Sprint

3100 Cumberland Circle
Atlanta, GA 30339
Telephone: (404) 649-6788
Fax: (404) 649-5174
Mailstop: GAATLN0802

Carolyn Tatum Roddy
Attorney, State Regulatory

March 26, 1998

VIA FEDERAL EXPRESS
Mr. David Waddell
Executive Director
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243-0505

RE: BellSouth Telecommunications, Inc.'s Entry Into Long Distance (InterLATA) Service in Tennessee Pursuant to Section 271 of the Telecommunications Act of 1996
Docket No. 97-00309

Dear Mr. Waddell:

Please find enclosed for filing the original and thirteen (13) copies of Direct Testimony of David Stahly in the above-captioned matter.

An extra copy of this transmittal letter is included which I would ask that you please date stamp and return to me for my files in the enclosed self-addressed, stamped envelope .

Thank you for your cooperation in this matter.

Sincerely,

Carolyn Tatum Roddy

Carolyn Tatum Roddy

CTR/de
Enclosures
cc: Parties of Record

BEFORE THE

TENNESSEE REGULATORY AUTHORITY

In Re:

BellSouth Telecommunications, Inc.'s Entry Into Long Distance (interLATA) Service in Tennessee Pursuant to Section 271 of the Telecommunications Act of 1996	))))	Docket No. 97-00309

DIRECT TESTIMONY OF DAVID E. STAHLY

ON BEHALF OF

SPRINT COMMUNICATIONS COMPANY L.P.

March 27, 1998

INTRODUCTION

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

A. My name is David E. Stahly. I am employed by Sprint Communications Company L.P. ("Sprint") as a Manager of Regulatory Policy. My business address is 8140 Ward Parkway, Kansas City, Missouri 64114.

Q. Please describe your educational background, work experience and present responsibilities.

A. I received a Master of Arts degree in Public Policy from the University of Chicago in 1987 and Bachelor of Arts degree in economics from Brigham Young University in 1985.

I began working for Sprint Communications Company L.P. in 1994 as a manager of regulatory access planning. In that position, I represented Sprint before state and federal regulatory commissions regarding the costing and pricing of switched and special access and negotiated access pricing and rate structures with the Local Exchange Carriers ("LECs").

Prior to joining Sprint Communications Company L.P., I was employed by Sprint Corporation's local telephone affiliate, Sprint-United North Central ("UNC") from 1990 to 1994. In that capacity, I was responsible for costing and pricing switched and special access services as well as local service product offerings. While at UNC, I also conducted competitive analyses of potential new entrants. Prior to joining Sprint, I worked for the Illinois Commerce Commission as an Executive Assistant to the Commissioners from 1986 to 1990. In that capacity, I provided financial and economic analyses of cost studies and other issues for telecommunications, gas and electric utilities and assisted in the preparation of orders and opinions.

My current responsibilities include the development of Sprint's regulatory policy focusing on issues surrounding competitive market entry such as TELRIC costing of unbundled network elements, universal service, access charges, and Section 271. In the development of such policy, I am responsible for coordinating with representatives of Sprint's local business units to ensure consistency within Sprint. I have filed testimony and/or testified before regulatory commissions in several states including Alabama, Arkansas, Colorado, Florida, Georgia, Indiana, Kansas, Kentucky, Louisiana, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, and Washington.

SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. My testimony addresses the public interest aspect of BellSouth Telecommunications, Inc.'s ("BellSouth") Section 271 filing. Sprint does not believe BellSouth meets the public interest test required for granting this application. I am concerned from a public interest perspective that if BellSouth is permitted to enter the long distance market prior to the development of effective local exchange competition and before BellSouth's intrastate switched access rates are at Total Element Long-Run Incremental Cost ("TELRIC") levels, long distance competition will be irreparably harmed. I provide evidence that rebuts BellSouth's assertion that the long distance market is not competitive. Furthermore, I also show that BellSouth's claim that BellSouth's entry into long distance will provide societal benefits is not credible. Finally, I present a discussion and give examples of the competitive harm that could occur if BellSouth is allowed to enter the in-region interLATA market at this time.

Sprint witness Melissa Closz addresses the Interconnection/OSS aspects of local entry. While effective interconnection rules, including a working OSS, are a necessary condition for granting BellSouth's Section 271 application, they are not

sufficient by themselves. My testimony addresses the other crucial aspect, whether approval of BellSouth's 271 application is in the public interest. I find it is not.

Q. Please summarize your testimony.

A. BellSouth claims its entry into the long distance market is in the public interest; however, BellSouth's assertion is based on the invalid assumption that the long distance market is currently not competitive. By any reasonable measure, long distance is competitive, viewed both in terms of declining prices and constantly improving product enhancements. BellSouth's analysis of the state of competition is flawed in several ways. BellSouth claims that its entry into long distance will yield a 25% reduction in toll prices and tremendous gains in Tennessee income. These claims are without merit. In fact, based on BellSouth's intraLATA pricing performance, consumer long distance prices could increase in Tennessee with BellSouth entry. Of great concern is the potential for BellSouth to leverage its control over nearly 100% of its switched access minutes within its franchised territory (which comprises at least 80% of all switched access minutes in the State of Tennessee) to force its long distance competitors out of the market via a price squeeze. My primary conclusion is that the Authority should deny BellSouth's request for Section 271 authority to provide in-region interLATA services until local exchange service is competitive and BellSouth reduces its intrastate access rates to TELRIC levels.

Based on BellSouth's application, which indicates that there is virtually no local competition in Tennessee today, it would be a mistake to relinquish the Section 271 lever. If Section 271 authorization is granted before we are confident that the required BellSouth cooperation for local interconnection is indeed forthcoming and will continue, the strong incentives for BellSouth cooperation created by the Section 271 process will be lost, and the emergence of local competition will be

undermined. This situation would be difficult to rectify. Once BellSouth is allowed into the long distance market, revocation of a grant of in-region long distance authority would be virtually impossible to reverse. If local competition fails to develop, BellSouth will maintain its monopoly position in switched access and be able to leverage that advantage in its in-region long distance market. Conversely, if Section 271 approval is deferred until local competition develops and we are certain BellSouth can not engage in a price squeeze based on its monopoly position in the provisioning of switched access, such approval can then be granted quickly. Thus, uncertainty favors erring on the side of caution and withholding Section 271 approval until local market (and access) competition on a commercial scale has been clearly demonstrated.

Q. What two questions and corresponding observations best support your position that BellSouth should not be allowed into the in-region interLATA market at this time?

A. Since the passage of the Telecommunications Act ("the Act") in February 1996, BellSouth has had authority to enter the interLATA long distance market in the 41 states outside of its territory as well as authority to operate as a CLEC and enter local markets outside of its territory. The first question that requires an answer is: "If long distance service, even on a "resold" basis, is as profitable as BellSouth claims, then why hasn't BellSouth been providing interLATA long distance service in the 41 states outside of its territory since February 1996?" Outside of its territory, BellSouth must pay the same above cost access charges as its IXC competitors and likely realizes that long distance may not turn out to be as profitable as it alleges. Hence, by its apparent reluctance to enter the out-of-region market, it appears that BellSouth is conceding that it has a huge access cost advantage within its region, which it intends to leverage when it enters the in-region long distance market.

The second question that needs to be answered is: "If it is as easy and profitable for a CLEC to enter the local market as BellSouth claims it is, why hasn't BellSouth negotiated interconnection agreements with other BOCs, such as Bell Atlantic, and started providing competing local service in markets such as New York City?" I suspect that BellSouth understands the enormous advantage that an incumbent BOC holds over new entrants and does not want to be on the CLEC side of the table trying to negotiate reasonable UNE prices and fair terms for interconnection and rebundling. BellSouth also likely understands the enormous complexity and resources required to start a CLEC and may not likely fare much better than other CLECs when operating outside of its monopoly base. Exhibit DES-1 includes a list of questions that the authority may find helpful in accessing BellSouth's efforts over the past two years to provide long distance service and CLEC services outside of its nine state region.

RELEVANT FACTORS FOR ANALYZING BELLSOUTH'S SECTION 271 APPLICATION

Q. What does the Telecommunications Act state in connection with interLATA authority and the public interest?

A. Specifically, Section 271(d)(3)(C) states that public utility commissions must find "the requested authorization is consistent with the public interest, convenience, and necessity." Thus, the Act is clear that it is not enough for the Authority to find that the BOC has met the requirements of the competitive checklist found in Section 271(c)(2)(B). BOC entry into in-region long distance must also be in the public interest. Given BellSouth's current monopoly control over its above-cost switched access rates within its region and the lack of competitive alternatives in the local market, it is my opinion that allowing BellSouth into the in-region long distance market at this time will harm the public interest.

Q. What factors should be considered when analyzing BellSouth's Section 271 application?

A. There are five major areas of focus that the Authority should consider when analyzing BellSouth's application to provide interLATA service within its franchise territory. Ultimately, determining whether in-region interLATA authorization for BellSouth would be consistent with the public interest, convenience, and necessity turns on these five factors:

(1) The overwhelming majority of consumers in Tennessee have no choice of local service provider;

(2) BellSouth's allegations that long distance is not competitive today are incorrect;

(3) BellSouth greatly overstates the benefit to consumers and the Tennessee economy of its participation in the in-region interLATA market;

(4) The potential for anti-competitive behavior by BellSouth far outweighs any minimal benefit its provisioning of in-region long distance service would generate; and

(5) Several conditions that should exist as a pre-requisite to BellSouth being allowed into the interLATA market within its region have not yet been met.

(1) The Overwhelming Majority Of Consumers In Tennessee Have No Choice Of Local Service Providers.

Q. How pervasive is local competition in Tennessee?

A. Based on the direct testimony filed by Mr. Varner in this docket, local competition in Tennessee is clearly still in its nascent stages. Of the more than 2.5 million access lines that BellSouth controls in Tennessee, Mr. Varner cites that only 2,000 (8/100ths of 1%) are provided by a CLEC (MCImetro) on a facilities basis.

Additionally, Varner claims that MCImetro provides service through resale to approximately 100 residential customers (4/1,000ths of 1%). Thus, out of a total of the more than 2.5 million local lines BellSouth controls in Tennessee, CLECs may only be serving a mere 2,100 lines.[1] Had BellSouth lost noticeable or significant market share to CLECs, it seems reasonable that Mr. Varner would provide BellSouth's declining market share percentages as evidence of local competition in Tennessee. Presently, BellSouth's market share loss appears to be virtually imperceptible. Such anemic levels of local competition in Tennessee's major metropolitan areas indicate that local competition may not yet be fully enabled in BellSouth's territory.

Q. Why is the expansion of consumer choice in local markets important?

A. Our experience in long-distance markets indicates that the introduction of competition into local exchange markets will generate substantial consumer benefits in the form of new services and lower prices. However, in Tennessee, BellSouth continues to maintain a virtual monopoly over the provisioning of local service within its territory.

On page seven of his direct testimony in this proceeding, Mr. Taylor says that long distance competition is "far from being fully effective" but can be remedied by BOC entry. While Taylor's desire to increase competition for the benefit of consumers is admirable, his focus is 180 degrees off base. One must wonder why he focuses on seeking to increase the level of competition in an intensely competitive long distance market where the former monopolist has lost 45% of its market share, when local market consumers could benefit from a competitive choice to the monopoly BOC which retains nearly 100% of the local market share. It would be far more interesting to see Mr. Taylor turn his attention to

[1] It is possible that CLEC serve more lines than those cited by BellSouth; however, the final number still likely represents an extremely small market share.

promoting competition in the local market to the point where local consumers can switch freely between competing local providers, providers seeking to out-do each other by mailing $100 checks to customers and continually lowering prices to entice customers to switch.

Q. What is the relationship between Section 271 applications and your first factor, expansion of consumer choice in local markets?

A. Introducing competition into local exchange markets requires the cooperation of the ILECs. This cooperation is unlikely to be voluntary. No monopolist, regulated or not, is eager to relinquish its dominant position. Furthermore, direct regulation of BellSouth's conduct in and of itself is a highly imperfect means of insuring viable local competition – there is too much leeway for BellSouth to get around the spirit if not the letter of the interconnection rules, and to impose its own interpretation of its interconnection duties, at least until many aspects of interconnection are tested in practice and are understood by competitive local exchange carriers as well as regulators.

The implication of this analysis is that the path to genuine local competition will be far smoother if BellSouth is given incentives to cooperate to make local competition truly possible, in order to partially offset its natural economic incentives to protect its monopoly position. By insisting, as a condition for entry into in-region interLATA markets, that BellSouth demonstrate that it has put in place the conditions necessary for local competition to flourish, in practice and not just on paper, the Section 271 process can be used to induce BellSouth's cooperation with CLECs. This *quid pro quo* is central to the development of local exchange competition.

(2) BellSouth's Allegations That Long Distance Is Not Competitive Today Are Incorrect.

Q. Do you agree with Mr. Taylor that long distance carriers failed to reflect access charge changes in their long distance prices?

A. No. On the contrary, at least as far as Sprint is concerned, Sprint prices have declined far more than access charge reductions. In fact, Sprint recently shared some data on this issue with the FCC, the relevant portions of which are attached as Exhibit DES-2. That data indicates that between 1995 and 1997, Sprint's domestic long distance prices declined by more than twice as much as access costs declined, on an apples-to-apples comparison basis.

Q. Have lower volume users benefited from access reductions?

A. Yes. In his discussion on this topic, Mr. Taylor disregards two important benefits accruing to lower volume users. First, telecommunications services are a significant input factor into the production process of many goods produced in a myriad of industries by all kinds of firms, but especially by large telecommunications users. Mr. Taylor acknowledges that these large telecommunication users have benefited greatly from competition in long distance. Lower access costs and the resulting reduction in long-distance prices reduce the production costs of these goods much to the benefit of the consuming public. Second, many low volume users avail themselves of 800/888 "toll free" services. Between 1995 and 1997, Sprint toll free calling has increased approximately 60 percent as the subscription price for the service has declined far in excess of overall telecommunication prices, leading many social service agencies, retailers, and others to offer toll free service to their constituents and/or customers. Many low volume consumers use toll free services. Low volume consumers, including those 25% or so of the Sprint base who make no billed long distance calls in any given month, benefit greatly from declining long distance prices for both of these reasons.

Q. How do consumers benefit from reduction In subscription prices for toll-free service?

A. As Sprint reduces its 800/888 subscription prices, many social service agencies, specialty retailers, and even individual consumers, can afford 800/888 service. Of course, the calling party does not incur a toll charge with 800/888, thus consumers, as the number of "toll free" sources has grown, have responded by increasing toll free calling. Consumers have benefited tremendously from this phenomenon.

Q. Does Sprint offer volume discount pricing to customers?

A. Yes. As is true with the pricing of products and services in many competitive industries, Sprint long distance customers that commit to purchasing higher volumes of service, often pay a lower unit cost. This is often referred to as volume discount pricing.

Q. Does BellSouth offer volume discount plans in Tennessee?

A. Yes. BellSouth offers several intraLATA toll-calling plans in which large toll users pay a lower per minute charge than small users. BellSouth also offers numerous dedicated service offerings in which customers, typically large business customers, who purchase greater levels of fiber capacity bandwidth often, pay a lower unit price than customers, typically residential customers, who purchase lesser amounts of bandwidth.

Q. How do BellSouth's intraLATA toll prices compare to Sprint's intraLATA toll prices in BellSouth's nine state region?

A. Generally speaking, BellSouth's intraLATA toll service is priced higher than toll service offered by Sprint or any other IXC. However, BellSouth's low intraLATA toll rates in Tennessee stand in stark contrast to its intraLATA toll pricing behavior in its other states and appear to be more the result of the PSC's and

the Authority's focus on reducing toll rates than proactive behavior by BellSouth. In the rest of its region, BellSouth has the highest intraLATA toll MTS rates. MTS rates for Sprint and other IXCs are generally much lower. Additionally, customers using Sprint's SprintSense Anytime, can generally pay rates even lower than Sprint's already low intraLATA toll MTS rates. For most residential and business callers, Sprint is priced lower than BellSouth.

Q. How is it that BellSouth can charge a premium for intraLATA service over Sprint and other IXCs?

A. IntraLATA toll service is not fully competitive in all of BellSouth's states. BellSouth has a monopoly advantage over its IXC competitors because it is the only 1+ carrier in the intraLATA market. That may be why BellSouth has found it easier to resist the temptation to engage in price competition. BellSouth's demonstrated willingness to flex its market power muscle in the intraLATA toll market and price higher than any of its IXC competitors indicates to me that BellSouth will likely abuse its market power in other markets as well. My concern is that BellSouth will flex its market power muscle of its monopoly provisioning of switched access minutes to price its competitors out of the interLATA toll markets.

Q. Does BellSouth have monopoly market power in the provision of access services?

A. Yes. BellSouth controls more than 80% of all switched access minutes in Tennessee and 67% of all switched access minutes within its immediate nine state region. Sprint's Access Management department reports that more than 99% of Sprint Long Distance access purchases in BellSouth's franchised territory are made from BellSouth. This indicates that BellSouth still retains enormous market power in the provision of access and any service (such as long distance) that relies on access as part of its service offering.

(3) BellSouth Greatly Overstates The Benefit To Consumers And The Tennessee Economy Of Its Participation In The In-Region InterLATA Markets.

Q. BellSouth has claimed that Tennessee consumers and the Tennessee economy will reap enormous benefits if BellSouth is allowed into the in-region interLATA market. Do you agree with its assessment?

A. No. The benefit of BellSouth providing service in an already competitive long distance market is very marginal, especially since BellSouth is likely to initially enter the market as a reseller. The economic benefit proposed by the WEFA study and the price decrease assumptions in the study border on the absurd. There are many more benefits to be obtained by focusing energies on opening the local market.

The long distance market in Tennessee is currently far more competitive than are the local exchange markets served by BellSouth. While customers in BellSouth's territory have the option of selecting long distance service from several different IXCs and resellers with hundreds of different calling plans, the majority of these same customers have only one choice for local exchange service. Clearly, the incremental benefits of BellSouth's entry into the long distance market will likely be much smaller than the corresponding benefits from CLEC entry into the local exchange market.

Three considerations limit any benefits to consumers in long-distance markets from BellSouth's entry into those markets. First, there is the very real danger that BellSouth will use its bottleneck local monopoly to reduce competition in long distance. Second, the benefits from adding another competitor to the long-distance market are minuscule in comparison with adding a competitor to the monopolized local exchange market. And third, to the extent that BellSouth is a

reseller of long-distance services rather than a facilities-based competitor, its impact on long-distance markets is less pronounced.

(a) WEFA's Study Overstates the benefits of BellSouth Entry into Long Distance

Q: What are the major shortcomings of the WEFA study?

A. (1) Many of the underlying assumptions are wrong or unrealistic. WEFA assumes BellSouth entry will automatically lead to a large 25% reduction in long distance prices. The WEFA study uses base tariff MTS rates as its starting point. The majority of Sprint's minutes are discounted off of base tariff prices.

(2) The WEFA study is not a "net benefits" test. It ignores the potential losses in local-bundled markets of premature entry by BellSouth into long distance.

(3) The WEFA study uses assumptions and inputs that are not specific to Tennessee and are overly optimistic.

Q: How does the WEFA study overstate the benefits of BellSouth providing in-region long distance?

A. First, it is unrealistic to expect BellSouth to price 25% below otherwise prevailing market prices for long distance if BellSouth enters the market as a reseller unless BellSouth institutes a price squeeze. Second, gains in productivity and quality have not been shown to follow from in-region entry. The WEFA study provides no discussion of specific changes in operations that allow those gains to occur above and beyond current, accelerating productivity growth. And third, the Labor Force Participation ("LFP") rate is a statistic of the labor market and not a function of BellSouth entering the in-region interLATA market.

Q. If a 25% decrease in prices is unrealistic, what is the likely impact on prices?

A. Based on real-world experience in intraLATA markets where BellSouth competes with IXCs today, BellSouth is generally the highest priced carrier and is not the main force driving prices down. A brief look at the existing toll rates that BellSouth offers today for intraLATA toll calling in Tennessee may give a better indication of the type of pricing the Authority can expect from BellSouth than by looking at the rates of SNET in Connecticut or GTE. As I indicated earlier, Sprint's prices are generally lower than BellSouth's intraLATA prices in Tennessee. For the typical toll user, Sprint's prices are much lower than BellSouth's intraLATA prices.

The likelihood of BellSouth being the low priced provider is further contradicted by BellSouth's pricing behavior in the interLATA toll calling it provides to its cellular customers. Cellular customers pay long distance charges in addition to usage and roaming charges and can choose to use BellSouth's long distance service or any other interexchange carrier's service. BellSouth charges 26¢ per minute for its long distance calling plan, which is significantly higher than AT&T's 15¢ per minute One-Rate, MCI's 12¢ per minute plan, and Sprint's 10¢ per minute SprintSense product. BellSouth's claim that its entry into the interLATA market will increase competition appears to be without merit.

Based on BellSouth's pricing behavior in the intraLATA toll market and the interLATA toll market, I am not convinced that BellSouth will drive rates down 25%; although, as I discuss later in my testimony, when the time comes, BellSouth will be able to leverage its high switched access rates and price below cost to drive competitors out of the market if it choose to do so. However, in the short run, based on pricing in the intraLATA toll market, BellSouth may simply

choose to flex its local market power and price long distance toll service higher than its IXC competitors.

Q. Why is WEFA's use of basic MTS rates in its study an unreasonable assumption?

A. Basing the model on price reductions off of basic MTS is unreasonable for several reasons. First, the vast majority of minutes billed today by IXCs are based on some type of a discount plan, which has rates significantly lower than basic MTS toll rates. For example, Sprint offers SprintSense Anytime, which is priced at 10¢ per minute. This service, made popular through the "Dime Lady" television advertising has proven to be extremely popular with residential callers in Tennessee and elsewhere[2]. WEFA neglected to consider discount pricing in its conclusions. Second, the other minutes that are billed at basic MTS rates are all available for a discount plan if consumers would take the time to call their carrier and select the plan that best fits their calling needs.[3] All major carriers offer a discount-calling plan that offers rates much lower than basic MTS rates and have no minimum usage requirements.

Third, a significant amount of a carrier's minutes – 800 and 888 services -- are priced to end-users on a toll-free basis, that is, at a price of zero. I suspect that WEFA did not even consider 800/888 service in the "analysis" of competitive price reductions.

Q. How should WEFA have conducted a proper net benefits test?

A. The WEFA study completely ignores the costs of premature BOC entry into the in-region interLATA toll market. The cost of premature BOC entry occurs

[2] Customer pays a $4.95 per month charge which is waived when customer's monthly billing exceeds $30.00.

[3] Sprint pro-actively calls its customers to ensure that they are on the calling plan that best meets the customers' needs.

because IXCs are unable to easily enter the local market. If the IXC cannot enter the local market to bypass the BOC's above cost switched access rates[4], the BOC has the ability to squeeze the IXCs out of the interLATA market by temporarily pricing interLATA toll at the switched access price. Once IXCs have lost sufficient market share or have been driven out of the market altogether, the BOC has the market power to raise interLATA toll prices above competitive levels. IXCs may then hesitate to re-enter the market or price aggressively enough to force interLATA toll prices back down to competitive levels.

Given the potential for the BOCs' anti-competitive pricing behavior, the potential competitive losses in the local and bundled long distance markets lead to higher prices for Tennessee consumers. A properly conducted net benefits test compares such a scenario with the one presented by WEFA. Thus, a net benefits test runs two scenarios: one with immediate BOC entry and one with BOC entry delayed until the local market is fully open and true local competition has been established. Each run takes the benefits of competitive entry as well as the costs of closed markets into account. The results can then be compared on a net present value basis.

Q. Why is the assumption of the increase in productivity too optimistic?

A. An exogenous increase in productivity must be well supported to be believable. WEFA must be able to rigorously explain how physical operations are altered to increase productivity solely due to entry into in-region, interLATA long distance services. The evidence in the report is simply not up to the task. It just assumes a number without any empirical or theoretical underpinnings. There are two specific concerns with the WEFA results on this issue. One, productivity growth appears to be accelerating in the current regulatory environment. Productivity offsets for price cap plans have often risen each time they have been

[4] It is estimated that SBC's intrastate-switched access rates are a multiple of eight to fourteen times cost.

readjusted.[5] It is unclear the extent to which Section 271 entry can contribute to that trend. In any case, the WEFA report does not explain how this growth in productivity actually occurs. Second, the exact same assumption is used for each state in which WEFA ran their study. I suspect that each BOC must have a somewhat different network, with differing densities of customers and varying mixes of products. It is difficult to accept that a BOC in Kansas, for example, would have the same underlying network, customer base, and product set as a BOC in Tennessee. Likewise, I would not expect BOC entry to have the exact same effect in every state for every BOC. The WEFA model results appear to do just that.

Q: Please explain why the assumption of an increase in the labor force participation rate as a result of Section 271 entry is not credible.

A: Workers that are not in the Civilian Labor Force ("CLF") are not likely to be drawn into CLF simply due to (the potential for) lower long distance rates. People out of the labor force include discouraged workers, stay-at-home parents, or retirees. WEFA makes no demonstration from theory or data that this is a plausible assumption for these types of workers in Tennessee. Finally, once again, WEFA makes the same assumption for all states. In reality, each state has a different population pool, a different Labor Force Participation ("LFP") rate and different labor market conditions. It strains credulity to believe that the same effect is felt everywhere in the same way.

Q. What is the impact of WEFA's overly optimistic assumptions on the alleged benefit of BellSouth entry into in-region long distance?

A. WEFA estimates BellSouth's entry into the in-region interLATA market will single-handedly create Tennessee economy gains of an additional $2.2 billion in real Gross State Product and create 23,729 additional jobs. However, once the

[5] For example, the FCC recently increased the productivity factor for Tier 1 LECs to 6.5%, from 5.3%.

assumptions are revised to reflect reality, such as the fact that BellSouth may actually charge more for toll service if it can drive its competitors out of the market, the model may, in fact, show that Tennessee consumers would be worse off if BellSouth were allowed into the in-region long distance market. I suspect WEFA's model could easily be used to strengthen my conclusion that if BellSouth is not compelled to truly open its local exchange markets to competition and engages in anti-competitive pricing, the Tennessee economy could suffer substantial harm. Furthermore, premature approval of BellSouth's Section 271 application could delay local competition for years to come, while denial of BellSouth's present application will delay the benefits, if any, by only a matter of months until another application can be filed and approved.

(4) The Potential For Anti-Competitive Behavior By BellSouth Far Outweighs Any Minimal Benefit Its Provisioning Of In-Region Long Distance Service Would Generate.

Q. How does preventing anti-competitive conduct in the provision of switched access relate to the public interest standard?

A. The Act requires Section 271 authorization to be consistent with the public interest. So long as switched access is priced several times higher than cost, BellSouth has a significant artificial cost advantage over other IXCs that they can use to drive the IXCs out of the interLATA market.[6] Thus, BellSouth's entry into the interLATA market prior to reductions in switched access prices could very well reduce the amount of competition that customers in Tennessee enjoy today; thus, harming the public interest.

Q. Has there been a concern in the past that a BOC could behave anti-competitively if it also provided long distance?

[6] This is true, even if SBC is required to impute the price of access in their toll prices.

A. Yes. In the early 1980s, AT&T Long Distance was divested of its local exchange companies. The Modified Final Judgment ("MFJ") recognized that the BOC/AT&T combination had enormous market power given their monopoly control over the provisioning of switched access and needed to be restrained. The divesting of AT&T's local and long distance business was to prevent the combined BOC/AT&T powerhouse from leveraging access which would have prevented long distance competition from ever really developing. The same argument holds true today. Just as in the old Bell System prior to divestiture, a BOC that enters the long distance market within its region has economic incentives to use its monopoly market power in the switched access market to disadvantage its long distance competitors.

If regulation is ineffective in preventing BOC discrimination against rival interLATA carriers, BOC entry into long distance will actually harm consumers in interLATA markets. Discrimination is especially harmful to consumer welfare and the public interest because it can, ultimately, force rivals out of the market causing the market to be less competitive and lead to higher, not lower, prices. Of course, the Commission will attempt to prevent discrimination it can detect, and Congress has provided the structural safeguards in Section 272 of the Act, to reduce the dangers of discrimination, although the strength of those safeguards remains uncertain. However, regulation is necessarily imperfect, no matter how energetic and insightful the regulators, so the prospect of discrimination cannot be discounted. The surest way to prevent the BOC from abusing its monopoly access advantage is to eliminate that advantage by reducing switched access rates to TELRIC cost.

Q. How can BellSouth use the subsidies in switched access rates to drive IXCs out of the interLATA markets?

A. BellSouth's access cost advantage works as follows: If the IXCs and BellSouth

face the same costs for providing the toll network portion of interLATA toll calling,[7] then the only cost difference they will face will be the price they each pay for switched access to originate and terminate toll calls. The cost to the IXCs for originating and terminating a call in Tennessee in BellSouth's territory is approximately 7¢ per minute on each end. However, the cost to BellSouth for originating and terminating a call in Tennessee in their own territory is estimated to be only ¼¢ per minute on each end. While it is true that the BellSouth Long Distance affiliate will pay the BellSouth local affiliate 7¢ per minute for access, the same as the IXC competitor, it is important to remember that the costs and profits of both BellSouth affiliates flow through to the parent corporation (also known as BellSouth Corporation). Hence, the cost BellSouth incurs in providing access to itself is only ½¢ per minute. Thus, BellSouth enjoys a 6½¢ per minute cost advantage when competing with the IXCs for interLATA toll traffic! In a market based on fractions of cents, BellSouth's 6½¢ per minute cost advantage in switched access is fatally detrimental to its IXC competitors.

The following table sets forth a numerical example, which summarizes BellSouth's arbitrary advantage.

BellSouth's Access Cost Advantage

Cost of Service	IXC Cost	BellSouth Cost	BellSouth Advantage
Access Cost	7¢	½¢	6½¢
Toll Network Cost	3¢	3¢	0¢
Total Cost	10¢	3½¢	6½¢

[7] It is reasonable to assume that BellSouth has the same, if not better, cost structure for its intrastate Tennessee toll network as the IXCs given that BellSouth has a more extensive toll network than the IXCs in Tennessee.

If the cost of providing the toll portion of interLATA toll calling is approximately 3¢ per minute for both the IXCs and BellSouth,[8] then the IXCs face a cost of 10¢ per minute to provide toll service (7¢ for switched access plus 3¢ for their toll network) while BellSouth faces a cost of only 3½¢ per minute to provide toll service (½¢ for switched access plus 3¢ for their toll network.) Even if BellSouth is required to impute full access charges and has to price its interLATA toll service at 7¢ per minute, it will still enjoy a 7½¢ per minute profit margin. The IXCs, on the other hand, will be forced to match BellSouth's 10¢ per minute price to stay competitive. However, at 10¢ per minute, the IXCs are receiving zero profit and will soon be driven out of the market. This anti-competitive advantage that BellSouth could exercise is often referred to as the "price squeeze" and is more fully explained in Exhibit DES-3.

The subsidies embedded in access charges can allow BellSouth to capture market share from the IXCs even if BellSouth is much less efficient. This undermines one of the attractive features of competition, namely, that market success is driven by lower costs and/or superior product quality. Thus, BellSouth's entry into the interLATA market may not increase competition, but may ultimately decrease competition.

Q. Have any LECs employed the price squeeze?

A. It is difficult to determine if Southern New England Telephone ("SNET") is implementing a price squeeze without more information; but, SNET does appear to be partially leveraging its switched access advantage, especially because they are just a reseller of Sprint's long distance service.[9] A true price squeeze would mean

[8] In this example, network cost assumes a zero return on equity.

[9] A reseller has less ability than a facilities-based carrier to reduce the total cost of providing toll service. A reseller can reduce its total cost of service only by reducing its overhead costs of marketing and general administration. For network costs, a reseller will generally pay an IXC facilities-based wholesaler a cost equal to or greater than the wholesaler's long run incremental cost. By contrast, a facilities-based provider directly controls its overhead and its network costs and can reduce

that the total revenues for a toll service offering were less than the total costs. Since SNET's toll service has mileage banded and time of day rates, it is difficult to determine if SNET is implementing a price squeeze without knowing their traffic volumes for different rate bands and different times of day.

SNET is pricing its intrastate toll service below cost for certain time of day rates for certain mileage bands. SNET controls over 95% of the access minutes in the state of Connecticut. The total price of SNET's switched access to originate and terminate an intrastate call within SNET's territory is approximately 4.2¢ per minute. Additionally SNET and others must incur a network cost and return of at least 2¢ per minute (or higher) that a carrier needs to remain competitively viable over the long run. Thus, if SNET is pricing calls at or below 6¢ per minute (4¢ for switched access plus at least 2¢ for network costs) we can be fairly certain that competitors cannot match that price without losing money on each call. Based on the 60% discount for calls between 9 p.m. and 9 a.m. that SNET offers customers via its CONNections, T Option Optional Calling Plan, SNET's toll calling rates are as low as 5.2¢ per minute. This price appears to be below the imputed cost of service.

If SNET's network cost is an additional 6¢ per minute (rather than 2¢), then any SNET call priced at or below 10¢ per minute would be an anti-competitive price squeeze. All of the rate bands under SNET's 60% discount CONNections T Option Optional Calling Plan are priced below 10¢ per minute, as are the prices for some of the rate bands for evening and weekend calling with a 35% discount. AT&T's special promotion, Connecticut Cents Per Minute Promotion, of only 5¢ per minute, shows that IXC competitors are willing to sell service at a loss for short periods of time in order to retain market share. However, such below cost pricing is not a viable long-term strategy for AT&T or any other IXC trying to compete with

its cost of service by reducing costs in either of those categories.

SNET's anti-competitive behavior. I would certainly not expect SNET to offer similar low pricing outside of its territory. SNET's pricing is proof positive of the dangers of allowing BellSouth into the long distance market before access rates are reduced to cost. Until access reductions are addressed, it is clearly not in the public interest to allow BellSouth into the long distance market.

Q. BellSouth has yet to offer interLATA service outside of its territory, yet has a strong desire to provide in-region interLATA service. Is that due to its in-region price squeeze advantage?

A. In my opinion, yes! BellSouth has been allowed to enter out-of-region long distance in the 41 states outside of its region since the Act was passed in February of 1996 over two years ago, but they have yet to do so in any commercially significant manner. If interLATA truly is as profitable as BellSouth claims it is, even as a reseller, then it would stand to reason that BellSouth would be providing long distance in those 41 states today. However, BellSouth only seems interested in entering long distance within its region. I believe that BellSouth fully understands the advantage its high access rates provide in-region and that BellSouth wants to leverage that advantage while access rates are still high. This will allow BellSouth to under-price its IXC competitors which will a), lock up customers for BellSouth's bundled service offering of local and long distance; and b), reduce the IXCs' profits, making it tougher for the IXCs to financially compete in the local market.

BellSouth alleges that the reason they have yet to enter out-of-region long distance is that BellSouth's name is not as well known outside of its territory. However, this supposed low name recognition has not prevented BellSouth from marketing its telephones and cellular service outside of its territory across the nation and in other parts of the world. The fact is, BellSouth will be just another IXC reseller outside of their region and will have to compete with Sprint, AT&T, MCI, and others on a level playing field paying the same price for switched access

that everyone else pays. BellSouth knows it won't be very profitable being just another reseller out-of-region, while in-region is a whole different ball game. Even though BellSouth will be just another IXC reseller, BellSouth controls more than 80% of all switched access minutes in Tennessee and 67% of all switched access minutes within its eight-state region. Additionally, within its franchise territory, BellSouth controls more than 99% of all switched access minutes. BellSouth knows that it can use the high profits in switched access rates to its advantage in the in-region interLATA market.

Q. Can Sprint leverage its access advantage through its local customer base in Tennessee?

A. No. Sprint's local presence is simply too small to flex what little muscle it may have. Proof of Sprint's small size is evidenced by the 1984 MFJ Consent Decree. The MFJ recognized that the BOCs had significant market power and needed to be restrained, but the independents, such as Sprint, were left alone. Hence, the BOCs were prohibited from providing long distance service in addition to its local service. As discussed above, the divesting of AT&T's local and long distance business was to prevent the combined BOC/AT&T powerhouse from leveraging access which would have prevented long distance competition from ever really developing. The MFJ also recognized that independents such as Sprint's local telephone company were too small to have enough market power to influence prices or attempt to exercise an unfair monopoly advantage should Sprint enter the long distance market. Sprint's local operations are scattered across nineteen states and account for only 6% of the nation's access traffic. BellSouth's local operations are concentrated in nine states and account for over 67% of access traffic in those nine states.

Fear of the BOCs' huge monopoly power and ability to leverage their high access rates within their regions is also evident in the 1996 Act and is the reason

Congress adopted the Section 271 checklist. Congress could have just removed the BOC ban on long distance without any conditions. However, it recognized that the BOCs' monopoly control over the majority of switched access minutes within their regions had to be restrained because access is an essential element for the provision of long distance service. Congress believed that if IXCs could easily enter the local market, they could self-provision access and by-pass the BOCs' high access rates. Local entry provides IXCs with an opportunity to begin to compete against the powerful BOC local access stranglehold. Unfortunately, the ability to enter the local market is not sufficient to restrain the BOC's powerful access advantage. Only when competition has developed to the point where IXCs have a true choice for the majority of their switched access minutes will the BOC's lose their bottleneck control over access prices, which will cause access prices to be driven down to cost. When this occurs, the IXCs will be on a level playing field with the BOCs.

Q. Until access prices are reduced to cost, will imputation resolve the price squeeze problem?

A. No. Even if BellSouth's long distance affiliate is required to impute the cost of access into its prices for interLATA toll service, BellSouth will still be able to price squeeze IXC competitors out of the market. This is because all of the profits and losses of BellSouth's long distance division and BellSouth's local division flow to their corporate parent (i.e., BellSouth Corporation). The best way for the corporation to maximize its profits may be to price its competitive long distance service close to cost and continue to collect monopoly prices on its non-competitive local services such as the high-priced custom calling features. Thus, in order to provide a packaged bundle of local and long distance service, BellSouth may choose to operate its long distance operations at a loss (provided it still can pass imputation tests) and keep the prices for all local services as high as it can.

Although imputation won't stop BellSouth from exercising a price squeeze, it is still an important and necessary safeguard. Imputation will at least set a minimum price level, which will prevent extreme predatory pricing.

Q. If imputation won't stop BellSouth from exercising its anti-competitive switched access price squeeze pricing advantage, what will?

A. The only way to overcome this problem is to reduce BellSouth's switched access prices to TELRIC cost so that when BellSouth is allowed into the interLATA market, BellSouth and the IXCs face the same cost for originating and terminating switched access. There are two ways to achieve this result. First, allow CLEC competition to develop to the extent that competitive forces drive the price of switched access down to cost; or second, prescriptively order BellSouth to reduce switched access prices to TELRIC cost.

Q. What are the implications of the anti-competitive BOC price squeeze problem?

A. The ongoing danger of BellSouth's powerful discrimination ability via a price squeeze has three implications: (1) the Authority should factor in this danger in evaluating the net benefit or harm to consumers in long-distance markets of BellSouth's entry into those markets; (2) if and when BellSouth is granted Section 271 authority to provide in-region long-distance service, the FCC and this Authority will have to be vigilant to prevent discrimination, act swiftly in response to complaints about discrimination, and respond forcefully when they detect discrimination; and (3) since the danger of discrimination diminishes as CLECs gain greater presence in local markets, protecting competition in long-distance markets provides yet another reason for the Authority to insist that local competition truly be enabled before approving any Section 271 entry by BellSouth.

Similarly, to the extent that regulation is unable to prevent cross-subsidization of long-distance customers by local exchange customers, BOC entry into long-distance markets will actually harm local exchange customers, who will be forced to subsidize long-distance calling. Such cross-subsidies, in addition to distorting competition in interLATA markets, amount to regulatory evasion and are contrary to the public interest.

Q. What action should the Authority take?

A. The Authority should not allow BellSouth into the intrastate interLATA market until BellSouth has reduced the price of switched access to TELRIC cost. Until this is accomplished, it would be against the public interest to allow BellSouth into the interLATA market.

(5) Several Conditions That Should Exist As A Pre-Requisite To BellSouth Being Allowed Into The InterLATA Market Within Its Region.

Q. What conditions should be met before BellSouth is allowed into the in-region interLATA market to ensure that its entry is in the public interest?

A. Before BellSouth is allowed into the interLATA long distance market within their nine-state region, the Authority should ensure that BellSouth does not have any unfair advantage over its competitors. The Authority must first ensure that interconnection agreements are fully operable and that CLECs can easily enter the local market and are provided service at parity with BellSouth; and second, BellSouth's access rates should be set at TELRIC cost.

Q. How can we be assured that the interconnection agreements are fully operable and that CLECs can easily enter the local market and receive service that is at parity with BellSouth?

A. One of the best measures to determine whether interconnection agreements are

operable is to measure the level of competition in the local market. If we see robust competition in the local market, then we can be relatively assured that the interconnection agreements are operating as they should. This necessarily means that BellSouth will have lost some market share. The greater the percentage of market share gained by competing CLECs, the more assurance we have that the interconnection agreements work and that the local market is moving toward full and fair competition.

Q. How will we know if BellSouth has reduced its access rates to TELRIC cost?

A. We can be relatively assured that switched access rates are close to TELRIC cost if they are set equal to the price for the transport and termination of local traffic.

SUMMARY

Q. In your opinion, do BellSouth's actions outside of its region support its claims in its testimony about the competitiveness and profitability of long distance or the relative and ease and profitability of entering the local market as a CLEC?

A. No. If long distance were truly as profitable as BellSouth claims it is, then it would be reasonable to expect that BellSouth would have spent the past two years aggressively entering the long distance market and competing for customers in the 41 states outside of its region. Literally hundreds of IXCs provide service across the country today, proving that it would be relatively easy for BellSouth to enter the market as a reseller. I suspect BellSouth's apparent reluctance to enter the long distance market outside of its territory where it will have to pay the same above cost access charges as the IXCs is because BellSouth realizes that long distance is not as profitable as it alleges and that BellSouth only wants to provide long distance service within its region where it has a huge access cost advantage.

Additionally, if local market entry is as easy and profitable as BellSouth claims it is, then it would be reasonable to expect that BellSouth would have spent the past two years aggressively entering local markets outside of their territory. However, I am not aware of any city where BellSouth is operating as a CLEC today nor am I aware of any interconnection agreements that BellSouth has negotiated with other BOCs that would enable it to provide CLEC services within the other BOC's territory. I suspect that BellSouth understands the enormous complexity and resources required to start a CLEC and that BellSouth would not fare much better than other CLECs have fared.

Q. Does this conclude your testimony?

A. Yes.

Exhibit DES-1

Questions for BellSouth's Provisioning of Long Distance and CLEC Services Outside of its Region

Note: All questions pertain only to the 41 states outside of BellSouth's nine state region and refer to long distance and CLEC activity that BellSouth has been allowed to engage in since the passage of the Telecommunications Act on February 8, 1996.

A. Out-of-Region Provisioning of Long Distance Services

(Note: All questions in this category refer solely to BellSouth Long Distance ("BLSD") and its provisioning of long distance service.)

1. List all states in which BSLD has received regulatory authority to provide long distance services.

2. List all states in which BSLD currently provides long distance services.

3. List by state, the number of business customers BSLD serves in each state.

4. Excluding cellular and calling card customers, list by state, the number of business customers BSLD serves in each state.

5. List by state, the percentage of the business customer market BSLD serves in each state.

6. List by state, the number of residential customers BSLD serves in each state.

7. Excluding cellular and calling card customers, list by state, the number of residential customers BSLD serves in each state.

8. List by state, the percentage of the residential customer market BSLD serves in each state.

9. What are BSLD's MTS rates?

10. How do BSLD's MTS rates compare to those of its competitors?

11. What, if any, discount pricing plans does BSLD offer?

12. What percentage of its traffic does BSLD carry over its own network facilities?

Exhibit DES-1

B. Out-of-Region Provisioning of Competing Local Exchange (CLEC) Services.

(Note: All questions in this category refer to BellSouth's CLEC affiliate and not to BellSouth Cellular Corporation or its affiliates.)

1. List all states in which BellSouth has received regulatory authority to provide CLEC services.

2. List by state, all incumbent LECs with which BellSouth has requested interconnection.

3. List by state, all incumbent LECs with which BellSouth has requested signed an interconnection agreement.

4. List all states in which BellSouth currently provides CLEC services.

5. List by state, whether BellSouth's CLEC is providing telephone exchange service exclusively over its own facilities.

6. List by state, whether BellSouth's CLEC is providing telephone exchange service over its own facilities in combination with unbundled network elements (UNEs) purchased from the ILEC.

7. List by state, whether BellSouth's CLEC is providing telephone exchange service via resale of ILECs services.

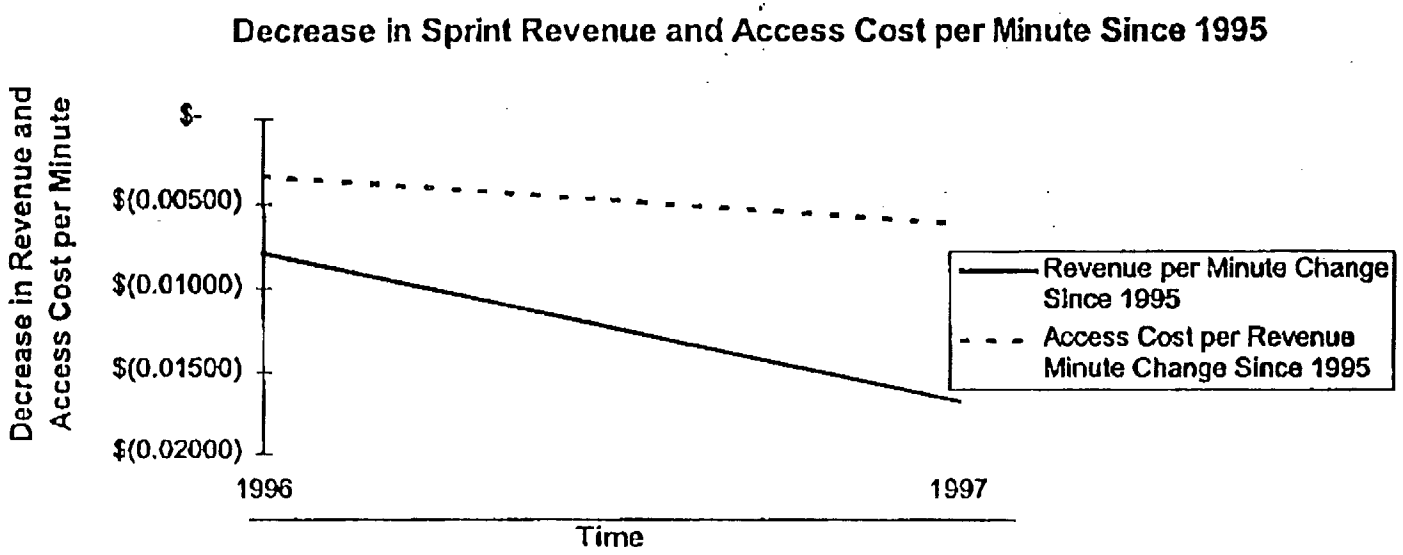
8. List by state, the number of business customers BellSouth's CLEC serves in each state and the method of serving those customers (exclusively own facilities, combination of own facilities and UNEs, and resale).

9. List by state, the number of residential customers BellSouth's CLEC serves in each state and the method of serving those customers (exclusively own facilities, combination of own facilities and UNEs, and resale).

10. List by state when BellSouth plans to begin offering local service if it is not currently offering local service.

Exhibit DES-2

Sprint.



This graph shows the change in Sprint's average annual domestic revenue per minute compared to the change in Sprint's switched access cost per revenue minute using 1995 as the base. Revenue per minute was calculated by dividing total minute-driven revenues by total billed revenue minutes. Access cost per revenue minute was calculated by relating the number of switched access minutes to billed revenue minutes to account for both originating and terminating access charges times Sprint's average access cost per access minute.

Sprint's revenue per minute has declined significantly more than the access cost per revenue minute because Sprint has passed access savings along to customers and has reduced prices to remain competitive.

Sprint would be willing to provide specific revenue and cost data if that competitively sensitive data could be accorded confidential treatment.

Exhibit DES-3

Profitability Analysis: RBOC v. IXC Competitor

	PROFITABILITY IF SWBT DOESN'T PRICE SQUEEZE		PROFITABILITY IF SWBT DOES PRICE SQUEEZE*(3)		SOLUTION TO PRICE SQUEEZE Set Access Rates Equal to Cost	
Local Company Books	**SBC Local**	**IXC Local**	**SBC Local**	**IXC Local**	**SBC Local**	**IXC Local**
Access Cost + E.C.						
Cost*(1)	$ 0.005	$ -	$ 0.005	$ -	$ 0.005	$ -
Excess Contribution*(4)	$ 0.065	$ -	$ 0.065	$ -	$ -	$ -
Price	$ 0.070	$ -	$ 0.070	$ -	$ 0.005	$ -
Long Distance Company Books	**SBC LD**	**IXC LD**	**SBC LD**	**IXC LD**	**SBC LD**	**IXC LD**
Cost + Profit						
Access Cost	$ 0.070	$ 0.070	$ 0.070	$ 0.070	$ 0.005	$ 0.005
Network & Overhead Cost*(2)	$ 0.030	$ 0.030	$ 0.030	$ 0.030	$ 0.030	$ 0.030
Profit	$ 0.020	$ 0.020	$ -	$ -	$ 0.020	$ 0.020
Minimum Toll Price	$ 0.120	$ 0.120	$ 0.100	$ 0.100	$ 0.055	$ 0.055
Parent Company Books (Local+LD)	**SBC**	**IXC**	**SBC**	**IXC**	**SBC**	**IXC**
Profit						
Access	$ 0.065	$ -	$ 0.065	$ -	$ -	$ -
LD	$ 0.020	$ 0.020	$ -	$ -	$ 0.020	$ 0.020
Total Profit	$ 0.085	$ 0.020	$ 0.065	$ -	$ 0.020	$ 0.020

*(1) The "cost" of access includes the authorized return on equity.

*(2) Network & Overhead includes all other costs besides access - network, overhead, marketing, admin., etc. **Network costs assume a zero return on equity in this example.**

*(3) Assumes SWBT must follow an imputation pricing standard.

*(4) Excess contribution is applied to corporate profits, special discount promotions, cost of local service in high cost areas, etc.

CERTIFICATION OF SERVICE

I hereby certify that I have this day served a true and exact copy of the within and foregoing Direct Testimony of David Stahly in Docket No. 97-00309, via United States mail, postage paid and properly addressed to the following:

H. LaDon Baltimore
Farrar & Bates, LLP
211 Seventh Avenue North, Ste. 320
Nashville, Tennessee 37219-1823

K. David Waddell
Executive Secretary
Tennessee Regulatory Authority
450 James Robertson Parkway
Nashville, Tennessee 37243-0505

Jonathan E. Canis
Kelley Drye & Warren LLP
1200 19TH Street, N.W.
Suite 500
Washington, D.C. 20036

Dana Shaffer, Esquire
Nextlink
105 Malloy Street, #300
Nashville, Tennessee 37201

Charles B. Welch, Esquire
Farris, Mathews, et al.
511 Union Street, #2400
Nashville, Tennessee 32719

Henry Walker, Esquire
Boult, Cummings, Conners & Berry, PLC
P.O. Box 198062
Nashville, Tennessee 37219-8062

Jon E. Hastings, Esquire
Boult, Cummings, et al.
P.O. Box 198062
Nashville, Tennessee 37219-8062

Alaine Miller
NextLink
155 – 108th Avenue NE
Suite 810
Bellevue, WA 98004

Bennett Ross
BellSouth Telecommunications
675 West Peachtree Street
Suite 4300
Atlanta, GA 30375

Claire Daly
LDDS WorldCom
201 Energy Parkway
Suite 200
Lafayette, LA 70508

Douglas W. Kinkoph
LCI International
8180 Greensboro Drive
Suite 800
McLean, VA 22101

Martha McMillin
MCI
780 Johnson Ferry Road
Suite 700
Atlanta, GA 30342

Guy Hicks
BellSouth Telecommunications Inc.
Suite 2101
333 Commerce Street
Nashville, TN 37201-3300

James P. Lamoureux
AT&T
Room 4068
1200 Peachtree Street NE
Atlanta, GA 30309

Michael McRae
Sr. Regulatory Counsel – TCG MidSouth
2 Lafayette Centre
1133 21st Street, Suite 400
Washington, DC 20036

Susan Davis Morley
Wiggins & Villacorta P.A.
PO Drawer 1657
501 East Tennessee Street
Tallahassee, FL 32302

Val Sanford, Esquire
Gullett, Sanford, et al.
PO Box 198888
230 Fourth Avenue N., 3rd Floor
Nashville, Tennessee 37219-8888

L. Vincent Williams, Esquire
Consumer Advocate Division
426 5th Avenue, N., 2nd Floor
Nashville, Tennessee 37243

Guilford Thornton, Esquire
Stokes & Bartholomew
424 Church Street
Nashville, Tennessee 37219

Donald L. Scholes BPR #10102
Branstetter, Kilgore, Stranch & Jennings
227 Second Avenue North
Nashville, TN 37219

Andrew O. Isar
Tennessee Resellers Assn.
Director-Industry Relations
4312 92nd Ave. NW
Gig Harbor, WA 98335

Enrico C. Soriano
Kelley Drye & Warren LLP
1200 19th Street, N.W.
Suite 500
Washington, D.C. 20036

D. Billye Sanders
Waller Lansden Dortch & Davis
A Professional Limited Liability Company
511 Union Street, Suite 2100
Nashville, TN 37219-1760

Vance Broemel, Esquire
Consumer Advocate Division
426 5th Avenue, N., 2nd Floor
Nashville, TN 37243

This the 26th day of March 1998

Danielle Etzbach
Sprint Communications Company L.P.
External Affairs

Sprint

Carolyn Tatum Roddy
Attorney, State Regulatory

3100 Cumberland Circle
Atlanta, GA 30339
Telephone (404) 649-6788
Fax (404) 649-5174
Mailstop: GAATLN0802

March 26, 1998

VIA FEDERAL EXPRESS
Mr. David Waddell
Executive Director
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243-0505

RE: BellSouth Telecommunications, Inc.'s Entry Into Long Distance (InterLATA) Service in Tennessee Pursuant to Section 271 of the Telecommunications Act of 1996
Docket No. 97-00309

Dear Mr. Waddell:

Please find enclosed for filing the original and thirteen (13) copies of Direct Testimony of Melissa Closz in the above-captioned matter.

An extra copy of this transmittal letter is included which I would ask that you please date stamp and return to me for my files in the enclosed self-addressed, stamped envelope.

Thank you for your cooperation in this matter.

Sincerely,

Carolyn Tatum Roddy

Carolyn Tatum Roddy

CTR/de
Enclosures
cc: Parties of Record

BEFORE THE

TENNESSEE REGULATORY AUTHORITY

In Re: BellSouth Telecommunications, Inc.'s Entry Into Long Distance (interLATA) Service in Tennessee Pursuant to Section 271 of the Telecommunications Act of 1996	Docket No. 97-00309

DIRECT TESTIMONYOF MELISSA L. CLOSZ

ON BEHALF OF

SPRINT COMMUNICATIONS COMPANY L.P.

March 27, 1998

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Melissa L. Closz. My business address is 151 Southall Lane, Maitland, Florida 32751.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Sprint Communications Company, L.P. ("Sprint") as Director-Local Market Development.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I have a Master of Business Administration degree from Georgia State University in Atlanta, Georgia and a Bachelor of Business Administration degree from Texas Christian University in Fort Worth, Texas. I have been employed by Sprint for over seven years and have been in my current position since February, 1997. I began my telecommunications career in 1983 when I joined AT&T Long Lines progressing through various sales and sales management positions. In 1989, I joined Sprint's Long Distance Division as Group Manager, Market Management and Customer Support in Sprint's Intermediaries Marketing Group. In this capacity, I was responsible for optimizing revenue growth from products and promotions targeting association member benefit programs, sales agents and resellers. I owned and operated a consumer marketing franchise in 1991 and 1992 before accepting the General Manager position for Sprint's Florida unit of United Telephone Long Distance ("UTLD"). In this role, I directed marketing and sales, operational support and customer service for this long distance resale operation. In Sprint's Local Telecommunications Division, in 1993, I was charged with establishing the Sales and Technical Support organization for Carrier and Enhanced Service Markets. My team interfaced with interexchange carriers, wireless companies and competitive access

providers. After leading the business plan development for Sprint Metropolitan Networks, Inc. ("SMNI"), I became General Manager in 1995. In this capacity I directed the business deployment effort for Sprint's first CLEC operation, including its network infrastructure, marketing and product plans, sales management and all aspects of operational and customer support.

Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES?

A. My present responsibilities include representation of Sprint in interconnection negotiations with BellSouth Telecommunications, Inc. ("BellSouth"). In addition, I am responsible for coordinating Sprint's entry into the local markets within BellSouth's states. I also interface with BellSouth's account team supporting Sprint to communicate service and operational issues and requirements.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address issues relevant to the Commission's review of BellSouth Telecommunications, Inc.'s entry into interLATA services pursuant to Section 271 of the Telecommunications Act of 1996 and Tennessee Regulatory Authority ("TRA") Docket No. 97-00309.

Q. WHAT IS THE IMPORTANCE OF THIS DOCKET TO SPRINT?

A. Sprint is certificated as a competitive local exchange company ("CLEC") in Tennessee. Sprint also has finalized, or is in the process of finalizing, negotiations in all other states in which BellSouth operates as an incumbent local exchange company ("ILEC"). In addition, Sprint has been operating as a CLEC in BellSouth franchise

territory in Orlando, Florida, since March, 1996. Accordingly, Sprint has first hand experience with issues relevant to this docket.

Q. DOES YOUR TESTIMONY ALSO ADDRESS ISSUES GERMANE TO THE COMMISSION'S ASSESSMENT OF BELLSOUTH'S STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS ("SGAT") UNDER SECTION 252 (f) OF THE ACT?

A. The portions of my testimony which discuss interconnection implementation concerns and operational readiness affect a new entrant's ability to offer competitive services. Therefore, a discussion of BellSouth's checklist compliance under Section 271 of the Act also apply to an examination of the SGAT under Section 252(f) because new entrants would be able to obtain interconnection services through the SGAT. I am not an attorney and I am not here to offer legal analysis, but it seems clear from an operational standpoint that the same standards, the interconnection requirements found in Section 251 and the requirements of cost-based rates in Section 252(d), apply to both the 271 checklist analysis and the 252(f) analysis.

Q. WHAT ISSUES WOULD YOU LIKE TO ADDRESS?

A. There are three. They are Operational Support Systems ("OSS"), the importance of performance measurements to the evaluation of BellSouth's ability to meet its obligations under the Telecommunications Act of 1996 ("Act"), and performance issues relevant to Sprint's experience as a CLEC in Florida.

Q. WHAT IS THE FIRST ISSUE YOU'D LIKE TO ADDRESS?

A. I'd like to address the area of OSS.

BellSouth's Operational Support Systems

Q. ARE OPERATIONAL SUPPORT SYSTEMS RELEVANT IN THIS DOCKET?

A. Yes. The competitive checklist in Section 271(c) of the Act includes nondiscriminatory access to network elements. OSS have been defined as a network element by the FCC in its First Report and Order in CC Docket No. 96-98 (issued August 8, 1996). More specifically, BellSouth has an obligation to provide new entrants nondiscriminatory access to the systems utilized for the various OSS functions, Pre-Order, Ordering & Provisioning, Maintenance, Usage and Billing.

Q. VERY BRIEFLY, DESCRIBE THE OSS FUNCTIONS.

A. "Pre-Order" can be described as the preparatory work necessary to submit an accurate and complete order. Pre-Order includes things like address verification, services & features availability, telephone number assignment, dispatch scheduling, establishment of due date, and customer service records ("CSRs"). This information is obtained from the ILEC.

"Ordering/Provisioning" is the function of actually submitting the necessary information to the ILEC so that service can be installed. The order includes among other things the information from the Pre-Order function. It also includes feedback

from the ILEC to the CLEC regarding confirmation of order receipt, order completion, etc.

"Maintenance" is the function utilized by the CLEC to report and monitor problems with services provided by the ILEC. It includes generation of trouble reports, troubleshooting, status updates, reporting, etc.

"Usage" is the function where the ILEC sends to the CLEC the information necessary for the CLEC to bill its end users. An example of this is the call detail records created when a CLEC end user makes a telephone call.

"Billing" is the function whereby the ILEC submits information to the CLEC for the services the ILEC has provided to the CLEC, i.e., the wholesale invoice for services resold by the CLEC.

The most critical functions as determined by the impact to the end user include Pre-Order, Ordering & Provisioning, Maintenance and Usage. It is imperative that these functions provide nondiscriminatory access as described previously.

All of these functions are critical in providing service to the customer that is equal to or better than the service that the ILEC can provide. It is essential that CLECs are provided nondiscriminatory access to the ILEC's OSS databases.

Q. WHAT IS MEANT BY NONDISCRIMINATORY ACCESS?

A. Nondiscriminatory access in this regard means the OSS interfaces must provide (1) equivalence to the ILEC for information availability and accessibility, (2) equivalence of information accuracy, and (3) equivalence of information timeliness.

Q. WHY IS NONDISCRIMINATORY ACCESS NECESSARY?

A. Nondiscrimination, sometimes referred to as parity, is a prevalent theme throughout the Act and the FCC's First Report and Order. It is the standard that has been set to ensure an environment is created that is conducive to competition. A lesser standard would certainly hinder competition. Since the Act seeks to create an environment where effective competition can take place, it is clear that anything less than nondiscriminatory access to OSS is unacceptable in accomplishing our goal.

Q. WHAT ARE THE CHARACTERISTICS OF AN INTERFACE THAT PROVIDES NONDISCRIMINATORY ACCESS TO AN INCUMBENT LEC'S OSS?

A. For an interface to provide nondiscriminatory access to an incumbent LEC's OSS, it must demonstrate the following requirements to keep these interfaces and access to OSS databases at parity with the incumbent LEC's retail organization.

Electronic Interface. A "machine-to-machine" interface (computer application program to computer application program) that enables a fully electronic interaction between the incumbent LEC's OSS and the new entrant's OSS is required. These

transactions must flow through electronically between OSS databases with no human intervention.

Equivalence of Information. The interface from the incumbent LEC's OSS must have at least the same functional information from their operations support functions and offer parity in accuracy, response times, and timeliness.

Documentation. The documentation of each interface needs to be adequately completed and communicated in advance to enable CLECs the opportunity to create the interfaces and develop the appropriate operational procedures.

Operability Testing. The interfaces need to be tested in a real world environment to determine that a parity level of service can be offered with an equivalence of information timeliness.

Standards Based. The interfaces need to be based upon standards. Without standards, Sprint is required to build a separate interface for each incumbent LEC, which increases costs and impacts the capability to provide a quality level of service to the customer.

Q. PLEASE SUMMARIZE SPRINT'S PERSPECTIVE ON NONDISCRIMINATORY ACCESS TO ILEC OPERATIONAL SUPPORT SYSTEMS.

A. Fundamentally, Sprint believes that nondiscriminatory access to operational support systems is achieved when the systems interfaces are functioning in a real world operating environment such that the resulting experience for the CLEC's end user customer is at parity with what BellSouth provides its own customers. This is the

only true test of whether nondiscriminatory access with respect to operational support systems has been provided.

Q. DO THE BELLSOUTH OSS INTERFACES MEET THE STANDARD OF NONDISCRIMINATORY ACCESS?

A. No. Sprint does not believe that BellSouth's currently deployed OSS interfaces meet the standard of nondiscriminatory access. The interfaces BellSouth has introduced to date are interim solutions which do not provide parity with BellSouth's own retail systems. "Long term" or "permanent" interfaces will be designed to conform to industry standards whenever possible and to provide full systems flow-through. While these "permanent" interfaces offer the greatest promise for the provision of nondiscriminatory access, they are still being developed. Until these interfaces are fully documented, developed and tested in a real world operating environment, their ability to afford CLECs the opportunity to provide a parity of experience to what BellSouth provides its own end-users will be unknown.

Q. PLEASE EXPAND ON SPRINT'S CONCERNS REGARDING THE INTERIM INTERFACES THAT BELLSOUTH HAS INTRODUCED TO DATE.

A. BellSouth has introduced several interim interfaces for use by the CLEC community including the Local Exchange Navigation System ("LENS"), the Trouble Analysis Facilitation Interface ("TAFI") and the Electronic Data Interface- PC ("EDI-PC"). This deployment is consistent with Sprint's observations in other regions where incumbent local exchange companies have developed, in many cases, a

Graphical User Interface ("GUI") in front of their legacy or retail systems. There are numerous shortcoming in interim interfaces such as LENS, TAFI and EDI-PC. These shortcomings include: (1) they do not conform to industry standards, and (2) they do not provide complete flow-through to the CLECs' own operational support systems.

Q. PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU SAY THAT INTERIM INTERFACES SUCH AS LENS, TAFI AND EDI-PC DO NOT CONFORM TO INDUSTRY STANDARDS.

A. BellSouth's interim interfaces, LENS, TAFI and EDI-PC are interfaces that were developed by BellSouth and function only to exchange information with BellSouth. They are what is called "proprietary" interfaces because their design and functionality are owned and controlled by BellSouth. Moreover, BellSouth has no obligation to conform to these interfaces to industry standards or guidelines.

Q. WHAT SPECIFICALLY IS THE DIFFERENCE BETWEEN A PROPRIETARY INTERFACE AND AN INDUSTRY STANDARD INTERFACE?

A. With a proprietary system, the system owner can make unilateral changes to the system. Unilaterally imposed changes can be expensive and disruptive for new entrants because the new entrant has no control over their content, timing or frequency.

In contrast, a system based on national standards (i.e., a non-proprietary system) is more stable because it is not subject to unilateral changes. National standards are

defined by industry participants in standards boards and committees. These industry groups also control the implementation and timing of changes. As a result, a new entrant can plan and implement its OSS operations more efficiently and effectively in this environment.

Q. PLEASE EXPAND ON WHY CONFORMANCE OF OPERATIONAL SUPPORT SYSTEMS TO INDUSTRY STANDARDS IS SO CRITICAL.

A. The lack of industry standard OSS interfaces means that CLECs have to use different interfaces for each RBOC or independent telephone company market served. Since every GUI system is unique, significant development, administration and training expenses will be incurred by every CLEC that chooses to operate in more than one ILEC market.

In BellSouth's case, as previously described, LENS, EDI-PC and TAFI are proprietary, BellSouth-specific interfaces that do not conform to industry standards. This means that use of these systems would require continual support of a BellSouth-specific solution. For national or multi-region CLEC providers, proprietary solutions represent an unacceptably expensive and administratively burdensome alternative.

Sprint believes that CLECs will be significantly disadvantaged in a competitive local market from both a time and cost perspective if forced to develop numerous

proprietary system interfaces and to provide training and administrative support for multiple systems and processes.

Systems based on national standards, however, should alleviate problems associated with proprietary systems and should afford new entrants with the opportunity to have nondiscriminatory access to OSS.

Q. YOU HAVE STATED THAT A SHORTCOMING OF INTERIM INTERFACES IS THAT THEY DO NOT PROVIDE COMPLETE FLOW-THROUGH TO THE CLEC'S OWN OSS. WHAT IS MEANT BY "FLOW-THROUGH" BETWEEN BELLSOUTH AND CLEC OSS?

A. Flow-through means the CLEC's electronic OSS will interact or interoperate with BellSouth's electronic OSS. This is sometimes referred to as a "machine-to-machine" interface since it excludes manual or "human-to-machine" interaction.

Q. WHY IS FLOW-THROUGH TO CLEC SYSTEMS IMPORTANT?

A. Without full system flow-through, CLEC orders will have to be re-keyed by BellSouth representatives and/or the CLEC. This manual intervention creates significant opportunity for errors. These errors can have a significant negative impact on a CLEC's ability to provide quality service and creates an impediment to the development of local competition.

Q. ARE THERE ANY OTHER CONCERNS REGARDING THE FUNCTIONALITY THAT THESE INTERIM OSS PROVIDE?

A. Yes. Another significant concern with interim OSS is that they do not provide a new entrant with the same on-line, front end edits available in BellSouth's internal OSS. On-line edits check for errors and prevent the release of orders until the service representative corrects such errors. With LENS and EDI-PC, for example, these systems only look for the presence of data in required fields and, therefore, would release orders with errors that BellSouth's internal OSS systems would not release. Without on-line edits, submitted orders are likely to be later rejected and must be resubmitted. The cycle time for that process will cause delays in providing service to customers and will increase transaction costs.

Q. WILL THE LACK OF ON-LINE, FRONT-END EDITS BE ADDRESSED WHEN CLECS UTILIZE THE PERMANENT OSS YOU'VE MENTIONED PREVIOUSLY IN THIS TESTIMONY?

A. Yes. This should be part of a CLEC's efforts to develop linkages between its OSS and BellSouth's OSS. When utilizing permanent OSS based on national standards, CLECs will construct up-front edits that will enable completed transactions to successfully process through BellSouth's systems. These edits enable the CLEC's transactions to follow what are called "business rules" for downstream BellSouth systems. These business rules define the criteria that the transactions must meet in order to successfully process through BellSouth's systems.

Q. DOES SPRINT HAVE EXPERIENCE IN UTILIZING BELLSOUTH OSS FOR ORDERING UNBUNDLED NETWORK ELEMENTS ("UNES")?

A. Yes. Sprint has a facilities-based CLEC operation in Florida that is provisioning service to customers utilizing unbundled network elements obtained from BellSouth. Since Sprint has its own central office switch and a limited fiber optic backbone network, it must order numerous service types from BellSouth including local loops, local number portability, directory listings, interoffice trunks and local interconnection trunks.

Q. HOW DOES SPRINT CURRENTLY SEND ORDER INFORMATION TO BELLSOUTH FOR ITS FLORIDA FACILITIES-BASED CLEC OPERATION?

A. Sprint currently utilizes the Exchange Access Control and Tracking ("EXACT") interface to electronically transmit local loop orders to BellSouth. In order to fully provision service to Sprint end-users, however, Sprint must also place separate service orders with BellSouth for local number portability (if the customer is keeping his or her BellSouth number), and for the customer's directory listing. These are currently being processed via facsimile.

Sprint currently requests and receives customer service record ("CSR") information via facsimile but is in the process of installing LENS access in order to improve the timeliness of receipt of this information.

Q. WHAT CHALLENGES DOES THE CURRENT OSS ENVIRONMENT PRESENT FOR SPRINT IN PROVISIONING SERVICES USING UNES?

A. Service establishment utilizing UNEs currently requires the use of a combination of interfaces which rely upon both manual and electronic interaction. As discussed previously, manual intervention creates significant opportunity for errors. Such errors increase order processing costs and negatively impact a CLEC's ability to provide quality service to its customers.

Q. BELLSOUTH HAS STATED THAT UNES CAN BE ORDERED VIA EDI. WOULD EDI REPRESENT A BETTER ALTERNATIVE TO SPRINT FOR THE TRANSMITTAL UNE ORDERS?

A. No. Even if Sprint used EDI for its UNE orders, multiple OSS would still have to be used to accomplish service establishment. For example, if local loop orders were placed via EDI, pre-order information would still have to be accessed through LENS and interconnection trunking would have to be ordered via EXACT. These systems are not integrated and as such, problems stemming from the lack of integration between pre-order and ordering functions would still exist. Moreover, the administrative and operational burdens incurred due to the use of multiple OSS interface use would still exist. The nature and importance of the integration of pre-order and ordering functions will be discussed in more detail later in this testimony.

Q. BELLSOUTH'S GLORIA CALHOUN HAS STATED IN HER DIRECT TESTIMONY, PAGE 51, LINES 7-8, THAT "ALTHOUGH EDI IS THE

RECOMMENDED PROCESS, THESE UNES COULD ALSO BE ORDERED VIA LENS." WOULD USE OF LENS BE AN APPROPRIATE ALTERNATIVE FOR SPRINT PRE-ORDER ACCESS AND UNE ORDERING?

A. No. UNE orders can be transmitted using LENS, but there are no ordering formats for UNE orders. The ordering information for UNEs ordered via LENS must be entered in the "Remarks" section and then re-keyed by BellSouth into the appropriate underlying system. This is the functional equivalent of sending the orders via facsimile and is inferior to the EXACT system currently being used to electronically transmit loop orders.

Q. WILL THE "PERMANENT" INTERFACES YOU REFERENCED EARLIER ADDRESS THE PROBLEMS WHICH CURRENTLY EXIST IN TODAY'S UNE ORDERING ENVIRONMENT?

A. Yes. The integration of pre-order and ordering functions, in particular, should be addressed with the development of "permanent" or "long term" interfaces.

Q. WHAT EFFORTS ARE UNDERWAY TO MOVE TOWARD PERMANENT OSS INTERFACES?

A. Both BellSouth and CLECs are actively involved in development activities surrounding the use of Electronic Data Interchange ("EDI") Version 7.0 for ordering functions. The Application Programming Interface ("API") is also being developed for pre-ordering functions and will provide the platform necessary to effectively integrate pre-order and ordering functions.

Q. ARE EDI VERSION 7.0 AND API INDUSTRY STANDARDS FOR CLEC TRANSACTIONS?

A. EDI has been selected as the industry standard for CLEC ordering. Version 7.0 is the most current version of EDI to be released. Although the pre-order industry standard has not yet been finalized, we anticipate that API will be selected.

Q. WHAT IS SPRINT'S ASSESSMENT OF BELLSOUTH'S CURRENTLY DEPLOYED OSS FOR PRE-ORDERING?

A. BellSouth is currently relying heavily on its LENS interface for pre-ordering functions. While operational, LENS has numerous gaps in functionality that are still being addressed. Most significantly, LENS does not allow flow-through of pre-order information to EDI, the ordering interface upon which BellSouth relies to fulfill its obligations under the Telecommunications Act. This lack of integration between pre-order and ordering functions does not provide parity with what BellSouth experiences in serving its own customers.

Q. DOES SPRINT BELIEVE THAT THE API INTERFACE UNDER DEVELOPMENT WILL EFFECTIVELY ALLOW FOR THE INTEGRATION OF PRE-ORDER AND ORDER FUNCTIONS?

A. Yes. Sprint believes that API currently being pursued by CLECs and BellSouth holds the greatest promise for integration of pre-order and ordering functions.

Q. BELLSOUTH HAS STATED IN OTHER FORUMS THAT IT DOES NOT BELIEVE THAT THE API INTERFACE IS NECESSARY TO ADDRESS THE LACK OF INTEGRATION BETWEEN PRE-ORDER AND ORDERING FUNCTIONS BECAUSE THE COMMON GATEWAY INTERFACE ("CGI") TO LENS PROVIDES A MACHINE-TO-MACHINE INTERFACE FOR PRE-ORDERING. DOES SPRINT AGREE?

A. No. CGI is an interface that can be constructed to move information from one system to another, such as the case with a CLEC's need to automatically populate orders with pre-order information. CGI specifications were provided to CLECs on December 15, 1997. If CLECs choose to use CGI, CLEC development time would be required in order for this interface to be operational. In short, the provision of specifications does not equate to the practical availability of a systems interface.

More importantly, however, CGI depends significantly on the stability of the underlying application since its ability to move information from one system to another is based upon the presence of data in particular fields of the application's screens. Re-programming is required every time there is a change in the information presented, and as such, CGI will be unacceptably burdensome to many CLECs. Moreover, CGI is built to interface with LENS, BellSouth's proprietary system. This represents a BellSouth-specific interface rather than one based on industry standards. As discussed previously, linkages to proprietary interfaces increase CLEC operating and administrative expenses and will not be acceptable to national or multi-region CLEC providers.

API, however, pulls information from the underlying data source and is not dependent upon changes in how the information is displayed on a screen. This structural

advantage, coupled with its probable designation as an industry standard, make it a much more viable alternative.

Q. WHAT IS SPRINT'S UNDERSTANDING OF THE CURRENT STATUS OF API DEPLOYMENT?

A. Sprint has been an active participant in API forums hosted by BellSouth. At the most recent API meeting in early March, BellSouth advised CLECs of its selection of a vendor to support API deployment. Once a final set of API specifications has been determined, BellSouth and interested CLECs will need to establish joint implementation agreements and timelines.

Q. WHAT IS THE CURRENT STATUS OF DEVELOPMENT EFFORTS SURROUNDING EDI VERSION 7.0?

A. OSS interfaces utilizing EDI Version 7.0 are being developed to provide a machine-to-machine ordering interface. In order to implement EDI Version 7.0, CLECs need complete system requirements specifications. Business rules which spell out the edits that orders must pass to successfully process through BellSouth's systems must also be provided. Preliminary EDI specifications and business rules were provided by BellSouth to CLECs in late 1997. Updated and supplemental information was provided by BellSouth to CLECs in late January and early February 1998. The supplemental information included additional and clarified business rules for BellSouth downstream systems, an EDI process flow document and updated "Reject Requirements" for several BellSouth systems.

Upon receipt of complete business rules and interface specifications, CLECs must fully address questions and clarify business rules. When outstanding questions have

been satisfactorily addressed by both Sprint and BellSouth, the companies can move forward to develop an implementation plan and timeline.

Q. DO SPRINT AND OTHER CLECS HAVE ALL THE SPECIFICATIONS NEEDED TO FULLY IMPLEMENT AND INTEGRATE PRE-ORDER AND ORDER FUNCTIONS?

A. No. As mentioned previously, the API specifications are still being completed. In OSS workshops sponsored by state regulatory commissions during late 1997 and early 1998, Sprint and other CLECs have acknowledged that there will be considerable CLEC resources that will need to be devoted to systems integration. Nevertheless, CLECs must receive final specifications from BellSouth in order for CLECs to accomplish their part of the task.

Q. WHEN WILL THE TRA BE ABLE TO DETERMINE WHETHER THE PERMANENT INTERFACES MEET THE STANDARD OF NONDISCRIMINATORY ACCESS?

A. Only when these interfaces are fully documented, developed and tested in a real world operating environment can their ability to meet the nondiscriminatory access standard be evaluated.

Performance Measurements

Q. WHAT IS THE SECOND ISSUE THAT YOU'D LIKE TO ADDRESS?

A. The second issue is BellSouth's proposed performance measurements.

Q. HOW ARE PERFORMANCE MEASUREMENTS RELEVANT TO THE TRA'S EVALUATION OF BELLSOUTH'S ABILITY TO MEET THE COMPETITIVE CHECKLIST REQUIREMENTS?

A. As stated previously, the competitive checklist in Section 271 (c) of the Act includes nondiscriminatory access to network elements. Sprint believes that BellSouth's performance in providing nondiscriminatory access to network elements can only be properly evaluated through documented results in accordance with specifically defined performance measures.

Sprint also believes, however, that the act of publishing an agreed upon list of performance measurements is fundamentally different from demonstrating that the stated performance targets can be met. Putting the performance measurements in writing is a good first step. Actually meeting the agreed upon performance targets on a consistent basis is the only true indicator of whether BellSouth is fulfilling its obligation to provide resale services and unbundled network elements in parity with what it provides to itself and others.

Q. WHY ARE PERFORMANCE MEASUREMENTS CRITICAL TO SPRINT'S FUTURE CLEC OPERATIONS?

A. Sprint, as with other CLECs, finds itself in the difficult situation of relying totally upon a dominant embedded competitor as its primary supplier for wholesale local services. Accordingly, the incentives to provide superior service quality levels that exist in traditional supplier/customer relationships are not replicated in the CLEC environment. At the same time, Sprint must deliver superior service quality to its

CLEC customers in order to remain competitive with BellSouth and to protect its reputation and brand image as a quality service provider. Unless BellSouth allows CLECs an opportunity to offer the same customer experience as is provided to its own retail customers, Sprint and other CLECs will be unable to effectively compete in the retail market.

In this environment, Sprint believes that adoption by the TRA of performance measurements and standards relevant to the procurement and maintenance processes for BellSouth's wholesale CLEC services is essential to establishing parity service levels. Sprint defines performance measurement standards as the higher of parity with the ILEC or compliance with existing state commission standards. Such reporting requirements will provide empirical evidence of BellSouth's ability to meet its nondiscrimination and parity obligations. It is critical that BellSouth provide surveillance reports of performance for CLEC and retail operations and that the Commission monitor those reports.

Q. HOW SHOULD NONDISCRIMINATION IN THE CONTEXT OF PERFORMANCE MEASUREMENTS BE DEFINED?

A. The competitive checklist in Section 271 (c) of the Act includes nondiscriminatory access to network elements. Included in this requirement for nondiscriminatory treatment are OSS, which have been defined as network elements by the FCC in its Local Competition Order in Docket No. 96-98. In the Local Competition Order, the FCC found (at par. 525) that ILECs must provide nondiscriminatory access to OSS functions for pre-order, ordering and provisioning, maintenance and repair, and billing, both for UNEs and resold services. The FCC defined nondiscriminatory access to mean nondiscrimination between all carriers requesting access, and parity as between the service provided to CLECs and service that the ILEC provides to itself (at par. 312).

Q. DOES SPRINT SUPPORT ESTABLISHMENT BY THE TRA OF COMPARATIVE PERFORMANCE STANDARDS?

A. Yes. Sprint supports the development of measurement categories and methodologies, including common definitions and calculation formulas that will be required to monitor and evaluate the nondiscrimination and parity obligations of ILECs as described in Section 251 of the Act. Sprint is a member of the Local Competition Users Group ("LCUG"), which has developed measurement categories and methodologies. Measurements should compare the ILEC's performance in support of its retail operations to the ILEC's support of its affiliates, individual CLECs and the CLEC industry.

These measurements should encompass all essential OSS categories including pre-order, ordering and provisioning, maintenance and repair, network performance, unbundled elements, operator services and directory assistance, system performance, service center availability and billing. Moreover, such measures should, where possible, have common nationwide definitions and calculation methodologies. Consistent measurements will allow the TRA and other state Commissions to easily monitor results across state boundaries to ensure nondiscriminatory treatment.

Measurement standards, as defined above, should be based upon actual BellSouth support provided to its retail operations or retail analogs. In the absence of directly comparative BellSouth results, standard levels of performance should be established based upon performance studies. This will ensure performance levels necessary to give CLECs a meaningful opportunity to compete. The measures employed must demonstrate that nondiscriminatory access is being delivered across all interfaces and a broad range of resold services and unbundled elements. The measures must also address availability, timeliness of execution and accuracy of execution. It is important to note that such parity considerations will change from month to month and over time as normal process improvements drive positive change in the levels of support afforded CLECs.

There may also be instances where ILEC performance falls short of existing TRA-mandated quality of service standards. In this case, the measurement objectives and methodologies should require that each function be performed equal to TRA standards.

Q. WHY DOES SPRINT FEEL IT IS NECESSARY TO DEVELOP NATIONAL PERFORMANCE MEASUREMENT STANDARDS?

A. As discussed above, consistent national measurements will allow the TRA and other state Commissions to easily monitor results across state boundaries to ensure nondiscriminatory treatment. In addition, nationally defined measurements and methodologies will minimize the costs to CLECs to develop the necessary performance monitoring processes and mechanisms. Developing different processes for every state or region makes it more difficult for companies to compete on a national basis.

Q. WHAT IS SPRINT'S POSITION REGARDING THE PERFORMANCE MEASUREMENTS DEVELOPED BY LCUG?

A. Sprint recommends implementation of these measures as a baseline for beginning the process of measuring and reporting ILEC performance in support of CLECs. Sprint proposes that the TRA adopt the performance measures and measurement methodologies set forth in the Executive Summary of the LCUG Service Quality Measurements ("SQM") document, which is attached as Exhibit "A" to my testimony. This will enable the TRA to begin to assess and gather data indicative of ILEC historical performance upon which determination of nondiscriminatory performance can be evaluated. Such evaluation should be required to ensure that the ILEC is providing service that is nondiscriminatory among CLECs and at least equal in quality to service provided internally or that which is equal to any relevant existing standards adopted by a state commission, whichever is higher.

Q. HOW CAN THE TRA HELP TO ENSURE THAT THE PERFORMANCE MEASUREMENT STANDARDS IT ESTABLISHES ARE MET AND MAINTAINED?

A. In order that BellSouth's progress towards the implementation of these standards may be monitored, BellSouth should be required to submit monthly surveillance reports, both to the TRA and to each requesting CLEC, showing: (a) BellSouth's own internal performance; (b) its performance for affiliates of the ILEC; (c) its performance for CLECs as a whole; and (d) its performance for the individual CLEC to whom the report is given. These reports should include sufficient data to enable the TRA and the CLEC to determine whether parity is being provided. This would include the raw data used to calculate performance results as well as the measurement methodology employed.

Identifying the specific methodology employed is important because certain types of reporting can mask whether meaningful parity is being provided. For example, an ILEC could report that it is achieving 95% of service installations within five days for itself and CLECs. However, an examination of the raw data used in such calculations may reveal that the ILEC is filling 95% of its own orders within two days but only 5% of a CLEC's orders within this same period. This illustrates why it is critical that both the measurement standard and the measurement methodology be prescribed.

Sprint further recommends that these surveillance reports be filed on a meaningful, geographically de-averaged basis. This would illuminate performance differences that may exist, for example, between service provided to retail customers in a metropolitan area facing competition compared with service provided to CLECs in the same geographic area. Such discrepancies could be masked if data were only reported on a state-wide or company-wide basis. Measurement data should be reported in connection with a natural geographic area such as those currently being reported by the ILEC. However, the minimum acceptable geographic area for reporting purposes should be the Metropolitan Statistical Area ("MSA").

Q. HOW IMPORTANT IS MEASUREMENT REPORTING TO ENSURE PARITY AND NONDISCRIMINATION?

A. Measurement reporting is the cornerstone to ensuring parity and nondiscrimination. Without measurement reporting there is no factual comparative data to evaluate whether BellSouth is allowing competition to flourish in the marketplace. Without factual measurement data illustrating parity and nondiscrimination, the intent of the Act will never become reality.

Q. SHOULD THESE SURVEILLANCE REPORTS BE THE ONLY DOCUMENTS REGARDING PERFORMANCE METRICS SUBMITTED TO THE COMMISSION?

A. No, not necessarily. BellSouth and CLECs should also be free to negotiate additional reporting, as deemed necessary, in order to augment the standard reports.

Q. SHOULD CLECS HAVE THE RIGHT TO AUDIT CERTAIN COMPONENTS OF THE PERFORMANCE MEASUREMENTS SURVEILLANCE REPORTS SUBMITTED BY BELLSOUTH?

A. Yes, reasonable audit rights of the reporting results and the raw data used by BellSouth in creating the report should also be required.

Sprint's Experience in Florida

Q. PLEASE DISCUSS THE THIRD ISSUE THAT YOU'D LIKE TO ADDRESS, WHICH IS BELLSOUTH'S PERFORMANCE IN PROVIDING UNBUNDLED NETWORK ELEMENTS TO SPRINT.

A. Sprint has been operating as a facilities-based CLEC focused primarily on business customers in Metropolitan Orlando, Florida since March, 1996. Sprint has

experienced ongoing problems when attempting to acquire service from BellSouth. These problems can be categorized as poor communications, ineffective processes, lack of performance and maintenance problems. The result has been increased operational costs, loss of revenue, loss of customers and a damaged reputation as a local exchange service provider.

Q. ARE THESE PROBLEMS RELEVANT TO THE TRA'S CONSIDERATION OF BELLSOUTH'S APPLICATION FOR IN-REGION, INTERLATA AUTHORIZATION IN TENNESSEE?

A. Yes. The processes and systems used by BellSouth in support of unbundled network elements are consistent across BellSouth's nine-state region. This means that the underlying process issues that have negatively impacted Sprint in Florida will also impact CLECs' ability to secure unbundled network elements from BellSouth in Tennessee. In fact, there is no reason to believe that CLECs utilizing network elements from BellSouth in Tennessee would have any different, or better, experience than the Sprint experience in Florida.

Q. WHAT KIND OF PROBLEMS HAS SPRINT EXPERIENCED?

A. Problems have occurred in virtually all phases of the customer activation process. For example, BellSouth regularly misses its commitment to provide Firm Order Confirmation ("FOC") to Sprint within 48 hours of receipt of a complete and accurate order. These delays frequently cause installations to be postponed, meaning that Sprint misses the due date commitment to its customer. In addition, on numerous

occasions BellSouth has failed to or been unable to stop service disconnection orders from being processed when the cutover to SMNI service has been delayed. BellSouth also consistently fails to notify Sprint in a timely fashion of facilities issues which will prevent Sprint from meeting its due date commitment to the customer. Such notification by BellSouth is frequently within a few days of the scheduled due date and typically requires postponement of the service installation. SMNI's wholesale bill has also been problematic. Rate elements have been repeatedly mis-applied and Sprint has had to request adjustments every month.

Q. HAS SPRINT COMMUNICATED ITS CONCERNS ABOUT BELLSOUTH'S PERFORMANCE IN SUPPORTING SMNI TO BELLSOUTH?

A. Yes. While there has been a continuing dialogue with BellSouth regarding performance issues since prior to the first service order being placed, formal written correspondence has been underway between the companies since February 6, 1997.

Q. WHAT IMPROVEMENTS HAVE OCCURED SINCE THIS WRITTEN CORRESPONDENCE BETWEEN SPRINT AND BELLSOUTH COMMENCED?

A. BellSouth claims to have implemented a process correction related to premature service disconnections and Sprint has requested that BellSouth provide documentation of this change. However, many of the underlying process deficiencies leading to the problems have not been corrected and performance failures are still occurring. Moreover, it is not clear whether recent improvements are the

result of permanent process corrections or are related to decreased order volumes or other short-term measures.

Q. HAS SPRINT TAKEN ADDITIONAL STEPS TO ATTEMPT TO SECURE IMPROVEMENT IN BELLSOUTH'S PERFORMANCE?

A. Yes. Because of the above described problems, as well as others, Sprint filed a formal Complaint against BellSouth with the Florida Public Service Commission on October 10, 1997, alleging several specific failures by BellSouth as follows:

a) BellSouth has failed to provide firm order confirmation in a timely and accurate manner to enable Sprint to install service at intervals comparable to what BellSouth provides to its retail customers;

b) BellSouth has failed to identify provisioning problems in a timely manner to enable Sprint to meet customer desired due dates consistent with the service provided by BellSouth to its retail customers;

c) BellSouth has disconnected customers seeking to migrate to Sprint service prior to the designated cutover date; and

d) BellSouth has caused service interruptions to Sprint customers. Those service interruptions have resulted in Sprint customers being unable to receive incoming calls and in some cases have also resulted in Sprint customer being unable to make outgoing calls.

Please note that the specific factual circumstances of the problems briefly referenced above, including PON numbers and order types, can be found in Sprint's various

filings in the complaint proceedings before the Florida Commission. See Docket No. 97-1314-TP.

Q. WHAT IS THE CURRENT STATUS OF THE COMPLAINT PROCEEDING IN FLORIDA AS OF MARCH 26, 1998?

A. Direct and rebuttal testimonies of the parties have been filed and depositions have been completed. A hearing before the Florida Public Service Commission is scheduled for March 30, 1998.

Q. DOES SPRINT BELIEVE THAT BELLSOUTH MEETS THE COMPETITIVE CHECKLIST?

A. No.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

LOCAL COMPETITION USERS GROUP (LCUG)

SERVICE QUALITY MEASUREMENTS (SQM)

September 26th, 1997
Membership: AT&T, Sprint, MCI, LCI, WorldCom

Version 6.1

Service Quality Measurements
Table Of Contents

Service Quality Measurements
Introduction

Background:

On August 8, 1996, the Federal Communications Commission released its First Report and Order (the Order) in CC Docket No. 96-98 (Implementation of the Local Competition Provisions of the Telecommunications Act of 1996). The Order establishes regulations to implement the requirements of the Telecommunications Act of 1996. Those regulations are intended to enable potential competitive local exchange carriers (CLECs) to enter and compete in the local telecommunications markets. One requirement found to be "absolutely necessary" and "essential" to successful entry is that the incumbent local exchange carriers (ILECs) provide nondiscriminatory access to their operations support systems (OSSs). Many variations of interim OSS GUIs (graphic user interfaces), and electronic gateways have been or are being offered by the ILECs. These interim systems have not provided the capability for the CLECs to provide the same customer experience for their customer as compared to what the ILECs do for theirs. The timeliness and accuracy of information processed by the ILEC for pre-ordering, ordering and provisioning, maintenance and repair, unbundled elements, and billing have not, to date, been satisfactory. The service delivery problems exist regardless whether total service resale or unbundled elements are utilized. Final solutions for application-to-application real time system interfaces are evasive because of the complexity, the diversity of committed implementation schedules and lack or inconsistent use of industry guidelines.

On February 12, 1997 the Local Competition Users Group (LCUG) issued their "Foundation For Local Competition: Operations Support Systems Requirements For Network Platform and Total Services Resale. The core principles contained in the document are: Service Parity, Performance Measurement, Electronic Interfaces, Systems Integrity Notification of Change, and Standards Adherence. Each of these are significant to ensure CLEC customers can receive at least equal levels of service to those the ILEC provides to its own customers. The LCUG group indicated that is was essential that a plan be developed to measure the ILECs performances for all the essential OSS categories (e.g. pre-ordering, ordering and provisioning, maintenance and repair, network performance, unbundled elements, operator services and directory assistance, system performance, service center availability and billing). To that end, an LCUG sub-committee was formed with a charter to address measurements and metrics. The subcommittee jointly developed a comprehensive list of potential measurements which was developed and shared among the team members for review. Each committee member researched an assigned measurement group for the purpose of proposing consolidation and other modifications. The subcommittee discussed each measurement and considered existing regulatory requirements (minimum service standards) as well as good business practices in arriving at the recommended measurement and extent of detail to be reported. The service quality measurement (SQM) goals, or benchmark levels of performance, were established to provide a nondiscrimination standard in the absence of directly comparative ILEC results. Establishing precise benchmark level was difficult because the ILECs have been reluctant to share actual results. The goals, therefore, were based upon best of class and/an assessment of the necessary performance to support a meaningful opportunity for CLECs to compete. The SQM goals may change if the ILECs share historical and/or self report current results.

Measurement Plans:

A measurement plan, capable of monitoring for discriminatory behavior, must incorporate at least the following characteristics; 1) it permits direct comparisons of the CLEC and CLEC industry experience to that of the ILEC though recognized statistical procedures, 2) it accounts for potential performance variations due to differences in service and activity mix, 3) it measures not only retail services but experiences with UNEs and OSS interfaces, and 4) it produces results which demonstrate the nondiscriminatory access to OSS functionality is being delivered across all interfaces and a broad range of resold services and unbundled elements. The measures employed must address availability, timeliness of execution, and accuracy of execution.

Service Quality Measurements

Introduction

It is essential that the CLECs be able to determine that they are receiving at least equal treatment to that ILECs provide to their own retail operations or their local service affiliates. Benchmarks and performance standards that are voluntarily adopted by the CLECs and ILECs, or ordered by commissions, need to clearly demonstrate that new service providers are receiving nondiscriminatory treatment.

This document discusses measurements at both a summary level (Executive Overview) and at a level suitable for starting the implementation process (Measurement Detail)

Service Quality Measurements
Business Rules

Test for Parity:

ILEC Reports Results For Own Local Operations:

Both the average (mean) result and the variance of the measurement result for the ILEC and the CLEC should be compared to establish that the CLEC result is no worse than the ILEC's result.

ILEC Results Are Not Reported Or Results Are Incomplete:

The mean result for CLEC must be compared and a determination made that the CLEC result is no worse than the benchmark performance level. The benchmark performance to be employed in the comparison is the result produced via special study by an ILEC (as described below) or, in the absence of such a study result, the LCUG default performance benchmarks.

Benchmarking Study Requirements:

A special study may be optionally utilized by the ILEC to establish the benchmark performance level whenever a reasonable ILEC retail analog does not exist. When the ILEC performs a benchmarking study, it must be based upon equivalent experiences of that ILEC and conform to the following minimum requirements: (1) a benchmark result is provided for each reporting dimension described for the measurement; (2) the mean, standard error, and number of sample points are disclosed for each benchmark result; (3) the study process and benchmark results may be subjected to independent audit; (4) update to the benchmark result will be submitted whenever changes may reasonably be expected to impact the study results or six months has elapsed since the conduct of the prior study, whichever occurs earlier. Unless directly ordered by the appropriate regulatory commission, no ILEC benchmark will be utilized in lieu of an LCUG benchmark without mutual agreement of the CLECs impacted by use of the benchmark

Reporting Expectations and Report Format:

CLEC results for the report month are to be shown in comparison to the ILEC result for the same period with an indication, for each measurement result, where the CLEC result is lesser in quality compared to the ILEC (based upon the test for parity described in the preceding). Such detailed results will be reported only to the CLEC unless written permission is provided to do otherwise. Furthermore, reporting to the individual CLECs should include, for each measure, a representation of the dispersion around the average (mean) of the measured results for the reporting period (e.g. percent of 1-4 lines installed in the 1st day, 2nd day, 3rd day, and > 10 days, etc.) In addition to providing the preceding detailed results, the ILEC must also supply, to each interested CLEC, a report showing the ILEC performance for each measure in comparison to both CLEC industry in aggregate and the performance delivered to any affiliate(s) of the ILEC.

Delivery of Reports and Data:

Reports are to be made available to CLEC by the 5th scheduled business day following the close of the calendar report month. If requested by the CLEC, data files of raw data are to be transmitted by the ILEC to the CLEC on the 5th scheduled business day pursuant to mutually acceptable format, protocol and transmission media.

Geographic Reporting:

Measurement data should be reported on a natural geographic area that allows prudent operational management decisions to be made and does not obscure actual performance levels. Presently ILECs report at levels as discrete as indiviual exchanges (Central Office) to as aggregated as the Region level. The recommended default level of reporting is the MSA although further detail should be required where it improves the ability to make meaningful comparisons..

Verification and Auditing:

By joint request of more than one CLEC, an audit of the data collecting, computing and reporting processes must be permitted by the ILEC. The ILEC must also permit an individual CLEC to audit or examine its own results pursuant to terms no more restrictive than those established between the CLEC and the ILEC in the interconnection agreement for the operating area underlying the reported results.

During implementation of the measurement reporting, validation of results of data collection, measurement result computation and report production will be necessary. The ILEC must permit such validation activities and not subsequently contend that an individual CLEC has undertaken an audit either under the terms of the measurement plan or pursuant to the terms of the CLEC's interconnection agreement.

Adaptation:

Technology, market conditions and industry guidelines/standard continue to evolve. LCUG reserves the right to modify the content of this document, adding, deleting or making modification, as necessary to reflect such changes.

Service Quality Measurements
Executive Overview

This Executive Overview section:

- Provides a summary of the detailed requirements
- Enables a quick overview and understanding of the proposed LCUG measurements
- Summarizes the Business Implications associated with each measurement
- Accommodates a target audiences who have a need to know about the measurements but not the specific details

Service Quality Measurements
Executive Overview

Pre-Ordering (PO)

Function:	
Average Response Interval for Pre-Ordering Information	
Business Implications:	
• The CLEC customer service agent must establish such basic facts as availability of desired features, likely service delivery intervals, the telephone number to be assigned and the validity of the street address while the customer (or potential customer) is on the phone • It is critical that the CLEC be perceived as equally competent, knowledgeable and fast as an ILEC customer service agent • This measure is designed to monitor the time required for CLECs to obtain the pre-ordering information necessary to establish and modify service • Comparison to the ILEC results allow conclusions whether an equal opportunity exists for the CLEC to deliver a comparable customer experience (compared to the ILEC) when a retail customer calls the CLEC with a service inquiry	
Measurements:	**Results Detail:**
• Average Response Interval for Pre-Ordering Information	• Major Pre-ordering Query Type

Ordering and Provisioning (OP)

Function:	
Order Completion Intervals	
Business Implications:	
• When the CLEC commits to a due date for service delivery, the customer plans for service availability at that point and will be dissatisfied if the requested service or feature is not delivered when promised • The "average completion interval" measure monitors the time required by the ILEC to deliver integrated and operable service components requested by a CLEC, regardless of whether services resale or unbundled network elements are employed • When the service delivery interval of the ILEC is measured for comparable services, then conclusion can be drawn regarding whether or not CLECs have a reasonable opportunity to compete for customers • The "average completion interval" and "percent completed on time" may prove useful in detecting developing capacity issues	
Measurements:	**Results Detail:**
• Mean Completion Interval • Percent Orders Completed on Time	• By Major Service Family and Order Type

Service Quality Measurements
Executive Overview

Function:	
Order Accuracy	
Business Implications:	
• Customers expect that their service provider will deliver precisely the service ordered and all the features specified • This measurement monitors the accuracy of the provisioning work performed by the ILEC in response to CLEC orders	
Measurements:	**Results Detail:**
• Percent Order Accuracy	• By Major Service Family

Function:	
Order Status	
Business Implications:	
• When a customers calls their service providers, they expect to be able to promptly get the information regarding the progress on their order(s) • When changes must be made, such as to the expected delivery date, customers expect that they will be immediately notified so that they may modify their own plans • The order status measurements monitor, when compared to the ILEC result, that the CLEC has timely access to order progress information so that the customer may be updated or notified, early on, when changes and rescheduling are necessary	
Measurements:	**Results Detail:**
• Mean Reject Interval • Mean FOC Interval • Mean Jeopardy Interval • Mean Completion Interval • Percent Jeopardies Returned	• By Status Type and Order Type

Function:	
Held Orders	
Business Implications:	
• Customers expect that work will be completed when promised • There must be assurances that the average period that CLEC orders are held, due to a delayed completion, is no worse for the CLEC when compared to ILEC orders	
Measurements:	**Results Detail:**
• Mean Held Order Interval • Percent Orders Held ≥ 90 Days • Percent Orders Held ≥ 15 Days	• By Major Service Family and Reason for Hold

Service Quality Measurements
Executive Overview

Maintenance and Repair (MR)

Function:	
Time To Restore	
Business Implications:	
• Customers expect prompt restoral of service to the normal operating parameters whenever troubles are detected • The longer the time required to correct a service problem, the greater the customer dissatisfaction	
Measurements:	**Results Detail:**
• Mean Time to Restore	• By Major Service Family and Trouble Type

Function:	
Frequency of Repeat Troubles	
Business Implications:	
• This measurement, when gathered for both the ILEC and CLEC can establish whether or not CLECs are competitively disadvantaged (vis-à-vis the ILEC) as a result of experiencing more frequent occurrence of customer troubles not being resolved in the first attempt to repair the trouble • Differences in this measure may indicate that the CLEC is receiving inferior maintenance support in the initial resolution of troubles or, in the alternative, it may indicate that the network components supplied are of inferior quality	
Measurements:	**Results Detail:**
• Repeat Trouble Rate	• By Major Service Family and Trouble Type

Function:	
Frequency of Troubles (Troubles per 100 Lines)	
Business Implications:	
• Customers demand high quality service performance from their supplier and differentials in performance are quickly recognized throughout the market place • When measured for both the ILEC and CLEC and compared, this measure can be used to establish that CLECs are not competitively disadvantaged, compared to ILEC, as a result of experiencing more frequent incidents of trouble reports • Disparity in this measure may indicate differences in the underlying quality of the network components supplied	
Measurements:	**Results Detail:**
• Trouble Rate	• By Major Service Family and Trouble Type

Service Quality Measurements
Executive Overview

Function:	
Estimated Time To Restore Met	
Business Implications:	
• When customers experience trouble on working services, they naturally expect the services to be restored within the time frame promised • When this measure is collected for the ILEC and CLEC and then compared, it can be used to establish that CLECs are receiving equally reliable (as compared to the ILEC operations) estimates of the time required to complete service repairs	
Measurements:	**Results Detail:**
• Percentage of Customer Troubles Resolved Within Estimate	• By Major Service Family and Trouble Type

Service Quality Measurements
Executive Overview

General (GE)

Function:	
Systems Availability	
Business Implications:	
• Access to essential business functionality, supported by OSS of the ILEC, is absolutely essential to CLEC operations • This measure monitors that such OSS functionality is at least as accessible to the CLEC as to the ILEC	
Measurements:	**Results Detail:**
• Percent System Availability	• By Function Interface

Function:	
Center Responsiveness	
Business Implications:	
• When CLECs experience operational problems dealing with ILEC processes or interfaces, prompt support by the ILEC is required in order to assure that the CLEC customers are not adversely impacted • Any delay in responding to CLEC center requests for support (e.g., request for a vanity telephone number) will, in turn, adversely impact the CLEC retail customer who may be holding on-line with the CLEC customer service agent • This measure, when gathered for both the CLEC and ILEC, supports monitoring that ILEC handling of support calls from CLECs is at least as responsive as for calls by ILEC retail customers seeking assistance (e.g., calling the business office of the ILEC or call the ILEC to report service repair issues)	
Measurements:	**Results Detail:**
• Mean Time to Answer Calls • Call Abandonment Rate	• By Support Center Provided

Service Quality Measurements
Executive Overview
Billing (BI)

Function:	
Timeliness Of Billing Record Delivery	
Business Implications:	
• Regardless whether the billing is for retail customer or exchange access service, the timing of ILEC delivery of billing records must provide CLECs with the opportunity to deliver timely bills in as timely a manner as the ILEC; otherwise artificial competitive advantage would be realized by the ILEC	
Measurements:	**Results Detail:**
• Mean Time to Provide Recorded Usage Records • Mean Time to Deliver Invoices	• By Type of Usage (End User Direct Bill, End User Alternately Billed, or Access) or By Type of Invoice (TSR or UNE)

Function:	
Accuracy of Billing Records	
Business Implications:	
• The accuracy of billing records affects the accuracy of the billing ultimately delivered to local service customers, whether retail service or exchange access service customers • Billing for the elements from which CLEC services are constructed must be validated to assure that only correct charges are paid	
Measurements:	**Results Detail:**
• Percent Invoice Accuracy • Percent Usage Accuracy	• By Type of Usage (End User Direct Bill, End User Alternately Billed, or Access) or By Type of Invoice (TSR or UNE)

Service Quality Measurements
Executive Overview
Operator Services and Directory Assistance (OS, DA)

Function:	
Speed To Answer	
Business Implications:	
• In order to assure that an unjustified competitive advantage is not created for the ILEC, the speed of answer delivered to CLEC retail customers, when the ILEC provides Operator Services or Directory Services on behalf of the CLEC, must be no slower than the speed of answer that the ILEC delivers to its own retail customers of equivalent local services	
Measurements:	**Results Detail:**
• Mean Time to Answer	• Operator Services and Directory Service Separately Reported Detailed, for eeach Service by Machine and Human Answer Time

Service Quality Measurements
Executive Overview
Network Performance (NP)

Function:	
Network Performance Parity	
Business Implications:	
• The perceived quality of CLEC retail services, particularly when either ILEC services are resold or UNE combinations are employed, will be heavily influenced by the underlying quality of the ILEC network performance • Customers experience the quality of the service provider each time services are used	
Measurements:	**Results Detail:**
• Network Performance Parity	• Transmission Quality • Speed Of Connection • Reliability

Service Quality Measurements
Executive Overview
Interconnect / Unbundled Elements and Combos (IUE)

Function:	
Availability of Network Elements	
Business Implications:	
• Because CLECs use individual elements as well as element combinations to deliver unique services, it is essential that the UNE functionality operate properly due to the crucial role played by such elements in providing quality retail services • This measure monitors individual network element or element combinations, that do not have an apparent retail analog, to assure that CLECs have a meaningful opportunity to compete through access to and use of element (or combination) functionality	
Measurements:	**Results Detail:**
• Availability of Network Elements	• By Unique UNE or UNE Combination employed (e.g., A-Link, D-Link, SCPs/Databases, SCPs/Databases Correctly Updated, Loop Combo Availability)

Function:	
Performance of Network Elements	
Business Implications:	
• As CLECs use individual elements (as well as element combinations) to deliver unique services, it is essential that the UNE functionality operates in a timely manner because of the crucial role played by such elements in providing quality retail services	
Measurements:	**Results Detail:**
• Timeliness of Element Performance	• By Unique UNE or UNE Combination employed (e.g.,LIDB Query time out)

CERTIFICATION OF SERVICE

I hereby certify that I have this day served a true and exact copy of the within and foregoing Direct Testimony of Melissa Closz in Docket No. 97-00309, via United States mail, postage paid and properly addressed to the following:

H. LaDon Baltimore
Farrar & Bates, LLP
211 Seventh Avenue North, Ste. 320
Nashville, Tennessee 37219-1823

K. David Waddell
Executive Secretary
Tennessee Regulatory Authority
450 James Robertson Parkway
Nashville, Tennessee 37243-0505

Jonathan E. Canis
Kelley Drye & Warren LLP
1200 19TH Street, N.W.
Suite 500
Washington, D.C. 20036

Dana Shaffer, Esquire
Nextlink
105 Malloy Street, #300
Nashville, Tennessee 37201

Charles B. Welch, Esquire
Farris, Mathews, et al.
511 Union Street, #2400
Nashville, Tennessee 32719

Henry Walker, Esquire
Boult, Cummings, Conners & Berry, PLC
P.O. Box 198062
Nashville, Tennessee 37219-8062

Jon E. Hastings, Esquire
Boult, Cummings, et al.
P.O. Box 198062
Nashville, Tennessee 37219-8062

Alaine Miller
NextLink
155 – 108th Avenue NE
Suite 810
Bellevue, WA 98004

Bennett Ross
BellSouth Telecommunications
675 West Peachtree Street
Suite 4300
Atlanta, GA 30375

Claire Daly
LDDS WorldCom
201 Energy Parkway
Suite 200
Lafayette, LA 70508

Douglas W. Kinkoph
LCI International
8180 Greensboro Drive
Suite 800
McLean, VA 22101

Martha McMillin
MCI
780 Johnson Ferry Road
Suite 700
Atlanta, GA 30342

Guy Hicks
BellSouth Telecommunications Inc.
Suite 2101
333 Commerce Street
Nashville, TN 37201-3300

James P. Lamoureux
AT&T
Room 4068
1200 Peachtree Street NE
Atlanta, GA 30309

Michael McRae
Sr. Regulatory Counsel – TCG MidSouth
2 Lafayette Centre
1133 21st Street, Suite 400
Washington, DC 20036

Susan Davis Morley
Wiggins & Villacorta P.A.
PO Drawer 1657
501 East Tennessee Street
Tallahassee, FL 32302

Val Sanford, Esquire
Gullett, Sanford, et al.
PO Box 198888
230 Fourth Avenue N., 3rd Floor
Nashville, Tennessee 37219-8888

L. Vincent Williams, Esquire
Consumer Advocate Division
426 5th Avenue, N., 2nd Floor
Nashville, Tennessee 37243

Guilford Thornton, Esquire
Stokes & Bartholomew
424 Church Street
Nashville, Tennessee 37219

Donald L. Scholes BPR #10102
Branstetter, Kilgore, Stranch & Jennings
227 Second Avenue North
Nashville, TN 37219

Andrew O. Isar
Tennessee Resellers Assn.
Director-Industry Relations
4312 92nd Ave. NW
Gig Harbor, WA 98335

Enrico C. Soriano
Kelley Drye & Warren LLP
1200 19th Street, N.W.
Suite 500
Washington, D.C. 20036

D. Billye Sanders
Waller Lansden Dortch & Davis
A Professional Limited Liability Company
511 Union Street, Suite 2100
Nashville, TN 37219-1760

Vance Broemel, Esquire
Consumer Advocate Division
426 5th Avenue, N., 2nd Floor
Nashville, TN 37243

This the 26th day of March 1998

Danielle Etzbach
Sprint Communications Company L.P.
External Affairs