out to \$0.000031, that is, about 3 one-thousandths of a
16 penny per minute. Elsewhere in his testimony (at page 19), Mr. Ruscilli
17 suggested that, but for the LATA restriction, ALECs might demand that
18 BellSouth haul their traffic from "Lake City all the way to Miami, at no cost
19 to the ALEC." The "cost" that even this irrelevant example would amount to
20 for the roughly 330 mile trip is only \$0.00017, i.e., 17 one-thousandths of a
21 penny per minute. I do not believe that there is any basis on the record in this
22 proceeding by which the Commission can affirmatively determine that this
23 almost immeasurably small \$0.000031 "additional" transport cost is not in

1 fact already fully embraced within the existing tandem reciprocal
2 compensation rate.

3

4 Q. Were ALECs willing to pay these transport costs, or if it turns out that they
5 are already paying them, should they then be entitled to reciprocal
6 compensation on calls originated in one ILEC local calling area and
7 terminated in another?

8

9 A. As I have already stated, it is less than obvious that ALECs are not already
10 paying these costs. In any event, if the ILEC's transport costs are fully
11 compensated, there is no basis whatsoever for the ILEC to refuse to pay
12 reciprocal compensation on calls it originates that are terminated to an ALEC.

13

14 By insisting that their definitions as to what calls are "local" and what are
15 "toll" be controlling, BellSouth and Verizon are attempting to force ALECs
16 to mirror the ILECs' monopoly era pricing practices when ALECs are
17 prepared to create service offerings and pricing plans that will bring the kinds
18 of massive cost decreases that are discussed in the *Scientific American* article
19 to Florida consumers. It is critical that the Commission recognize that the
20 ILEC local/toll distinctions and local calling area definitions are entirely
21 matters of *price*, not of cost or network architecture. These concepts are
22 artifacts of the past, and it is essential that the competitive marketplace be
23 permitted to operate so as to replace these artificial service distinctions and

1 pricing schemes with offerings that capture the actual cost of providing the
2 service.

3

4 Q. How does the ILECs' position force ALECs to mirror ILEC pricing and
5 service arrangements?

6

7 A. If ALEC costs and compensation arrangements are linked to existing ILEC
8 pricing practices, ALECs will be forced to reflect those conditions in their
9 own end user price⁵. For example, if an ALEC-originated call traverses a
10 route that is subject to toll rate treatment in ILEC tariffs, the ILECs may not
11 view the ALEC call as local and on that basis make it subject to access
12 charges. If an inbound (ILEC-originated) call to an ALEC customer traverses
13 an ILEC toll route, the ALEC would not (under the ILEC view) be entitled to
14 any reciprocal compensation, and might instead be required to *pay* access
15 charges to the ILEC. All that this policy would accomplish is to protect the
16 ILECs' existing service and pricing arrangements from competition. ALECs
17 are entitled under TA-96 to exchange all intraLATA traffic with ILECs on
18 the basis of cost and to set their prices and design their services in whatever
19 way they believe will best serve their own competitive position.

20

21 Q. In support of BellSouth's position that ALECs should be required to establish
22 a POI in each BellSouth local calling area to which they want local
23 interconnection, Mr. Ruscilli asserts that "BellSouth has a local network in

1 each of the local calling areas it serves in Florida.”⁵ Do you agree with Mr.
2 Ruscilli’s characterization?

3
4 A. No. BellSouth has clearly organized its networks along LATA lines, not
5 along “local calling area” lines. For example, as is demonstrated in Exhibit
6 ____ (LLS-2) to my rebuttal testimony, all of BellSouth’s end office switches
7 in the Jacksonville LATA “home” on the Jacksonville local tandem switch.
8 Some calls (both local and toll) may be routed via direct end office-to-end
9 office trunking, but all other interoffice (local and toll) calls must be routed
10 via the tandem. Mr. Ruscilli’s statement appears to be driven by existing
11 *pricing* practices rather than by the physical configuration of BellSouth’s
12 intraLATA networks:

13
14 ... these networks are individual networks *in the sense that when a*
15 *customer pays for local service in the Jacksonville local calling*
16 *area, that is what the customer gets. The customer does not get*
17 *access to other distant local calling areas, at least not without*
18 *payment of the appropriate fees.*⁶
19

20 Not only does the network configuration shown in Exhibit ____ (LLS-2)
21 belie the notion that BellSouth operates a separate local network in each of its
22 local calling areas, it underscores the fundamental efficiency of a network
23 design in which all local and toll interoffice traffic is routed through a single

5. Ruscilli (BellSouth), at 13.

6. *Id.*, at 16, emphasis supplied.

1 switching point. When a BellSouth customer in Lake City initiates an
2 interoffice call – perhaps to a nearby exchange that is within the Lake City
3 local calling area – that call may be routed directly if a direct end office-to-
4 end office trunk is available, or would be routed via Jacksonville. In that
5 case, BellSouth needs to haul the call the 60 miles from Lake City to
6 Jacksonville and then haul it back roughly the same distance to the nearby
7 exchange. The reason why this network architecture is so efficient is because
8 the costs of transport are so small. But it also means that the cost to
9 BellSouth of a “local” call (i.e., one that is subject to local rate treatment) is
10 substantially the same as the cost to BellSouth of a toll-rated call. ALECs
11 should be confronted with a comparable cost structure, whether they own
12 their own network facilities, use BellSouth’s, or some combination of the
13 two.

14

15 Q. Hasn’t this Commission required an ALEC to pay the ILEC the costs of
16 dedicated transport of an ILEC-originated call from the ILEC’s local calling
17 area to the ALEC’s POI?

18

19 A. Yes, on one occasion. This is an issue that has arisen before this Commission
20 in a number of recent arbitrations. In the Level 3/BellSouth arbitration,
21 Docket No. 000907-TP, the Commission concluded “... that BellSouth has
22 failed to demonstrate a clear, argument that the parties should compensate
23 each other for the use of interconnection trunks if those trunks are used to

1 deliver traffic to a POI outside the local calling area from which the call
2 originated.”⁷ The Commission also concluded that BellSouth had not met its
3 burden to sustain its position that Level 3 should be required to pay BellSouth
4 for the use of BellSouth’s interconnection trunks on BellSouth’s side of the
5 POI.⁸ Subsequently, in the MCI WorldCom/BellSouth arbitration in Docket
6 No. 000649-TP, the Commission found the record to be inadequate to resolve
7 this issue and concluded that the issue would be addressed in this generic
8 docket.⁹ However, on April 17, 2001, the Commission approved a staff
9 recommendation in the Sprint Communications Limited Partnership/
10 BellSouth arbitration in Docket No. 000828-TP which reflects a departure
11 from prior Commission orders and, for that matter, from FCC rules and
12 orders.

13
14 Q. What decision did the Commission reach in the Sprint/BellSouth arbitration?

15
16 A. While the order has not yet been issued, the decision made by the
17 Commission on April 17, 2001, approving the April 5, 2001 Staff
18 Recommendation, requires Sprint to pay TELRIC rates for interoffice
19 dedicated transport between a virtual POI designated by Sprint in the
20 BellSouth local calling area and Sprint’s actual POI in the LATA where

7. Order No. PSC-01-0806-FOF-TP issued March 27, 2001, at 25.

8. *Id.*

9. Order No. PSC-01-0824-FOF-TP issued March 30, 2001, at 82.

1 Sprint has a NPA/NXX homed in the BellSouth local calling area and has
2 assigned numbers from that NPA/NXX. The Staff Recommendation
3 approved by the Commission would not have Sprint pay BellSouth for so-
4 called “typical” activities associated with transporting such calls from
5 BellSouth’s local calling area to the Sprint POI, such as multiplexing and
6 interoffice local transport.

7

8 Q. Do you agree with the Staff recommendation that was approved by the
9 Commission in the Sprint/BellSouth arbitration?

10

11 A. No. While obviously the Sprint/BellSouth decision is based upon a different
12 record, and the final order has not yet been issued and may be revisited on
13 reconsideration, there are a number of reasons why the Sprint/BellSouth
14 decision should not be controlling in this generic docket.

15

16 First, the Sprint/BellSouth decision was based upon a different record. The
17 Staff evidently believed that the record in that case, contrary to the records in
18 the Level 3/BellSouth and MCI WorldCom/BellSouth cases, showed that
19 BellSouth incurred additional costs to haul a BellSouth originated call from
20 the BellSouth local calling area to the Sprint POI. There is no ILEC-specific
21 cost data to that effect that has been submitted in this proceeding.

22

1 Second, the Staff relied upon paragraph 176 of the FCC's *Local Competition*
 2 *Order*¹⁰ for its conclusion that TA-96 requires distinct charges for
 3 interconnection and transport and termination. That same argument was
 4 made by BellSouth in the MCI WorldCom/BellSouth arbitration and was
 5 apparently not viewed by the Commission to be persuasive.¹¹ Obviously,
 6 there has been no FCC ruling since this Commission's MCI WorldCom/
 7 BellSouth arbitration decision that would justify a different conclusion. The
 8 important point is that the FCC has already ruled that an ILEC may not
 9 charge an ALEC for either the facilities used to deliver ILEC-originated
 10 traffic or transport charges for the traffic itself on the ILEC side of the POI.¹²
 11
 12 Third, the Staff Recommendation in the Sprint/BellSouth arbitration was
 13 predicated upon a new and, I would submit, erroneous, interpretation of FCC
 14 Rule 51.703(b). That rule precludes a LEC from assessing "charges on any
 15 other telecommunications carrier for local telecommunications traffic that
 16 originates on the LEC's network." Staff (and the Commission) interpreted
 17 that rule to preclude BellSouth from assessing charges for facilities used to

10. In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, First Report and Order, 11 FCC Rcd 15499 (1996).

11. Order No. PSC-01-0824-FOF-TP, at 77.

12. *In the Matters of TSR Wireless, LLC, et al. v. US West Communications, Inc.*, Memorandum Opinion and Order, File Nos. E-98-13, E-98-15, E-98-16, E-98-17, E-98-18, released June 21, 2000, at ¶25.

1 transport BellSouth originated traffic within the local BellSouth calling area
2 but not outside of the BellSouth local calling area. To reach that conclusion,
3 Staff imported BellSouth's definition of a local calling area into the rule even
4 though there is no reference in the rule to the local calling area of an ILEC or
5 ALEC. There is nothing in the rule that limits its application to the ILEC
6 local calling area and, indeed, an interpretation of that nature undermines the
7 very purpose of TA-96, which is to foster local service competition by, for
8 example, encouraging innovative and different local calling areas and local
9 calling plans.

10

11 Finally, it appears that the Staff and/or the parties in the Sprint arbitration did
12 not heed the FCC's statements in paragraph 1062 of the August 1996 *Local*
13 *Competition Order*. There the FCC was specifically addressing the question
14 of cost responsibility for "transmission facilities that are dedicated to the
15 transmission of traffic between two networks." That is precisely the situation
16 at issue here, where traffic originating at some ILEC end office has to be
17 transmitted to an ALEC for completion. The FCC specifically found that the
18 "interconnecting carrier" – that is, the carrier receiving the traffic – "should
19 not be required to pay the providing carrier" – that is, the one sending the
20 traffic and putting in the facility to do it – "for one-way trunks ... which the
21 providing carrier owns and uses to send its own traffic to the interconnecting
22 carrier." In case two-way trunks are installed by the providing carrier, then
23 the cost should be based "on the proportion of traffic that the interconnecting

1 carrier" – here, the ALEC – "uses to send terminating traffic to the providing
2 carrier." The point is that the FCC has already concluded that it is the
3 responsibility of the carrier originating the traffic to get that traffic to the
4 carrier terminating it. Combined with the fact that, unlike ILECs, ALECs are
5 not obliged to permit interconnection "at any technically feasible point," the
6 only sensible conclusion is that the originating ILEC, not the ALEC, is
7 responsible for getting its traffic all the way from the end office where the
8 traffic originates to the ALEC's POI.

9

10 Q. Does this conclude your rebuttal testimony at this time?

11

12 A. Yes, it does.

1 BY MR. HOFFMAN:

2 Q Doctor Selwyn, have you prepared a summary of your
3 prefiled direct and rebuttal testimony?

4 A Yes.

5 Q Would you please provide your summary to the
6 Commission?

7 A Yes, thank you. Good afternoon, Commissioners. My
8 testimony addresses Issues 11 through 15 and 17 and 18, as set
9 forth in the Commission's prehearing order. As a general
10 matter, my testimony examines the current manner in which
11 ALEC/ILEC interconnections are being provided with respect to
12 those issues. As a broad theme of my testimony, the costs of
13 transport have been dropping precipitously in recent years due
14 to major developments in fiber-optic technology that have
15 enabled the even existing fiber that had been constructed some
16 years ago to handle substantially more capacity in terms of
17 bandwidth and -- as expressed in digital terms in terms of bits
18 per second, than was possible at the time that these facilities
19 were being constructed.

20 In fact, the cost of transport has dropped by such an
21 extreme amount that this is for all practical purposes has
22 become almost a nonissue in telecommunications. ALECs have
23 been entering the market in various -- in various services to
24 take advantage of these very dramatic changes in the costs of
25 transport and in developing new services, new ways of

1 delivering services, and new ways of offering and prices
2 services that are designed to bring these cost advantages to
3 consumers.

4 To put this in its appropriate context, ILEC prices
5 relating to distance have remained largely unchanged for a
6 number of years. The distinctions that ILECs have
7 traditionally made between local and toll, for example, have
8 remained largely in place with very little modification. ILEC
9 prices for services such as foreign exchange service which are
10 based upon mileage between the dial tone exchange and the
11 exchange in which the NXX code for the customer is located,
12 that is, the customer premises on the one hand and the rating
13 point for the foreign exchange line, those distance based
14 charges also have remained largely unchanged for a number of
15 years despite the fact that transport costs, by my estimate,
16 have probably dropped by something in the range of 98 percent
17 over just the past five years.

18 What CLECs have been attempting to do is to eliminate
19 distance in their own method of charging and have been
20 frustrated in those efforts by attempts by the incumbent LECs
21 to maintain what amounts to protectionist measures in their
22 regulatory and rate-setting processes. Within the issues
23 embraced by this docket, this phase of this docket, we are
24 looking at, for example, the matter of point of
25 interconnection.

1 The ALECs take the position, which I believe is
2 correct as a matter of law, that they are entitled to establish
3 one point of interconnection in each LATA, and that it is the
4 responsibility of the ILEC to transport traffic down for the
5 ALEC to that point of interconnection.

6 What the ILECs in this proceeding are attempting to
7 do is to require that ALECs either build-out or lease
8 facilities so as to effectively negate the elimination of
9 distance as a cost driver. And ALECs would then be required to
10 construct or lease networks and facilities that would replicate
11 those of the ILECs, that would duplicate those of the ILECs in
12 many cases and that would increase the societal costs of
13 telecommunications by forcing them to create unnecessary
14 facilities and prevent them from providing consumers with the
15 maximum advantage of the distance based -- the elimination of
16 distance as a cost driver.

17 The ILECs are also attempting to preserve their
18 retail pricing regime by limiting compensation payments,
19 reciprocal compensation payments to the calling areas as they
20 define them, as the ILECs define them, not as the ALECs would
21 seek to define them. And, in fact, to continue to apply access
22 charges to ALEC traffic where the call extends beyond the
23 calling area as defined by the ILEC. So, for example, if an
24 ALEC wanted to offer a LATA-wide outward calling type of
25 service, the ILECs seem to agree that the ALEC has the right to

1 do that, but would charge the ALEC an access charge for
2 termination beyond the ILEC's local calling area. That charge
3 would make it an economic impossibility for the ALEC to
4 introduce this type of distance and sensitive pricing.

5 Overall, I believe that competition is best served by
6 eliminating the pricing distortions that are anachronisms from
7 the past, eliminate the requirement that ALECs replicate ILEC
8 networks that were constructed under network architectures that
9 are, again, artifacts of the past, and permit the ALECs to
10 develop and compete in the market to bring consumers the
11 benefits of the dramatic changes in cost conditions that have
12 occurred in recent years.

13 And if you need any evidence that that competition is
14 not occurring, you need look no further than the ILEC tariffs.
15 Because if the ILECs were truly confronted with the kind of
16 competition that should be taking place based on these cost
17 changes, we would not see the existing local calling areas,
18 existing toll rates, and existing foreign exchange rates be
19 preserved largely intact in the face of this kind of
20 competition.

21 In virtually every other sector of the
22 telecommunications industry where competition is effective, and
23 I'm including things like long distance, wireless, and the
24 internet, distance is no longer a factor. In fact, wireless
25 affiliates of the very same ILECs that have presented testimony

1 to preserve local calling areas in this case are themselves
2 offering services with nationwide local calling, that is
3 offering services that have no toll charges for calls anywhere
4 in the United States.

5 So where they confront competition the ILECs
6 eliminate distance as a pricing element. Where they preserve
7 their monopoly, they maintain that distance. And I think this
8 Commission needs to recognize this when it considers the
9 various proposals set forth in this case.

10 I need to make one other observation before I close
11 my summary, because I think there is at least one aspect of my
12 testimony relating to virtual NXX code treatment that is
13 affected by the FCC's Order 011-31, which was issued subsequent
14 to the date at which my testimony was filed. As framed, the
15 issue of the virtual NXX was motivated by the practice of ALECs
16 to offer their customers the opportunity to maintain a foreign
17 exchange type of presence in a local calling area by
18 establishing an NXX code that made those customers' numbers
19 local calls for ILEC customers within those local calling
20 areas.

21 For the reasons set forth in my testimony, I see
22 nothing wrong with that practice, and I think it is consistent
23 with overall competitive conditions and is entirely desirable.
24 That having been said, I believe that in one important respect
25 the FCC order alters the VNXX issue with respect to this

1 Commission's consideration. In the recip comp order the FCC
2 defined a new category of interstate service which it describes
3 as information access service. And by so doing effectively
4 removed ISP-bound calling from the jurisdiction of state
5 commissions. Subject to possible appeals or reversal of that
6 decision, that is the present regime as it exists today and as
7 I understand it.

8 In that regard, then, any call that would be placed
9 by a customer to an ISP would be an interstate call and not
10 subject to this Commission's jurisdiction. To the best of my
11 knowledge there is no tariff that has been filed by any of the
12 ILECs in this proceeding that actually covers those calls. For
13 example, if a customer in, say, West Palm Beach were to dial an
14 ISP NXX code in Miami, which would ordinarily be subject to a
15 toll charge as an intrastate call, I do not believe that that
16 call could be subject to the intrastate tariff based upon the
17 jurisdictional change that has been adopted by the FCC. In the
18 absence of a tariff, BellSouth would have no ability to impose
19 a toll charge pursuant, an intrastate toll charge for that
20 call.

21 Administratively, the existence of VNXX numbers for
22 ISPs now becomes even more important because it may be the only
23 way, at least in the short run, by which the ILECs can avoid
24 imposing toll charges for calls that are in this category and
25 that are not subject to intrastate rate treatment. At some

1 point in the future it may be possible, assuming that the FCC
2 order stands, for an NXX code in each LATA to be defined for
3 the express purpose of separating out ISP-bound traffic. And
4 that call - the calls to that particular NXX code would then be
5 subject to whatever interstate retail rate is ultimately
6 applicable for these calls. But for the time being, absent
7 such an arrangement, the VNXX treatment for ISP-bound calls may
8 be the only way that the inadvertent application of an
9 intrastate toll charge could be prevented.

10 With respect to other uses of VNXXs that ALECs may
11 employ for purposes of competing for foreign exchange service,
12 as my testimony explains, that purpose and use is appropriate
13 and would be unaffected by the FCC's decision. The reason why
14 virtual NXX codes have become a standard practice in Florida
15 and also other places in the country is because the ILECs have
16 not felt any competitive pressure to eliminate local toll
17 distinctions and expand local calling to respond to
18 competition.

19 Were that to happen, the need for NXX presence in
20 multiple calling areas would be substantially reduced, if not
21 eliminated. The kind of numbering problems and area code
22 problems that have plagued this state and the country, but this
23 state in particular, would no longer apply. And it is sort of
24 unfortunate that we can't sort of get past these monopoly era
25 pricing practices, because if we could the numbering problem

1 would be significantly alleviated.

2 That completes my summary, thank you.

3 MR. HOFFMAN: Thank you, Doctor Selwyn.

4 Mr. Chairman, the witness is available for cross
5 examination.

6 CHAIRMAN JACOBS: Very well. Mr. Lamoureux.

7 MR. LAMOUREUX: AT&T has no questions.

8 CHAIRMAN JACOBS: Mr. Moyle.

9 MR. MOYLE: No questions.

10 CHAIRMAN JACOBS: Mr. McGlothlin.

11 MR. MCGLOTHLIN: No questions.

12 CHAIRMAN JACOBS: Mr. Melson. Okay. Mr. Edenfield.

13 MR. EDENFIELD: BellSouth has no questions. But I
14 will say that I did offer to stipulate Doctor Selwyn in because
15 I knew I didn't have any.

16 MS. CASWELL: And I made the same offer. I have no
17 questions, either.

18 CHAIRMAN JACOBS: Staff.

19 COMMISSIONER JABER: (Inaudible. Microphone not on.)

20 MR. HOFFMAN: I will respond to your question. It
21 was. And we checked with staff, and staff had questions.

22 CHAIRMAN JACOBS: Great answer.

23 COMMISSIONER JABER: I just wanted to say that is
24 okay.

25 CHAIRMAN JACOBS: Staff.

CROSS EXAMINATION

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BY MS. BANKS:

Q Good afternoon, Doctor Selwyn.

A Good afternoon.

Q I'm Felicia Banks, and I will be asking you a few questions on behalf of Commission staff. I believe it is your position, if I'm wrong, correct me, that ALECs should be entitled to establish an inward local calling area, is that correct?

CHAIRMAN JACOBS: I may need you to get a little bit closer to the microphone.

THE WITNESS: I'm sorry, I'm having difficulty hearing you.

BY MS. BANKS:

Q Let's try it once more. I believe it is your position that ALECs should be entitled to establish an inward local calling area, is that correct?

A Well, it is my position that ALECs should be entitled to offer their customers the opportunity to expand inward calling in the same way that ILECs offer their customers that opportunity through foreign exchange service.

Q Okay. And I'm assuming by this you mean by use of a virtual NXX that you reference in your summary to provide a local dialing presence in an exchange for customers that would be physically located in different exchanges, is that correct?

1 A Yes, which is essentially the same as foreign
2 exchange service.

3 Q Okay. I don't know if you have had an opportunity,
4 I'm referring to Staff's Stipulated Exhibit Number 10, which is
5 Hearing Exhibit 9, which is the Joint ALECs' responses to
6 staff's second set of interrogatories, do you have a copy of
7 that?

8 A Are those my responses or is that something else?

9 Q Yes, it is your responses.

10 A Yes, I have a copy of that.

11 Q And I'm referencing Item 8B?

12 A Yes.

13 Q In your response to Item 8B, which asked these inward
14 local calling areas plan to supersede the outward local calling
15 areas establish by carriers, do you recall that?

16 A Yes.

17 Q And you stated further that the inward local calling
18 area defined by a particular carrier does not supersede the
19 outward local calling areas define by other carriers except
20 with respect to calls placed by customers -- those other
21 carriers to a customer of those carriers whose inward local
22 calling area embraces the rate center from which the call was
23 originated, is that correct?

24 A Yes.

25 Q Okay. Then doesn't that mean that an ALEC's inward

1 local calling area does, in fact, supersede the outward local
2 calling area of an ILEC, since we are talking about calls
3 placed to a virtual NXX from customers that are physically
4 located in a different exchange?

5 A Well, yes, but in exactly the same way and precisely
6 the same way that an ILEC's foreign exchange service does. In
7 other words, if an ILEC offers foreign exchange service to, for
8 example, a Miami customer and assigns that customer a Palm
9 Beach NXX code, then that Miami customer now has an inward
10 calling area that corresponds to the inward calling area
11 applicable to the Palm Beach exchange. And that is identically
12 what happens in the case of a virtual NXX.

13 So the answer is for the customer who subscribes to
14 this service, whether it be furnished as an FX under an ILEC
15 tariff or as a VNXX by an ALEC, that that customer's local
16 calling area, inward local calling area embraces the toll free
17 area of that NXX code.

18 MS. BANKS: Thank you, Doctor Selwyn. That's all
19 that staff has.

20 COMMISSIONER DEASON: Doctor Selwyn, I have just a
21 few questions, and it's primarily as a result of the summary.

22 You indicated at the conclusion of your summary that
23 the incumbent LECs have felt no pressure to increase their
24 local calling areas, and that if they felt this pressure and as
25 a consequence increased their local calling area it would have

1 a beneficial effect on the use of telephone numbers.

2 THE WITNESS: Yes.

3 COMMISSIONER DEASON: As a matter of policy, how do
4 we go about seeing to it that incumbent LECs do feel the
5 pressure, competitive pressure to increase their local calling
6 areas?

7 THE WITNESS: Well, I think one way to do it is to
8 allow ALECs to define their service as they are requesting to
9 be able to do; that is to, in the case of outward services, to
10 be able to define calling areas that cover as much of a LATA or
11 perhaps even beyond the LATA as they deem appropriate, and to
12 not subject the ALEC to access charges for terminating calls
13 beyond the calling areas that the ILEC happens to have
14 historically defined. That would certainly put pressure on the
15 ILECs to make comparable offerings.

16 With respect to inward calling, I think the ALECs
17 have developed an innovative approach to the same, to competing
18 with the ILECs with respect to foreign exchange service, have
19 enabled ISPs to operate efficiently by consolidating all of
20 their traffic at a single point rather than establishing
21 multiple locations in each LATA where local calls could be
22 terminated, and if ALECs continue to be permitted to do that,
23 then that puts pressure on ILECs.

24 I also believe administratively, and I have certainly
25 made this recommendation in numerous fora around the country,

1 that the Commission should be affirmatively pursuing policies
2 aimed at expanding the scope of rate centers for the purpose of
3 relieving pressure on numbers.

4 COMMISSIONER DEASON: Let me ask you if an ALEC has a
5 customer and the ALEC has defined its local calling area as an
6 entire LATA, and the customer makes a call to a BellSouth
7 customer within that LATA but would be a toll call under
8 BellSouth's definition, it's your suggestion that there should
9 not be access charges on that particular call?

10 THE WITNESS: It is not only my suggestion, I think
11 actually that is what the law requires. If you refer to the
12 definitions in 47 USC in the Communications Act, a toll call --
13 and I believe I have cited this in response to Staff
14 Interrogatory 6 in that second set. At Page 6 of that same
15 exhibit that staff counsel referred me to a moment ago, and I
16 am reading, quoting from the Act, the term, quote, telephone
17 toll service, end quote, means telephone service between
18 stations in different exchange areas for which there is made a
19 separate charge not included in contracts with subscribers for
20 exchange service. Reference there to 47 USC, Section 153, Sub
21 48.

22 I don't have the reference, but it is my recollection
23 that there is a definition also in 47 USC, 153 of access
24 charges which are expressly limited to the case where a toll
25 charge applies. So if an ALEC offers a service, defines its

1 local service to embrace the entire LATA and does not apply any
2 toll charges for the completion of calls anywhere within that
3 local calling area within its contract for local service then
4 extends to the entire LATA, I believe that there would be no
5 basis for access charges to apply in that situation.

6 COMMISSIONER DEASON: Thank you.

7 CHAIRMAN JACOBS: Doctor Selwyn, I'm interested in
8 the analysis you reached -- actually it is the distinction that
9 you raised between what we have heard heretofore as an increase
10 in costs to the ILECs to take this traffic from their switch to
11 the ALEC's point of interconnection. And you make the
12 distinction that there is no increase in cost. Perhaps some
13 revenue impact, but no increase in cost, is that correct?

14 THE WITNESS: Well, a very insignificant increase in
15 cost.

16 CHAIRMAN JACOBS: And that goes to your statement
17 earlier about the decline in transport cost, is that correct?

18 THE WITNESS: Right. I believe in my rebuttal at
19 approximately Page 19, I have actually made some calculations
20 of the transport costs per minute per mile. And I point out at
21 Line 12 that it is something like 5/100,000ths of a cent.

22 So if, for example, let's say that by requiring that
23 the ILEC transport calls to a single point of interconnection
24 in the LATA rather than to a point of interconnection in each
25 to its local calling areas that the average transport distance,

1 say, went from instead of being ten miles, say, it became 20
2 miles, just as an example. We would be looking at a per minute
3 cost differential of approximately 5/10,000ths of one cent per
4 minute. And that is a number that at this point is just too
5 small to measure.

6 And certainly the ILEC is able to accomplish that at
7 far less costs than if it were to force, as I believe both
8 BellSouth and Verizon are asking to be done here, if it were to
9 force CLECs, ALECs to actually either construct or lease
10 dedicated facilities to provide that transport, which would
11 require that the ALEC maintain far more extensive and
12 inefficient switch configurations and the ALEC simply could not
13 do it anywhere near that cheaply, but the ILEC can, and that is
14 the point that I'm making in this testimony.

15 CHAIRMAN JACOBS: And I'm interested also, I saw the
16 article that you raised, and the point there is if -- I will
17 put it in your context, unless you allow that type of
18 architecture in the network, we won't be able to derive some of
19 the costs savings that are possible for consumers.

20 THE WITNESS: You're absolutely right. The consumer
21 has -- I mean, as I indicated, in the interexchange, in the
22 long distance market the consumer has clearly benefitted by the
23 elimination of distance, but you don't see that in the local
24 tariffs.

25 CHAIRMAN JACOBS: And in your conclusions, so then

1 the fact that perhaps that there may be a revenue impact to the
2 ILEC, your response to that is that that simply calls for a
3 competitive response?

4 THE WITNESS: Yes. You know, that is a competitive
5 loss to the ILEC. And what the ILECs here are asking you to do
6 is to help them essentially put their thumb in the dyke to
7 prevent competition from rolling in here. The competitive
8 pressure is there. It has arisen in other sectors. But by
9 trying to maintain the kind of protectionist measures that the
10 ILECs are asking this Commission to endorse and to adopt, they
11 are hoping to delay, and I believe that is all they will do is
12 delay, they won't ultimately succeed, but they will delay the
13 development of competition.

14 And, you know, where you see -- where you see
15 distance eliminated, consumers have benefitted. And if I can
16 take a moment, Commissioner, just to give you an illustration,
17 there is a lot of talk, and go back to the days before the FCC
18 order about the whole issue of ISP traffic and VNXXs. The
19 question is do VNXXs actually deprive the ILEC of toll or
20 access revenue. And I would submit with respect to at least
21 ISP-bound traffic, that that was never the case. Because under
22 no circumstance would ISPs have designed their networks to pay
23 those charges.

24 If they were not able to take the kind of satisfying
25 arrangements that the ALECs have been offering them which

1 enabled them to consolidate all of their traffic, all of their
2 in-bound calling to one point in a LATA and operate a very
3 efficient point of connection to the Internet, they would be
4 required to establish physical presence in each local calling
5 area, that is, ISPs would.

6 And what would end up happening is that the ISPs
7 would establish those presence, they would have to construct
8 much more complex networks to take their internet traffic from
9 each local calling area and put it onto the internet backbone.
10 And I think that you can be absolutely assured that if they
11 were required to do that, there would be many parts of this
12 state that would have no internet access.

13 And what has happened here is that because the ILECs
14 have been able to -- I'm sorry, because the ISPs have been able
15 to take advantage of the network efficiencies that have arisen
16 because of the elimination of distance and transport, they are
17 able to efficiently provide this service and provide it
18 statewide.

19 And, you know, you see ILECs doing the same thing
20 with respect to directory assistance service and other things
21 where they have consolidated operations. When you dial 411,
22 you don't talk to a directory assistance operator in your town,
23 you might even not -- the directory assistance operator might
24 not even be in Florida. The ILECs have taken advantage of the
25 low transport costs to consolidate their operations, but they

1 are attempting to deny other industries, such as the ISP
2 industry, the opportunity to do exactly the same thing.

3 There is no revenue loss as a result of VNXX
4 treatment to ISPs, because ISPs would never have paid toll
5 charges. They simply would have configured their networks
6 differently and less efficiently and provided less service to
7 the public.

8 CHAIRMAN JACOBS: Well, okay. I can buy your
9 analysis, but if indeed there should be some measure of --
10 there should be some measure I would think. I have gotten the
11 impression that there is a line beyond which we shouldn't ask
12 the ILECs to go. Do you have a line in mind? Is there some --
13 I heard you say you would even extend it beyond LATA
14 boundaries. So I assume that wouldn't be it. Where would it
15 be?

16 THE WITNESS: Well, certainly for the time being, at
17 least, the LATA boundary seems to be a point of departure.
18 BellSouth in Florida does not have interLATA authority. But,
19 you know, it is hard for me to say precisely where to do that
20 because, for example, there is nothing that would prevent
21 BellSouth, as far as I know, from offering their own LATA-wide
22 ISP type service, or any other LATA-wide service that would
23 take advantage of its own network efficiencies and effectively
24 block the ALECs from competing in that market.

25 I mean, ILECs have plenty of competitive response

1 opportunities that they are not taking advantage of. Many
2 ALECs that have specialized in serving ISPs, for example, allow
3 ISPs to collocate their equipment in the ALEC's central office
4 building. To the best of my knowledge BellSouth does not offer
5 nonaffiliated ISPs a similar collocation opportunity. That
6 alone is a very valuable service that has nothing to do with
7 VNXXs, or rates, or anything else, but it's an area in which
8 the ALECs have chosen to compete and BellSouth, for whatever
9 reason, has chosen not to compete.

10 So before we draw a line in the sand and say there is
11 a point at which we are going to protect the ILEC, it seems to
12 me that we need to see what the ILECs themselves are capable of
13 doing which they are not doing. A good deal of their revenue
14 loss for ISP-bound traffic was not the result of recip comp or
15 pricing, but rather was simply the result of the fact that the
16 ILECs generally weren't satisfying the communications needs of
17 ISPs and ALECs were.

18 CHAIRMAN JACOBS: Very well. Thank you.

19 COMMISSIONER DEASON: I have one follow-up question.
20 In a situation where an ALEC defines a LATA as its local
21 calling area, what happens if a BellSouth customer originates a
22 call to an ALEC customer within that LATA and under BellSouth's
23 definition of local service that would be a toll call. Would
24 the ALEC be entitled to receive access charges for that, for
25 completing that call?

1 THE WITNESS: As I read the federal statute, I think
2 the answer is yes. Because the definition of toll is a toll --
3 a call is a toll call if it is not included within the contract
4 for local service. And access charges apply where there is a
5 toll call. So if BellSouth applies a toll charge when its
6 customer calls the ALEC, and then the call is a toll call as
7 defined in the statute and access charges apply again as
8 defined in the statute.

9 On the other hand, if BellSouth were to eliminate
10 that toll charge and apply local call treatment, then there
11 would be no access charge. In fact, I think that a fair
12 reading of the statute would actually allow a distinction to be
13 made between basic and optional type services. In other words,
14 if BellSouth had a basic local service that applied to the home
15 exchange and some contiguous exchanges with toll for the rest
16 of LATA, then it would have to pay access charges to terminate
17 those toll calls.

18 On the area hand, if BellSouth also offered a
19 LATA-wide optional calling plan, which I'm told it does, I know
20 they do in Georgia, and I'm told that they do in Florida, then
21 as to that, as to those customers, in my opinion, there would
22 not be access charges because there is no toll since all of the
23 calling embraced within that local service contract is part of
24 the local service contract and no separate charge applies,
25 therefore, no access charge applies. So I think you have to

1 apply the statutory definition to answer that question.

2 COMMISSIONER DEASON: Thank you.

3 CHAIRMAN JACOBS: Any questions, Commissioners.

4 Redirect.

5 MR. HOFFMAN: Thank you, Mr. Chairman. Just one or
6 two.

7 REDIRECT EXAMINATION

8 BY MR. HOFFMAN:

9 Q Doctor Selwyn, I want to follow up on the questions
10 posed by Commissioner Deason. Either scenario, so to speak,
11 where I believe that your testimony was that the virtual NXXs
12 are not subject to access charges based on certain definitions
13 under federal law. Do you recall that exchange with
14 Commissioner Deason?

15 A Yes.

16 Q I'm going to hand you now a copy of 47 USC, Section
17 153(16), which defines exchange access, and 47 USC, Section
18 153(48), which defines telephone toll service, and ask you to
19 review those.

20 A Okay.

21 COMMISSIONER DEASON: Mr. Hoffman, you don't have
22 extra copies of that, do you?

23 MR. HOFFMAN: I'm sorry, Commissioner, I didn't know
24 that this was going to come up, I just have the Act with me.

25 COMMISSIONER DEASON: That's fine.

1 THE WITNESS: Okay.

2 BY MR. HOFFMAN:

3 Q Doctor Selwyn --

4 A Would you like me to read them into the record?

5 Q Well, I don't have extra copies of those. To the
6 extent necessary, please read those definitions into the
7 record. What I'm looking for is for you to just confirm that
8 it is those two definitions upon which you rely on in providing
9 your response that a virtual NXX call would not be subject to
10 access charges and, if so, why?

11 A Okay. Well, let me start by reading definition (48),
12 telephone toll service. "The term 'telephone toll service,'
13 means telephone service --"

14 CHAIRMAN JACOBS: Doctor Selwyn, I think the court
15 reporter would appreciate it if you would speak into the mike.

16 A (Continuing) I'm sorry. "The term 'telephone toll
17 service,' means telephone service between stations in different
18 exchange areas for which there is made a separate charge not
19 included in contracts with subscribers for exchange service."

20 And that is consistent with my discussion before that
21 a toll call is basically a call for which a toll charge
22 applies. It sounds circular, but that is what the statute
23 says. Definition (16), exchange access, reads, "The term
24 'exchange access' means the offering of access to telephone
25 exchange service or facilities for the purpose of the

1 origination or termination of telephone toll services." And
2 that, in fact, is precisely the point that I made in response
3 to the Chairman's question. If a call is placed to a foreign
4 exchange or a virtual NXX that is within the local calling area
5 of the calling party, then that call is embraced by the
6 contract for local service, it is therefore not a toll call.
7 And if it is not a toll call, then it is not subject to access
8 charges.

9 Q Okay. Would a call from an ILEC customer to an
10 ALEC's virtual NXX customer outside the local calling area of
11 the ILEC customer be considered exchange access?

12 A Just to make sure I understand the question, if the
13 VNXX, the rating point to the VNXX is outside the local calling
14 area of the ILEC customer who originates the call?

15 Q Right.

16 A Yes, that would then be a toll call. And, again, I
17 assume we are not speaking here of information access calls,
18 because we don't know exactly what those are since there is no
19 tariff for them.

20 Q Right.

21 A But for ordinary intrastate calls, that would be a
22 toll call and access charges would apply.

23 MR. HOFFMAN: Let me just go through my notes.

24 COMMISSIONER DEASON: So it all depends on how the
25 local provider of service defines their local calling area.

1 THE WITNESS: That's how I read the statute. And
2 with respect to the specific customer. In other words, as I
3 said, I read the statute as permitting the local exchange
4 carrier to offer different local service contracts, some of
5 which would be subject to toll charges for certain calls and
6 others might not.

7 COMMISSIONER DEASON: Okay. I understand that. But
8 in a practical sense, we have had testimony earlier about the
9 billing capabilities and how it has been a comparison of NXXs
10 and whether it is defined as local or toll. How do we go about
11 providing for proper billing and collection of access if it
12 applies when you could have numerous iterations of different
13 calling scopes by different providers of service irregardless
14 of what NXX they are using?

15 THE WITNESS: Well, let me try to respond to that.
16 Where the same carrier is offering optional calling plans, some
17 of which involve toll calls, toll charges for particular calls
18 and others don't, the carrier has already modified its billing
19 system to capture those differences. So, if BellSouth has a
20 calling plan under which a call from West Palm Beach to Miami
21 is a toll call, and has a different plan under which a call
22 from West Palm Beach to Miami is not a toll call, then it has
23 already made the modifications in its billing system and it
24 knows exactly how many toll minutes it is billed for. And if
25 it is terminating that call to an ALEC, it knows whether or not

1 it has to pay an access charge to that ALEC based on the way it
2 billed the call to its customers.

3 With respect to different carriers, each carrier has
4 its own billing system and is responsible for making the same
5 kind of judgments. If a carrier offers only LATA-wide local
6 calling, then it will never be subject to access charges for
7 any intraLATA calls that it would terminate to an ALEC and
8 there is no billing issue.

9 The kind of billing issues that were being discussed
10 earlier today related to the situation that I believe that Mr.
11 Ruscilli had posited where he was asserting that BellSouth
12 somehow figures out whether or not a particular FX number, a
13 particular telephone number is a local number or an FX number.
14 And if it is an FX number somehow it figures out not to charge
15 an ALEC recip comp if the ALEC customer happens to dial that
16 number. I actually think that the ALEC is entitled to recip --
17 is obligated to pay recip comp in that situation. But, in
18 fact, even the approach that BellSouth seems to be using seems
19 incomplete because under the BellSouth theory the ALEC ought to
20 be receiving access charges from BellSouth if, in fact, that
21 really is a toll call.

22 But I read the statute, the statute to me is very
23 clear from the perspective of the originating caller, that is
24 not a toll call, it is embraced within that caller's contract
25 for local service, it is not subject to access charges. End of

1 story.

2 Q And, therefore, would not constitute exchange access?

3 A That is correct.

4 MR. HOFFMAN: No further questions.

5 CHAIRMAN JACOBS: Other questions? That take care --
6 and we have exhibits.

7 MR. HOFFMAN: Mr. Chairman, I believe that I had
8 moved Doctor Selwyn's -- I'm sorry.

9 COMMISSIONER JABER: I thought Mr. Moyle was about to
10 say something.

11 MR. MOYLE: No, I just wanted to make sure that the
12 testimony was moved in as well as the exhibits. Mr. Hoffman, I
13 think, was going to get to that point, but just doing a little
14 bit of double-checking.

15 MR. HOFFMAN: I thought I had, but I was just making
16 sure that we had moved --

17 CHAIRMAN JACOBS: Right. We moved the testimonies,
18 both direct and rebuttal.

19 MR. HOFFMAN: We would move Composite Exhibit 18.

20 CHAIRMAN JACOBS: Very well. Without objection, show
21 Exhibit 18 is admitted.

22 (Exhibit 18 admitted into the record.)

23 MR. HOFFMAN: May Doctor Selwyn be excused?

24 CHAIRMAN JACOBS: Yes. Thank you. You are excused,
25 Doctor Selwyn.

1 MR. HOFFMAN: Thank you, Commissioner.

2 CHAIRMAN JACOBS: Next witness.

3 MR. HOFFMAN: Mr. Chairman, Level 3 would call
4 Timothy Gates.

5 Mr. Chairman, before we begin with Mr. Gates, Level 3
6 also had a Witness Mr. Hunt.

7 CHAIRMAN JACOBS: I was just going to mention that.
8 Do you want to move his testimony?

9 MR. HOFFMAN: Yes, sir, his prefiled direct and
10 rebuttal testimony.

11 CHAIRMAN JACOBS: Very well. Without objection, show
12 the prefiled direct and rebuttal testimony of Mr. William Hunt
13 is admitted into the record as though read.

14 MR. HOFFMAN: Thank you.

15 CHAIRMAN JACOBS: He didn't have any exhibits, did
16 he?

17 MR. HOFFMAN: I do not believe he had any exhibits.

18

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1 **Q: PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS**
2 **FOR THE RECORD.**

3 **A:** My name is William P. Hunt, III. I am Vice President for Public Policy for
4 Level 3 Communications, Inc., the parent company of Level 3
5 Communications, LLC (“Level 3”). My business address is 1025 Eldorado
6 Boulevard, Broomfield, CO, 80021.

7 **Q: PLEASE DESCRIBE YOUR RESPONSIBILITIES FOR LEVEL 3.**

8 **A:** As Vice President for Public Policy, I am responsible for government
9 relations and developing, implementing and coordinating worldwide
10 regulatory policy for Level 3’s global operations, including North America,
11 Europe, and Asia.

12 **Q: PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND**
13 **AND PROFESSIONAL EXPERIENCE.**

14 **A:** I received a Bachelor of Journalism from the University of Missouri in 1984.
15 I received my Juris Doctor from Western New England School of Law in
16 1991. I joined Level 3 as Regulatory Counsel in February, 1999 and was
17 promoted to Vice President and Regulatory Counsel in January, 2000, and to
18 Vice President for Public Policy in January, 2001. Prior to joining Level 3,
19 I spent almost five years at MCI Communications (“MCI”). I joined MCI’s
20 Office of General Counsel in 1994 as a commercial litigator. In March of
21 1996, I joined MCI’s state regulatory group in Denver, Colorado, where I
22 was responsible for securing state certifications in the western United States,
23 supporting arbitrations under the Communications Act of 1934, as amended

1 (“Act”), and prosecuting complaints against US West Communications (“US
2 West”) in Washington and Minnesota.

3 **Q: HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA**
4 **PUBLIC SERVICE COMMISSION?**

5 **A:** No. Although I submitted prefiled testimony in Level 3’s arbitration with
6 BellSouth in Florida in Docket No. 000907-TP, I did not attend the hearing
7 and another Level 3 witness adopted my testimony. I testified before the
8 South Dakota Public Utilities Commission during MCI’s state certification
9 proceeding and before the Arizona Corporation Commission, California
10 Public Utilities Commission, Colorado Public Utilities Commission, Georgia
11 Public Service Commission, Illinois Commerce Commission, Michigan
12 Public Service Commission, North Carolina Utilities Commission, and Texas
13 Public Utilities Commission in connection with Level 3 arbitration
14 proceedings. I am also scheduled to testify before the Utah Public Service
15 Commission regarding a rulemaking on intercarrier compensation.

16 **Q: PLEASE DESCRIBE THE OPERATIONS OF LEVEL 3.**

17 **A:** Level 3 Communications, Inc., through its subsidiaries, including Level 3, is
18 a global next-generation service provider with a state-of-the-art Internet
19 Protocol based network capable of delivering a full range of services,
20 including data, voice, video, fax and multi-media. Level 3’s network
21 employs a “softswitch” technology. A softswitch is a software system
22 running on commercially available servers that provides Level 3 with the

1 ability to offer services over the same Internet Protocol network that carries
2 broadband data services. Level 3's system has non-proprietary interfaces
3 intended to encourage the development of innovative new services and
4 applications by software and hardware developers, Level 3's bandwidth
5 customers, and other service providers. Level 3's initial service offerings
6 have focused on enhanced service providers, web-centric companies, and, on
7 a carrier's carrier basis, competitive local exchange carriers, fax service
8 providers, and long distance carriers.

9 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 **A:** The purpose of my testimony is to provide the information requested by the
11 Commission on Issue 11 (network architectures) and explain Level 3's
12 positions on Issue 14 (LEC responsibilities for delivering traffic) and Issue
13 16 (definition of and compensation for Internet Protocol ("IP") telephony).

14 **Q: COULD YOU PLEASE SUMMARIZE YOUR TESTIMONY ON**
15 **ISSUES 11 AND 14?**

16 **A:** Yes. In Issue 11, the Commission asks:

17 What types of local network architectures are
18 currently employed by ILECs and ALECs, and what
19 factors affect their choice of architecture?
20

21 In Issue 14, the Commission asks:

22
23 (a) What are the responsibilities of an originating
24 local carrier to transport its traffic to another local
25 carrier? (b) For each responsibility identified in part
26 (a), what form of compensation, if any, should apply?
27

1 Level 3 typically installs a single switch and initially establishes a
2 single Point of Interconnection (“POI”) with the incumbent local exchange
3 carrier (“ILEC”) in each Local Access and Transport Area (“LATA”). The
4 Act and FCC rules establish “rules of the road” governing LECs’
5 interconnection responsibilities. The first rule is that an Alternative LEC
6 (“ALEC”) may select the POI where the parties will exchange traffic. The
7 second rule, explained in further detail by Mr. Gates, is that each LEC is
8 responsible for delivering its originating traffic to the POI and paying the
9 other LEC reciprocal compensation for terminating such traffic. As the
10 Commission found in Docket 000907-TP, together, these two rules establish
11 that each LEC must deliver its traffic to the POI selected by the ALEC and
12 each LEC recovers the costs of delivering that traffic from its end users, not
13 its competitor.

14 Thus, to address Issue 14, the Commission must first determine where
15 each LEC must deliver its traffic to another LEC. As an ALEC, Level 3 has
16 the right to select a single POI per LATA under the Act and FCC rules.
17 However, Level 3 also has both a duty and a right to negotiate additional
18 POIs in good faith. While Level 3 prefers to negotiate additional POIs at the
19 local network planning level based on sound engineering principles,
20 including actual and forecasted traffic flows, Level 3 has been willing to
21 establish contractual traffic thresholds for additional POIs. Level 3 believes

1 that such an approach is consistent with the letter and intent of the Act and
2 Commission and FCC rules.

3 **Q: COULD YOU PLEASE SUMMARIZE YOUR TESTIMONY ON**
4 **ISSUE 16?**

5 **A:** Yes. In Issue 16, the Commission asks:

6 (a) What is the definition of Internet Protocol (IP)
7 telephony? (b) What carrier to carrier compensation
8 arrangements, if any, should apply to IP Telephony?
9

10 There is no single, or generally accepted, definition of IP telephony.

11 Although the FCC has outlined a tentative definition of phone-to-phone IP
12 telephony, it has not adopted that definition, nor has it classified
13 phone-to-phone IP telephony as a telecommunications service. The FCC has
14 cautioned that it would not be appropriate to adopt a broad, sweeping
15 definition of IP telephony and classify such services as telecommunications.
16 Indeed, although the FCC has been given the opportunity to impose
17 traditional regulation on IP telephony providers, it has declined to do so.

18 The Act and FCC rules distinguish between telecommunications
19 services, which are regulated, and information services, which are not. As I
20 will show in this testimony, the technology underlying a communication
21 makes a difference in how that communication is classified, and how a
22 communication is classified has far-reaching impacts that are not addressed
23 in Issue 16. Level 3 therefore recommends that the Commission neither
24 adopt a definition of IP telephony nor determine what intercarrier

1 compensation mechanism applies to IP telephony. Consistent with FCC
2 rules, the determination of whether a service is telecommunications, and
3 subject to access charges, or information, and exempt from access charges,
4 should be made on a case-by-case basis. If a LEC believes a particular
5 provider has misclassified its IP-based service to avoid access charges, the
6 LEC may seek relief from the Commission.

7 **ISSUE 11: NETWORK ARCHITECTURE**

8 **Q: COULD YOU DESCRIBE LEVEL 3'S NETWORK?**

9 **A:** Yes. We are building what we believe will be the finest network in the world
10 that uses Internet Protocol ("IP") technology end-to-end. You will not find
11 a circuit switch in our network anywhere. We are building 16,000 miles of
12 long haul network in the United States. This will connect 30 gateway cities,
13 including Miami, Orlando, and Tampa, and a number of other sites
14 throughout the country. We also have local networks in Miami, Orlando and
15 Tampa. In each local network, Level 3 installs a single switch and a fiber
16 ring to serve an area that an ILEC may serve through a more switch-
17 intensive, hub and spoke network architecture.

18 During the past three years, we have focused on building our network.
19 It is substantially completed and we expect to reap the benefits of our
20 technology and network in 2001 as we shift to being an operations company.
21 Our interconnection arrangements with ILECs are fundamental building

1 blocks that Level 3 needs to provide our customers with new competitive
2 services.

3 **Q: WHAT IS LEVEL 3'S PREFERRED NETWORK**
4 **INTERCONNECTION ARCHITECTURE?**

5 **A:** At least initially, Level 3 would like to establish a single POI in each LATA
6 in which Level 3 provides local exchange service. As Mr. Gates discusses
7 in the context of Issue 14, each carrier should be responsible for providing
8 facilities and trunking to the POI for the hand off of local and toll traffic, and
9 each carrier should be responsible for completing calls to all end users on its
10 network.

11 **Q: CAN YOU PLEASE EXPLAIN WHAT A POI IS?**

12 **A:** The POI is a demarcation between the networks of two LECs where the
13 exchange of traffic takes place. Each LEC is responsible for installing
14 facilities on its side of the POI. As the physical and conceptual end point of
15 each LEC's network, the POI also divides financial responsibility for the
16 facilities between interconnecting LECs.

17 **Q: HOW DOES LEVEL 3 PROPOSE TO DETERMINE IF AND WHEN**
18 **ADDITIONAL POIs SHOULD BE ESTABLISHED?**

19 **A:** We believe that the question of whether multiple POIs need to be established
20 should be determined through consideration of specific network concerns by
21 the planners responsible for running the networks. Because the network
22 planners are most familiar with the network architecture, traffic volumes, and

1 forecasts, Level 3 prefers that the establishment of additional POIs be left to
2 the discretion of the network planners from both companies, consistent with
3 sound engineering principles. In considering new POIs, sound engineering
4 principles dictate a case-by-case analysis under which carriers should
5 consider factors such as the current network architecture, the current and
6 forecasted level of traffic flowing through the existing POI, the location(s)
7 from which traffic is flowing, the remaining capacity at the existing POI, and
8 the demand placed upon that POI. After these and other relevant factors are
9 taken into account, an appropriate, mutually agreeable determination can be
10 made as to when and where an additional POI may be needed.

11 In our recent arbitration with BellSouth, we offered to establish a
12 contractual traffic threshold that would govern the establishment of additional
13 POIs. We proposed that once traffic originating from or terminating to a
14 specific access tandem reached the level of an OC-12, an additional POI
15 would be established at that access tandem. Level 3 has generally been
16 successful at negotiating interconnection architectures tailored to meet both
17 Level 3's and the interconnecting ILEC's needs, as evidenced by our
18 settlements with Verizon and SBC Communications that incorporate both
19 compensation and network architecture components.

20 **Q: HAS LEVEL 3 IMPLEMENTED A SINGLE POI PER LATA**
21 **ARCHITECTURE WITH ILECs IN FLORIDA?**

1 **A:** Yes. Although I am not a network planner, I understand that Level 3 initially
2 established a single POI per LATA with each major ILEC (BellSouth, Sprint,
3 and Verizon). Local network planners for Level 3 and those ILECs confer
4 on a weekly basis and review the Florida network architecture as necessary
5 during these weekly discussions.

6 **Q:** **DOES LEVEL 3 MAINTAIN A SINGLE POI IN EACH LATA OR**
7 **MULTIPLE POIs IN OTHER MARKETS?**

8 **A:** Level 3 generally enters a new market by establishing a single POI per LATA
9 and then works at the local network planning level to determine when
10 additional POIs are necessary.

11 **ISSUE 14 - LEC RESPONSIBILITIES FOR DELIVERING TRAFFIC**

12 **Q:** **WHAT IS THE LEGAL BASIS FOR LEVEL 3'S POSITION**
13 **REGARDING APPROPRIATE INTERCONNECTION**
14 **ARCHITECTURES?**

15 **A:** The Act and FCC rules establish “rules of the road” governing LECs’
16 interconnection responsibilities. The first rule is that an ALEC may select
17 the POI where the parties will exchange traffic. The second rule, explained
18 in further detail by Mr. Gates, is that each LEC is responsible for delivering
19 its originating traffic to the POI and paying the other LEC reciprocal
20 compensation for terminating such traffic. Together, these two rules establish
21 that each LEC must deliver its traffic to the POI selected by the ALEC and
22 each LEC recovers the costs of delivering that traffic from its end users, not

1 its competitor. Thus the threshold question that must be addressed under
2 Issue 14 is where the exchange of traffic takes place. As the Commission
3 found in Docket 000907-TP, the ALEC has the right to select that point of
4 exchange.

5 The Act and the FCC recognize that new entrants, such as Level 3,
6 must be able to determine the most efficient location for their switches. The
7 Act grants ALECs, not ILECs, the right to select the POI. Under 47 U.S.C.
8 § 251(c)(2)(B),¹ an ILEC must provide interconnection at any technically
9 feasible point within its network selected by an ALEC. This means that the
10 ALEC has the right to interconnect at a single POI per LATA.² Mandating
11 interconnection at any point unilaterally selected by an ILEC may require
12 ALECs' to mirror ILECs' legacy network architecture, which may not be the
13 most efficient forward-looking architecture for an entrant deploying a new
14 network, and therefore constitutes a barrier to entry.

15 **Q: BUT SHOULDN'T THE COMMISSION TAKE INTO ACCOUNT**
16 **ILEC CONCERNS ABOUT THE COST OF DELIVERING THEIR**
17 **TRAFFIC TO THE POI?**

¹ Under Section 251(c)(2)(B), ILECs have the "duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network ... at any technically feasible point within the carrier's network." 47 U.S.C. §251(c)(2).

² *Application by SBC Communications, Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Service, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide in-Region, InterLATA Services in Texas*, CC Docket No. 00-65, Memorandum Opinion and Order, FCC 00-238, ¶ 78 (rel. June 30, 2000).

1 **A:** No. The Commission and FCC addressed this very question and found that
2 these kinds of cost considerations are not to be considered in evaluating
3 whether an ALEC's chosen POI is acceptable or not. This is a rate issue, not
4 a network design/architecture issue. As the FCC argued in an amicus brief
5 submitted to the U.S. District Court for the District of Oregon, a state
6 commission may not consider the cost to the ILEC in determining the
7 technical feasibility of points of interconnection:

8 Nothing in the 1996 Act or binding FCC regulations
9 requires a new entrant to interconnect at multiple
10 locations within a single LATA. Indeed, such a
11 requirement could be so costly to new entrants that it
12 would thwart the Act's fundamental goal of opening
13 local markets to competition. The provision in the
14 AT&T and MCI agreements that allows
15 interconnection at "any point designated by [AT&T or
16 MCI] that is technically feasible" is consistent with
17 the Act and FCC regulations and should be upheld.³

18 Under binding FCC rules, unless the ILEC can meet its burden of
19 showing that the exchange of both parties' traffic at a single POI per LATA
20 is not technically feasible, it must offer such interconnection.⁴ Furthermore,
21 the fact that ALECs have already interconnected with ILECs in Florida at a
22

³ *US West Communications, Inc. v. AT&T Communications of the Pacific Northwest, Inc.*, No. CV-97-1575-JE, Memorandum of the FCC as Amicus Curiae (D. Ore. Sept. 14, 1998).

⁴ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, ¶¶ 198, 205 (1996) ("*Local Competition Order*").

1 single POI per LATA is evidence that a single POI per LATA is technically
2 feasible.⁵

3 **Q: WHY DID YOU SAY THE COST OF DELIVERING TRAFFIC TO**
4 **THE POI IS A RATE ISSUE, NOT A NETWORK ARCHITECTURE**
5 **ISSUE?**

6 **A:** Under the FCC's rules, each carrier must pay the other carrier for "transport
7 and termination" of the traffic it delivers to the POI. The transport portion
8 of that payment covers delivery of traffic from the POI to the end office
9 serving the called party.⁶ Most ILECs have adopted a mileage-sensitive
10 charge for this transport. Therefore, if the ALEC chooses a POI location that
11 is far away from where most of its calls terminate, it will have to pay
12 additional transport charges to the ILEC for termination of its traffic.
13 Conversely, each party bears its own cost of delivering originating traffic to
14 the POI, and has the opportunity to recover that cost through the rates it
15 charges its end users for local exchange service.

16 **Q: WHAT PROVISIONS OF THE ACT GOVERN SELECTION OF**
17 **POIs?**

18 **A:** Congress placed the requirement to provide technically feasible POIs in
19 Section 251(c)(2), which applies only to incumbent LECs. If Congress had

⁵ *Id.* at ¶ 204.

⁶ 47 C.F.R. § 51.701(c).

1 wanted to have ALECs bear the same duty in establishing POIs as incumbent
2 LECs bear, it would have specifically stated that outcome, rather than
3 separating out the interconnection obligations to apply only to incumbent
4 LECs under Section 251(c)(2). Although an ALEC has an obligation under
5 Section 251(a) to interconnect directly or indirectly with an ILEC, the Act
6 places no obligation on an ALEC to provide an ILEC interconnection at any
7 technically feasible point, nor does it give an ILEC any right to select POIs
8 at its whim. Only Section 251(c)(2) designates who may pick POIs.

9 **Q: ARE THERE PUBLIC POLICY REASONS TO DENY ILECs THE**
10 **ABILITY TO REQUIRE ALECs TO BUILD FACILITIES, OR PAY**
11 **FOR FACILITIES, TO PICK UP ILEC TRAFFIC IN EACH LOCAL**
12 **CALLING AREA?**

13 **A:** Yes. If ILECs were allowed to identify POIs for originating traffic and
14 require ALECs to build or buy facilities to reach those POIs, ILECs would
15 be able to disadvantage ALECs and impose additional and unwarranted costs
16 on new entrants, impeding the development of competition. Indeed, if ILECs
17 were allowed such discretion, they may force ALECs to essentially duplicate
18 the incumbent's network. Duplication of the ILEC network is not required
19 by the Act; indeed, it runs counter to the Act's objective of opening local
20 markets to competition to promote innovation in networks and services.

1 **Q: DID CONGRESS RECOGNIZE THAT ILECs WOULD HAVE TO**
2 **MODIFY THEIR NETWORKS IN OPENING UP LOCAL**
3 **EXCHANGE MARKETS TO COMPETITION?**

4 **A:** Yes. In crafting ILECs' interconnection obligations, Congress chose to
5 require ILECs to provide interconnection at any technically "feasible" point.

6 As the FCC found:

7 use of the term "feasible" implies that interconnecting
8 or providing access to a LEC network element may be
9 feasible at a particular point even if such
10 interconnection or access requires a novel use of, or
11 some modification to, incumbent LEC equipment.
12 This interpretation is consistent with the fact that
13 incumbent LEC networks were not designed to
14 accommodate third-party interconnection or use of
15 network elements at all or even most points within the
16 network. If incumbent LECs were not required, at
17 least to some extent, to adapt their facilities to
18 interconnection or use by other carriers, the purposes
19 of sections 251(c)(2) and 251(c)(3) would often be
20 frustrated. For example, Congress intended to
21 obligate the incumbent to accommodate the new
22 entrant's network architecture by requiring the
23 incumbent to provide interconnection "for the
24 facilities and equipment" of the new entrant.
25 Consistent with that intent, the incumbent must accept
26 the novel use of, and modification to, its network
27 facilities to accommodate the interconnector or to
28 provide access to unbundled elements.⁷

29
30 By choosing the word "feasible," Congress indicated that ILECs
31 would have to consider new uses of, and modifications to, their
32 networks in order to provide interconnection to ALECs. It should

⁷ *Local Competition Order* at 202.

1 also be noted again that the FCC barred a consideration of cost in
2 determining technical feasibility. Taken together, this means that an
3 ILEC should not be allowed to use its own network inefficiencies as
4 an excuse to prevent an ALEC from selecting a technically feasible
5 interconnection point.

6 **Q: HOW DID THE FCC RECOGNIZE THAT ILECs WOULD HAVE TO**
7 **MODIFY THEIR NETWORKS IN OPENING UP LOCAL**
8 **EXCHANGE MARKETS TO COMPETITION?**

9 **A:** In the FCC's Local Competition proceeding, the United States Telephone
10 Association ("USTA") argued that the Act only requires ILECs to provide
11 interconnection to their networks as they are "configured presently."⁸ The
12 FCC rejected USTA's interpretation of the Act, finding that:

13 the obligations imposed by sections 251(c)(2) and
14 251(c)(3) include modifications to incumbent LEC
15 facilities to the extent necessary to accommodate
16 interconnection or access to network elements.⁹

17
18 In many instances, the Act and the FCC's rules show that neither Congress
19 nor the FCC want to constrain the ability of an ALEC to innovate and deploy
20 services, technologies, and network architectures that differ from historical
21 services, technologies, and network architectures deployed by ILECs. For

⁸ *Id.* at ¶ 195.

⁹ *Id.* at ¶ 198.

1 example, Congress provided two alternative definitions of “telephone
2 exchange service:”

3 The term “telephone exchange service” means (A)
4 service within a telephone exchange, or within a
5 connected system of telephone exchanges within the
6 same exchange area operated to furnish to subscribers
7 intercommunicating service of the character ordinarily
8 furnished by a single exchange, and which is covered
9 by the exchange service charge, or (B) comparable
10 service provided through a system of switches,
11 transmission equipment, or other facilities (or
12 combination thereof) by which a subscriber can
13 originate and terminate a telecommunications
14 service.¹⁰

15
16 The FCC also recognizes differences in incumbent and competitive
17 technologies in its reciprocal compensation rules, which, for example, define
18 transport as:

19 the transmission and any necessary tandem switching
20 of local telecommunications traffic subject to section
21 251(b)(5) of the Act from the interconnection point
22 between the two carriers to the terminating carrier’s
23 end office switch that directly serves the called party,
24 *or equivalent facility provided by a carrier other than*
25 *an incumbent LEC.*¹¹

26
27 Examples such as these show that Congress and the FCC anticipated
28 differences between incumbent and competitive networks and crafted rules
29 to ensure that ALECs would not be required to mimic ILECs. If ILECs are
30 permitted to require ALECs to establish a POI in each local calling area, the

¹⁰ 47 U.S.C. § 153(47) (emphasis added).

¹¹ 47 U.S.C. § 51.701(c) (emphasis added).

1 Commission would be undermining Congressional and FCC intent to
2 promote competition and innovation in network design.

3 **Q: IS IT POSSIBLE THAT ALECs MAY ONLY DESIGNATE POIs FOR**
4 **DELIVERY OF THEIR TRAFFIC, NOT THE ILEC'S?**

5 **A:** No. The FCC affirmed an ALEC's right to *exchange* traffic with the ILEC
6 at a single POI:

7 Of course, requesting carriers have the right to select
8 points of interconnection at which to exchange traffic
9 with an incumbent LEC under section 251(c)(2).¹²

10 Similarly, in the Intermedia arbitration, this Commission rejected BellSouth's
11 one-sided definition of the POI, recognizing that at the POI "traffic is
12 mutually exchanged between carriers."¹³

14 **Q: PLEASE SUMMARIZE LEVEL 3'S POSITION ON THIS ISSUE.**

15 **A:** Consistent with the Act and applicable FCC rules, ALECs have the right to
16 interconnect with an ILEC at a single POI in each LATA for the exchange of
17 traffic between the companies, and ILECs may not dictate where ALECs
18 must pick up an ILEC's traffic. Similarly, as Mr. Gates testifies, each LEC
19 is operationally and financially responsible for delivering its traffic to the POI
20 selected by the ALEC and recovering those costs from its end users, not its
21 competitor. While it may be appropriate to establish additional POIs as

¹² *Local Competition Order at ¶ 220* (footnotes omitted).

¹³ *Petition of BellSouth Telecommunications, Inc. for Section 252(b) arbitration of interconnection agreement with Intermedia Communications, Inc.*, Docket No. 991854-TP, Final Order on Arbitration, Order No. PSC-00-1519-FOF-TP, 48 (Aug. 22, 2000).

1 traffic volumes grow, Level 3 prefers to let local network planners evaluate
2 traffic patterns and other factors to determine where and when additional
3 POIs should be established.

4 **ISSUE 16: IP TELEPHONY**

5 **Q: ARE YOU AWARE OF A COMMONLY ACCEPTED DEFINITION**
6 **OF IP TELEPHONY?**

7 **A:** No. The phrase “IP Telephony” seems to refer to voice communications
8 carried over Internet Protocol. For this reason, IP Telephony is sometimes
9 also referred to as VOIP (voice over Internet Protocol). However, the phrase
10 “IP telephony” can mean different things to different people and could
11 encompass a wide variety of services. For instance, it could be
12 phone-to-phone, computer-to-phone, phone-to-computer, or
13 computer-to-computer. In some cases it could be delivered to a World Wide
14 Web address, in others, to a North American Numbering Plan number, in
15 others to an Internet Protocol address not on the World Wide Web. It could
16 also originate from any one of these several points. Furthermore, Internet
17 Protocol telephony could include other bells and whistles such as storage and
18 retrieval of data or translation of English to French.

19 **Q: WHAT IS INTERNET PROTOCOL?**

20 **A:** The Internet Protocol is simply a set of rules for the transmission of
21 information over networks in the form of data packets. As the name implies,
22 it is the protocol used on the public Internet; but it can also be used in other

1 packet-switched networks, such as Level 3's proprietary network.
2 Significantly, the protocol only specifies the format and routing of data
3 packets, not their content. Therefore, it can be used to transmit any kind of
4 information that can be expressed in digital form, including voice
5 transmissions.

6 **Q: DO YOU AGREE WITH THE COMMISSION'S IMPLIED**
7 **DISTINCTION BETWEEN THE "INTERNET" AND PRIVATE**
8 **NETWORKS THAT CARRY INTERNET PROTOCOL**
9 **TELEPHONY?¹⁴**

10 **A:** No. Based on the limited record in the BellSouth/Intermedia arbitration, the
11 Commission stated:

12 Except for, perhaps, calls routed over the internet, the
13 underlying technology used to complete a call should
14 be irrelevant to whether switched access charges
15 apply.¹⁵
16

17 I do not believe it is possible to draw a black and white distinction between
18 private networks that carry Internet Protocol telephony and communications
19 that traverse the Internet. There is a reason that people often draw a cloud to
20 represent the Internet. The Internet is a loosely organized group of *private*
21 *networks* that connect and exchange information at public access points.
22 Because Level 3 is connected to these public access points, it is possible that

¹⁴ See *Intermedia Order* at 53.

¹⁵ *Intermedia Order* at 57.

1 providers of Internet Protocol telephony will handle communications that
2 begin, traverse, or end on the “public” Internet.

3 **Q: DO YOU AGREE THAT THE UNDERLYING TECHNOLOGY USED**
4 **TO COMPLETE A CALL IS IRRELEVANT?**

5 **A:** No. Under federal law, specifically the FCC’s enhanced services framework
6 and the Act’s definition of information services, the technology used to
7 complete a communication is relevant.

8 **Q: COULD YOU PLEASE BRIEFLY EXPLAIN THE IMPACT OF**
9 **INTERNET PROTOCOL TECHNOLOGY ON EXISTING**
10 **REGULATORY CLASSIFICATIONS?**

11 **A:** Yes. Internet Protocol technology blurs traditional distinctions between local
12 and long distance service and between voice, fax, data, and video services,
13 thereby making regulation of this technology a difficult proposition. As I
14 have already explained, Internet Protocol networks transmit indistinguishable
15 packets of digital bits. Packets are routed through networks based on a
16 non-geographical, non-hierarchical addressing scheme that allows packets to
17 follow several possible routes between network nodes. Additionally, Internet
18 Protocol technology allows users to designate multiple “ports” on their
19 terminals so that multiple applications may simultaneously send and receive
20 information. This means that in the streams of packets flowing to a particular
21 terminal, some may be carrying digitized voice messages, others may be

1 carrying a computer program being downloaded from a remote server, and
2 others may be carrying video entertainment.

3 **Q: WHAT IS YOUR UNDERSTANDING OF THE REGULATORY**
4 **DISTINCTION BETWEEN TELECOMMUNICATIONS (BASIC) AND**
5 **INFORMATION (ENHANCED) SERVICES?**

6 **A:** The FCC initially established the distinction between “basic services” and
7 “enhanced services” in the Second Computer Inquiry, 77 F.C.C.2d 384
8 (1980) (“Computer II”). There, the FCC defined “basic services” as “the
9 common carrier offering of transmission capacity for the movement of
10 information.”¹⁶ In general, a basic service transmits information generated
11 by a customer from one point to another, without changing the content of the
12 transmission. Thus, the “basic” service category is intended to define the
13 transparent transmission capacity that makes up conventional
14 communications service. Because the FCC considers “basic” services to be
15 “wholly traditional common carrier activities,” they are regulated under Title
16 II of the Act.¹⁷ Among other things, Title II requires that basic interstate and
17 international services be offered at non-discriminatory, just and reasonable
18 rates.

19 **Q: DID THE FCC DEFINE “ENHANCED” SERVICES?**

¹⁶ *Computer II* at ¶ 420.

¹⁷ *Id.* at ¶ 435.

1 **A:** Yes. In contrast to basic services, the FCC defined unregulated “enhanced
2 services” as:

3 services, offered over common carrier transmission
4 facilities used in interstate communications, which [1]
5 employ computer processing applications that act on
6 the format, content, code, protocol or similar aspects
7 of the subscriber’s transmitted information; [2]
8 provide the subscriber additional, different or
9 restructured information; or [3] involve subscriber
10 interaction with stored information.¹⁸

11
12 Clause one of this definition is often referred to as the protocol processing
13 test. To determine whether a service meets the enhanced services definition,
14 the FCC has traditionally acted on a *case-by-case basis*, applying each clause
15 of the definition against the specific functionalities of the service in question.
16 The service is generally deemed “enhanced” if it meets the language of one
17 of the three clauses, as interpreted by the FCC. After the 1996 Act was
18 passed, the FCC determined that protocol processing services that qualified
19 as enhanced should be treated as information services under the Act.¹⁹

20 **Q: HOW DOES THE FCC REGULATE ENHANCED SERVICES?**

21 **A:** In *Computer II*, the FCC concluded that regulation of enhanced services is
22 unwarranted because the market for those services is competitive and

¹⁸ 47 C.F.R. § 64.702(a).

¹⁹ *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended*, CC Docket 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21955-58, ¶¶ 104-107 (1996) (“*Non-Accounting Safeguards Order*”).

1 consumers benefit from that competition.²⁰ The FCC reached this
 2 conclusion notwithstanding the close relationship between communications
 3 and some services it classified as enhanced:

4 We acknowledge, of course, the existence of a
 5 communications component. And we recognize that
 6 some enhanced services may do *some of the same*
 7 *things that regulated communications services did in*
 8 *the past.* On the other side, however, is the
 9 substantial data processing component in all these
 10 services.²¹

11
 12 **Q: IS THE BASIC/ENHANCED DICHOTOMY CODIFIED IN THE**
 13 **FEDERAL ACT?**

14 **A:** No. The Act distinguishes between telecommunications and information
 15 services. It defines “telecommunications service” as the “offering of
 16 telecommunications for a fee directly to the public or to such classes of users
 17 as to be effectively available directly to the public regardless of the facilities
 18 used.”²² The term “telecommunications” is defined as “transmission,
 19 between or among points specified by the user, of information of the user’s
 20 choosing, without change in the form or content of the information as sent
 21 and received.”²³ The definitions of “telecommunications” and
 22 “telecommunications service” can be contrasted with “information service,”

²⁰ *Computer II* at ¶ 433.

²¹ *Id.* at ¶ 435 (emphasis added).

²² 47 U.S.C. § 153(46).

²³ 47 U.S.C. § 153(43).

1 which is defined as the “offering of a capability for generating, acquiring,
2 storing, transforming, processing, retrieving, utilizing or making available
3 information via telecommunications, and includes electronic publishing, but
4 does not include any use of any such capability for the management, control,
5 or operation of a telecommunications system or the management of a
6 telecommunications service.”²⁴

7 However, the FCC determined that in adopting these definitions,
8 Congress intended to continue the distinction between basic and enhanced
9 services.²⁵ Specifically, the FCC found that services previously classified
10 as basic fit the definition of “telecommunications” and services previously
11 classified as enhanced fit the definition of “information services.” The FCC
12 also determined that the categories of “telecommunications” and
13 “information service” are *mutually exclusive*.²⁶ In other words, a particular
14 service can be an information service or telecommunications, but it cannot be
15 both. Although providers of information services may offer their service by
16 using telecommunications, they provide a separate and distinct information
17 service that is not regulated. For instance, ISPs buy local telephone lines
18 from carriers, and may also purchase private line transport services from
19 carriers, and combine these carrier-provided telecommunications services

²⁴ 47 U.S.C. § 153(20).

²⁵ *Report to Congress* at ¶ 21.

²⁶ *Id.* at ¶ 39.

1 with the ISP's equipment to provide Internet access service to the ISP's end
2 users. However, although the ISP uses telecommunications services as an
3 input, the services it offers to others are information services because they
4 include, for instance, the capability for generating, acquiring, storing,
5 transforming, processing, and/or retrieving information.²⁷

6 **Q: HAS THE FCC ADOPTED A DEFINITION OF, OR CLASSIFIED, IP**
7 **TELEPHONY?**

8 **A:** No. In its 1998 *Report to Congress*, although the FCC crafted a loose
9 definition of phone-to-phone Internet Protocol telephony, *it specifically and*
10 *expressly refused to classify that service as telecommunications absent*
11 *further information about how such services are provided.*²⁸ Although
12 Qwest, then U S WEST, filed a petition in April 1999 asking the FCC to find
13 that phone-to-phone IP telephony is subject to access charges, the FCC has
14 taken no action on that Petition.

15 **Q: DID THE FCC CONSIDER WHETHER TO CLASSIFY IP**
16 **TELEPHONY AFTER ITS 1998 REPORT?**

17 **A:** Yes, and it again refused to do so. Shortly after U S WEST, now Qwest,
18 filed its 1999 petition with the FCC, the FCC reviewed and rejected language
19 that would have classified calls carried using Internet Protocol as

²⁷ See *Bell Atlantic Telephone Cos. v. FCC*, 206 F.3d 1, 7 (D.C. Cir. 2000).

²⁸ *Report to Congress* at ¶ 90.

1 telecommunications. In an attempt to reduce the reporting requirements
2 placed on interstate common carriers, the FCC consolidated a number of
3 worksheets carriers complete to support various federal programs. When the
4 FCC proposed the consolidated worksheet, it included language that would
5 have required carriers to report revenue from “calls handled using Internet
6 technology as well as calls handled using more traditional switched circuit
7 techniques” as telecommunications (rather than information) service
8 revenue.²⁹ The FCC removed this language when it adopted the final
9 consolidated worksheet:

10 As noted by certain commenters, this Commission in
11 its *April 10, 1998 Report to Congress* considered the
12 question of contributions to universal service support
13 mechanisms based on revenues from Internet and
14 Internet Protocol (IP) telephony services. We note
15 that the Commission, in the Report to Congress,
16 specifically decided to defer making pronouncements
17 about the regulatory status of various forms of IP
18 telephony until the Commission develops a more
19 complete record on individual service offerings. We,
20 accordingly, delete language from the instructions that
21 might appear to affect the Commission’s existing
22 treatment of Internet and IP telephony.³⁰
23

²⁹ 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, CC Docket No. 98-171, Notice of Proposed Rulemaking and Notice of Inquiry, 13 FCC Rcd 19295 (1998).

³⁰ 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, CC Docket No. 98-171, Report and Order, ¶ 22 (rel. July 14, 1999) (footnotes omitted).

1 **Q: HAS THE FCC EXPRESSED CONCERNS ABOUT DEFINING AND**
2 **CLASSIFYING IP TELEPHONY?**

3 **A:** Yes. The FCC noted that given the wide array of services that can be
4 provided using packetized voice technology, it needs to consider if its
5 tentative definition of the service “accurately distinguishes between
6 phone-to-phone and other forms of IP telephony, and is not likely to be
7 quickly overcome by changes in technology.”³¹

8 For instance, based on the record in the Intermedia arbitration, I
9 expect that even BellSouth will concede that under federal law some IP
10 telephony services, such as computer-to-phone, are enhanced and should not
11 be subject to access charges. Yet, as a terminating carrier, Level 3 has no
12 means of knowing what the originating carrier hands off to Level 3, for
13 instance, whether a communication originated on a phone or computer.
14 Furthermore, a call could begin on an IP-enabled “phone” and still fit within
15 the enhanced services test even as it would fit under a broadly defined
16 category of “phone-to-phone IP telephony.” What might be considered
17 subject to access charges under a definition of phone-to-phone IP telephony
18 could also be a hybrid service that incorporates an information processing
19 component, even as it originates and terminates on “phones.” Thus, it may
20 be impossible for carriers to distinguish between phone-to-phone and

³¹ *Report to Congress* at ¶ 90.

1 computer-to-phone IP telephony or phone-to-phone IP telephony with no
2 enhancements and phone-to-phone IP telephony with enhancements that
3 would bring the service into an information classification.

4 **Q: HOW DID THE FCC SUGGEST THIS PROBLEM COULD BE**
5 **RESOLVED?**

6 **A:** The FCC specifically cautioned against making definitive pronouncements
7 as to the nature of a service “in the absence of a more complete record
8 *focused on individual service offerings.*”³² Any characterization of an
9 evolving IP service for regulatory purposes without a detailed analysis would
10 be futile and prejudicial to the provider’s interests. As the FCC said:

11 [w]e defer a more definitive resolution of these issues
12 pending the development of a more fully-developed
13 record because we recognize the need, when dealing
14 with emerging services and technologies in
15 environments as dynamic as today’s Internet and
16 telecommunications markets, to have as complete
17 information and input as possible.³³

18
19 Thus, a detailed consideration of the service needs to be made, and an
20 analysis of the appropriate regulation to be attached to such a product, if any.

21 **Q: ARE YOU ADVOCATING THAT THE COMMISSION UNDERTAKE**
22 **A CASE-BY-CASE SERVICE ANALYSIS RATHER THAN**
23 **ADOPTING A DEFINITION OF IP TELEPHONY?**

³² *Report to Congress at ¶ 90.*

³³ *Id.*

1 A: Yes. In the first instance, Level 3 believes that a case-by-case analysis is
2 consistent with the Act and FCC rules. If, however, the Commission wants
3 to adopt a definition of IP telephony in this proceeding, there are many other
4 pieces of this puzzle that the Commission should consider. For instance, if
5 the Commission were to find that intrastate phone-to-phone IP telephony is
6 a telecommunications service, that finding could impact access charge
7 revenue, universal service support, and carrier certification and reporting
8 requirements. Furthermore, to impose access charges on one Internet Protocol
9 application and not another (*e.g.*, voice but not data, or phone-to-phone but
10 not computer-to-phone) would raise privacy concerns, since a provider would
11 have to determine the origin, destination, and nature of the packet. Such
12 monitoring would likely be expensive if it could be done at all.

13 Because the Commission does not have jurisdiction over interstate
14 services, it would have to limit its definition to intrastate services. The FCC
15 expressed concern about making such intrastate versus interstate distinctions
16 as another reason for refusing to classify phone-to-phone IP telephony as
17 telecommunications.³⁴ To date, the FCC has maintained a “hands-off”
18 approach to IP telephony and has not imposed legacy, circuit-switched
19 regulatory or compensation requirements on providers of IP telephony. It
20 would be an administrative nightmare for all parties involved if this

³⁴ *Id.* at ¶ 91.

1 Commission and the FCC were to adopt inconsistent rulings. Level 3
2 therefore recommends that the Commission defer these issues until the FCC
3 takes action.

4 As these examples show, the classification of Internet-based services
5 raises many complicated and overlapping issues, with implications far
6 beyond a definition and compensation arrangement. Yet this proceeding does
7 not permit the Commission to consider the host of other regulatory
8 requirements that would be imposed on IP telephony service providers based
9 on a telecommunications classification. If the Commission, contrary to Level
10 3's recommendation, decides to address the definition and compensation
11 issues prior to a FCC determination, the Commission must at least explore
12 the global impact a definition and classification would have on providers of
13 such services. It must also ensure that it does not adopt a definition that
14 paints all "IP telephony" services as telecommunications without reference
15 to binding statutory definitions.

16 **Q: WHY IS THE FCC'S "HANDS-OFF" APPROACH GOOD POLICY?**

17 **A:** IP telephony is in its infancy, and regulators may stunt its growth and stifle
18 innovation by imposing burdensome regulatory obligations on such services
19 at this time. Regulations designed for circuit-switched networks make little
20 sense in an environment where packet switching, Internet Protocol
21 transmission protocols, optical switching, and decreasing transport costs
22 permit more efficient networks.

1 **Q: WHAT IMPACT COULD THE IMPOSITION OF TRADITIONAL**
2 **ACCESS CHARGES HAVE ON THE DEPLOYMENT OF IP-BASED**
3 **SERVICES?**

4 **A:** Applying regulations designed for circuit-switched communications could
5 distort pricing incentives for Internet Protocol-based services. Today’s
6 access charges are assessed on a per-minute basis. Assessment of a
7 per-minute charge on a provider of Internet-based service will inevitably lead
8 to that provider passing on its costs in the form of per-minute charges to end
9 users. The relative higher usage of the Internet in the United States has been
10 attributed to the prevalence of flat-rate local telephone service pricing.
11 Flat-rate pricing for Internet access is a by-product of the exemption from
12 per-minute access charges for providers of enhanced services. Assessment
13 of per-minute access charges on IP telephony providers would result in a
14 per-minute pricing structure and a hampering of demand for this information
15 service.

16 **Q: HOW SHOULD THE COMMISSION ADDRESS THE**
17 **COMPENSATION ISSUE?**

18 **A:** FCC rules define “access service” as “services and facilities provided for the
19 origination or termination of any interstate or foreign *telecommunication*[.]”³⁵

20 In contrast, under the FCC’s enhanced service provider exemption, an

³⁵ 47 C.F.R. § 69.2(b) (emphasis added).

1 information service is not subject to access charges and information service
2 providers may access the local exchange network by purchasing local service
3 as an end user.³⁶ Thus a service must meet the definition of
4 telecommunications before it becomes subject to access charges. If an ILEC
5 alleges that a specific service provided by an IP-based provider should be
6 subject to access charges, it may take advantage of the Commission's
7 complaint procedures and attempt to prove that a particular IP-based provider
8 is using its services in violation of a tariff or applicable state or federal law.

9 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

10 **A:** Yes, it does.

11

³⁶ *Access Charge Reform*, CC Docket No. 96-262, First Report and Order, FCC 97-158, 12 FCC Rcd 15982, ¶¶ 344-7 (re. May 16, 1997).

1 **Q: PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS**
2 **FOR THE RECORD.**

3 **A:** My name is William P. Hunt, III. I am Vice President for Public Policy for
4 Level 3 Communications, Inc., the parent company of Level 3
5 Communications, LLC (“Level 3”). My business address is 1025 Eldorado
6 Boulevard, Broomfield, CO, 80021.

7 **Q: ARE YOU THE SAME MR. HUNT WHO SUBMITTED DIRECT**
8 **TESTIMONY IN THIS DOCKET ON MARCH 12, 2001?**

9 **A:** Yes.

10 **Q: WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 **A:** I am responding to the testimony submitted by BellSouth’s witness Mr.
12 Ruscilli and Sprint’s witness Mr. Hunsucker regarding Issue 16 (definition
13 of and compensation for Internet Protocol (“IP”) telephony).

14 **Q: DO YOU AGREE WITH MR. RUSCILLI’S AND MR. HUNSUCKER’S**
15 **RECOMMENDATIONS REGARDING ISSUE 16?**

16 **A:** No. Mr. Ruscilli’s recommendation that phone-to-phone IP telephony be
17 subject to access charges (Ruscilli at 47, 49) ignores FCC precedent and is
18 based on a simplistic description of a single application of phone-to-phone
19 IP telephony. Mr. Hunsucker recommended that IP telephony be defined as
20 services that “enable real-time voice transmission using Internet protocols.”
21 (Hunsucker at 15-16) Referencing selected paragraphs of the FCC Report to
22 Congress, Mr. Hunsucker recommended that both phone-to-phone and
23 computer-to-phone IP telephony be subject to access charges. (Hunsucker at

1 17-19) I believe his recommended definition and compensation mechanism
2 are also based on a faulty description of these services and a selective reading
3 of the FCC Report to Congress.

4 **Q: PLEASE PROVIDE AN EXAMPLE OF THE FACTUAL**
5 **INACCURACIES IN THEIR DESCRIPTIONS OF IP TELEPHONY.**

6 **A:** Mr. Ruscilli testified that the characteristics of phone-to-phone IP telephony
7 include use of traditional telephone sets instead of computers. However, as
8 Ms. Geddes testified for Verizon, an “IP phone” may be designed to look and
9 work just like a conventional phone but include the functionalities of a
10 personal computer. (Geddes at 11) In other words, phone-to-phone IP
11 telephony may not use traditional telephone sets.

12 **Q: MR. HUNSUCKER DEFINED IP TELEPHONY AS SERVICES THAT**
13 **“ENABLE REAL-TIME VOICE TRANSMISSION USING INTERNET**
14 **PROTOCOLS.” (HUNSUCKER AT 15-16) DO YOU AGREE WITH**
15 **HIS DEFINITION?**

16 **A:** No. First of all, Mr. Hunsucker’s definition is too broad. Although Mr.
17 Hunsucker testified that his definition of IP telephony includes three classes
18 of services, computer-to-computer, computer-to-phone, and phone-to-phone,
19 he proposed that only the latter two be subject to access charges. Yet he
20 never defined each class or explained why two of those classes should be
21 subject to traditional access charges. His recommendation also contradicts
22 the FCC’s Report to Congress. As FCC Commissioner Ness advised the

1 International Telecommunication Union's ("ITU") IP Telephony Forum, in
2 the Report to Congress, the FCC:

3 preserved the unregulated status of IP telephony,
4 although we noted that we would determine on a case-
5 by-base basis whether certain phone-to-phone IP
6 telephony – as opposed to computer-to-computer IP
7 telephony configurations – may be properly classified
8 as telecommunications services. Our decision to
9 adopt a case-by-case approach, rather than make
10 definitive pronouncements in the absence of a
11 complete record on specific offerings, was prudent
12 due to the nascent state of the technology. As in other
13 instances, the FCC recognized the dynamism of the
14 Internet and the need to consider whether any
15 tentative definition of IP telephony would be quickly
16 overcome by technological changes.¹

17 Although the FCC proposed a tentative definition of phone-to-phone IP
18 telephony in the Report to Congress, it refused to classify that service as
19 telecommunications. Neither Mr. Ruscilli nor Mr. Hunsucker acknowledged
20 that portion of the FCC's Report to Congress in their testimony and neither
21 of them suggested adopting the FCC's tentative definition.

22 As Mr. Gillan testified, IP telephony encompasses a continuum of
23 services. (Gillan at 2) The evolving nature of IP applications makes it
24 difficult if not impossible to adopt a definition that will not be overcome by
25 changes in technology. In contrast, Congress has adopted definitions of
26 "telecommunications service" and "information service" and the FCC has

¹ Remarks of Commissioner Susan Ness (as prepared for delivery), Information Session - WTPF (March 7, 2001) (emphasis added) ("Ness Remarks").

1 established precedent for applying those definitions on a case-by-case basis
2 to classify particular services. According to FCC Chairman Powell,
3 classifying IP telephony as subject to traditional regulatory regimes is:

4 probably the \$64 billion question, literally. Part of the
5 answer to that depends on a pretty fact specific
6 evaluation of whether IP telephony can fairly be
7 evaluated and categorized as a telecommunications
8 service as defined by Congress... If the factual
9 analysis were to suggest it was something else, for
10 example an information service – or as many of the
11 Internet services have been categorized – it would
12 largely fall outside of at least the traditional
13 application of those kinds of subsidy programs.²
14

15 **Q: PLEASE PROVIDE AN EXAMPLE OF THE MISAPPLICATION OF**
16 **THE FCC’S ENHANCED SERVICES TEST.**

17 **A:** Part of the problem with Mr. Ruscilli’s testimony is that he made conclusory
18 statements that were not supported by the fact-specific, case-by-case analysis
19 of services required under the FCC’s rules. For instance, at page 45 of his
20 testimony, Mr. Ruscilli stated that “Phone-to-Phone IP Telephony is
21 telecommunications service that is provided using Internet Protocol for one
22 or more segments of the call.” At page 46 of his testimony, he stated that a
23 characteristic of phone-to-phone IP telephony is that it is basic
24 telecommunications, not enhanced. However, Mr. Ruscilli never backed up
25 these conclusory statements with an analysis of whether phone-to-phone IP

² *Agenda and Plans for Reform of the FCC: Hearing before the Telecommunications and Internet Subcommittee of the House Energy and Commerce Committee, 107th Cong. 24, Testimony of Chairman Powell (March 29, 2001) (“Powell Congressional Testimony”).*

1 telephony meets the definition of “telecommunications service” or instead
2 qualifies as an “information service” under the Act and FCC rules.

3 **Q: DIDN'T MR. RUSCILLI DESCRIBE THE MECHANICS OF A**
4 **PHONE-TO-PHONE IP TELEPHONY CALL AND SHOW THAT IT**
5 **FAILS THE FCC'S ENHANCED SERVICES TEST? (RUSCILLI AT**
6 **45-46)**

7 **A:** No. Mr. Ruscilli described the mechanics of a single, hypothetical phone-to-
8 phone IP telephony application and argued that it fails the FCC's enhanced
9 services test because there is no net change in protocol. Mr. Ruscilli ignored
10 the second and third prongs of the test under which a service may also qualify
11 as enhanced. (*See* Hunt Direct at 22) Mr. Ruscilli also tried to draw a broad
12 generalization that all so-called phone-to-phone IP telephony services fail the
13 net protocol test. However, his broad generalization does not withstand
14 scrutiny. In the case of IP phones, for instance, phone-to-phone IP telephony
15 may undergo a net protocol change from IP format to traditional circuit-
16 switched format, or vice versa.

17 His example shows why the Commission should not adopt a
18 definition of IP telephony that treats all services using a particular technology
19 (whether it be so-called phone-to-phone IP telephony or computer-to-phone
20 IP telephony) as telecommunications, no matter how the service operates or
21 what information processing features it may incorporate. It is possible that
22 some IP telephony services are not enhanced, but that does not justify a

1 conclusion that all such services, or even a subset of such services, are never
2 enhanced. As Mr. Gillan noted in his direct testimony (at 9), any service that
3 combines an information capability with telecommunications (so-called
4 hybrid services) is classified as an information service. Under Mr.
5 Hunsucker's broad definition, hybrid services could be subject to access
6 charges because they enable, among other things, real-time voice
7 transmission. Thus Mr. Hunsucker's definition could violate the FCC's
8 hybrid services rule. Likewise, under Mr. Ruscilli's approach, even if a
9 particular service met the Act's definition of an information service, it could
10 nevertheless be subject to access charges if it could also be classified as
11 phone-to-phone IP telephony. Because any attempt to define IP telephony
12 runs the risk of conflicting with definitions in the Act, I urge the Commission
13 to apply the Act's definitions to particular services rather than creating a new
14 definition that tries to capture the evolving continuum of IP telephony.

15 **Q: MR. RUSCILLI STATED THAT "THE FCC HAS PROVIDED NO**
16 **EXEMPTION FROM ACCESS CHARGES WHEN IP TELEPHONY**
17 **IS USED TO TRANSMIT LONG DISTANCE**
18 **TELECOMMUNICATIONS." (RUSCILLI AT 48) PLEASE**
19 **COMMENT.**

20 **A:** Mr. Ruscilli's statement does not support his recommendation. While it is
21 correct that the FCC has not exempted telecommunications services from
22 access charges, it is also true that the FCC has exempted information services

1 from access charges. The important question is whether IP telephony is a
2 telecommunications service or an information service. If IP telephony is a
3 telecommunications service, it is subject to access charges; if it is an
4 information service, it is not. I cannot emphasize enough the importance of
5 the statutory definitions.

6 **Q: BOTH MR. RUSCILLI AND MR. HUNSUCKER EQUATED IP**
7 **TELEPHONY WITH THE “MATURE” CIRCUIT-SWITCHED LONG**
8 **DISTANCE INDUSTRY. (RUSCILLI AT 47, HUNSUCKER AT 17)**
9 **DO YOU AGREE WITH THEIR CHARACTERIZATION?**

10 **A:** No. Their characterization is not borne out by an analysis of where IP
11 telephony is today. As Ms. Geddes (at 13) and Dr. Beauvais (at 15) testified,
12 IP telephony is a nascent technology and service. Level 3 believes that IP
13 telephony usage will some day catch up with and surpass conventional,
14 circuit-switched long distance usage. However, today IP telephony usage
15 does not come close to matching traditional long distance usage. As
16 Commissioner Ness told the ITU IP telephony forum, IP telephony “still
17 constitutes a minute fraction of global voice traffic – close to one percent of
18 that traffic, at best.”³ FCC Chairman Powell testified that:

19 [o]ne of the reasons I tend to resist prematurely
20 intervening in a context of IP telephony is because it
21 is engaged in a wonderful period of innovation,

³ Ness Remarks at 1.

1 experimentation ... and consumers are really reaping
2 the benefit of its deployment.⁴

3
4 I recommend that this Commission, like the FCC, resist any urge to intervene
5 in the market for IP telephony by imposing outdated regulations designed for
6 circuit-switched telecommunications services on these new and developing
7 services.

8 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A: Yes, it does.**

(Transcript continues in sequence in Volume 5.)

⁴ Powell Congressional Testimony at 24.

1 STATE OF FLORIDA)
2 : CERTIFICATE OF REPORTER
3 COUNTY OF LEON)

4
5 I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter
6 Services, FPSC Division of Commission Clerk and Administrative
7 Services, do hereby certify that the foregoing proceeding was
8 heard at the time and place herein stated.

9 IT IS FURTHER CERTIFIED that I stenographically
10 reported the said proceedings; that the same has been
11 transcribed under my direct supervision; and that this
12 transcript constitutes a true transcription of my notes of said
13 proceedings.

14 I FURTHER CERTIFY that I am not a relative, employee,
15 attorney or counsel of any of the parties, nor am I a relative
16 or employee of any of the parties' attorney or counsel
17 connected with the action, nor am I financially interested in
18 the action.

19 DATED THIS 20TH DAY OF JULY, 2001.

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JANE FAUROT, RPR
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Administrative Services
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