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Before the

RECORDS AND REPORTING

STATE OF FLORIDA PUBLIC SERVICE COMMISSION

Re:)	
Global NAPS, Inc. Arbitration)	Docket No. 991220-TP
with BellSouth Telecommunications, Inc.)	

Reply Testimony of

LEE L. SELWYN

on behalf of

Global NAPS, Inc.

SC BUREAU OF RECORDS

May 1, 2000

DOCUMENT NUMBER-DATE
05370 MAY-18

FPSC-RECORDS/MEPORTING

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Attachment 1: Statement of Qualifications



1		INTRODUCTION
2		
3	Qual	ifications
4		
5	Q.	Please state your name and business address.
6		
7	A.	My name is Lee L. Selwyn. I am President of Economics and Technology, Inc., ("ETI"),
8		One Washington Mall, Boston, Massachusetts 02108. Economics and Technology, Inc.
9		is a research and consulting firm specializing in telecommunications economics,
10		regulation, management and public policy.
11		
12	Q.	Please summarize your educational background and previous experience in the field of
13		telecommunications regulation and policy.
14		
15	A.	I have prepared a Statement of Qualifications, which is attached hereto as Appendix 1.
16		
17	Q.	Have you previously testified before the Florida Public Service Commission (the
18		"Commission")?
19		
20	A.	Yes. I have testified before this Commission on a number of occasions dating back to the
21		mid-1970s, on the subjects of rate design and service cost analysis on behalf of business
22		telecommunications users as well as the State of Florida Department of General Services.
23		These cases have included Dockets 74805-TP, 760842-TP, 810035-TP and 820294-TP
24		involving Southern Bell, Docket 74792-TP involving General Telephone Company of



1		Florida, Docket 750320-TP involving Central Telephone Company of Florida. I also
2		testified in Docket 950696-TP on the subject of Universal Service, on behalf of Time
3		Warner AxS and Digital Media Partners. In December 1997, I testified before this
4		Commission in Docket No. 960833-TP/960847-TP, on behalf of AT&T. My most recent
5		testimony before this Commission was in 1999, when I offered testimony on behalf of
6		Global NAPS, Inc. in Docket No. 991267-TP.
7		
8	Assig	nment
9		
10	Q.	On whose behalf is this testimony being submitted?
11		
12	A.	This testimony is being submitted on behalf of Global NAPs, Inc. ("Global NAPs").
13		Global NAPs is a competitive local exchange carrier ("CLEC") with operations in Florida
14		(currently the Miami area), as well as in a number of other states. Global NAPs provides
15		many Internet Service Provider ("ISP") customers with telephone service on the public
16		switched network. Global NAPs' service allows the ISPs' end users to reach them by
17		means of a dial-in connection between the end users' modem equipment and the modem
18		equipment of Global NAPs' ISP customers.
19		
20	Q.	What is the purpose of your testimony in this case?
21		
22	A.	The purpose of my testimony is to explain as an economic and policy matter why this
23		Commission should require BellSouth Telecommunications, Inc. to compensate Global
24		NAPs Inc. ("Global NAPs") when BellSouth subscribers place locally-dialed calls to



1 Internet Service Providers ("ISPs") served by Global NAPs. 2 3 Summary of testimony 4 5 Q. Please summarize the testimony you will be presenting before the Commission at this 6 time. 7 8 A. The Commission, like most state regulators, is by now quite familiar with the question of 9 compensation for ISP-bound calls. While incumbent local exchange carriers ("ILECs") 10 such as BellSouth routinely resist compensating competing local exchange carriers 11 ("CLECs") for ISP-bound calls, it is absolutely clear that requiring such compensation is 12 the only economically rational result in today's regulatory environment. 13 14 Very briefly, in the normal case, locally-dialed calls are sent-paid. That is, the calling party pays the originating LEC — typically the ILEC — to carry a locally-dialed call all 15 the way from the calling party's premises to the premises of the called party. Putting 16 aside the cost of the loops themselves, this involves three activities: originating 17 18 switching, inter-switch transport, and terminating switching. This payment arrangement applies fully to ISP-bound calls. When a CLEC serves the ISP, the terminating switching 19 function is performed by the CLEC, even though the originating customer has paid the 20 ILEC to carry the call all the way to the ISP. It follows as a matter of economics and 21 competitive policy that the ILEC must compensate the CLEC for the terminating 22 23 switching function.



BellSouth's Mr. Varner advances a variety of arguments to try to resist this simple and straightforward result, but they all boil down to the claim that the regulatory economics of ISP-bound calling should be different than they actually are. Two key points are noted below:

First, while one could make a case in the abstract for the notion that ISPs should pay
access charges, as opposed to being allowed to connect to the public switched
network just like other end users, not only is such an arrangement not in place today,
it is affirmatively *banned* today by the operation of the Federal Communications
Commission's ("FCC's") "ESP Exemption."

• Second, while one could make a case in the abstract for a mandatory bill-and-keep regime, again, such a regime is not only not in place, it is banned by applicable federal law and FCC rulings. Sections 251 and 252 of the federal Telecommunications Act of 1996¹ entitle CLECs and ILECs alike to a regime of compensation for terminating calls that originate on another carrier's network. In light of those provisions, the FCC has ruled that states may impose "bill-and-keep" over the objections of a party only if the record supports a finding that traffic flows will be roughly balanced between the carriers.² When ISP-bound traffic is involved,



¹ Pub. L 104-104, 110 Stat. 56 (hereafter, Telecommunications Act of 1996).

² FCC, CC Docket No. 96-98, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, rel. August 8, 1996, 11 FCC Rcd 15499, 16054 (Local Competition First Report and Order), aff'd in part and

however, it is quite clear that traffic will not be in balance.

I also note that there has been a very significant legal and policy development relating to the question of ISP-bound calling. In late March of this year, the D.C. Circuit vacated the FCC's Declaratory Ruling (from February 1999)³ that had been the source of so much confusion on this topic. I am not a lawyer, but from my perspective the most significant aspects of the court's ruling is not "legal" in any strict sense but, instead, the court's understanding of the actual, real-world situation applicable to ISP-bound calls. First, as a policy matter, the court rejected the notion that the FCC's longstanding "one call theory" used to determine regulatory jurisdiction over particular traffic had anything to do with the status of calls as "local" calls subject to compensation. Second, the court flatly held that in an ISP-bound call, the ISP was "clearly" the called party. This eliminates any logical basis for treating ISP-bound calls as different from other local calls on the basis of some notion that the "call" continues beyond the ISP's premises. Third, and most significantly on this point, the court found that it could see no relevant difference between ISPs and other local businesses such as pizza parlors, taxicab companies and credit card



^{(...}continued)

vacated in part sub nom., Competitive Telecommunications Ass'n v. FCC, 117 F.3d 1068 (8th Cir. 1997) and Iowa 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).

³ In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, and Inter-Carrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68, FCC 99-38, Adopted February 25, 1999, Released February 26, 1999. ("Declaratory Ruling").

1		verification services, all of which are very intensive users of incoming local
2		telecommunications services. Just like ISPs, these businesses use local
3		telecommunications as an input to their underlying non-telecommunications businesses.
4		In light of the D.C. Circuit's ruling, there is simply no reason for this Commission to
5		undertake any special effort to isolate ISP-bound calls and treat them differently from any
6		other local calls.
7		
8		Finally, I note that the Commission has just had the occasion to consider most of the
9		arguments relevant to the ISP-bound calling issue in the recently-completed complaint
10		case between Global NAPs and BellSouth regarding the interpretation of the
11		interconnection agreement under which they are currently operating. In order to avoid
12		unduly repetitious discussion, I am attaching copies of my direct and rebuttal testimony
13		in that case, in which I discuss the relevant legal and policy issues, and adopt and
14		incorporate by reference that prior testimony here.
15		
16		COMPENSATION ON ISP-BOUND CALLS
17		
18	ISP-I	Bound Calls Are Local Calls Subject To Compensation
19		
20	Q.	Dr. Selwyn, is there any valid economic or policy basis to treat locally-dialed ISP-bound
21		calls any differently than other local calls?
22		
23	A.	No, there is not. I have discussed this issue extensively in my recent testimony in the
24		complaint case between BellSouth and Global NAPs, and I hereby adopt and incorporate



1		that earlier testimony. My direct and rebuttal testimony in that earlier case is attached to
2		this testimony as Exhibit 1.
3		
4	Q.	Have there been any significant developments since the time of your earlier testimony
5		that bear on this issue?
6		
7	A.	Yes. Most prominently, the D.C. Circuit has vacated the FCC's Declaratory Ruling
8		relating to ISP-bound calls.4 The court laid out some basic facts about these calls that
9		bear directly on the proper resolution of this case, which I have highlighted below. I have
10		attached a copy of the court's ruling as Exhibit 2 for ease of reference.
11		
12		• The D.C. Circuit held that end users place calls "to the ISP server[s] in [their] local
13		calling area," D.C. Circuit Ruling at 6. This indicates that the court understood that it
14		is the ISP's equipment that is being "called," not some distant Internet site. I note
15		that this observation (unlike the approach advocated by BellSouth) comports with the
16		technical realities of communications between end users and ISPs explained in detail
17		by Mr. Goldstein.
18		
19		• The court observed that "[c]alls to ISPs appear to fit [the] definition" of local
20		"termination" because "the traffic is switched by the LEC whose customer is the ISP



⁴ Bell Atlantic Telephone Companies v. FCC, No. 99-1094, slip. op. (D.C. Cir. March 24, 2000) ("D.C. Circuit Ruling").

and then delivered to the ISP, which is clearly the 'called party,' id. at 9 (emphasis added). Here again, the court rejected the notion that an end user, in calling an ISP, is somehow "really" calling some web site beyond the ISP's location. This, too, essentially compels the conclusion that ISP-bound calls are "local" calls for reciprocal compensation purposes.

• The court rejected as "not on point" the traditional cases the Commission had used (and the ILECs had relied upon) to apply the "one call" theory to ISP-bound traffic.

D.C. Circuit Ruling at 10. This matters in this case because BellSouth still seems to be arguing that calls to ISPs, in some meaningful sense, don't "terminate" at the ISP's premises. The court's discussion shows that citing the FCC cases about determining jurisdiction on the basis of consideration of the supposed "end points" of the call do not suffice to justify that conclusion here.

• In this same regard, the court confirmed that ISPs "are not themselves telecommunications providers," *id.* at 11. While I am not a lawyer, this appears to undercut the relevance of the FCC's December 1999 decision regarding jurisdiction over xDSL services referenced by Mr. Varner (*see* below). ISPs provide access to the Internet, not to telephone toll services; it follows that the FCC's longstanding *regulatory* view that when ISPs purchase business lines, they are really "using" a form of "access service" may not be viable under the new statutory definitions in the 1996 Act.

Perhaps most significant, the court approvingly noted the analogy between ISPs and



other firms "which use a variety of communications services to provide their goods or services to their customers," *id.* at 11. Many different types of firms in today's economy provide their services in ways that require extremely intensive use of telecommunications. The court agreed with the idea that the fact that an ISP *uses* a lot of telecommunications services, both in order for its own customers to reach it, and in order to provide its own services (that is, upstream connections to the Internet) does not mean that when customers call their ISP to obtain the ISP's services, they are "really" calling some location other than the ISP. In this same regard, the court specifically rejected the claim that the additional communications services that ISPs use might "imply that the original communication does not 'terminate' at the ISP." *Id.* at 11. Indeed, as if to emphasize this conclusion, the court made this same point *twice* on this same page.

Q. Is the court's ruling significant in any other way?

A.

I believe that it is. I am not a lawyer, but you don't have to be a lawyer to understand that the ILECs have placed enormous reliance over the past year on the statement in footnote 87 of the *Reciprocal Compensation Ruling* that ISP-bound calls are non-local calls. My layman's understanding of the effect of the D.C. Circuit's ruling — vacating the *Reciprocal Compensation Ruling* — is that the FCC's decision is a legal nullity, of no further force and effect. Without prejudging what the FCC might eventually do when it considers the matter further, at present there is no legal bar that I can see to this Commission issuing what seems to me from a policy and economic perspective to be the only sensible answer, which is that locally-dialed ISP-bound calls are "local" calls. I



1		would also note that the court's analysis appears to support Mr. Goldstein's discussion of
2		the technical aspects of ISP-bound calling.
3		
4 5 6		Varner's arguments for excluding ISP-bound local traffic from reciprocal eensation are invalid.
7 8	Q.	Have you read Mr. Varner's testimony in this matter on behalf of bellsouth?
9	A.	Yes, I have.
10		
11	Q.	Do you agree with it?
12		
13	A.	No, I do not. Mr. Rooney is addressing Mr. Varner's assertions regarding contractual
14		matters other than ISP-bound calling, and Mr. Goldstein is addressing Mr. Varner's
15		efforts to address technical questions regarding ISP-bound calling. Here, I briefly explain
16		why Mr. Varner's discussion of the policy and economic aspects of ISP-bound calling are
17		wrong. The discussion below addresses those aspects of Mr. Varner's arguments that are
18		not already addressed in the testimony I filed in the complaint case, and that is attached as
19		Exhibit 1.
20		
21	Q.	Do you agree with Mr. Varner's proposed definition of local traffic (Varner testimony at
22		4-5)?
23		
24	A.	No. The point of Mr. Varner's proposed language is to exclude ISP-bound traffic from
25		the scope of reciprocal compensation obligations. There is no sensible economic or 10



1		policy justification for doing so, and Mr. Varner's suggestion should be rejected.
2		
3	Q.	Do you agree with Mr. Varner that ISP-bound calls "clearly constitute interstate traffic"
4		(Varner testimony at 5, line 14, and 6-11)?
5		
6	A.	No. If there is one thing that is clear about the jurisdiction of ISP-bound traffic, it's that
7		it isn't "clear." That said, the D.C. Circuit did not seem to take issue with the FCC's
8		decision to apply its normal "end-to-end" test to determine jurisdiction; it simply held
9		that it made no sense to apply that same test to determine whether a call met the
10		legal/regulatory definition of "local" or not. Now, that said, I would note again that Mr.
11		Goldstein has shown that even applying the "end-to-end" test, well above 90% of ISP-
12		bound traffic is, indeed, jurisdictionally intrastate because it stops at the ISP's modem
13		and/or servers and does not go on "the Internet" at large.
14		
15		But for all these reasons, Mr. Varner's critique of the definition of "local call" in the 1997
16		DeltaCom Agreement (which this Commission recently held to include ISP-bound calls)
17		is beside the point. The fact that some traffic might meet the FCC's test for being
18		interstate is simply not relevant to the question whether the call is "local" or not. My
19		earlier testimony shows that these are two different questions from a policy and economic
20		perspective. The court's ruling simply confirms that these are two different questions
21		from a legal perspective as well.
22		
23		In this regard, too, I have to take issue with Mr. Varner's commentary on the effect of the
24		D.C. Circuit's ruling on the FCC's Reciprocal Compensation Order (Varner Testimony



1	at 6-8). (I am not a lawyer, but neither, of course, is Mr. Varner.) He seems to believe
2	that the court's decision simply asked the FCC to provide some further explanation for a
3	basically uncontroverted conclusion. But the quotes from the D.C. circuit's opinion
4	provided above — and, indeed, any fair reading of the court's ruling — shows that the
5	court fundamentally rejected the reasoning that the FCC had used to conclude that ISP-
6	bound calls were not, in fact, "local" calls. Mr. Varner seems to assume that the FCC
7	will ignore what the court said in conducting its further proceedings.
8	
9	Also, with due respect to the FCC's Common Carrier Bureau Chief (see Varner
10	Testimony at 7, lines 12-19), the court did not take issue with the FCC's conclusion that
11	ISP-bound calls in general appeared to meet the statutory definition of "interstate"
12	communication. It took issue with the FCC's further conclusion that that result
13	controlled the answer to the question actually before the FCC, which was whether or not
14	ISP-bound calls meet the relevant statutory and regulatory definitions of "local."
15	
16	Finally on this point, it really doesn't matter at all to the correct outcome of this case
17	whether ISP-bound calls meet the statutory definition of "exchange access" or not. See
18	Varner Testimony at 7-8, 10-14. For reasons explained in my earlier (attached)
19	testimony, even if this is "access" traffic, the FCC's longstanding ESP exemption makes
20	ISP-bound calls the economic equivalent of local calls, so that the only logical result for
21	compensation purposes is to treat them like local calls. Put another way, the D.C.
22	circuit's opinion makes clear that traffic may simultaneously meet the statutory and
23	regulatory criteria both of being "exchange access" and of being "local." So the entire
24	discussion of the status of this traffic as "interstate" or "access" is largely beside the



1		point. ISP-bound calls are for all practical purposes "local" calls, and — under a fair
2		reading of the D.C. circuit's opinion — are probably legally "local" calls as well.
3		Consequently, ISP-bound traffic should be subject to compensation like any other local
4		traffic.
5		
6	Q.	Do you agree with Mr. Varner that it "does not make sense for an ILEC to compensate
7		an ALEC for ISP-bound traffic" (Varner testimony at 15, line 14, through 19, line 4)?
8		
9	A.	No, not at all. Mr. Varner works from a false premise to reach a false conclusion. His
0		initial explanation of why reciprocal compensation is necessary (pages 16-17) is basically
1		reasonable. It explains why an ILEC should be indifferent between completing a local
2		call itself (and incurring the cost of doing so) and paying an ALEC a cost-based rate to
3		perform that function instead. However, his attempt to analogize ISP-bound calls to
4		switched access service (Varner Testimony at 18-19) is simply wrong.
15		
6	Q.	Please explain.
17		
8	A.	Mr. Varner posits that the issue of compensation for ISP-bound traffic hinges upon
9		properly identifying the relevant cost causer, and he contends that the cost causer is the
20		ISP, because "the end user accessing the Internet is a customer of the ISP for that service"
21		(Varner Testimony at 15, lines 21-22). On that basis, Mr. Varner concludes that ISP-
22		bound calls are analogous to interLATA toll calls for compensation purposes, so that the
23		charges that the ISP pays for connection to the public switched telephone network should
24		be (in Mr. Varner's view) analogous to the switched access charges applying to such toll



calls (Varner Testimony at 18-19).

In reality, the customer-service provider relationship between an end user and an ISP has no bearing on the cost causation for telephone calls originated by the end user desiring to use the ISP's information services. It is the end user, and not the ISP, who makes the decision to place any given telephone call to the ISP, and the ISP has no direct control over those decisions. Moreover, if an ISP's business relationship with users of its services was to imply that the ISP is causally responsible for those users' local telephone calls to reach the ISP, that same cost-causation would extend similarly to *any* type of business that relies on telecommunications to communicate with its customers.

Consider the case of a call answering bureau, to which a BellSouth end user subscribes (entirely independently of their local telephone service subscription with BellSouth). Mr. Varner seems to believe that the call answering bureau is responsible for the end users' calls into that bureau (e.g., to check for and receive messages); that the call answering bureau should charge the BellSouth end user for those local calls directly; and that, indeed, the call answering bureau should actually pay BellSouth for the privilege of receiving calls. Moreover, his "logic" would compel the conclusion that if the call answering bureau were served by a CLEC, then BellSouth should not make reciprocal compensation payments for BellSouth end users' calls terminated by the CLEC to the bureau. Indeed, under that theory, whenever a BellSouth end user called up a pizza parlor served by a CLEC and arranged for delivery of a pizza (thereby creating a business relationship between the two parties), the pizza parlor would be "responsible" for the costs of that call, and BellSouth would not be obliged to pay reciprocal compensation for



its termination by the CLEC! Following this invalid line of reasoning, one could make similar arguments for any number of businesses that use local telephone service, and thus virtually eliminate the possibility of reciprocal compensation on calls terminating to businesses served by CLECs.

The observation of the D.C. Circuit is on point here: ISPs do not offer telecommunications services, they offer something else (information services) that requires them (and their customers) to *use* a large amount of telecommunications services. This is true, but it no more makes the ISPs responsible for the costs of incoming calls than a pizza parlor, taxicab dISPatch service, or credit card validation service is responsible for the costs of those calls. All of these businesses purchase standard business telephone service, and that service does not include charges for — or "responsibility for" the costs of incoming traffic.

Moreover, Mr. Varner's analysis simply ignores the fact that the FCC expressly *prohibited* application of the switched access charge regime to ISP-bound calls by means of the ESP exemption. In this regard, the D.C. Circuit also made a point of rejecting the FCC's apparent claim that ISPs and IXCs are indistinguishable in how they use the local network. The FCC had apparently argued that ISPs and IXCs were really the same, but that ISPs were treated differently simply for policy reasons. The court, however, concluded that ISPs really were *not* the same as IXCs. The court is, of course, correct, and Mr. Varner — whose argument depends on IXCs and ISPs being indistinguishable — is wrong.



1	Q.	Do you agree with Mr. Varner's discussion of whether bellsouth "cover[s] the cost of
2		originating traffic to ISPs from its own end users" (Varner testimony at 19-22)?
3		
4	A.	No. Mr. Varner's entire discussion of this point — including his outlandish assertion that
5		BellSouth does not receive revenues from its customers for ISP-bound calls — is quite
6		wrong. I discussed this in the attached testimony and will not repeat it here.
7		
8 9 10		Varner's proposals for the treatment of compensation on ISP-bound calls are asonable and should be rejected.
11	Q.	Please comment on Mr. Varner's three proposals for handling inter-carrier compensation
12		for ISP-bound calls (Varner testimony at 22-24).
13		
14	A.	Basically, Mr. Varner is trying to find ways to avoid paying a fair price for the work that
15		BellSouth calls on ALECs to do when BellSouth customers call ISPs served by ALECs.
16		These are simply efforts to delay making fair and reasonable payments, and the
17		Commission should reject them.
18		
19		Mr. Varner's first proposal is simply to track ISP-bound calling, with no payment, and
20		then true up accounts between the carriers when and if the FCC ultimately establishes
21		rules governing this issue. This makes no sense for several reasons. First, as BellSouth's
22		witness Mr. Halprin testified in the complaint case, there is no assurance that the FCC
23		will actually resolve this issue any time soon. In fact, the D.C. Circuit ruling discussed
24		above, at a minimum, complicates the FCC's task somewhat, so the only logical
25		expectation is that the FCC's final rules will, unfortunately, likely be further delayed.



Second, the FCC's preferred option in the rulemaking as I understand it, is to have parties negotiate this issue and, if they cannot agree, to have state commissions arbitrate it. If the FCC ultimately adopts this proposal, the delay from implementing a "track-and-true-up" approach will have been for no purpose (other than to save BellSouth money, unfairly). Third, the FCC has stated that its rules will have prospective effect. It does not make a great deal of sense to wait for the FCC to promulgate prospective rules and then apply them retroactively.

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Mr. Varner's second proposal is somewhat audacious: it proposes that Global NAPs pay BellSouth for the privilege of receiving locally-dialed ISP-bound calls from BellSouth customers — for which BellSouth has been paid by its customers. This is based on the mistaken assumption that ISP-bound calling is properly treated as switched access service for compensation purposes, which is false for the reasons described above and in my earlier testimony. This proposal is also inconsistent with standard industry treatment of the most analogous access service, which is Feature Group A. For FGA service, it is not uncommon for IXCs to receive *credits* against their access charge bills (which do not exist here, because ISPs are not, and may not be, charged access) for message unit and similar charges that the originating LEC receives from its end user customers dialing the FGA line. In other words, even when the service in question is absolutely, unambiguously a form of access service — plainly not the case here — industry practices recognize that it constitutes unjust enrichment for the originating LEC to be able to obtain revenues from its end users for the same usage that the IXC is also paying for. As described in my earlier (attached) testimony, BellSouth undoubtedly is well paid for originating ISP-bound calls from its customers, so a reasonable share of that revenue —



here, measured by a per-minute rate — should be remitted to Global NAPs. Finally in this regard (referring to Mr. Varner's numerical example on pages 26 and 27) I am informed that Global NAPs does not charge as much as \$850 per PRI. To the contrary, one of the ways that Global NAPs contributes to the development of competition in the Florida telecommunications industry is by engaging in direct price competition, offering its PRI service at a lower rate than what BellSouth apparently regards as a "market" rate.

Mr. Varner's third proposal is called "bill-and-keep," but this is simply a somewhat different name for a "no payment" regime. As a general proposition, a no-payment regime for ISP-bound calling is unfair and unreasonable for the reasons stated above and in my earlier (attached) testimony. I would only add that the FCC contemplated the imposition of bill-and-keep arrangements in situations where traffic appears to be roughly balanced. That is obviously not the case here.

Q. Please summarize your conclusions.

A.

It is absolutely clear as an economic, policy and technical matter that ISP-bound calls are in all material respects identical to local calls. The FCC's initial conclusion that these are not local calls has been vacated by the courts "for want of reasoned decisionmaking." Moreover, the court's reasoning strongly supports — if indeed it does not compel — the conclusion that ISP-bound calls really are "local" calls in the context of reciprocal compensation arrangements. BellSouth obviously doesn't like this conclusion, because it means that it is actually vulnerable to competition for the business of ISPs, and, moreover, if it is not successful in competing for their business, it will suffer economic



Reply Testimony of Lee L. Selwyn Florida PSC Docket No. 991220-TP

1		consequences. This is simply the competitive market at work, however. BellSouth's
2		position on this issue, including its various specific alternatives, boils down to an effort to
3		use the regulatory process to short-circuit that competition. This Commission should
4		decline to participate in that anticompetitive endeavor.
5		
6	Q.	Does this conclude your testimony?
7		
8	A.	Yes.
9		
10		
11		



Attachment 1

LEE L. SELWYN

Statement of Qualifications



Statement of Qualifications

DR. LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than twenty-five years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct



research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Dr. Selwyn has published numerous papers and articles in professional and trade journals on the subject of telecommunications service regulation, cost methodology, rate design and pricing policy. These have included:

"Taxes, Corporate Financial Policy and Return to Investors" National Tax Journal, Vol. XX, No.4, December 1967.

"Pricing Telephone Terminal Equipment Under Competition" *Public Utilities Fortnightly*, December 8, 1977.

"Deregulation, Competition, and Regulatory Responsibility in the Telecommunications Industry"

Presented at the 1979 Rate Symposium on Problems of Regulated Industries - Sponsored by: The American University, Foster Associates, Inc., Missouri Public Service Commission, University of Missouri-Columbia, Kansas City, MO, February 11 - 14, 1979.

"Sifting Out the Economic Costs of Terminal Equipment Services" *Telephone Engineer and Management*, October 15, 1979.

"Usage-Sensitive Pricing" (with G. F. Borton) (a three part series)

Telephony, January 7, 28, February 11, 1980.

"Perspectives on Usage-Sensitive Pricing" *Public Utilities Fortnightly*, May 7, 1981.

"Diversification, Deregulation, and Increased Uncertainty in the Public Utility Industries" Comments Presented at the Thirteenth Annual Conference of the Institute of Public Utilities, Williamsburg, VA - December 14 - 16, 1981.

"Local Telephone Pricing: Is There a Better Way?; The Costs of LMS Exceed its Benefits: a Report on Recent U.S. Experience."

Proceedings of a conference held at Montreal, Quebec - Sponsored by Canadian Radio-Television and Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, May 2 - 4, 1984.



"Long-Run Regulation of AT&T: A Key Element of A Competitive Telecommunications Policy" *Telematics*, August 1984.

"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?"

Presented at the Institute of Public Utilities Eighteenth Annual Conference, Williamsburg, VA - December 8 - 10, 1986.

"Market Power and Competition Under an Equal Access Environment"

Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation"

Institute of Public Utilities, Michigan State University, Williamsburg, VA - December 3 - 5, 1987.

"Contestable Markets: Theory vs. Fact"

Presented at the Conference on Current Issues in Telephone Regulations: Dominance and Cost Allocation in Interexchange Markets - Center for Legal and Regulatory Studies Department of Management Science and Information Systems - Graduate School of Business, University of Texas at Austin, October 5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services"

Presented at the Nineteenth Annual Conference - "Alternatives to Traditional Regulation: Options for Reform" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform"

Federal Communications Law Journal, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation"

Presented at the Twentieth Annual Conference - "New Regulatory Concepts, Issues and Controversies" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1988.

"The Sustainability of Competition in Light of New Technologies" (with D. N. Townsend and P. D. Kravtin)

Presented at the Twentieth Annual Conference - Institute of Public Utilities Michigan State University, Williamsburg, VA, December, 1988.



"Adapting Telecom Regulation to Industry Change: Promoting Development Without Compromising Ratepayer Protection" (with S. C. Lundquist)

IEEE Communications Magazine, January, 1989.

"The Role of Cost Based Pricing of Telecommunications Services in the Age of Technology and Competition"

Presented at National Regulatory Research Institute Conference, Seattle, July 20, 1990.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" (with Patricia D. Kravtin and Paul S. Keller) Columbus, Ohio: *National Regulatory Research Institute*, September 1991.

"Telecommunications Regulation and Infrastructure Development: Alternative Models for the Public/Private Partnership"

Prepared for the Economic Symposium of the International Telecommunications Union Europe Telecom '92 Conference, Budapest, Hungary, October 15, 1992.

"Efficient Infrastructure Development and the Local Telephone Company's Role in Competitive Industry Environment" *Presented at the Twenty-Fourth Annual Conference, Institute of Public Utilities, Graduate School of Business, Michigan State University, "Shifting Boundaries between Regulation and Competition in Telecommunications and Energy"*, Williamsburg, VA, December 1992.

"Measurement of Telecommunications Productivity: Methods, Applications and Limitations" (with Françoise M. Clottes)

Presented at Organisation for Economic Cooperation and Development, Working Party on Telecommunication and Information Services Policies, '93 Conference "Defining Performance Indicators for Competitive Telecommunications Markets", Paris, France, February 8-9, 1993.

"Telecommunications Investment and Economic Development: Achieving efficiency and balance among competing public policy and stakeholder interests"

Presented at the 105th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, New York, November 18, 1993.

"The Potential for Competition in the Market for Local Telephone Services" (with David N. Townsend and Paul S. Keller)

Presented at the Organization for Economic Cooperation and Development Workshop on Telecommunication Infrastructure Competition, December 6-7, 1993.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," *Utilities Policy*, Vol. 4, No. 1, January 1994.



"The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers," (with Susan M. Gately, et al) a report prepared by ETI and Hatfield Associates, Inc. for AT&T, MCI and CompTel, February 1994.

"Commercially Feasible Resale of Local Telecommunications Services: An Essential Step in the Transition to Effective Local Competition," (Susan M. Gately, et al) a report prepared by ETI for AT&T, July 1995.

"Efficient Public Investment in Telecommunications Infrastructure" *Land Economics*, Vol 71, No.3, August 1995.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," in *Networks, Infrastructure, and the New Task for Regulation*, by Werner Sichel and Donal L. Alexander, eds., University of Michigan Press, 1996.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Tele-Communications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies. Attachment 1



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 991220-TP

In the Matter of: Global NAPS SOUTH, INC.

For Arbitration of Interconnection Rates, Terms and Conditions and Related Relief of Proposed Agreement with BellSouth Telecommunications, Inc. under the Telecommunications Act of 1996

> EXHIBIT LLS-1 LEE L. SELWYN MAY 1, 2000

Before the

STATE OF FLORIDA PUBLIC SERVICE COMMISSION

Global NAPs, Inc., Complainant,

versus

BellSouth Telecommunications, Inc. *Defendant*

Docket No. 991267-TP

Direct Testimony

of

LEE L. SELWYN

on behalf of

Global NAPs, Inc.

November 24, 1999

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1		INTRODUCTION	
2			
3	Qualifications		
4			
5	Q.	Please state your name, position and business address.	
6			
7	A.	My name is Lee L. Selwyn; I am President of Economics and Technology, Inc.	
8		("ETI"), One Washington Mall, Boston, Massachusetts 02108. Economics and	
9		Technology, Inc. is a research and consulting firm specializing in	
10		telecommunications economics, regulation, management and public policy.	
11			
12	Q.	Please summarize your educational background and previous experience in the	
13		field of telecommunications regulation and policy.	
14			
15	A.	I have prepared a Statement of Qualifications, which is attached hereto as	
16		Appendix 1.	
17			
18	Q.	Have you previously testified before the Florida Public Service Commission (the	
19		"Commission")?	
20			
21	A.	Yes. I have testified before this Commission on a number of occasions dating	
22		back to the mid-1970s, on the subjects of rate design and service cost analysis o	
23		behalf of business telecommunications users as well as the State of Florida	

1		Department of General Services. These cases have included Dockets 74805-TP,
2		760842-TP, 810035-TP and 820294-TP involving Southern Bell, Docket 74792-TP
3		involving General Telephone Company of Florida, Docket 750320-TP involving
4		Central Telephone Company of Florida. I also testified in Docket 950696-TP on
5		the subject of Universal Service, on behalf of Time Warner AxS and Digital Media
6		Partners. My most recent appearance before this Commission was in Docket No.
7		960833-TP/960847-TP on behalf of AT&T.
8		
9	Ass	ignment
0		
1	Q.	On whose behalf is this testimony being submitted?
12		
13	A.	This testimony is being submitted on behalf of Global NAPs, Inc. ("Global
14		NAPs"). Global NAPs is a competitive local exchange carrier ("CLEC") with
15		operations in Florida (currently the Miami area), as well as in a number of other
16		states. Global NAPs provides many Internet Service Provider ("ISP") customers
17		with telephone service on the public switched network. Global NAPs' service
18		allows the ISPs' end users to reach them by means of a dial-in connection between
19		the end users' modem equipment and the modem equipment of Global NAPs' ISP
20		customers.
21		
22	Q.	What is the purpose of your testimony at this time?

ECONOMICS AND TECHNOLOGY, INC

l	A.	The specific purpose of this testimony is to briefly describe (a) the economics of
2		processing ISP-bound traffic as a basis for reciprocal compensation, and (b) the
3		factors identified by the Federal Communications Commission (the "FCC") to
4		determine whether any particular interconnection agreement should be viewed as
5		encompassing ISP-bound traffic within the rubric of "local calls." Based upon that
6		description, I recommend that to the extent the Commission's decision in this
7		matter is affected by matters of economics and policy, the Commission should
8		conclude that ISP-bound calls should be viewed as falling squarely within the
9		scope of "local" calls under the parties' interconnection agreement.

Summary of testimony

13 Q. Please summarize the testimony you will be presenting before the Commission at this time.

A. In economic and policy terms, ISP-bound calls have long been treated as a form of "local" call. ISPs are expressly permitted to purchase local business lines, as opposed to interstate access lines, to obtain their connections to the public switched network. The FCC has specifically noted — and the courts have affirmed — that the purpose and effect of this arrangement is to allow ISPs to connect to the network as business customers, not as carriers, and to receive locally-dialed calls from end users that are priced, to the end user, as local calls. While ISP-bound calls may in a legalistic sense be jurisdictionally interstate, in *economic* terms they

ĺ	are equivalent to traditional local calls, not unlike the types of local calls that end
2	users routinely make to their neighbors, their children's schools, local restaurants,
3	etc. Indeed, BellSouth's own ISP affiliate, bellsouth.net, offers local call dial-up
4	service to its end user customers in locations throughout BellSouth's Florida
5	service area.
6	
7	In this regard, I have been active in matters relating to regulatory economics and
8	policy in the telecommunications field for more than thirty years, including
9	involvement in the FCC's First, Second and Third Computer Inquiry proceedings.
0	In the second of these, so-called Computer II, the FCC established the formal
1	regulatory distinction between "basic" services, such as those offered by carriers,
2	and "enhanced" services, such as those offered by ISPs. In the FCC's MTS and
3	WATS Market Structure proceeding (CC Docket 78-72, a matter in which I and my
4	firm were extensively involved) that created "access charges" for the first time, the
5	Commission explicitly exempted "enhanced service providers" from paying them
6	on the same basis as carriers. See MTS and WATS Market Structure,
.7	Memorandum Opinion and Order, CC Docket No. 78-72, 97 FCC 2d 682, 711-12
.8	(1983). That exemption was reiterated by the FCC in its 1988 decision in CC
.9	Docket No. 87-215. See Amendment of Part 69 of the Commission' Rules
20	Relating to Enhanced Service Providers, Order CC Docket No. 87-215, 3 FCC Red
21	2631 (1988). The Commission affirmed that exemption yet again both in its
22	Access Charge Reform Order in CC Docket No. 96-262 (Access Charge Reform, CC
23	Docket No. 96-262, First Report and Order, 12 FCC Rcd 15982 (1997) at ¶ 342, aff d sub

1	nom. Southwestern Bell Tel. Co. v. FCC, 153 F.3d 523 (8th Cir. 1998)) and most
2	recently in its February 26, 1999 Declaratory Ruling in that same proceeding.
3	Implementation of the Local Competition Provisions in the Telecommunications Act of
4	1996, Inter-Carrier Compensation for ISP-Bound Traffic, Declaratory Ruling in CC Docke
5	No. 96-98 and Notice of Proposed Rulemaking in Docket No. 99-68, CC Docket Nos. 96-
.6	98 and 99-68 (released February 26, 1999) ("Declaratory Ruling"). It is absolutely
7	clear, as a result of the FCC's repeated affirmation of the unique regulatory status
8	of entities such as ISPs, that the general understanding in the telecommunications
9	industry during the 1996-1997 period was that ISP-bound calls were properly
10	treated as "local" calls.
11	
12	As noted, the FCC once again recognized this in its February 1999 Declaratory
13	Ruling addressing compensation for ISP-bound calls. Among the key factors it
14	suggests that state regulators consider in assessing whether existing interconnection
15	agreements contemplate treating ISP-bound calls as "local" is the FCC's own
16	actions in creating an industry regulatory "context" within which such calls were
17	treated as "local." As described below, the other factors that the FCC identifies as
18	relevant also will generally support a conclusion that any interconnection
19	agreement entered into during that time frame would generally treat ISP-bound
20	calls as "local."
21	
22	For these reasons, I recommend that the Commission find the contract between
23	Global NAPs and BellSouth (which is the result of Global NAPs opting into an
24	agreement between BellSouth and DeltaCom) be interpreted as including ISP-



- bound calls within the definition of "local" calls. In this regard, I note that the
- 2 Alabama PSC, interpreting what is apparently exactly the same contract between
- 3 BellSouth and DeltaCom, reached exactly this conclusion.

1 COMPENSATION TO CLEC'S FOR COMPLETING ISP-BOUND CALLS

The Economics Of ISP-Bound Calls

Q. Please describe the basic economic arrangements applicable to (a) local calls
 involving two carriers and (b) interexchange calls involving one or two local
 exchange carriers and an interexchange carrier.

A. The almost universal practice in Florida as well as generally throughout the United States is for local calls to be provided on a "sent paid" basis by the local exchange carrier on whose network the call originates. By that I mean that the customer who originates the call pays his or her local carrier to get the local call all the way to its intended destination. These payment arrangements can take many forms, including flat-rated local calling over a wide area; "extended area service" or "extended area calling" plans that have the same effect; flat-rated local calling over a smaller area with some type of message unit or local measured charge for local calls outside that area; flat-rated local calling for a certain number of calls per month, with a per-message or other charge for usage above that level; and even local service with no usage included in the base price at all, with each call subject to a separate local message unit or measured service charge.

In Florida, BellSouth offers local usage services under a combination of flat, message and measured rate elements, but in all cases the charges for these services

.6

are paid by the customer who originates calls. The Basic flat-rate usage charge
provides for unlimited outward calling within a specific local calling area, which
consists of the customer's home and certain nearby "extended area service"
exchanges. In most areas, customers may alternatively choose "message rate" local
service where, for a lower monthly charge than that which applies for flat-rate
local service the customer receives a small "monthly calling allowance" and is then
charged for each originated call in excess of that allowance. In certain
communities, customers are offered the option of including one or more additional
exchanges in their flat-rate local calling area by paying a fixed monthly "Enhanced
Optional Extended Area Service" ("EOEAS") charge for each such exchange they
wish to reach on a flat-rate basis. The flat-rate EOEAS charge is based upon two
factors — the distance between the customer's home exchange and the EOEAS
exchange, and the number of exchange access lines in the EOEAS exchange. Calls
placed to other nearby exchanges, including exchanges for which EOEAS is
available but that are not selected by a customer for inclusion in his or her EOEAS
flat-rate calling area, are provided under so-called "Extended Calling Service"
("ECS") and are charged at a fixed per-message (per-call) amount of \$0.25 for
residential subscribers or \$0.10 and \$0.06 for the initial and subsequent minutes of
each call, respectively, for calls originated by business customers. (Calls placed to
all other points within the same LATA are rated as intraLATA toll.) Whatever the
precise form of local service plan, and whether priced on a flat-rate or usage-
sensitive basis, what is common to all of them is that the originating end user pays



1		the originating local carrier an amount designed to cover the entire cost of getting
2		the call from the origin to its destination.
3		
4	Q.	Is this "sent paid" approach to local calling a recent development, or has it been in
5		place for some time?
6		
7	A.	This arrangement has been in place for decades, and has provided the framework
8		both for the interchange of traffic as well as for the allocation of usage revenues as
9		between two incumbent local exchange carriers (e.g., BellSouth and an
10		Independent Telephone Company). With the introduction of "CLECs" into the
11		local service market, this same longstanding framework has now been extended to
12		the new entrants as well.
13		
14	Q.	How are connecting carriers compensated, under the "sent paid" paradigm, for
15		terminating calls that are originated by customers of a different local carrier?
16		
17	A.	There are two basic revenue sharing models in common use — so called "bill-and-
18	٠	keep" arrangements, and "reciprocal compensation." Under "bill-and-keep," each
19		carrier bills its own customers for the entire price of the call and retains all of the
20		revenue realized thereby, but completes calls handed off to it by another carrier
21		(which would have collected and retained revenue from its customer, the calling
22		party) without any explicit charge to the other (originating) carrier. The notion
23		here is that as a general matter the volume of calls flowing in each direction (i.e.,

1		from carrier A to carrier B and from carrier B to carrier A) will roughly balance
2		out, so the aggregate revenue share inuring to each carrier will compensate it both
3		for the "half-calls" it originates (for which it receives "full-call" revenues) and the
4		"half-calls" it terminates (for which it receives no revenues).
5		
6		Where traffic is not, or is not expected to be, "in balance," carriers have typically
7		adopted a so-called "reciprocal compensation" model. Here, the originating carrier
8		receives "full-call" revenues from the customer who originates the call, but then
9		pays the terminating carrier for the "half-call" that the latter will provide in
10		completing the call from the hand-off point to the ultimate recipient. Reciprocal
11		compensation assures that both carriers are fairly compensated for the actual
12		volume of traffic they handle, whether it is in, or seriously out of, balance.
13		
14	Q.	Which of these two models — "bill-and-keep" or "reciprocal compensation" — is
15		used in the interconnection agreement between Global NAPs and BellSouth?
16		
17	A.	That agreement calls for the interchange of local traffic to be compensated under
18		reciprocal compensation arrangement. In this regard, reciprocal compensation for
19		local traffic interchange is expressly contemplated and provided for in the federal
20		Telecommunications Act of 1996 ("TA96" or "Act").
21		
22		In fact, the "sent paid" nature of local calls underlies the TA96 requirement for
23		reciprocal compensation arrangements between connected local exchange carriers

		("LECs"). The whole idea of the originating LEC paying the terminating LEC is
2		based upon the understanding that the money to pay for all parts of the call, from
3		beginning to end, is received by the originating carrier. Reciprocal compensation
1		for local calls means that the terminating carrier — which does some of the work
5		in getting the call to its intended destination and which enables the originating
5		carrier correspondingly to avoid the costs associated with call termination — has
7		a right to get paid for it.
8		
9	Q.	How does this treatment of local calls handled by more than a single carrier
0		compare with the treatment of toll calls that are handled by two local carriers and
1		an interexchange carrier ("IXC")?
2		
3	A.	At least since the break-up of the former Bell System and the adoption in 1984 of
4		Part 69 of the FCC's Rules governing "Access Charges," interexchange calls have
5		been handled differently from local calls. For an interexchange call, the
6		originating LEC delivers the call from the end user to the IXC, but does not charge
7		the end user for that activity. (Technically, the interstate subscriber line charge
8		(SLC) reflects a charge by the originating LEC to the end user for the general use
9		of the local loop to originate and terminate interstate calls. But there is no usage
0		component to the SLC: it is simply a flat charge designed to recover a portion of
1		the loop costs for loops that are used for both intrastate and interstate
2		telecommunications. By contrast, loop costs are not involved in inter-carrier
23		compensation for local calls at all.) Instead, the IXC bills the end user for the full

1	cost of the call, and then pays both the originating LEC and the terminating LEC
2	for their respective roles in delivering the call from the originating subscriber to
3	the IXC and from the IXC to the call recipient. These payments, of course, are the
4	originating and terminating access charges.
5	
6	So, to summarize, local calls are sent paid, which means that the originating carrier
7	charges the end user to get the call all the way to its destination; reciprocal
8	compensation is designed to reflect that economic fact by requiring the originating
9	carrier to pay the terminating carrier for doing some of the work of carrying the
10	call, when two carriers are involved. By contrast, interexchange calls are not "sent
11	paid" by the originating carrier in this sense. The originating carrier does not
12	charge the end user anything for such calls; instead, the IXC bills the end user and
13	pays both the originating and terminating LECs for their work in originating and
14	terminating the call. (There are a few exceptions, of course. An intraLATA toll
15	call handled end-to-end by a single carrier does not fit this model exactly — such
16	a situation is more like the pre-divestiture Bell System where (in effect) a single
17	entity handled the call end-to-end. On the other hand, when an interexchange call
18	is "sent paid" — as when two adjacent LECs carry an intraLATA toll call — the
19	most common arrangement under "originating responsibility plans" of various sorts
20	is for the originating LEC to collect from the customer for the end-to-end call, and
21	then to pay the terminating LEC for its services in delivering the call to its
22	destination. These exceptions, of course, prove the general rules discussed above.)



1	Q.	Does either the local call model or the interexchange call model depend upon the
2		carrier who collects the money actually collecting enough on any particular call to
3		cover the payments made to other carriers?

4

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A. No, not at all. On the toll side, it is quite common (indeed, under Section 254(g) of the federal law, it is in many cases mandatory) for long distance carriers to charge an averaged rate for their toll services (say, \$0.10 per minute) even in situations where the access charges that must be paid on either end (or considered together) exceed that amount, as is sometimes the case. While long distance carriers obviously "lose money" on any individual call where their access charge obligations exceed their retail price, that does not mean that they lose money on their retail offerings in the aggregate. The same is true for local calling plans. Typically, the incremental cost to an ILEC of local usage is well below any perminute or per-message local calling rates the ILEC may have established — and that is true whether local calls are charged on a flat-rated or on a per-message or per-minute basis. Moreover, the usage "allowance" included in flat-rated local calling plans also is quite often much, much higher than the average usage-related costs imposed by customers who subscribe to such plans. But on calls that are charged on an untimed per-message basis (e.g., BellSouth's Extended Calling Service, at 25 cents per call for residence customers), it is actually quite common for there to be some set of calls (a typical example is calls made by teenagers) on which the ILEC "loses money" due to above-average call length. But at the same time, there are also many, many calls (such as brief calls that end up being



1		connected to an answering machine) where the ILEC "makes money" because of
2		below-average call duration.
3		
4		The same is true for flat-rated calling plans. On average, such plans make money
5		for ILECs, even though there are some customers whose calling volumes are so
.6		high that for those customers, considered individually, the plan does not cover cost
7		In this regard, ILECs often point out that they may receive no incremental revenue
8		at all when a customer on a flat-rated plan makes a call. But the fact that many
9		customers make local calls at a per-call incremental revenue to the ILEC of zero
10		does not mean that the ILEC is providing "free" service, not does it somehow
11		relieve the ILEC of its obligation to pay a terminating CLEC for the work the
12		CLEC does in delivering such local calls to their destination.
13		
14	Q.	Into which of these economic models does ISP-bound calling fall?
15		
16	A.	ISP-bound calling unquestionably falls into the "local" call model. In the typical
17		situation prior to competition, an ISP-bound call was handled end-to-end by a
18		single ILEC, just like other local calls and unlike a typical interexchange call. As
19		noted above, ISPs are expressly permitted by FCC rulings to purchase local
20		business lines from LECs in order to receive local calls from their own subscribers
21		and are expressly not required to pay access charges for calls directed to them by
22		end users.
23		



1	Q.	Have there been efforts in the industry to change the treatment of ISP-bound calls?
2		-
3	A.	Indeed there have been, but the FCC has repeatedly rejected each and every one of
4		them. At the very inception of access charges back in 1984, the ILEC industry
5		argued that "enhanced service providers" (forerunners of today's ISPs) used the
.6		local network for originating and terminating jurisdictionally interstate traffic and
7		should therefore pay access charges just like IXCs. The FCC said no. (CC
8		Docket 78-72 Memorandum Opinion and Order, 97 FCC 2d at 711-12.) The FCC
9		conducted a further proposed rulemaking on this issue in 1987 and 1988. It again
10		concluded that IXCs were different from ISPs, and that ISPs should not pay access
11		charges. (CC Docket 87-215, Order, 3 FCC Rcd at 2632-33.) The issue arose
12		again following passage of TA96; in proposing to reform access charges in
13		December 1996, the FCC asked again whether ISPs should pay access charges like
14		IXCs do. Again — and over vigorous opposition from the ILECs — the FCC
15		affirmed in May 1997 that ISPs are properly viewed as end users with regard to
16		their connections to the local network, and so would not pay access charges.
17		(Access Reform Order, supra, 12 FCC Rcd 15982, at ¶¶ 341-48.) The ILECs took
18		the FCC to court on this issue, and the 8th Circuit ruled in August 1998 that ISPs
19		were different from IXCs, and that the FCC's ban on ISPs paying access charges
20		was lawful. And in issuing its February 1999 Declaratory Ruling on compensation
21		for ISP-bound calls, the FCC took pains to repeat that nothing in its order affected
22		the fact that ISPs do not pay access charges. The fact that ISP-bound calls "look

I		tike local calls is not the result of accident of oversight. It is the result of
2		conscious and consistent policy decisions by the FCC.
3		
4	Q.	What is the economic significance of the fact that ISPs do not pay access charges?
5		
6	A.	It means that in economic terms, ISP-bound calls are "local" in nature. From the
7		consumer's perspective, an ISP-bound call is dialed just like any other local call.
8		Also from the consumer's perspective, an ISP-bound call is covered under whatever
9		local calling plan the consumer has chosen from his or her LEC. If the ISP's
0		phone number is outside the consumer's local calling area, then toll charges apply.
1		If it is within the consumer's local calling area but the consumer has elected to
12		take measured local service, then measured local service rates apply. From the
13		consumer's perspective, there is no distinction between a local call placed to an
14		ISP and a local call placed to a neighbor; both are dialed in the same manner,
15		priced in the same manner, and are included or not included in the consumer's
16		local calling area on exactly the same basis.
17		
18		From the ISP's perspective, these calls are delivered over local exchange lines
19		(typically ISDN PRI circuits) obtained from a LEC. Also from the ISP's
20		perspective, because it is extremely rare for a local exchange customer to be
21		charged for incoming local calls, the ISP is not charged for the calls that it
22		receives from its own users.

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1		By contrast, if ISPs did pay per-minute access charges just like IXCs do, the entire
2		controversy over compensation for ISP-bound calling would not exist. The LEC
3		serving the ISP would charge per-minute access charges. Under well-established
4		"meet point billing" rules, either the LEC serving the ISP would charge full-bore
5		access rates, including switching, transport and carrier common line — and share
6		those with the originating LEC — or the terminating LEC would charge the ISP
7		for its own activities and allow the originating LEC to separately bill the ISP for
8		its activities. While requiring ISPs to pay access charges would probably be
9		devastating to the ISP industry and to the growth and usefulness of the Internet, it
10		would completely solve the problem of inter-carrier compensation for these calls.
11		
12		The only reason that problem exists, in fact, is that — as noted above — ISP-
13		bound calls are "local" calls from a practical and economic perspective, yet
14		apparently are "interstate" calls from a legal, jurisdictional perspective. From my
15		perspective as an economist, ILEC resistance to paying reciprocal compensation for
16		these calls amounts to an effort to exploit a legalistic loophole to reach an
17		economically nonsensical result.
18		
19	Q.	Does the FCC agree with you?
20		
21	A.	Yes, I believe that it does, as I will discuss more fully in the next section of my
22		testimony.



1 The FCC's Approach To Compensation For ISP-Bound	1	1	The FCC's	Approach	To Con	pensation	For	ISP-Boun	d Calls
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2	1.	
1	_	

Q. Please summarize your understanding of the FCC's approach to compensation for
 ISP-bound calls.

5

A. The FCC has held since 1983 that calls placed to "enhanced service providers" —
the predecessors to today's ISPs — were jurisdictionally interstate. It has held in a
number of contexts, however, that ISPs should be treated as ordinary business end
users and that ISP-bound calls should be treated as local.

10

11 When the FCC was confronted with implementing the Telecommunications Act of 12 1996, it concluded (in August 1996) that the reciprocal compensation provisions of 13 the Act were intended to cover local calls. I would note that nothing in Section 14 251(b)(5) actually says that compensation is limited to local calls. At the time, 15 however, there was a major controversy (that continues in various ways today) 16 about whether and to what extent the general requirements in Sections 251 and 252 17 of the Act to establish cost-based rates apply to the obviously non-cost-based 18 access charges that ILECs have established for both interstate and intrastate toll traffic. I believe that this is what the FCC probably had in mind when it held that 19 20 only "local" traffic (that is, traffic to which access charges do not apply) was 21 subject to reciprocal compensation obligations.



i		But the FCC said what it said. And by mid-1997, the controversy over
2		compensation for ISP-bound calls had reached the FCC for resolution. ILECs
3		argued that the fact that ISP-bound calls were "really" interstate meant that
4		reciprocal compensation could not apply. Many CLECs argued that ISP-bound
5		calls were not "really" interstate at all; others argued that, interstate or not, the
6		FCC could still apply the reciprocal compensation requirement to these calls.
7		
8		The FCC's consideration of this issue was greatly complicated by the fact that it
9		took place mainly during the time that the 8th Circuit's ruling limiting FCC
10		involvement in local interconnection matters was in place. Under that ruling
11		(which was subsequently overturned by the US Supreme Court) and generally
12		speaking, the FCC had only limited authority to establish binding rules for how
13		states have to handle particular interconnection questions. So while the
14		controversy started with both sides basically assuming that whatever the answer
15		was, the FCC was the body to give the answer, the FCC's actual decision (so far)
16		in the Declaratory Ruling could not be that direct. (Of course, now that the
17		Supreme Court has reaffirmed the FCC's authority to set rules under the 1996 Ac
18		it is widely expected that the FCC will issue rules that will determine how this
19		issue is to be handled in the future.)
20		
21	Q.	What did the February 1999 Declaratory Ruling say?



1	A.	Basically, the FCC did four things. First, it reaffirmed its view that ISP-bound
2		calling, in the main, was indeed jurisdictionally interstate. Second, it determined
3		that ISP-bound calling was unique: there was "no rule" then in place that applied
4		to it. Third, based upon that conclusion, the FCC initiated a rulemaking
5		proceeding to establish a rule. Fourth, the FCC provided some guidance to state
6		commissions facing the questions of interpreting existing interconnection
7		agreements and/or establishing rules to apply in the absence of those agreements.
8		
9		The dispute in which this testimony is being filed involves interpretation of an
10		existing agreement.
11		
12	Q.	What did the FCC say about that question?
13		
14	A.	Basically, the FCC identified a number of factors that state commissions should
15		consider in trying to ascertain whether an existing interconnection agreement
16		should reasonably be interpreted as encompassing ISP-bound calls within the scope
17		of "local" traffic as to which compensation is due under the agreement. The
18		reasonableness of this approach can be seen by considering the seven factors that
19		the FCC identified as relevant to the interpretation of interconnection agreements
20		in paragraph 24 of the Declaratory Ruling. Those factors are:
21		
22		(1) the negotiation of the agreements in the context of this Commission's
23		longstanding policy of treating this traffic as local;

1	(2)	the conduct of the parties pursuant to those agreements;
2		
3	(3)	whether incumbent LECs serving ESPs (including ISPs) have done so out
4		of intrastate or interstate tariffs;
5		
. 6	(4)	whether revenues associated with those services were counted as intrastate
7		or interstate revenues;
8		
9	(5)	whether there is evidence that incumbent LECs or CLECs made any effort
10		to meter this traffic or otherwise segregate it from local traffic,
11		particularly for the purpose of billing one another for reciprocal
12		compensation;
13		
14	(6)	whether, in jurisdictions where incumbent LECs bill their end users by
15		message units, incumbent LECs have included calls to ISPs in local
16		telephone charges; and
17		
18	(7)	whether, if ISP traffic is not treated as local and subject to reciprocal
19		compensation, incumbent LECs and CLECs would be compensated for
20		this traffic.
21		
22	In the r	emainder of my testimony, I provide evidence relevant to applying certain
23	of these	e factors to this case.



1	Ap	pheation of the FCC's factors in determining the nature of 15x-bound traffic
2		_
3	Q.	Before discussing any particular factor, do you have any general observations
4		about the FCC's seven factors?
5		
6	A.	Yes. As will be seen below, the FCC plainly understood that it had, itself, created
7		a long-standing regulatory context in which the "default" condition was to treat
8		ISP-bound calls as local. The FCC recognized, of course, that individual
9		contracting ILECs and CLECs could have agreed to treat ISP-bound calls
0		differently. But its discussion of the factors relevant to interpreting interconnection
1		agreements clearly shows that the FCC understood that not treating these calls as
12		"local" would have been a peculiar and unusual result.
13		
14	Q.	Please address the first factor identified by the FCC — the negotiation of the
15		agreements in the context of the FCC's longstanding policy of treating this traffic
16		as local.
17		
18	A.	The FCC first directs states' attention to the FCC's own regulatory policies
19		regarding ISPs and ISP-bound calls. As discussed above, those policies are quite
20		clear, and uniformly treat ISP-bound calls as local. The FCC clearly expects that
21		this factor will influence state commissions in interpreting particular inter-
22		connection agreements, and this factor clearly supports a conclusion that ISP-bound
23		calls should be treated as local.

1	Q.	Please now address factor number five — whether there is evidence that incumben
2		LECs or CLECs made any effort to meter the ISP-bound traffic or otherwise
3		segregate it from local traffic, particularly for the purpose of billing one another
4		for reciprocal compensation.
5		
.6	A.	I am taking this one out of order because it is directly related to the overall
7		regulatory context of treating ISP-bound calls as local that the FCC had, itself,
8		established. In light of that regulatory context, while it is permissible for parties to
9		treat such calls in some other manner, the FCC understood that one would
10		logically expect some evidence on the face of the agreement itself demonstrating
11		that the parties had reached some different understanding regarding ISP-bound
12		calls. Factor number five suggests that state commissions should look to see if the
13		parties provided for some special, differential treatment for ISP-bound calls. While
14		I am not testifying here as to the precise language of the contract that Global
15		NAPs opted into with BellSouth, I am informed that nothing in that contract
16		separately identifies ISP-bound calls for separate treatment for purposes of
17		reciprocal compensation. The Commission, of course, has access to the agreement
18		itself and can confirm that fact in considering how to resolve this case. But from
19		my perspective, this factor, too, clearly supports treating ISP-bound calls as local.
20		
21	Q.	Please address factor number three — whether incumbent LECs serving ESPs
22		(including ISPs) have done so out of intrastate or interstate tariffs.
23		



İ	A.	Factor number three asks whether the ILEC (here BellSouth) has served ISPs out
2		of interstate tariffs (indicating, presumably, a conscious effort to treat ISP-bound
3		traffic as interstate) or out of intrastate tariffs. Of course, the flip side of the
4		FCC's longstanding policies exempting ISPs from paying per-minute access
5		charges is an express federal obligation on ILECs to allow ISPs to purchase
6		intrastate-tariffed local business lines to receive intrastate-tariffed local calls from
7		their subscribers. While I have not conducted an exhaustive survey of how
8		BellSouth has served ISPs in Florida, it would appear that BellSouth serves its own
9		ISP affiliate, bellsouth.net, in precisely this manner — i.e., it treats calls placed
0		by its (telephone) subscribers to its ISP as local calls. BellSouth.net's web site
1		identifies local call availability in a number of Florida cities (see Attachment 2).
2		Where the ISP affiliate does not have a local dial-in number, the customer is
3		instructed as to how the service can nevertheless be reached on a local call basis.
4		For example, a customer in St. Augustine, upon entering his telephone number into
5		"availability" page on the BellSouth.net web site, is advised that the St. Augustine
6		telephone number "is not local to any dial-in site, but there may be an optional
.7		plan that can be purchased to make it local to Jacksonville, FL at (904) 350-1090
8		Please contact your local telephone company's business office for further
9		information." See Attachment 3. In fact, a residence customer in St. Augustine
20		may purchase Enhanced Optional Extended Area Service providing flat-rate local
21		calling to Jacksonville for an additional \$10.85 per month. BellSouth Florida
22		General Subscriber Tariff, Original Page 40, Issued July 1, 1996, Effective July 15
23		1996. Based upon this specific example as well as my general and substantial



1		experience in the industry, I can state that ISPs almost without exception exercise
2		their right to purchase intrastate-tariffed local business lines, precisely in order to
3		be able to receive local calls from their subscribers. This factor clearly supports
4		treating these calls as local.
5		
6	Q.	Please address factor number four — whether revenues associated with those
7		services were counted as intrastate or interstate revenues.
8		
9	A.	Factor number four is also not subject to any particular debate. The existing FCC
0		rule is that ILEC costs associated with handling ISP-bound calls are to be
1		separated to the intrastate jurisdiction. Indeed, at least two ILECs (Bell Atlantic
12		and Southwestern Bell) have asked for a waiver of the normal separations rules to
13		allow them to allocate such costs to the interstate jurisdiction, and both requests
4		have been denied by the FCC's Common Carrier Bureau. See Letter to Don
15		Evans, Vice President — Regulatory Advocacy, Bell Atlantic from Lawrence E.
16		Strickling, Chief, Common Carrier Bureau, Re: Separations Treatment of
17		Internet-Related Reciprocal Compensation (July, 29, 1999); Letter to Dale
18		Robertson, Sr. Vice President, SBC Communications, Inc. from Lawrence E.
19		Strickling, Chief, Common Carrier Bureau, Re: Separations Treatment of
20		ISP-Bound Traffic (May, 18, 1999). (In this regard, the FCC made a point of
21		stating the existing rule in the "proposed rulemaking" portion of the Declaratory
22		Ruling.) This factor clearly supports treating ISP-bound calls as local.
73		

1	Q.	Please address factor number six — whether, in jurisdictions where incumbent
2		LECs bill their end users by message units, incumbent LECs have included calls to
3		ISPs in local telephone charges.
4		
5	Α.	Factor number six asks whether customers on message unit plans are charged
6		(local) message units when they call ISPs. From my examination of the BellSouth
7		Florida local service Tariff together with the local call availability information
8		contained on the bellsouth.net web site, it appears that in fact such message unit
9		charges would apply for local calling area calls to ISPs placed from message-rate
0		telephones, except of course if the call fell within the customer's monthly call
1		allowance, in which case it would be charged against that allowance. It is thus
2		clear that factor number six also supports the conclusion that ISP-bound calls
3		should be treated as "local."
4		
5	Q.	Please address factor number seven — whether, if ISP traffic is not treated as loca
6		and subject to reciprocal compensation, incumbent LECs and CLECs would be
7		compensated for this traffic.
8		
9	A.	The concern being expressed by the FCC here is that if ISP-bound calls are not
20		subject to reciprocal compensation, they would then go entirely uncompensated
21		under the agreement. The basic economic point is that it is unlikely that rational
22		contracting parties would have left a significant category of traffic unaccounted for
23		(factor 5) and uncompensated (factor 7) in an agreement that otherwise

1		comprehensively covers compensation arrangements for traffic to be exchanged
2		between the parties. As with factor 5, whether or not there is any other
3		arrangement for compensating either party for handling ISP-bound calls if they are
4		not treated as local is apparent from the face of the agreement, which is before the
5		Commission. Subject of course to the Commission's own review, however, I am
Ģ		informed and understand that the agreement contains no alternative means for
7		compensating either party for ISP-bound calls, if such calls are not treated as local
8		This factor, too, therefore, supports a conclusion that ISP-bound calls are to be
9		treated as "local."
10		
11	Q.	What does your review of the factors identified by the FCC suggest about the
12		proper interpretation of the BellSouth/Global NAPs interconnection agreement?
13		
14	A.	Clearly, those factors overwhelmingly support the conclusion that ISP-bound calls
15		should be treated as local under that agreement.
16		
17	Q.	You said earlier that the FCC clearly thought that an arrangement under which
18		ISP-bound calls would not be treated as local would be unusual. Aside from the
19		factors that the FCC has itself identified as relevant to interpreting interconnection
20		agreements and which you have just discussed, is there any other basis for that
21		conclusion?
22		

1	A.	Yes. One of the key points that the FCC made in the Declaratory Ruling was that
2		nothing in that ruling was intended to set aside or upset the results reached by any
3		state commission that had considered the question of ISP-bound calling prior to the
4		time of that decision. It could not have been lost on the FCC that as of that time,
5		of the more than two dozen states that had addressed the question, every one had
.6		concluded that ISP-bound calls should be treated as local and be subject to
7		reciprocal compensation. If the FCC had any substantive difficulty with this
8		treatment of what it itself pointedly classified as interstate traffic, it seems quite
9		likely to me that it would have indicated its displeasure with that substantive
10		result. And, of course, not only did the FCC not do that, it affirmatively invited
11		state regulators to continue to address that question — and to reach the same
12		answer — as long as the state-level reasoning did not conflict with the FCC's own
13		views of its own regulatory authority over ISP-bound calls.
14		
15	Q.	How have state regulators addressed this question since the time the Declaratory
16		Ruling was issued?
17		
18	A.	The vast majority of states to address the question since that time have concluded
19		(typically in the context of interpreting individual contracts) that compensation for
20		ISP-bound calls is required. A handful of states have (erroneously, in my view)

23

22

21

indicated that such calls are not necessarily subject to compensation, at least until

the FCC takes further action in the ongoing rulemaking proceeding.

1	Q.	Are any of the various decisions from other states relevant here?
2		
3	A.	One must always be careful in uncritically importing the results of one state's
4		regulatory proceedings into another state's regulatory system: at a minimum, the
5		policies underlying the other states' decisions should be considered. But in this
6		case there is a particularly relevant ruling from another state, Alabama. In
7		Alabama, BellSouth and DeltaCom (the original party to the contract that Global
8		NAPs "opted into" in this case) litigated the precise question of whether the
9		language of what I understand to be the very same contract at issue here
10		encompassed ISP-bound calling within the scope of local traffic subject to
11		reciprocal compensation. The Alabama PSC — acting after the FCC's Declaratory
12		Ruling was issued — concluded that this very same contract did, indeed,
13		contemplate treating ISP-bound calls as "local" for compensation purposes.
14		
15		I am not an attorney, and so I have no view on whether the Alabama PSC's
16		decision is in any formal way "binding" on this Commission. But in practical
17		terms, it would seem to me that the Alabama decision would be highly instructive
18		here.
19		
20	Q.	Does this conclude your direct testimony at this time?
21		



22 A. Yes, it does.

EXHIBIT LLS-1 Dr. Lee L. Selwyn Docket No. 991267-TP

Attachment 1 Statement of Qualifications DR. LEE L. SELWYN



Attachment 1

Statement of Qualifications

DR. LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than twenty-five years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.



Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Dr. Selwyn has published numerous papers and articles in professional and trade journals on the subject of telecommunications service regulation, cost methodology, rate design and pricing policy. These have included:

"Taxes, Corporate Financial Policy and Return to Investors" *National Tax Journal*, Vol. XX, No.4, December 1967.

"Pricing Telephone Terminal Equipment Under Competition" *Public Utilities Fortnightly*, December 8, 1977.

"Deregulation, Competition, and Regulatory Responsibility in the Telecommunications Industry"

Presented at the 1979 Rate Symposium on Problems of Regulated Industries —

Sponsored by: The American University, Foster Associates, Inc., Missouri

Public Service Commission, University of Missouri-Columbia, Kansas City,

MO, February 11 — 14, 1979.

"Sifting Out the Economic Costs of Terminal Equipment Services" *Telephone Engineer and Management*, October 15, 1979.

"Usage-Sensitive Pricing" (with G. F. Borton) (a three part series)

Telephony, January 7, 28, February 11, 1980.

"Perspectives on Usage-Sensitive Pricing" *Public Utilities Fortnightly*, May 7, 1981.



"Diversification, Deregulation, and Increased Uncertainty in the Public Utility Industries"

Comments Presented at the Thirteenth Annual Conference of the Institute of Public Utilities, Williamsburg, VA — December 14 — 16, 1981.

"Local Telephone Pricing: Is There a Better Way?; The Costs of LMS Exceed its Benefits: a Report on Recent U.S. Experience."

Proceedings of a conference held at Montreal, Quebec — Sponsored by Canadian Radio-Television and Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, May 2 — 4, 1984.

"Long-Run Regulation of AT&T: A Key Element of A Competitive Telecommunications Policy" *Telematics*, August 1984.

"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?"

Presented at the Institute of Public Utilities Eighteenth Annual Conference, Williamsburg, VA — December 8 — 10, 1986.

"Market Power and Competition Under an Equal Access Environment"

Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation"

Institute of Public Utilities, Michigan State University, Williamsburg, VA — December 3 — 5, 1987.

"Contestable Markets: Theory vs. Fact"

Presented at the Conference on Current Issues in Telephone Regulations: Dominance and Cost Allocation in Interexchange Markets — Center for Legal and Regulatory Studies Department of Management Science and Information Systems — Graduate School of Business, University of Texas at Austin, October 5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services"

Presented at the Nineteenth Annual Conference — "Alternatives to Traditional Regulation: Options for Reform" — Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform"



Federal Communications Law Journal, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation"

Presented at the Twentieth Annual Conference — "New Regulatory Concepts, Issues and Controversies" — Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1988.

"The Sustainability of Competition in Light of New Technologies" (with D. N. Townsend and P. D. Kravtin)

Presented at the Twentieth Annual Conference — Institute of Public Utilities Michigan State University, Williamsburg, VA, December, 1988.

"Adapting Telecom Regulation to Industry Change: Promoting Development Without Compromising Ratepayer Protection" (with S. C. Lundquist) *IEEE Communications Magazine*, January, 1989.

"The Role of Cost Based Pricing of Telecommunications Services in the Age of Technology and Competition"

Presented at National Regulatory Research Institute Conference, Seattle, July 20, 1990.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" (with Patricia D. Kravtin and Paul S. Keller) Columbus, Ohio: *National Regulatory Research Institute*, September 1991.

"Telecommunications Regulation and Infrastructure Development: Alternative Models for the Public/Private Partnership"

Prepared for the Economic Symposium of the International Telecommunications Union Europe Telecom '92 Conference, Budapest, Hungary, October 15, 1992.

"Efficient Infrastructure Development and the Local Telephone Company's Role in Competitive Industry Environment" Presented at the Twenty-Fourth Annual Conference, Institute of Public Utilities, Graduate School of Business, Michigan State University, "Shifting Boundaries between Regulation and Competition in Telecommunications and Energy", Williamsburg, VA, December 1992.

"Measurement of Telecommunications Productivity: Methods, Applications and Limitations" (with Françoise M. Clottes)



Presented at Organisation for Economic Cooperation and Development, Working Party on Telecommunication and Information Services Policies, '93 Conference "Defining Performance Indicators for Competitive Telecommunications Markets", Paris, France, February 8-9, 1993.

"Telecommunications Investment and Economic Development: Achieving efficiency and balance among competing public policy and stakeholder interests"

Presented at the 105th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, New York, November 18, 1993.

"The Potential for Competition in the Market for Local Telephone Services" (with David N. Townsend and Paul S. Keller), presented at Organization for Economic Cooperation and Development Workshop on Telecommunication Infrastructure Competition, December 6-7, 1993.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," *Utilities Policy*, Vol. 4, No. 1, January 1994.

"The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers," (with Susan M. Gately, et al) report prepared by ETI and Hatfield Associates, Inc. for AT&T, MCI and CompTel, February 1994.

"Commercially Feasible Resale of Local Telecommunications Services: An Essential Step in the Transition to Effective Local Competition," (Susan M. Gately, et al) a report prepared by ETI for AT&T, July 1995.

"Efficient Public Investment in Telecommunications Infrastructure" Land Economics, Vol 71, No.3, August 1995.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," in *Networks, Infrastructure, and the New Task for Regulation*, by Werner Sichel and Donal L. Alexander, eds., University of Michigan Press, 1996.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program



on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Tele-Communications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies.



EXHIBIT LLS-2 Dr. Lee L. Selwyn Docket No. 991267-TP

Attachment 2

bellsouth.net dial-in access numbers for Florida



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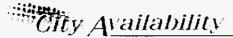
Main

Features

Pricing

What's New City Availability

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BellSouth.net Dial-in Access Numbers

Click on your local area to get the local dial-in number The number to dial in to will be displayed on another page so you can easily print it out.



Before dialing any number, check with your phone company to find out if you will incur any toll charges. BellSouth will not reimburse customers for any long distance toll charges associated with conecting to BellSouth.net service.

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EXHIBIT LLS-3 Dr. Lee L. Selwyn Docket No. 991267-TP

Attachment 3

bellsouth.net dial-in instructions for a hypothetical customer in St. Augustine

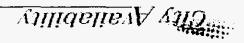


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BellSouth.net Dial-in Numbers for Your Neighborhood

The dial-in numbers provided are for BellSouth.net members only. If you are not a BellSouth.net member, but would like to become one, you can sign up now.

Results:

(904) 829- is not local to any dial-in site, but there may be an optional plan that can be purchased to make it local to Jacksonville, FL at (904) 350-1090 (ISDN dailup available at (904) 353-1333). Please contact your local telephone company's business office for further information.

Before disling any number, check with your phone company to find out if you will incur any toll charges. BellSouth will not reimburse customers for any long distance toll charges associated with connecting to BellSouth.net service.

Find out how to Change Your Dialer

rectribeM I.S awobniW TN awobniW 39 awobniW

Note: Only members with ISDN equipment installed at their location will be able to use the ISDN dial-in numbers.

HLNOSTT38 @

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66/91/11



ONE WASHINGTON MALL BOSTON, MASSACHUSETTS 02108-2617

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 991220-TP

In the Matter of: Global NAPS SOUTH, INC.

For Arbitration of Interconnection Rates, Terms and Conditions and Related Relief of Proposed Agreement with BellSouth Telecommunications, Inc. under the Telecommunications Act of 1996

> EXHIBIT LLS-2 LEE L. SELWYN MAY 1, 2000

Before the

STATE OF FLORIDA PUBLIC SERVICE COMMISSION

SS DEC 20 PH 4: 34
RECORDS AND

Global NAPs, Inc., Complainant,

versus

BellSouth Telecommunications, Inc. *Defendant*

Docket No. 991267-TP

Rebuttal Testimony

of

LEE L. SELWYN

on behalf of

Global NAPs, Inc.

December 20, 1999

Mor

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	Whether ISP-bound calls are local or interstate, BellSouth receives payments from its end user customers for these calls, and avoids call termination costs when the calls are handed off to an ALEC for completion.	9
	Unless BellSouth is required to make reciprocal compensation payments to ALECs, ALECs will be forced to provide a service and incur costs for which they will receive no compensation.	13
	The possible presence of a disparity between the reciprocal compensation rate and the ALEC's costs for completing ISP-bound calls is not a basis for permitting BellSouth to escape its obligations to compensate ALECs for the call termination services that they provide.	15
	In specifically allowing ALECs to "opt in" to an existing interconnection agreement, the 1996 Act sought to assure that all ALECs are treated on an equal and nondiscriminatory basis by the incumbent LEC.	19



1		REBUTTAL TESTIMONY
2		
3	Int	roduction
4		
5	Q.	Please state your name, position and business address.
,6		
7	A.	My name is Lee L. Selwyn; I am President of Economics and Technology, Inc.
8		("ETI"), One Washington Mall, Boston, Massachusetts 02108.
9		
10	Q.	On whose behalf is this testimony being submitted?
11		,
12	A.	This testimony is being submitted on behalf of Global NAPs, Inc. ("Global
13		NAPs").
14		
15	Q.	Have you previously submitted testimony in this proceeding?
16		
17	A.	Yes. On November 24, 1999, I submitted pre-filed direct testimony in this matter
18		on behalf of Global NAPs.
19		
20	Q.	What is the purpose of your testimony at this time?
21		
22	A.	I will respond to and rebut certain statements and assertions made by BellSouth
23		witnesses Beth Shiroishi and Albert Halprin.

1	Eve	en under the FCC's "one call" paradigm in which the jurisdictional character	
2	of J	Internet traffic is based upon the locations of the end user and the point on the	
3	Internet to which the user is connected, the overwhelming majority of ISP-bound		
4	call	s are nevertheless jurisdictionally "local" in nature.	
5			
. 6	Q.	Dr. Selwyn, Ms. Beth Shiroishi, testifying for BellSouth, argues that the intercon-	
7		nection agreement between BellSouth and Global NAPs obligates BellSouth to	
8		make reciprocal compensation payments to Global NAPs only with respect to	
9		local calls which, she explains, are defined at Section 49 of the Interconnection	
10		Agreement as "telephone calls that originate in one exchange or LATA and	
11		terminates [sic] in either the same exchange or LATA, or a corresponding	
12		Extended Area Service (EAS) exchange." Shiroishi (BellSouth), at 11, emphasis	
13		in original. She also contends that ISP-bound traffic does not terminate at the	
14		ISP, and for that reason ISP-bound traffic is interstate in nature and therefore not	
15		subject to reciprocal compensation payments. Putting aside the matter of whether	
16		reciprocal compensation payments are due for ISP-bound traffic that is	
17		jurisdictionally interstate in nature, do you agree with Ms. Shiroishi that all ISP-	
18		bound traffic is, in fact, not "local" as that term is defined in the Interconnection	
19		Agreement?	
20			
21	A.	No, I do not. In fact, the overwhelming majority of ISP-bound traffic satisfies the	
22		definition of "local" as stated by Ms. Shiroishi. It would appear that Ms.	

1		Shiroishi does not understand how the Internet works and how access to the
2		Internet is furnished by ISPs to their end user customers.
3		
4	Q.	Please explain.
5		
6	A.	In her discussion of "the nature of ISP traffic," Ms. Shiroishi seeks to portray the
7		ISP as performing little more than a passive interconnection function between the
8		Public Switched Telephone Network (PSTN) and the Internet: "The ISP converts
9		the signal of the incoming [PSTN] call to a digital signal and routes the call,
10		through its modems, over its own network to a backbone network provider, where
11		it is ultimately routed to an Internet-connected host computer." Shiroishi
12		(BellSouth), at 5. This description, together with her Exhibit ERAS-1, portrays a
13		continuous flow of data across the ISP from the end user to some remote Internet
14		host web site: "The call from an end user to an ISP only transits through the
15		ISP's local point of presence; it does not terminate there. There is no interruption
16		of the continuous transmission of signals between the end user and the host
17		computers." Shiroishi, at 7, emphasis in original. Mr. Goldstein covers this issue
18		in greater detail. But suffice it to say here that Ms. Shiroishi's testimony
19		describing the manner in which end users communicate with remote host
20		computers over the Internet is simply wrong. It is utterly inaccurate as a
21		description of the manner in which the Internet and ISPs actually operate.
22		
73	0	Please explain

A. First, and contrary to Ms. Shiroishi's description, the flow of data between the end
user and the remote host across the ISP is anything but continuous. Consider the
following examples:

4

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A user dials up his or her ISP and establishes a connection by transmitting user identification information that is then validated by the ISP. Depending upon the ISP, that validation exchange may utilize a user data base that is maintained locally (at the same physical location at which the ISP's modems are located) or remotely. If the latter, the ISP assembles and transmits a packet of data containing the user identification data to a remotely-located host, which responds by transmitting either an acceptance or a rejection message back to the ISP. If the validation is confirmed, a "home page" is transmitted over the Internet to the ISP and then on to the end user. Once that transmission is completed, however, and until some other transmission takes place, there is no data flowing across the ISP between the end user and the Internet; i.e., the connection terminates at the ISP. This condition persists while the user is reading the home page content and until he/she clicks on a link to access another page. The request (initiated by a mouse click or by typing an Internet address (a "URL") into an Internet browser) is then transmitted by the ISP up to a remote host via the Internet, which (presumably) will respond by downloading another page of text or graphics to the user. The only time that an actual connection between the end user and the remote host computer is in existence in which a continuous flow of data



....

1		signals is taking place is when data is actually being uploaded or
2		downloaded; at all other times, the end user's "call" terminates in all
3		relevant senses at the ISP's modem bank. Thus, as long as the ISP's local
4		service from the ALEC is obtained in a manner that makes calls from the end
5		user to the ISP's location "local," the call fully comports with and satisfies the
6		definition of "local" as contained in the interconnection agreement and as
7		conceded by Ms. Shiroishi.
8		
9	•	Even in those situations in which actual transmission of data is occurring, if
.0		the remote host is itself physically located in the same exchange or LATA, or
1		EAS exchange, as the end user, then the call is also "local" as defined in the
12		Interconnection Agreement. Thus, if an Internet user in Miami clicks on the
13		Miami Herald's web site (whose host server is also located in Miami), both
14		the call origination and termination are within the same exchange or LATA,
15		and the call satisfies the definition of "local."
16		
17	•	The end user places a PSTN call to his or her ISP and then enters a "chat
18		room" to converse with others who live in the same town (e.g., schoolmates)
19		Irrespective of where the physical switching function takes place, this type of
20		call is inherently "local" in nature, because both the origination and
21		termination locations are within the same exchange or LATA.

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22

i		in each of these examples, the point of origination and the point of termination of
2		the call (defined as the end user and the location on "the Internet" being
3		contacted) are both wholly within the same exchange or LATA; indeed, the only
4		situation in which a "cross-LATA" (i.e., "non-local" call, as defined by Ms.
5		Shiroishi), is in place is where data is actually flowing across the ISP and where
6		the remote host is not located within the same exchange or LATA as the end user.
7		Even then, not all such calls are "non-local." To avoid tying up long-haul circuit
8		bandwidth, ISPs utilize a technique known as "caching" in which the page of data
9		that is downloaded from a remote host web site is stored locally at the ISP; for
0		many popular web sites where repetitive accesses are made, the ISP can often
1		provide the contents to its subscribers right out of its own local storage device
2		rather than repetitively downloading it from the remote host each time it is
13		requested. In that case, a user's request for a particular page of data is not
14		transmitted upstream (and out of state), but is actually fulfilled locally using
15		"cached" copies of the requested material.
16		
17	Q.	Has the FCC recognized "caching" and its possible implications for determining
18		the jurisdictional character of Internet use?
19		
20	A.	Indeed, it has. At para. 18 of its Declaratory Ruling in CC Docket No. 96-98 and
21		Notice of Proposed Rulemaking in CC Docket No. 99-68 (FCC 99-38, Adopted
22		February 25, 1999, Released February 26, 1999), the FCC concluded that:

22

l		Further complicating the matter of identifying the geographical
2		destinations of Internet traffic is that the contents of popular websites
3		increasingly are being stored in multiple servers throughout the Internet,
4		based on "caching" or website "mirroring" techniques. After reviewing
5		the record, we conclude that, although some Internet traffic is intrastate, a
6		substantial portion of Internet traffic involves accessing interstate or
7		foreign websites.
8		
9		Footnotes omitted. I would note that, while the Commission concluded that a
0		"substantial" portion of Internet traffic is interstate, it did not quantify any specific
1		percentage.
12		
13	Q.	What fraction of total end user-ISP connection time actually involves a direct
14		flow-through of data between the end user and the remote host?
15		
16	A.	According to Mr. Goldstein, on average less than 10% of the total connection time
17		that an average end user has with the local ISP actually involves direct flow-
18		through of data between the end user and a remote host.
19		
20	Q.	But doesn't the FCC's Declaratory Ruling effectively classify all ISP-bound calls
21		as inherently interstate in nature?

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1	A.	No, it certainly does not. The Ruling merely holds that where a connection
2		between an end user and a remote host crosses state (or national) boundaries, the
3		jurisdictional character of the call is determined by the locations of those two end
4		points (i.e., the end user and the remote host) rather than by the location of the
5		ISP through which the end user obtains access to the Internet. If no through-
.6		connection involving an out-of-state host is in progress, or if the through-
7		connection involves a host that is situated within the same exchange or LATA as
8		the end user, then the call is inherently local, and nothing in the Declaratory
9		Ruling can change that fact. Indeed, the Declaratory Ruling, in the rulemaking
10		portion of the order, expressly seeks comment on the question of whether and
11		how to segregate interstate versus intrastate portions of ISP-bound calls.
12		
13	Q.	It would appear that Ms. Shiroishi does not agree. She states (at 8) that "ISP-
14		bound traffic is interstate. The FCC, in its recent Declaratory Ruling, clearly
15		stated it had always considered ISP-bound traffic to be interstate." Is her
16		portrayal of the FCC's position accurate?
17		
18	A.	No. In fact, in the specific language that she quotes from Paragraph 16 of the
19		Declaratory Ruling, the Commission states that "[i]n the MTS/WATS Market
20		Structure Order, for instance, the Commission concluded the ESPs are 'among a
21		variety of users of access service' in that they 'obtain local exchange services or
22		facilities which are used, in part or in whole, for the purpose of completing
23		interstate calls which transit its location and, commonly, another location in the

1	exchange area." Emphasis supplied. The Commission thus found that some
2	ESP/ISP traffic is interstate but, contrary to Ms. Shiroishi's contention, it never
3	found that all ISP-bound traffic is interstate. Indeed, in the context of access
4	services generally, interexchange carriers utilize the same access facilities to carry
5	both interstate and intrastate toll calls, and report the relative percentages of each
.6	to the ILEC as a basis for determining the applicability of interstate vs. intrastate
7	switched access rates. Access services may carry interstate traffic, but not all
8	traffic carried by access services is interstate. The same is true with respect to
9	ISP-bound calls: Under the FCC's "one-call" paradigm as adopted in the
10	Declaratory Ruling, the use of the ILEC's and ALEC's networks to establish a
11	connection between an end user and an ISP would be deemed to be jurisdic-
12	tionally interstate only while an interstate connection is actually taking place; at
13	all other times, the facility is being used entirely for local and/or intrastate traffic.
14	
15	Whether ISP-bound calls are local or interstate, BellSouth receives payments
16	from its end user customers for these calls, and avoids call termination costs
17	when the calls are handed off to an ALEC for completion.
18	
19	Q. At page 12 of her direct testimony, Ms. Shiroishi states that "[r]eciprocal compen-
20	sation was established in order to ensure that each carrier involved in carrying a
21	local call is compensated for its portion of that call." Do you agree?

1	Α.	Yes. As Ms. Shiroishi goes on to explain, "BellSouth receives a monthly fee
2		from its end user to apply towards the cost of that call. BellSouth would then pay
3		the ALEC a per minute of use rate to compensate the ALEC for terminating that
4		local call over its network." Shiroishi (BellSouth), at 12.
5		
.6	Q.	Does BellSouth in fact receive revenue from its end user subscribers for calls
7		placed by them to ISPs served by ALECs such as Global NAPs?
8		
9	A.	Yes. Ms. Shiroishi concedes (at 20) that BellSouth is compensated by its own
10		customers for such usage: "BellSouth currently serves residence customers in
11		Miami for \$10.65 per month (flat-rate local rate)." .That \$10.65 charge, however,
12		applies in addition to the monthly interstate Subscriber Line Charge (SLC) of
13		\$3.50 and PICC charge (paid by the customer's presubscribed interexchange
14		carrier) of \$1.04 or, if a second access line in the same residence, \$6.07 per
15		month for the SLC plus \$2.53 for the PICC, for a total of as much as \$19.25 in
16		monthly revenue. (A heavy Internet user of the type described in Ms. Shiroishi's
17		example would likely use an additional residential access line for this purpose, so
18		the \$19.25 in total monthly revenue would be the correct basis for comparison.)
19		For flat-rate business customers, BellSouth receives \$29.10 in basic service
20		revenue plus \$13.16 in SLC and PICC revenue, for a total of \$42.26. (BellSouth
21		also receives revenue from various other sources, including vertical service
22		features, intraLATA toll, and intrastate and interstate switched access charges paid

1		by interexchange carriers, all of which provide "contribution" toward the total cost
2		of the access line and associated usage.)
3		
4	Q.	But according to Ms. Shiroishi, the Company would be losing money on this
5		service if it is required to pay reciprocal compensation to Global NAPs. In her
6		example at page 20, she suggests that BellSouth would have to pay Global NAPs
7		\$15.04 per month, whereas it would receive only \$10.65 in usage revenue from its
8		own customer. Doesn't this argument demonstrate the inappropriateness of
9		requiring BellSouth to make reciprocal compensation payments to ALECs for ISP-
10		bound traffic?
11		
12	A.	No. First, as I have just noted, the \$10.65 figure advanced by Ms. Shiroishi
13		significantly understates the actual revenue that BellSouth receives from its flat-
14		rate residence customers. But even if her revenue figure were correct, all that this
15		"example" demonstrates is that BellSouth may have entered into what turned out
16		(after the fact) to have been a bad business decision for the Company, in connec-
17		tion with some of its customers. First, the reciprocal compensation rate itself
18		(\$.009 per minute in this case) was supposed to have been set on the basis of cost.
19		That is, the \$.009 per minute represents the cost that each participating LEC
20		(BellSouth and the interconnecting ALEC) incur in terminating local traffic, or
21		conversely avoid when someone else assumes responsibility for that function.
22		Assuming that the rate was properly set in relation to cost when the
23		Interconnection Agreement was initially established with DeltaCom in 1996, then

1	BellSouth would be incurring exactly the same \$15.04 in call termination cost for
2	the end user in Ms. Shiroishi's example irrespective of whether an ALEC or
3	BellSouth furnished service to the ISP that the end user is calling. That is, if a
4	residence customer spends a lot of time on-line connected to an ISP served by
5	BellSouth, then BellSouth itself incurs the switching costs which, at \$0.009 per
.6	minute, lead to the same \$15.04 call termination cost Ms. Shiroishi identifies. If
7	an ALEC serves the ISP, BellSouth avoids incurring the cost itself, but has to pay
8	it to the ALEC. This should be economically neutral to BellSouth.
9	
10	But Ms. Shiroishi's analysis is actually wrong for a more fundamental reason.
11	BellSouth collects the same \$10.65 in local usage charges from all of its flat-rate
12	Miami residence customers, including those who do not use their telephone
13	service to call ISPs. If, for example, a particular customer uses her telephone for
14	500 minutes per month for "ordinary" local (voice) calls, and if the call
15	termination cost incurred by BellSouth (whether it or an ALEC completes the call)
16	is the \$.009 established in the Interconnection Agreement, then BellSouth's cost
17	for that particular line would be only \$5.40 which, at the \$10.65 monthly rate,
18	would result in a net profit of \$5.15. The point here is that where a flat-rate
19	usage charge applies, there will be some customers whose usage falls below
20	average, and others whose usage is above average. In any event, if the particular
21	manner in which BellSouth prices its local exchange usage is the source of its
22	problem, then it can apply to the Commission for a change in rate level and/or
23	rate structure.

1		The bottom line, however, is that BellSouth is receiving revenue from its
2		customers for usage that is completed by ALECs (a fact that Ms. Shiroishi readily
3		admits), yet at the same time is arguing that it has no obligation to compensate
4		those ALECs for their participation in carrying this traffic. This outcome would
5		unjustly enrich BellSouth while denying ALECs compensation for services that
6		they are lawfully furnishing.
7		
8	Unl	ess BellSouth is required to make reciprocal compensation payments to
9	AL	ECs, ALECs will be forced to provide a service and incur costs for which they
10	will	receive no compensation.
11		
12	Q.	At page 23 of her testimony, Ms. Shiroishi states that "When a BellSouth end user
13		dials into the Internet through an ISP served by a [sic] ALEC, the ALEC is
14		compensated by the ISP. The ISP is compensated by the end user. BellSouth is
15		the only party involved in this traffic that is not receiving revenue for these calls."
16		Is Ms. Shiroishi correct in making these assertions?
17		
18	A.	Ms. Shiroishi is wrong on all three counts. First, the ALEC is not compensated
19		by the ISP for call transport and termination, because calls rated as "local" (which
20		these calls are expressly required to be under the FCC's frequently-reiterated ISP
21		access charge exemption) are handled on a "sent paid" basis (see my Direct
22		Testimony at 7-12). Thus, while the ISP will typically pay the ALEC for the

1	exchange access dial tone lines that terminate in its modem banks, it will not pay
2	for local usage, because that is the responsibility of the call originator.
3	
4	Second, Ms. Shiroishi claims that the ISP is compensated by the end user for its
5	local usage payments to the ALEC. Again, since the ISP does not pay the ALEC
.6	for receiving the incoming local calls, there are no ISP costs for this function that
7	are to be recovered from end users. More importantly, because calls originated by
8	the end user are in all instances sent-paid, the end user is already paying
9	BellSouth for the calls he or she places to the ISP, and there would be no basis
10	for the ISP to collect additional revenues from its end users for telephone charges
11	that they have already paid directly to the telephone company. In fact,
12	BellSouth's own web site admonishes its customers to be sure that the calls they
13	place to BellSouth.net are rated as local: "Before dialing any number, check with
14	your phone company to find out if you will incur any toll charges. BellSouth will
15	not reimburse customers for any long distance toll charges associated with
16	connecting to BellSouth.net service." (See Attachment 2 to my Direct
17	Testimony.)
18	
19	Finally, Ms. Shiroishi contends that "BellSouth is the only party involved in this
20	traffic that is not receiving revenue for these calls." This is, of course, a
21	remarkable claim, in light of her own testimony (at 20) that BellSouth in fact
22	receives flat-rate local usage revenue from customers who use BellSouth's service
23	to call ISPs served by ALECs (\$10.65 for Miami residence customers); indeed, it

1		is the ALEC that completes the call that will not be compensated if BellSouth is
2		permitted to escape its obligations to make reciprocal compensation payments.
3		
4	The	e possible presence of a disparity between the reciprocal compensation rate
5	and	the ALEC's costs for completing ISP-bound calls is not a basis for permitting
6	Bel	South to escape its obligations to compensate ALECs for the call termination
7	ser	vices that they provide.
8.		
9	Q.	At page 38 of his Direct Testimony, Mr. Albert Halprin claims that "[r]eciprocal
10		compensation for ISP Internet traffic leads to the recovery of many times the
11		actual costs ALECs incur to carry ISP Internet traffic that originates on
12		BellSouth's network." Assuming, for the moment that the reciprocal
13		compensation rate is "many times the actual costs ALECs incur to carry ISP
14		Internet traffic" as Mr. Halprin contends, is that a per se basis for denying such
15		payments to Global NAPs or other ALECs?
16		
17	A.	No, and for several reasons. Mr. Halprin states (at 38-39) that "[c]all set-up
18		represents a significant portion of the total costs a LEC incurs to terminate a call
19		that originates on another LEC's network. However, the per-minute reciprocal
20		compensation rate is the same for each minute of a call. The rate represents the
21		average of the call set-up and other costs over the duration of a call and is set on
22		the basis of the average duration of a call. Thus, on average, the terminating LEG

recovers its actual costs. But because the average Internet communication lasts

1	far longer than the average voice call, application of the reciprocal compensation
2	rate to such ISP-bound traffic will result in a significant over-recovery of the
3	ALEC's costs." Emphasis supplied.
4	
5	First, and as Mr. Halprin readily concedes, "on average, the terminating LEC
6	recovers its actual costs." In that regard, one must recognize that the \$.009 rate
7	was the result of an arm's length negotiation between BellSouth and an ALEC
8	(DeltaCom, in this case). Since the same rate was intended to apply for traffic
9	flows in either direction, it satisfied the classic "you cut, I choose/I cut, you
10	choose" type of negotiation process. At the time it entered into the contract,
11	BellSouth was (or should have been) fully aware of the fact that, as Mr. Halprin
12	now readily concedes (at 35), ALECs have a much greater ability than do ILECs
13	to specialize (through marketing emphasis) in particular types of customers, such
14	as ISPs.
15	
16	If that \$.009 rate were set too low relative to cost, then ALECs would be seeking
17	out high-volume call origination customers (such as telemarketers) because it
18	would be underpaying BellSouth for terminating that traffic; by contrast, if the
19	rate were set too high relative to cost, ALECs would be expected to seek out
20	high-volume call termination customers, because they would be compensated by
21	BellSouth at a rate that was above their own call termination cost. Putting ISPs
22	aside, these high-volume call termination customers could have included voice
23	mail service providers, pizza delivery services, taxicab dispatchers, and "call

centers" operated by government agencies and companies to receive and process	
inquiries from individuals, all of which would have been indisputably local call	
applications. Obviously, BellSouth had a strong incentive, in setting the specific	;
reciprocal compensation rate in the DeltaCom contract, to get it right, and Mr.	
Halprin himself appears to believe that in fact BellSouth did get it right, i.e., the	į
\$.009 rate assures that BellSouth will "on average recover[] its actual costs."	
If, in fact, BellSouth did not "get it right," that is a management error that was	
perhaps caused by a mis-assessment of the nature of the local telephone service	
market, but is in any event not a basis for allowing BellSouth to now renege on	
its contractual agreement. (It is also possible that BellSouth believed, at the time	ie
it negotiated the DeltaCom agreement, that it would actually be a net recipient of	of
terminating usage, and deliberately set the terminating usage charge in excess of	f
its own costs so as to extract monopoly rents from its ALEC rivals. Given that	
BellSouth is currently negotiating substantially lower reciprocal compensation ra	ate
levels in all new interconnection agreements, it would seem that this scenario m	ay
well have driven the DeltaCom negotiation. In that case, BellSouth acted based	ı
upon a serious error in judgment, apparently ignoring the potential impact of the	e
Internet upon the demand for local calling and the ability of ALECs to specialize	e.
in serving ISPs. The Commission should not now "bail out" BellSouth from th	e
business consequences of this management miscalculation.)	
Second, the very fact that the ALEC's call termination costs are lower than	
BellSouth's — thereby permitting the ALEC to realize a profit — cannot be a	



1		basis to abrogate or limit the reciprocal compensation agreement. In a
2		competitive local service market environment, it is expected that some providers
3		will be able to produce their service more efficiently than BellSouth; if that
4		entirely desirable outcome arises, the entrant should certainly not be penalized for
5		accomplishing something that the incumbent was not itself able to do.
6		
7	Q.	What about Mr. Halprin's contention that the reason that call termination costs for
8		ISP-bound traffic is lower than for ordinary voice calls is due to the relatively
9		long duration of these calls? If his facts are accurate, doesn't that suggest that the
10		use of a per-minute reciprocal compensation rate is not appropriate?
11		
12	A.	No, not at all. Mr. Halprin states that "because the average Internet
13		communication lasts far longer than the average voice call, application of the
14		reciprocal compensation rate to such ISP-bound traffic will result in a significant
15		over-recovery of the ALEC's costs." That the existing reciprocal compensation
16		rate has been established on a per-minute basis is merely the result of the
17		BellSouth/DeltaCom negotiation; there is no reason why the rate could not have
18		consisted of separate call set-up and call duration elements if in fact the long
19		duration property of ISP-bound calls would materially affect the ALEC's (as well
20		as the ILEC's) costs. Once again, however, that is not what is in the
21		Interconnection Agreement. If by relying solely upon a uniform per-minute
22		reciprocal compensation rate BellSouth made yet another error in judgment, that is
23		not a basis to permit it to escape its obligations under the terms of the Agreement.

1	In :	specifically allowing ALECs to "opt in" to an existing interconnection
2	agr	eement, the 1996 Act sought to assure that all ALECs are treated on an equal
3	and	nondiscriminatory basis by the incumbent LEC.
4		
5	Q.	BellSouth's witnesses also contend that ISP-bound calls are not covered by the
6		agreement between Global NAPs and BellSouth because BellSouth made clear
7		that it did not view them to be covered at the time that Global NAPs was opting
8		into the DeltaCom agreement. Is that position consonant with the non-
9		discrimination policies of the Telecommunications Act of 1996?
0		
1	A.	No. Obviously, the ultimate legal question of what the statute "means" is for
12		lawyers, not policy analysts. But from a policy perspective, it is clear that one of
13		the key concerns addressed by the 1996 federal Act is nondiscrimination. The
14		sections of the law dealing with ILEC-specific duties (mainly, the subsections of
15		Section 251(c)) repeatedly require that interconnection, unbundled elements, etc.,
16		be provided by ILECs on terms that are just, reasonable, and non-discriminatory.
17		State regulators may generally not reject agreements voluntarily entered into by
18		carriers, but must do so (under Section 252(e)(2)(A)(i)) if the voluntary agreement
19		discriminates against a carrier not a party to it.
20		
21		And, a key non-discrimination obligation in the law is Section 252(i). Section
22		252(i) lets any ALEC choose to operate under the same terms and conditions that
23		apply to any other ALEC. It would be completely inconsistent with that nondis-

1		crimination principle if ALEC #1 enters into a deal with BellSouth, approved by
2		the PSC, which imposes certain obligations on BellSouth, but then when ALEC
3		#2 "opts into" that same deal under Section 252(i), BellSouth's obligations to
4		ALEC #2 are somehow different from BellSouth's obligations to ALEC #1. That
5		approach would actually create discrimination between the two ALECs under the
.6		guise of a statutory provision whose plain purpose (at least from my non-legal
7		perspective — but based upon more than 30 years' experience in this industry) is
8		to prevent discrimination.
9		
10		So, while I will certainly leave to the lawyers the question of the "legal effect," if
11		any, of BellSouth's statements about ISP-bound calls at the time Global NAPs
12		opted into the DeltaCom agreement, from a public policy perspective it would be
13		a serious mistake to allow BellSouth to create discrimination among different
14		ALECs, each supposedly operating under the same agreement, simply by declaring
15		that it doesn't like what the agreement in question means with respect to the first
16		ALEC who obtained it.
17		
18	Q.	Does this conclude your rebuttal testimony?
19		
20	A.	Yes, it does.





ONE WASHINGTON MALL BOSTON, MASSACHUSETTS 02108-2617

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 991220-TP

In the Matter of: Global NAPS SOUTH, INC.

For Arbitration of Interconnection Rates, Terms and Conditions and Related Relief of Proposed Agreement with BellSouth Telecommunications, Inc. under the Telecommunications Act of 1996

> EXHIBIT LLS-3 LEE L. SELWYN MAY 1, 2000

Notice: This opinion is subject to formal revision before publication in the Federal Reporter or U.S.App.D.C. Reports. Users are requested to notify the Clerk of any formal errors in order that corrections may be made before the bound volumes go to press.

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 22, 1999

Decided March 24, 2000

No. 99-1094

BELL ATLANTIC TELEPHONE COMPANIES,
PETITIONER

V

Federal Communications Commission and United States of America, Respondents

Telecommunications Resellers Association, et al., Intervenors

Consolidated with 99–1095, 99–1097, 99–1106, 99–1126, 99–1134, 99–1136, 99–1145,

On Petitions for Review of a Declaratory Ruling of the Federal Communications Commission

Bills of costs must be filed within 14 days after entry of judgment. The court looks with disfavor upon motions to file bills of costs out of time.

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Mark L. Evans and Darryl M. Bradford argued the causes for petitioners. With them on the briefs were Thomas F. O'Neil, III, Adam H. Charnes, Mark B. Ehrlich, Donald B. Verrilli, Jr., Jodie L. Kelley, John J. Hamill, Emily M. Williams, Theodore Case Whitehouse, Thomas Jones, Albert H. Kramer, Andrew D. Lipman, Richard M. Rindler, Robert M. McDowell, Robert D. Vandiver, Cynthia Brown Miller, Charles C. Hunter, Catherine M. Hannan, Michael D. Hays, Laura H. Phillips, J. G. Harrington, William P. Barr, M. Edward Whelan, III, Michael K. Kellogg, Michael E. Glover, Robert B. McKenna, William T. Lake, John H. Harwood, II, Jonathan J. Frankel, Robert Sutherland, William B. Barfield, Theodore A. Livingston and John E. Muench. Maureen F. Del Duca, Lynn R. Charytan, Gail L. Polivy, John F. Raposa and Laurence W. Katz entered appearances.

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Robert J. Aamoth, Ellen S. Levine, Charles D. Gruy, James B. Ramsay, Jonathan J. Nadler, David A. Gross, Curtis T. White, Edward Huyes, Jr., and David M. Janas entered appearances for intervenors

Before: WILLIAMS, SENTELLE and RANDOLPH, Circuit Judges.

Opinion for the Court filed by Circuit Judge WILLIAMS.

WILLIAMS, Circuit Judge: The Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, 47 U.S.C. §§ 151-714, requires local exchange carriers ("LECs") to "establish reciprocal compensation arrangements for the transport and termination of telecommunications." Id. § 251(b)(5). When LECs collaborate to complete a call, this provision ensures compensation both for the originating LEC, which receives payment from the end-user, and for the recipient's LEC. By regulation the Commission has limited the scope of the reciprocal compensation requirement to "local telecommunications traffic." 47 CFR § 51.701(a). In the ruling under review, it considered whether calls to internet service providers ("ISPs") within the caller's local calling area are themselves "local." In doing so it applied its so-called "end-to-end" analysis, noting that the communication characteristically will ultimately (if indirectly) extend beyond the ISP to websites out-of-state and around the world. Accordingly it found the calls non-local. See In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Intercarrier Compensation for ISP-Bound Traffic, 14 FCC Red 8689, 3690 (¶1) (1999) ("FCC Ruling").

Having thus taken the calls to ISPs out of § 251(b)(5)'s provision for "reciprocal compensation" (as it interpreted it), the Commission could nonetheless itself have set rates for such calls, but it elected not to. In a Notice of Proposed Rulemaking, CC Docket 99–68, the Commission tentatively concluded that "a negotiation process, driven by market forces, is more likely to lead to efficient outcomes than are rates set by regulation," FCC Ruling, 14 FCC Rcd at 3707 (¶ 29), but for the nonce it left open the matter of implementing a system of federal controls. It observed that in the

meantime parties may voluntarily include reciprocal compensation provisions in their interconnection agreements, and that state commissions, which have authority to arbitrate disputes over such agreements, can construe the agreements as requiring such compensation; indeed, even when the agreements of interconnecting LECs include no linguistic hook for such a requirement, the commissions can find that reciprocal compensation is appropriate. FCC Ruling, 14 FCC Red at \$703-05 (¶24-25); see § 251(b)(1) (establishing such authority). "[A]ny such arbitration," it added, "must be consistent with governing federal law." FCC Ruling, 14 FCC Red at \$705 (¶25).

This outcome left at least two unhappy groups. One, led by Bell Atlantic, consists of incumbent LECs (the "incumbents"). Quite content with the Commission's finding of § 251(b)(5)'s inapplicability, the incumbents objected to its conclusion that in the absence of federal regulation state commissions have the authority to impose reciprocal compensation. Although the Commission's new rulemaking on the subject may eventuate in a rule that preempts the states' authority, the incumbents object to being left at the mercy of state commissions until that (hypothetical) time, arguing that the commissions have mandated exorbitant compensation. In particular, the incumbents, who are paid a flat monthly fee, have generally been forced to provide compensation for internet calls on a per-minute basis. Given the average length of such calls the cost can be substantial, and since ISPs do not make outgoing calls, this compensation is hardly "reciprocal."

Another group, led by MCI WorldCom, consists of firms that are seeking to compete with the incumbent LECs and which provide local exchange telecommunications services to ISPs (the "competitors"). These firms, which stand to receive reciprocal compensation on ISP-bound calls, petitioned for review with the complaint that the Commission erred in finding that the calls weren't covered by § 251(b)(5).

The end-to-end analysis applied by the Commission here is one that it has traditionally used to determine whether a call is within its interstate jurisdiction. Here it used the analysis for quite a different purpose, without explaining why such an extension made sense in terms of the statute or the Commis-

sion's own regulations. Because of this gap, we vacate the ruling and remand the case for want of reasoned decision-making.

* * :

In February 1996 Congress passed the Telecommunications Act of 1996 (the "1996 Act" or the "Act"), stating an intent to open local telephone markets to competition. See H.R. Conf. Rep. No. 104–458, at 113 (1996). Whereas before local exchange carriers generally had state-licensed monopolies in each local service area, the 1996 Act set out to ensure that "[s]tates may no longer enforce laws that impede[] competition," and subjected incumbent LECs "to a host of duties intended to facilitate market entry." AT&T Corp. v. Iowa Utils. Bd., 119 S. Ct. 721, 726 (1999).

Among the duties of incumbent LECs is to "provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network ... for the transmission and routing of telephone exchange service and exchange access." 47 U.S.C. § 251(c)(2). ("Telephone exchange service" and "exchange access" are words of art to which we shall later return.) Competitor LECs have sprung into being as a result, and their customers call, and receive calls from, customers of the incumbents.

We have already noted that § 251(b)(5) of the Act establishes the duty among local exchange carriers "to establish reciprocal compensation arrangements for the transport and termination of telecommunications." 47 U.S.C. § 251(b)(5). Thus, when a customer of LEC A calls a customer of LEC B, LEC A must pay LEC B for completing the call, a cost usually paid on a per-minute basis. Although § 251(b)(5) purports to extend reciprocal compensation to all "telecommunications," the Commission has construed the reciprocal compensation requirement as limited to local traffic. See 47 CFR § 51.701(a) ("The provisions of this subpart apply to reciprocal compensation for transport and termination of local telecommunications traffic between LECs and other telecom-

munications carriers."). LECs that originate or terminate long-distance calls continue to be compensated with "access charges," as they were before the 1996 Act. Unlike reciprocal compensation, these access charges are not paid by the originating LEC. Instead, the long-distance carrier itself pays both the LEC that originates the call and links the caller to the long distance network, and the LEC that terminates the call. See In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Red 15499, 16013 (¶ 1034) (1996) ("Local Competition Order").

The present case took the Commission beyond these traditional telephone service boundaries. The internet is "an international network of interconnected computers that enables millions of people to communicate with one another in 'cyberspace' and to access vast amounts of information from around the world." Reno v. ACLU, 521 U.S. 844, 844 (1997). Unlike the conventional "circuit-switched network," which uses a single end-to-end path for each transmission, the internet is a "distributed packet-switched network, which means that information is split up into small chunks or 'packets' that are individually routed through the most efficient path to their destination." In the Matter of Federal-State Joint Board on Universal Service, 13 FCC Red 11501, 11532 (¶ 64) (1998) ("Universal Service Report"). ISPs are entities that allow their customers access to the internet. Such a customer, an "end user" of the telephone system, will use a computer and modem to place a call to the ISP server in his local calling area. He will usually pay a flat monthly fee to the ISP (above the flat fee already paid to his LEC for use of the local exchange network). The ISP "typically purchases business lines from a LEC, for which it pays a flat monthly fee that allows unlimited incoming calls." FCC Ruling, 14 FCC Rcd at 3691 (¶ 4).

In the ruling now under review, the Commission concluded that § 251(b)(5) does not impose reciprocal compensation requirements on incumbent LECs for ISP-bound traffic. FCC Ruling, 14 FCC Red at 3690 (11). Faced with the question whether such traffic is "local" for purposes of its

regulation limiting § 251(b)(5) reciprocal compensation to local traffic, the Commission used the "end-to-end" analysis that it has traditionally used for jurisdictional purposes to determine whether particular traffic is interstate. Under this method, it has focused on "the end points of the communication and consistently has rejected attempts to divide communications at any intermediate points of switching or exchanges between carriers." FCC Ruling, 14 FCC Rcd at 3695 (¶ 10). We save for later an analysis of the various FCC precedents on which the Commission purported to rely in choosing this mode of analysis.

Before actually applying that analysis, the Commission brushed aside a statutory argument of the competitor LECs. They argued that ISP-bound traffic must be either "telephone exchange service," as defined in 47 U.S.C. § 153(47), or "exchange access," as defined in § 153(16).\(^1\) It could not be the latter, they reasoned, because ISPs do not assess toll charges for the service (see id., "the offering of access ... for the purpose of the origination or termination of telephone toll services"), and therefore it must be the former, for which reciprocal compensation is mandated. Here the Commission's answer was that it has consistently treated ISPs (and ESPs generally) as "users of access service," while treating them as end users merely for access charge purposes. FCC Ruling, 14 FCC Rcd at 3701 (¶17).

[&]quot;Telephone exchange service" is defined as:

⁽A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service.

⁴⁷ U.S.C. § 153(47). "Exchange access" is defined as: the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services.

Id. § 153(16).

Having decided to use the "end-to-end" method, the Commission considered whether ISP-bound traffic is, under this method, in fact interstate. In a conventional "circuit-switched network," the jurisdictional analysis is straightforward: a call is intrastate if, and only if, it originates and terminates in the same state. In a "packet-switched network," the analysis is not so simple, as "[a]n Internet communication does not necessarily have a point of 'termination' in the traditional sense." FCC Ruling, 14 FCC Red at 8701-02 (¶ 18). In a single session an end user may communicate with multiple destination points, either sequentially or simultaneously. Although these destinations are sometimes intrastate, the Commission concluded that "a substantial portion of Internet traffic involves accessing interstate or foreign websites." Id. Thus reciprocal compensation was not due, and the issue of compensation between the two local LECs was left initially to the LECs involved, subject to state commissions' power to order compensation in the "arbitration" proceedings, and, of course to whatever may follow from the Commission's new rulemaking on its own possible ratesetting.

The issue at the heart of this case is whether a call to an ISP is local or long-distance. Neither category fits clearly. The Commission has described local calls, on the one hand, as those in which LECs collaborate to complete a call and are compensated for their respective roles in completing the call, and long-distance calls, on the other, as those in which the LECs collaborate with a long-distance carrier, which itself charges the end-user and pays out compensation to the LECs. See Local Competition Order, 11 FCC Rcd at 16018 (¶ 1084) (1996).

Calls to ISPs are not quite local, because there is some communication taking place between the ISP and out-of-state websites. But they are not quite long-distance, because the subsequent communication is not really a continuation, in the conventional sense, of the initial call to the ISP. The Commission's ruling rests squarely on its decision to employ an

end-to-end analysis for purposes of determining whether ISP-traffic is local. There is no dispute that the Commission has historically been justified in relying on this method when determining whether a particular communication is jurisdictionally interstate. But it has yet to provide an explanation why this inquiry is relevant to discerning whether a call to an ISP should fit within the local call model of two collaborating LECs or the long-distance model of a long-distance carrier collaborating with two LECs.

In fact, the extension of "end-to-end" analysis from jurisdictional purposes to the present context yields intuitively backwards results. Calls that are jurisdictionally intrastate will be subject to the federal reciprocal compensation requirement, while calls that are interstate are not subject to federal regulation but instead are left to potential state regulation. The inconsistency is not necessarily fatal, since under the 1996 Act the Commission has jurisdiction to implement such provisions as § 251, even if they are within the traditional domain of the states. See AT&T Corp., 119 S. Ct. at 730. But it reveals that arguments supporting use of the end-to-end analysis in the jurisdictional analysis are not obviously transferable to this context.

In attacking the Commission's classification of ISP-bound calls as non-local for purposes of reciprocal compensation, MCI WorldCom notes that under 47 CFR § 51.701(b)(1) "telecommunications traffic" is local if it "originates and terminates within a local service area." But, observes MCI WorldCom, the Commission failed to apply, or even to mention, its definition of "termination," namely "the switching of traffic that is subject to section 251(b)(5) at the terminating carrier's end office switch (or equivalent facility) and delivery of that traffic from that switch to the called party's premises." Local Competition Order, 11 FCC Rcd at 16015 (\$1040); 47 CFR § 51.701(d). Calls to ISPs appear to fit this definition: the traffic is switched by the LEC whose customer is the ISP and then delivered to the ISP, which is clearly the "called party."

In its ruling the Commission avoided this result by analyzing the communication on an end-to-end basis: "[T]he communications at issue here do not terminate at the ISP's local server ..., but continue to the ultimate destination or destinations." FCC Ruling, 14 FCC Red at 3697 (§ 12). But the cases it relied on for using this analysis are not on point. Both involved a single continuous communication, originated by an end-user, switched by a long-distance communications carrier, and eventually delivered to its destination. One, Teleconnect Co. v. Bell Telephone Co., 10 FCC Rcd 1626 (1995), aff'd sub nom. Southwestern Bell Tel. Co. v. FCC, 116 F.3d 593 (D.C. Cir. 1997) ("Teleconnect"), involved an 800 call to a long-distance carrier, which then routed the call to its intended recipient. The other, In the Matter of Petition for Emergency Relief and Declaratory Ruling Filed by the Bell-South Corporation, 7 FCC Red 1619 (1992), considered a voice mail service. Part of the service, the forwarding of the call from the intended recipient's location to the voice mail apparatus and service, occurred entirely within the subscriber's state, and thus looked local. Looking "end-to-end," however, the Commission refused to focus on this portion of the call but rather considered the service in its entirety (i.e., originating with the out-of-state caller leaving a message, or the subscriber calling from out-of-state to retrieve messages). Id. at 1621 (¶ 12).

ISPs, in contrast, are "information service providers," Universal Service Report, 18 FCC Red at 11532-33 (\$\\$66\$), which upon receiving a call originate further communications to deliver and retrieve information to and from distant websites. The Commission acknowledged in a footnote that the cases it relied upon were distinguishable, but dismissed the problem out-of-hand: "Although the cited cases involve interexchange carriers rather than ISPs, and the Commission has observed that "it is not clear that [information service providers] use the public switched network in a manner analogous to IXCs," Access Charge Reform Order, 12 FCC Red at 16133, the Commission's observation does not affect the jurisdictional analysis." FCC Ruling, 14 FCC Red at \$697 n.36 (\$\\$12). It is not clear how this helps the Commission. Even if the difference between ISPs and traditional long-distance carriers

is irrelevant for jurisdictional purposes, it appears relevant for purposes of reciprocal compensation. Although ISPs use telecommunications to provide information service, they are not themselves telecommunications providers (as are longdistance carriers).

In this regard an ISP appears, as MCI WorldCom argued, no different from many businesses, such as "pizza delivery firms, travel reservation agencies, credit card verification firms, or taxicab companies," which use a variety of communication services to provide their goods or services to their customers. Comments of WorldCom, Inc. at 7 (July 17, 1997). Of course, the ISP's origination of telecommunications as a result of the user's call is instantaneous (although perhaps no more so than a credit card verification system or a bank account information service). But this does not imply that the original communication does not "terminate" at the ISP. The Commission has not satisfactorily explained why an ISP is not, for purposes of reciprocal compensation, "simply a communications-intensive business end user selling a product to other consumer and business end-users." Id.

The Commission nevertheless argues that although the call from the ISP to an out-of-state website is information service for the end-user, it is telecommunications for the ISP, and thus the telecommunications cannot be said to "terminate" at the ISP. As the Commission states: "Even if, from the perspective of the end user as customer, the telecommunications portion of an Internet call 'terminates' at the ISP's server (and information service begins), the remaining portion of the call would continue to constitute telecommunications from the perspective of the ISP as customer." Commission's Br. at 41. Once again, however, the mere fact that the ISP originates further telecommunications does not imply that the original telecommunication does not "terminate" at the ISP. However sound the end-to-end analysis may be for jurisdictional purposes, the Commission has not explained why viewing these linked telecommunications as continuous works for purposes of reciprocal compensation.

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Adding further confusion is a series of Commission rulings dealing with a class, enhanced service providers ("ESPs"), of which ISPs are a subclass. See FCC Ruling, 14 FCC Rcd at 3689 n.1 (¶1). ESPs, the precursors to the 1996 Act's information service providers, offer data processing services, linking customers and computers via the telephone network. See MCI Telecommunications Corp. v. FCC, 57 F.3d 1136, 1138 (D.C. Cir. 1995).2 In its establishment of the access charge system for long-distance calls, the Commission in 1983 exempted ESPs from the access charge system, thus in effect treating them like end users rather than long-distance carriers. See In the Matter of MTS & WATS Market Structure, 97 F.C.C.2d 682, 711-15 (¶77-83) (1983). It reaffirmed this decision in 1991, explaining that it had "refrained from applying full access charges to ESPs out of concern that the industry has continued to be affected by a number of significant, potentially disruptive, and rapidly changing circumstances." In the Matter of Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture, 6 FCC Rcd 4524, 4584 (¶ 54) (1991). In 1997 it again preserved the status quo. In the Matter of Access Charge Reform, 12 FCC Red 15982 (1997) ("Access Charge Reform Order"). It justified the exemption in terms of the goals of the 1996 Act, saying that its purpose was to "preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services." Id. at 16133 (¶344) (quoting 47 U.S.C. § 230(b)(2)).

This classification of ESPs is something of an embarrassment to the Commission's present ruling. As MCI World-Com notes, the Commission acknowledged in the Access Charge Reform Order that "given the evolution in [information service provider] technologies and markets since we first

The regulatory definition states that ESPs offer "services ... which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information." 47 CFR § 64.702(a).

established access charges in the early 1980s, it is not clear that [information service providers] use the public switched network in a manner analogous to IXCs [inter-exchange carriers]." 12 FCC Rcd at 16133 (¶ 345). It also referred to calls to information service providers as "local." Id. at 16132 (§ 342 n.502). And when this aspect of the Access Charge Reform Order was challenged in the 8th Circuit, the Commission's briefwriters responded with a sharp differentiation between such calls and ordinary long-distance calls covered by the "end-to-end" analysis, and even used the analogy employed by MCI WorldCom here—that a call to an information service provider is really like a call to a local business that then uses the telephone to order wares to meet the need. Brief of FCC at 76, Southwestern Bell v. FCC, 153 F.3d 523 (8th Cir. 1998) (No. 97-2618). When accused of inconsistency in the present matter, the Commission flipped the argument on its head, arguing that its exemption of ESPs from access charges actually confirms "its understanding that ESPs in fact use interstate access service; otherwise, the exemption would not be necessary." FCC Ruling, 14 FCC Rcd at 3700 (§ 16). This is not very compelling. Although, to be sure, the Commission used policy arguments to justify the "exemption," it also rested it on an acknowledgment of the real differences between long-distance calls and calls to information service providers. It is obscure why those have now dropped out of the picture.

Because the Commission has not supplied a real explanation for its decision to treat end-to-end analysis as controlling, Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); 5 U.S.C. § 706(2)(A), we must vacate the ruling and remand the case.

There is an independent ground requiring remand—the fit of the present rule within the governing statute. MCI WorldCom says that ISP-traffic is "telephone exchange service[]" as defined in 47 U.S.C. § 158(16), which it claims "is synonymous under the Act with the service used to make local phone calls," and emphatically not "exchange access" as defined in 47 U.S.C. § 158(47). Petitioner MCI WorldCom's Initial Br. at 22. In the only paragraph of the ruling in which the Commission addressed this issue, it merely stated that it

"consistently has characterized ESPs as 'users of access service' but has treated them as end users for pricing purposes." FCC Ruling, 14 FCC Rcd at 3701 (¶17). In a statutory world of "telephone exchange service" and "exchange access," which the Commission here says constitute the only possibilities, the reference to "access service," combining the different key words from the two terms before us, sheds no light. "Access service" is in fact a pre-Act term, defined as "services and facilities provided for the origination or termination of any interstate or foreign telecommunication." 47 CFR § 69.2(b).

If the Commission meant to place ISP-traffic within a third category, not "telephone exchange service" and not "exchange access," that would conflict with its concession on appeal that "exchange access" and "telephone exchange service" occupy the field. But if it meant that just as ESPs were "users of access service" but treated as end users for pricing purposes, so too ISPs are users of exchange access, the Commission has not provided a satisfactory explanation why this is the case. In fact, in In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, 11 FCC Rcd 21905, 22023 (¶ 248) (1996), the Commission clearly stated that "ISPs do not use exchange access." After oral argument in this case the Commission overruled this determination, saying that "non-carriers may be purchasers of those services." In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, FCC 99-418, at 21 (¶ 43) (Dec. 23, 1999). The Commission relied on its pre-Act orders in which it had determined that non-carriers can use "access services," and concluded that there is no evidence that Congress, in codifying "exchange access," intended to depart from this understanding. See id. at 21-22 (¶ 44). The Commission, however, did not make this argument in the ruling under review.

Nor did the Commission even consider how regarding noncarriers as purchasers of "exchange access" fits with the statutory definition of that term. A call is "exchange access" if offered "for the purpose of the origination or termination of telephone toll services." 47 U.S.C. § 153(16). As MCI WorldCom argued, ISPs provide information service rather than telecommunications; as such, "ISPs connect to the local network 'for the purpose of providing information services, not originating or terminating telephone toll services." Petitioner MCI WorldCom's Reply Br. at 6.

The statute appears ambiguous as to whether calls to ISPs fit within "exchange access" or "telephone exchange service," and on that view any agency interpretation would be subject to judicial deference. See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842-43 (1984). But, even though we review the agency's interpretation only for reasonableness where Congress has not resolved the issue, where a decision "is valid only as a determination of policy or judgment which the agency alone is authorized to make and which it has not made, a judicial judgment cannot be made to do service." SEC v. Chenery Corp., 318 U.S. 80, 88 (1943). See also Acme Die Casting v. NLRB, 26 F.3d 162, 166 (D.C. Cir. 1994); Leeco, Inc. v. Hays, 965 F.2d 1081, 1085 (D.C. Cir. 1992); City of Kansas City v. Department of Housing and Urban Development, 923 F.2d 188, 191-92 (D.C. Cir. 1991).

Because the Commission has not provided a satisfactory explanation why LECs that terminate calls to ISPs are not properly seen as "terminat[ing]...local telecommunications traffic," and why such traffic is "exchange access" rather than "telephone exchange service," we vacate the ruling and remand the case to the Commission. We do not reach the objections of the incumbent LECs—that § 251(b)(5) preempts state commission authority to compel payments to the competitor LECs; at present we have no adequately explained classification of these communications, and in the interim our vacatur of the Commission's ruling leaves the incumbents free to seek relief from state-authorized compensation that they believe to be wrongfully imposed.

So ordered.