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> > March 1, 2002

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ECEIVED FPSC

Ms. Blanca S. Bayo, Director Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Betty Easley Conference Center, Room 110 Tallahassee, Florida 32399-0850

Re: Docket No. 000075-TP

Dear Ms. Bayo:

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Enclosures

cc: All Parties of Record

COM 2 CTR ECR Enclosed for filing in the above-referenced docket are an original and fifteen copies of refiled excerpts of the previously filed direct testimony of Lee L. Selwyn on behalf of AT&T Communications of the Southern States, Inc., TCG of South Florida, Global NAPS, Inc., MediaOne Florida Telecommunications, Inc., Time Warner Telecom of Florida, L.P., Florida Cable Telecommunications Association, Inc. and the Florida Competitive Carriers Association. This testimony was previously filed on March 12, 2001 and is in the record in Phase II of this proceeding at Tr. pages 607 through 628, and Tr. pages 649. Portions of this testimony are also in the record in Phase I of this proceeding at Tr. pages 90 through 95.

Please acknowledge receipt of these documents by stamping the extra copy of this letter "filed" and returning the copy to me.

Thank you for your assistance with this filing.

Sincerely,

Martin P. McD.

Martin P. McDonnell

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DOCUMENT NUMBER-DATE 02426 MAR-18 FPSC-COMMISSION CLERK Before the

STATE OF FLORIDA PUBLIC SERVICE COMMISSION

Re: Investigation into appropriate methods to compensate carriers for exchange of traffic subject to Section 251 of the Telecommunications Act of 1996

Docket No. 000075-TP - Phase II

Refile of Excerpts of Direct Testimony

of

LEE L. SELWYN

on behalf of

AT&T Communications of the Southern States, Inc. TCG of South Florida Global NAPS, Inc. MediaOne Florida Telecommunications, Inc. Time Warner Telecom of Florida, LP Florida Cable Telecommunications Association, Inc. and the Florida Competitive Carriers Association

March 1, 2002

(Previously filed March 12, 2001) DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

An ALEC has the right to interconnect with the ILEC at any technically 1 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 Issue 13. 6 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

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area served by more than one "wire center" or central office switch.

The precise definition of a "local calling area" with respect to BellSouth in 1 2 Florida is a bit more complex. BellSouth's tariffs specify Local Calling Areas, which include Extended Area Service (EAS) exchanges and Extended 3 Calling Service (ECS) exchanges. Calls placed to points located within the 4 5 EAS exchanges are provided without additional charge to Flat Rate and 6 Message Rate Service subscribers (both residential and business customers). For example, the Local Calling Area for the West Palm Beach exchange 7 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 additional charges.⁵ Several more exchanges classified as "ECS," namely 10 Belle Glade, Boca Raton, Delray Beach, Hobe Sound, Jensen Beach, 11 Pahokee, Port St. Lucie, and Stuart,⁶ can be accessed from the West Palm 12 Beach exchange for an untimed per-message charge of 25 cents.⁷ For 13 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

6. *Id*.

^{7.} Id., Section A3, page 42 (first revision), effective October 7, 1997.



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

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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 assigned to ("held by") one or more ALECs. When a call is placed, the 4 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

^{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...)



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^{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.

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

2

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Α.

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

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

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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."



^{9. (...}continued)

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 local calling including, in some cases, all exchanges within the subscriber's 9 10 LATA. 11 12 О. Is it appropriate for competing carriers to adopt local calling area definitions 13 that differ from those of the ILEC? 14 15 Indeed it is. One of the primary public policy goals of introducing Α. 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.



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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



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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



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

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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.

- 18 O. What about incoming calls?
- 19

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A. In the case of incoming calls, the local calling area applicable to the *calling party* (who we can assume is most likely to be an ILEC customer) will
 necessarily govern the rate treatment for the call. Whereas (referring to the
 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 customers in those two exchanges to customers in rate center "A" - whether 3 4 served by the ILEC or by an ALEC — subject to toll rate treatment. 5 6 O. Why is this the case? 7 A. Recall from our earlier discussion that the determination as to whether a 8 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 ILEC switches serving "D" and "E". 15 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

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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.

does not.¹² Hence, in order for the ALEC and its customers to obtain local 1 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 A. No. The only way a one-to-one mapping could occur would be if an ALEC 19 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.



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

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

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 "interexchange" calls were rated as "toll" and additional charges for the call would 17 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.

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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.



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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



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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 all implicit subsidies eliminated.¹⁵ The recovery of fixed (non-traffic-12 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

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

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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 a140-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 long distance charges" for calling anywhere within the 50 states.¹⁷ 19

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^{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.



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

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

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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.



The appropriate inter-carrier compensation for the termination and transport of local traffic is a symmetric rate based upon the ILEC's prevailing TELRIC cost level, which creates incentives for continual reductions in the costs of call termination services and harms neither ILECs nor end users. Issue 17. Should the Commission establish compensation mechanisms governing the transport and delivery or termination of traffic subject to Section 251 of the Act to be used in the absence of the parties reaching an agreement or negotiating a compensation mechanism? If so, what should be the mechanisms? O. What should be the default compensation mechanism, if any, for the Commission to apply for reciprocal compensation? A. Issue 17 in this phase of the proceeding is closely related to Issue 9 in Phase I. I addressed this question in my December 1, 2000 Direct Testimony, pages 63-68.



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9 10 11 12 13 14	The tran sym crea serv	appropriate inter-carrier compensation for the termination and asport of ISP-bound local calls, as well as other forms of local traffic, is a metric rate based upon the ILEC's prevailing TELRIC cost level, which ates incentives for continual reductions in the costs of call termination vices and harms neither ILECs nor end users. (Issues 3, 4, 5 and 6)
15	Q.	When the FCC devised its rules for reciprocal compensation between ILECs
16		and CLECs for the exchange of local traffic, what principle did the FCC
17		adopt concerning the use of a symmetric rate?
18		
19	A.	In the First Report and Order ¹⁴ establishing the FCC's rules for reciprocal
20		compensation for the exchange of local traffic, the FCC determined that the
21		rates applied for reciprocal compensation purposes should be presumptively

^{14.} Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499 (1996) (Local Competition Order), aff'd in part and vacated in part sub nom., Competitive Telecommunications Ass'n v. FCC, 177 F.3d 1068 (8th Cir. 1997) and Iowas Utils. Bd. V. FCC, 120 F.3d 753 (8th Cir. 1997), aff'd in part and remanded, AT&T v. Iowa Utils. Bd., 119 S. Ct. 721 (1999).



1	symmetric and based upon the ILEC's costs, unless a CLEC believes that its
2	own costs are greater. The specific rule implementing this requirement is 47
3	CFR ' 51.711(b), which provides that:
4 5 6 7 8 9 10 11 12 13 14 15	A state commission may establish asymmetrical rates for transport and termination of local telecommunications traffic only if the carrier other than the incumbent LEC (or the smaller of two incumbent LECs) proves to the state commission on the basis of a cost study using the forward-looking economic cost based pricing methodology described in Secs. 51.505 and 51.511, that the forward-looking costs for a network efficiently configured and operated by the carrier other than the incumbent LEC (or the smaller of two incumbent LECs), exceed the costs incurred by the incumbent LEC (or the larger incumbent LEC), and, consequently, that such that a higher rate is justified.
16	The rules in Section 51.505 and 51.511 referenced therein define the
17	"forward-looking economic cost" that is to be the basis for pricing, in terms
18	of the FCC's "total element long run incremental cost" (TELRIC)
19	methodology plus a reasonable allocation of forward-looking common costs.
20	Thus, the FCC allows a CLEC to rebut the presumptive symmetric rate by
21	filing its own TELRIC-based cost study if the CLEC believes its transport
22	and termination costs are <i>higher</i> than the ILEC's. ¹⁵ The FCC did not
23	contemplate the filing of separate CLEC cost studies in the event a CLEC's
24	costs were lower than the ILEC's.

^{15.} See also the Local Competition Order at para. 1089 for elaboration of this point.



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1	Q.	Is it appropriate to apply the same type of presumptive symmetry framework
2		to the rates for the inter-carrier compensation for transport and termination of
3		ISP-bound local calls, even if the Commission decides to treat ISP-bound
4		calls separately from other forms of local traffic for reciprocal compensation
5		purposes?
6		
7	A.	Yes, it is. Whether or not the Commission determines that the FCC's
8		reciprocal compensation rules are directly applicable to local (or for our
9		present purposes, at least toll-free) ISP-bound calls, their underlying
10		economic justification applies with undiminished force.
11		
12		First, Section 252(d)(2)(ii) of the Telecommunications Act requires that
13		inter-carrier charges for the transport and termination of traffic must reflect "a
14		reasonable approximation of the additional costs of terminating such calls."
15		As a forward-looking, long run incremental costing methodology, the
16		TELRIC-based approach, as defined by the FCC and implemented by the
17		CPUC, satisfies this requirement. During the FCC's consideration of this
18		issue, some ILECs, including Verizon's parent company GTE Service
19		Corporation (GTE), argued that application of a symmetric reciprocal
20		compensation rate based upon the ILEC's costs would violate this provision
21		of the Act. ¹⁶ The FCC correctly rejected those arguments, since Section
22		252(d)(2)(ii) does not require precise identification of each carrier's call

16. Local Competition Order at para. 1072.



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termination costs, but instead a reasonable approximation which is afforded by the ILEC's forward-looking cost level.¹⁷

4 Second, adopting a symmetric rate based upon the ILEC's TELRIC cost level 5 minimizes the ILEC's incentives for strategic gaming of its termination rate. 6 If the ILEC's claimed costs are overstated, the resulting symmetric rate would 7 create opportunities for CLECs to pursue customers with high volumes of 8 inbound traffic, and thereby become net recipients of (overstated) termination 9 charges. If the ILEC understates its costs, CLECs could pursue outbound 10 traffic-oriented customers, and thus pay (understated) termination charges.¹⁸ The FCC concluded similarly that "symmetrical rates may reduce an 11 12 incumbent LEC's ability to use its bargaining strength to negotiate 13 excessively high termination charges that competitors would pay the 14 incumbent LEC and excessively low termination rates that the incumbent 15 LEC would pay interconnecting carriers."¹⁹ Clearly, the FCC intended that, 16 by requiring symmetry, the result would approximate the classic "you cut, I 17 choose/I cut, you choose" form of negotiation that I described earlier in my 18 testimony, which provides both parties with the incentive to "divide the pie" 19 equally between them.



^{17.} Id. At para. 1085.

^{18.} In fact, it appears that ILECs pursued the first strategy during their initial arbitrations with CLECs, thereby stimulating CLEC's targeting of in-bound calling services markets.

^{19.} Local Competition Order at para. 1087.

1	The ILEC's TELRIC cost level represents the ILEC's avoided cost of
2	termination, which would otherwise be incurred by the ILEC; consequently,
3	if it is used to establish a symmetric termination rate, the ILEC should be
4	indifferent as an economic matter to whether it or a CLEC completes the
5	ISP-bound calls. That is, if the ILEC is the net recipient of traffic, it will be
6	compensated for its work at a rate than accurately reflects the actual costs it
7	incurs; conversely, if the CLEC is the net recipient, then the ILEC will avoid
8	costs precisely in proportion to the quantity of traffic that is delivered to the
9	CLEC for termination.

11 In addition, use of a symmetric rate based upon the ILEC's TELRIC cost 12 level creates incentives for all carriers, including CLECs, to find innovative 13 ways to reduce their costs below that level. The FCC also recognized the 14 possibility that CLECs' own termination costs may be lower than the level 15 implicit in the symmetric rate, finding that (id., para. 1086) "a symmetric 16 compensation rule gives the competing carriers correct incentives to 17 minimize its own costs of termination because its termination revenues do not 18 vary directly with changes in its own costs". Nothing in the FCC's rules 19 suggested that the symmetric reciprocal compensation rate would 20 subsequently be adjusted based upon the CLEC's (lower, more efficient) 21 costs, as BellSouth and Verizon are here seeking to accomplish.

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1	Thus, the FCC correctly viewed the possibility of CLECs lowering their own
2	termination costs below the symmetric rate (and thereby receiving payments
3	higher than their forward-looking economic costs) as a positive development
4	and a consequence of competition and innovation.
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