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July 17, 1997

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

RE: Docket No. 960786-TL

Dear Mrs. Bayo:

Enclosed for filing in the above-referenced docket are an original and fifteen (15) copies of the Direct Testimony of Jay Bradbury, John M. Hamman and C. Michael Pfau.

Copies of the foregoing are being served on all parties of record in accordance with the attached Certificate of Service.

Sincerely,

Marsha Rule

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CERTIFICATE OF SERVICE

DOCKET NO. 960786-TL

I HEREBY CERTIFY that a true copy of the foregoing has been furnished by U.S. Mail or hand-delivery to the following parties of record this 17th day of July, 1997:

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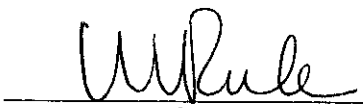


Marsha E. Rule

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Consideration of	)	DOCKET NO. 960786-TL
BellSouth Telecommunications	)	FILED: July 17, 1997
Inc.'s entry into InterLATA	)	
services pursuant to Section 271	)	
of the Federal	)	
Telecommunications Act of 1996.	)	

DIRECT TESTIMONY
OF
JAY BRADBURY
ON BEHALF OF
AT&T COMMUNICATIONS OF
THE SOUTHERN STATES INC.

BACKGROUND

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Jay Bradbury. My business address is 1200 Peachtree Street, Atlanta, Georgia.

Q. PLEASE DESCRIBE YOUR CURRENT POSITION AND RESPONSIBILITIES.

A. Since August 1995, I have been employed by AT&T as a Manager in the Local Infrastructure and Access Management Organization. In that position, I handle responsibilities associated with negotiating and implementing operational agreements with incumbent local exchange companies needed to support AT&T's entry into the local telecommunications market.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I graduated with a Bachelor of Arts degree in History from The Citadel in 1966. I have taken additional undergraduate and graduate courses at the University of South Carolina and North Carolina State University in Business and Economics. In 1987 and 1988, I participated in Advanced Management Programs at Rutgers University and the University of Houston.

I began my AT&T career in 1970 as a Chief Operator with Southern Bell's Operator Services Department in Raleigh, North Carolina. From 1972 through 1987, I held various positions within Southern Bell's (1972 - 1984)

and AT&T's (1984 - 1987) Operator Services Departments where I was responsible for the planning, engineering, implementation and administration of personnel, processes and network equipment used to provide local and toll operator services and directory assistance services in North Carolina, South Carolina, Kentucky, Tennessee and Mississippi. In 1987, I transferred to AT&T's External Affairs Department in Atlanta, Georgia, where I was responsible for managing AT&T's needs for access network interfaces with South Central Bell, including the resolution of operational performance, financial and policy issues. From 1989 through November 1992, I was responsible for AT&T's relationships (including the negotiation and administration of billing and marketing contracts, card honoring contracts, facility contracts, and the support of sales of Network Systems products) with Independent Telephone Companies within the South Central Bell States and Florida. From November 1992 through April 1993, I was a Regulatory Affairs Manager in the Law and Government Affairs Division responsible for the analysis of industry proposals before regulatory bodies in the South Central States to determine their impact on AT&T's ability to meet its customers' needs with services that are competitively priced and profitable. In April of 1993, I transferred to the Access Management Organization within AT&T's Network Services Division as a Manager - Access Provisioning and Maintenance with responsibilities for on-going management of processes and structures in place with Southwestern Bell to assure that their access provisioning and maintenance performance met the needs of AT&T's Strategic Business Units.

Q. WHAT IS THE SCOPE OF YOUR TESTIMONY?

A. My testimony examines whether BellSouth's proposed operational support system ("OSS") interfaces described by BellSouth Witness Calhoun comply with the Telecommunications Act of 1996 (the "Act") and its implementing regulations. In particular, I examine whether such interfaces provide new entrants with nondiscriminatory access to BellSouth's OSS functions. BellSouth's interfaces do not meet the requirements of the Act; and therefore this Commission should not approve either BellSouth's SGAT or BellSouth's 271 application.

The primary reason is that BellSouth's proposed OSS interfaces are discriminatory. With few exceptions, the BellSouth interfaces do not provide new entrants with the same capabilities BellSouth possesses for itself. For example, most of BellSouth's interfaces require more human intervention to perform OSS functions than is required when BellSouth uses its OSS to perform the same or equivalent functions. This is important because human intervention increases work time, error rates, and costs for new entrants. In addition, several of BellSouth's proposed interfaces do not have sufficient capacity to meet the combined operational requirements of all new entrants. Furthermore, several of BellSouth's proposed interfaces do not comport with existing and emerging industry standards, and BellSouth has not provided adequate technical data to allow new entrants to develop systems and processes that would be compatible with BellSouth's proposed interfaces.

The Act requires nondiscriminatory access to BellSouth's interfaces, and BellSouth has not met this requirement. BellSouth has not provided empirical evidence that its interfaces actually provide nondiscriminatory access to BellSouth's OSS. BellSouth's proposed interfaces have not been sufficiently tested. In fact, BellSouth has conceded that the design of a primary interface (the Local Exchange Negotiation System or LENS) will not be stable before the end of the year, which means that BellSouth's proposed interfaces also have little if any operational experience to demonstrate that they will provide nondiscriminatory access in the real world. For these reasons and others discussed below, the Florida Commission should find that BellSouth's OSS interfaces, as they exist today, do not comply with the requirements of Section 251 of the Act and, therefore, do not meet the competitive checklist requirements under Section 271 of the Act or the SGAT requirements under Sections 251 and 252 of the Act.

Q. WHAT ISSUES INVOLVED IN THIS DOCKET DOES YOUR TESIMONY AFFECT?

A. As noted above, my testimony examines BellSouth's failure to provide nondiscriminatory access to OSS functions. BellSouth's failure to provide such access is critical to many issues that are now before the Florida Commission. Specifically:

Issue 2: Has BellSouth provided interconnection in accordance with the requirements of Sections 251(c)(2) and 252(d)(1) of the Telecommunications Act of 1996, pursuant to Section 271(c)(2)(B)(i) and applicable rules promulgated by the FCC?

Reason: BellSouth's failure to provide nondiscriminatory access to OSS functions as specifically required by the Act is necessary for new entrants to order interconnection, obtain provisioning information about interconnection orders, submit and monitor trouble reports regarding interconnection, and receive necessary billing information for interconnection.

Issue 3: Has BellSouth provided nondiscriminatory access to network elements in accordance with the requirements of Sections 251(c)(3) and 252(d)(1) of the Telecommunications Act of 1996, pursuant to Section 271(c)(2)(B)(ii) and applicable rules promulgated by the FCC?

Reason: Operational support systems are network elements for which BellSouth must, but cannot presently, provide nondiscriminatory access. In addition, nondiscriminatory access to OSS functions is critical to BellSouth's ability to provide nondiscriminatory access to other network elements. Nondiscriminatory access to other network elements necessarily includes the ability to order, provision, maintain, and bill those network elements.

Issue 3(a) Has BellSouth developed performance standards and measurements ? If so, are they being meet?

Reason: BellSouth must have performance standards and measurements for OSS functions to demonstrate that it meets its obligation under the Act to provide

nondiscriminatory access. Lack of such standards makes it impossible for BellSouth to demonstrate compliance with its obligations to provide nondiscriminatory access. This is discussed in further detail in Mike Pfau's testimony.

Issue 9: Has BellSouth provided white pages directory listings for customers of other telecommunications carrier's telephone exchange service, pursuant to Section 271(c)(2)(B)(viii) and applicable rules promulgated by the FCC?

Reason: Nondiscriminatory access to directory listings requires that BellSouth provide new entrants the same capability to submit orders for directory listings as BellSouth provides itself. BellSouth has not provided such capability.

Issue 10: Has BellSouth provided nondiscriminatory access to telephone numbers for assignment to the other telecommunications carriers' telephone exchange service customers, pursuant to Section 271(c)(2)(B)(ix) and applicable rules promulgated by the FCC?

Reason: Nondiscriminatory access to telephone numbers requires that BellSouth provide new entrants the same capability to obtain telephone numbers as BellSouth provides itself. BellSouth has not provided such capability.

Issue 12: Has BellSouth provided number portability, pursuant to Section 271(c)(2)(B)(xi) and applicable rules promulgated by the FCC?

Reason: BellSouth must provide new entrants with a reasonable and nondiscriminatory means to order number portability. BellSouth has not done so.

Issue 15: Has BellSouth provided telecommunications services available for resale in accordance with the requirements of Sections 251(c)(4) and 252(d)(3) of the Telecommunications Act of 1996, pursuant to Section 271(c)(2)(B)(xiv) and applicable rules promulgated by the FCC?

Reason: The FCC Order requires BellSouth to provide nondiscriminatory access to OSS function as part of its obligation under Section 251(c)(4) not to impose unreasonable or discriminatory conditions or limitations on resale. BellSouth has not provided such nondiscriminatory access.

Issue 15(a) Has BellSouth developed performance standards and measurements ? If so, are they being meet?

Reason: BellSouth must have performance standards and measurements for OSS functions involved in resale in order to demonstrate that BellSouth is meeting its obligations under the Act. As stated above, BellSouth has not instituted such performance standards and measures. This is discussed in further detail in Mike Pfau's testimony.

OSS REQUIREMENTS UNDER THE ACT

Q. WHAT ARE OPERATIONAL SUPPORT SYSTEMS ("OSS")?

A. Operational support systems are computer-based systems and databases that telecommunications carriers use to perform essential customer and business support functions, including pre-ordering, ordering, provisioning, maintenance and repair, and billing. Computer-based OSS enable telecommunications carriers to transmit data electronically between different systems, thereby maximizing efficiency and effectiveness in the performance of these essential support functions. Without electronic OSS interfaces, effective competition within the local telecommunications market will not develop.

Q. DID THE FEDERAL COMMUNICATIONS COMMISSION ("FCC") ADDRESS ACCESS TO OSS?

A. Yes. In its First Report and Order, the FCC concluded that OSS were network elements that must be unbundled upon request under Section 251(c)(3). FCC Order No. 96-325 ¶ 525 (Aug. 8, 1996) (hereinafter "FCC Order"). In addition, the FCC concluded that OSS functions are subject to the duty imposed by Section 251(c)(3) on incumbent local exchange carriers to provide nondiscriminatory access to network elements, and the duty imposed by Section 251(c)(4) to provide resale services under just, reasonable, and nondiscriminatory conditions. FCC Order ¶ 517. An incumbent LEC, therefore, must provide nondiscriminatory access to the full range of functions within pre-ordering, ordering, provisioning, maintenance and repair, and billing of network elements and resold services. FCC Order ¶ 525. Nondiscriminatory access necessarily includes access to the functionality of any internal systems the incumbent LEC employs for its own

customers. FCC Order ¶ 523. An incumbent LEC does not discharge its duty to provide nondiscriminatory access if that incumbent LEC provides electronic access to itself but offers new entrants access that involves human intervention. FCC Order ¶ 523.

In its Second Order on Reconsideration, the FCC affirmed its previous order. FCC Order No. 96-476 (Dec. 13, 1996). The FCC noted that providing access to OSS functions is a critical requirement for complying with Section 251. Id. at ¶ 11. The FCC also indicated that incumbent LECs not providing access to OSS functions in accordance with the FCC's First Report and Order (discussed above) would not meet the competitive checklist under Section 271 of the Act. Id. In other words, nondiscriminatory access to all OSS functions, including internal LEC systems, is required by Section 271. BellSouth does not meet this requirement at this time.

Q. IS NONDISCRIMINATORY ACCESS TO OSS REQUIRED BY SECTION 252 AND SECTION 271 OF THE ACT?

A. Yes. Under Section 252(f)(2) of the Act, a State commission may not approve an SGAT unless the SGAT complies with Section 251, Section 252(d), and the respective implementing regulations. As explained above, the FCC regulations require a Regional Bell Operating Company ("RBOC") to provide nondiscriminatory access to its OSS in order to comply with Section 251(c)(3) regarding network elements, and Section 251(c)(4) regarding resale. FCC Order ¶ 525. Accordingly, State commissions may not approve

an SGAT unless it provides for nondiscriminatory access to the RBOC's OSS.

Under Section 271, the FCC may not approve an RBOC's application under either Track A or Track B unless that RBOC complies with the competitive checklist. The Act requires the FCC to consult with the State commission in order to verify compliance with the competitive checklist and other requirements. Two of the many requirements of the competitive checklist are compliance with Sections 251(c)(3) and 251(c)(4). An RBOC, therefore, must provide nondiscriminatory access to its OSS in order to meet the competitive checklist, because such nondiscriminatory access is essential to complying with Sections 251(c)(3) and 251(c)(4).

Q. DO YOU HAVE ANY SUPPORT FOR YOUR ASSERTIONS REGARDING NONDISCRIMINATORY ACCESS TO AN RBOC'S OSS?

A. Yes. The U.S. Department of Justice ("DOJ") has commented on this issue extensively, as have the Attorneys General of several states. The DOJ determined that Section 271 requires an RBOC to demonstrate that it can practicably provide checklist items by means of efficient wholesale support processes, including access to OSS functions. Evaluation of the U.S. Department of Justice, SBC Communications-Oklahoma, dated May 16, 1997 ("DOJ Evaluation"), at 28. The DOJ's review emphasizes that nondiscriminatory access to RBOC OSS functions is an essential prerequisite to the development of competition. RBOC support processes must allow new

entrants to perform OSS functions at parity with the RBOC. Id. In addition to providing parity, the RBOC's wholesale support processes also must offer a level of functionality sufficient to provide new entrants with a meaningful opportunity to compete using resale and network elements. Id. In other words, providing parity of access is not enough if such parity does not provide new entrants with the functionality necessary to compete effectively.

The DOJ concluded that automation of wholesale support processes is needed in two primary areas to provide access to OSS functions and facilitate the processing of transactions for resale services and network elements. DOJ Evaluation, App. A, at 69. First, the RBOC and new entrants must develop electronic transaction interfaces that will permit them to exchange information in agreed-upon formats. Id. An example of an agreed-upon format is Electronic Data Interchange ("EDI") format that is the industry standard for ordering. The RBOC must provide the new entrant with the information and cooperation necessary for the new entrant to develop and maintain its internal OSS to be compatible with the electronic interface. Id.

Second, the RBOC must automate the interaction of its internal OSS with the transactions flowing through the electronic interface in agreed-upon formats. DOJ Evaluation, App. A, at 70. That may require the RBOC to develop entirely new systems for efficiently processing the new entrants' transactions in order to make resale and network elements practicably available. Id. At a minimum, the RBOC must automate processes for new entrants where the RBOC utilizes automated processes for its own retail operations. Id. at 71.

Put another way, the degree of automation that the RBOC uses in its retail operations marks the floor -- not the ceiling -- for the degree of automation that the RBOC must provide new entrants. BellSouth, therefore, must provide additional automation if the existing processes do not provide new entrants a meaningful opportunity to compete.

Q. HOW DID THE DOJ EVALUATE THE RBOC'S COMPLIANCE WITH THE REQUIREMENTS OF SECTION 271?

A. The DOJ used two criteria to evaluate compliance with Section 271 requirements -- functionality and operability. DOJ Evaluation, App. A, at 68. The functionality criterion evaluates system capabilities, whereas the operability criterion evaluates system performance. Described below are some of the issues that the DOJ evaluated under each criterion.

Functionality

Compliance with Industry Standards -- The DOJ concluded it was critical for RBOCs to be proactive in complying with existing and emerging industry standards. Industry standards will ultimately reduce the need for new entrants to build completely separate interfaces for each RBOC, which in turn will lower costs and facilitate faster development of such interfaces. DOJ Evaluation, App. A, at 73-74.

Human-to-Machine Interfaces versus Machine-to-Machine Interfaces --The DOJ found that current industry standards recognize the shortcomings of human-to-machine interfaces, and industry groups

have focused almost exclusively on machine-to-machine (i.e., application-to-application) interfaces. The DOJ concluded that human-to-machine interfaces may satisfy the Act's nondiscrimination requirements for small new entrants. That same interface, however, would place larger new entrants at a significant competitive disadvantage, would deny the larger new entrants a meaningful opportunity to compete, and would limit the practicable availability of services and network elements to larger new entrants. Specifically, the DOJ found that SBC's EASE interface (which uses terminal emulation technology) forces new entrants with their own OSS to manually enter the information twice -- once in the RBOC's interface and a second time into its own OSS. Double entry places new entrants at a significant disadvantage by introducing additional costs, delays, and human error. Such a disadvantage amounts to unreasonable and discriminatory conditions imposed on new entrants possessing their own OSS. DOJ Evaluation, App. A, at 74-75. Importantly, BellSouth's LENS shares the deficiencies of SBC's EASE interface.

Nondiscrimination -- The DOJ concluded that the FCC's nondiscrimination rules (1) require parity of access to specific OSS functions, (2) recognize that providing such access may require the RBOC to modify its existing systems, and (3) are nowhere limited by the role OSS functions play in the RBOC's retail offerings. Importantly, the DOJ specifically rejected the notion that

nondiscriminatory access simply means that an incumbent LEC need only offer to new entrants the same type of OSS functionality that the RBOC currently utilizes for itself. In addition to providing parity of access, the RBOC must make services and network elements practically available, which can require additional automation. DOJ Evaluation, App. A, at 77-80.

Operability

Testing -- The DOJ found that software development experts widely agree that highly-complex software applications, like electronic interfaces and the associated OSSs, must undergo all of the generally agreed-upon tests for quality software development to be considered practically operational. The most widely used software testing process consists of five stages. The last stage, acceptance testing, involves the use of data supplied by the system procurer rather than simulated test data. Effective OSS interface testing must include testing by new entrants.

Q. WHAT IS THE DOJ'S ROLE IN EVALUATING OPERATIONAL SUPPORT SYSTEMS?

A. The Act clearly authorizes the DOJ to evaluate the RBOC's ability to provide nondiscriminatory access to OSS functions. Through Section 271(d)(2)(A), Congress requires the DOJ to evaluate an RBOC's Section 271 application using any standard the DOJ considers appropriate. Furthermore, Congress requires that the FCC give substantial weight to the DOJ's evaluation. While

the DOJ's evaluation may not be binding, it certainly is particularly persuasive with respect to interpreting the statutory and regulatory requirements that an RBOC provide nondiscriminatory access to OSS functions—an essential component to the development of competition.

I have met with the DOJ on several occasions and their representatives impressed me with their knowledge of systems issues. It is my understanding that the DOJ has consulted with many systems experts, including experts from the RBOCs, new entrants, and independent consultants. Furthermore, it is my understanding that the DOJ received all of the affidavits and other evidence submitted in both the SBC and Ameritech Section 271 proceedings. Additionally, BellSouth's ability to provide nondiscriminatory access to OSS functions is essential to the development of competition in the monopoly local exchange market. That would appear to me to involve antitrust issues and therefore is a necessary component of the DOJ's antitrust review. For these reasons, the Commission should give great weight to the DOJ's evaluation.

Q. DID THE ATTORNEYS GENERAL FROM THIRTEEN STATES SUBMIT A BRIEF TO THE FCC REGARDING SBC'S SECTION 271 APPLICATION THAT ADDRESSED OSS ISSUES?

A. Yes. The Attorneys General from thirteen states, including Florida, submitted a brief to the FCC to set forth their views on the public policy considerations and legal principles the FCC should apply in considering a Section 271 application. Reply Comments of the Attorneys General, SBC

Communications § 271 - Oklahoma (May 27, 1997) ("Attorneys General Brief"), at 3. The Attorneys General urged the FCC to pay particular attention to an RBOC's efforts to provide nondiscriminatory access to its OSS because such access is a "critical prerequisite to the development of effective local competition." Id. at 7-8. The Attorneys General concluded that "[n]ondiscriminatory access requires implementation of OSS functions that are sufficiently comparable to what is available internally to the BOC that they do not present barriers to effective competition by CLECs." Id. at 8 (emphasis added). The Attorneys General believe that "[a]ttentive regulatory review of a BOC's efforts at providing nondiscriminatory access to OSS is necessary, since providing this sort of assistance to its competitors runs strongly counter to the natural competitive instincts of any business." Id.

Given the natural competitive tension involved with the RBOCs providing critical services to their competitors, the Attorneys General concluded that an RBOC's internal testing was not sufficient to demonstrate that the proposed interfaces would function as planned. Attorneys General Brief at 8. The Attorneys General outlined several prerequisites that must be satisfied before an RBOC's OSS interfaces meet the requirements of the competitive checklist. First, there must be "some experience with the systems on a day-to-day basis under conditions of general local competition in order to assess their adequacy on this measure." Id. at 8-9. Second, there must be a shakedown and debugging period, and all the debugging must be successfully completed. Id. at 9. Third, there must be some accumulation of experience in a competitive environment "so that the disputes that will inevitably arise

about the scope of the BOC's interconnection obligations can be identified and addressed while the BOC still has a powerful incentive to resolve the dispute promptly." Id. at 9. Fourth, some record of experience under competitive conditions "is necessary to reveal whether the RBOC will engage in unfair or discriminatory practices to inhibit entry into local exchange services markets." Id. at 9. As the Attorneys General point out, nondiscriminatory access to RBOC OSS interfaces is not an arbitrary hurdle to RBOC long distance market entry—rather, it is a necessary condition for local competition.

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

A. The first characteristic is performance. The FCC Order, the DOJ, and the 13 Attorneys General focused on enabling new entrants to perform OSS functions in substantially the same time and manner as the incumbent in order to provide new entrants with a meaningful opportunity to compete.

> As stated by the FCC: [I]f competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing

nondiscriminatory access to these support system functions, which would include access to the information that such systems contain, is vital to creating opportunities for meaningful competition.

FCC Order ¶ 518. Likewise, the DOJ concluded:

> Under Section 271, an applicant must demonstrate that it can practicably provide checklist items by means of efficient wholesale support processes, including access to OSS functions. These processes must allow CLECs to perform ordering, maintenance, billing, and other functions at parity with the BOC's retail operations. Further, a BOC's wholesale support processes must offer a level of functionality sufficient to provide CLECs with a meaningful opportunity to compete using resale services and unbundled elements.

DOJ SBC Evaluation, at 28 (emphasis added). Similarly, the Attorneys General concluded:

> Nondiscriminatory access requires implementation of OSS functions that are sufficiently comparable to what is available internally to the BOC that they do not present barriers to effective competition by CLECs.

Attorneys General Brief at 8 (emphasis added). In sum, the Act's nondiscrimination requirements mandate that an incumbent LEC's interfaces enable a new entrant to perform the OSS functions in substantially the same time and manner as the incumbent LEC, and provide new entrants with a

meaningful opportunity to compete. BellSouth's current offerings do not meet this standard.

For an interface to satisfy the Act's nondiscrimination requirements, the interface must demonstrate, at a minimum, the characteristics described below. An interface with these characteristics will minimize the differences in OSS functional capabilities between the incumbent LEC and the new entrant:

Electronic -- The interface must be a machine-to-machine interface (computer application program-to-computer application program) that provides fully electronic interaction between the incumbent LEC's OSS and the new entrant's OSS. The interface must not require more human intervention in a transaction than is necessary when the incumbent performs a similar transaction for itself. As demonstrated below, BellSouth's electronic interfaces do not meet this standard.

Functionality -- The interface must provide all new entrants requesting access to the incumbent LEC's OSS with at least the same capabilities to perform their operations support functions with at least the same level of quality, efficiency, and effectiveness that the incumbent provides to itself. Again, BellSouth's interface fails to provide the necessary capability.

Documented -- The interface must be documented both adequately and sufficiently in advance to allow new entrants a reasonable opportunity to develop and deploy their own necessary systems, work processes, and employee training to use the interface. BellSouth does not yet offer adequate documentation.

Capacity -- The interface must have the capacity to meet combined market volumes of all new entrants with response times that are equivalent to those the incumbent LEC provides itself. CLECs cannot compete without such volume capacity, which BellSouth has not demonstrated.

Standards -- The interface must comply with existing telecommunications industry standards and ease the transition to evolving standards. Standards must govern:

- What is to be communicated (transaction sets)
- Specific information to be communicated (data elements)
- Language and Rules for Communication (protocols).

Appropriate testing and performance measurements are necessary to determine whether the proposed OSS interfaces meet these five characteristics. Testing is necessary to determine initially whether the proposed OSS interfaces have the capability to meet the five characteristics. Performance measurements are required to determine whether the proposed OSS interfaces continue to operate at a level that meets the five

characteristics. Again, BellSouth's OSS interfaces have not met these characteristics.

Q. MUST OSS INTERFACES BE ELECTRONIC IN ORDER TO PROVIDE NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS FUNCTIONS?

A. Yes. The FCC Order requires BellSouth to provide access to OSS functions under terms and conditions that would provide a new entrant with a meaningful opportunity to compete. The DOJ correctly interpreted the FCC Order to require electronic interfaces. The DOJ found that machine-to-machine interfaces are necessary to provide larger new entrants a meaningful opportunity to compete. See DOJ SBC Evaluation, App. A, at 74-76; DOJ Ameritech Evaluation, App. A, at A-2. The fact that industry groups have either adopted or are in the process of adopting machine-to-machine interfaces as the industry standard is evidence that the industry has concluded that such interfaces are necessary to provide new entrants with a meaningful opportunity to compete. See DOJ SBC Evaluation, App. A, at 75; DOJ Ameritech Evaluation, App. A, at A-2, A-3 n.5, A-5 n.6. Additional evidence that machine-to-machine interfaces are necessary to provide larger new entrants a meaningful opportunity to compete is the fact that AT&T and MCI have arbitrated interconnection agreements that require BellSouth to provide machine-to-machine interfaces. Clearly, the DOJ, industry groups, and the larger new entrants themselves are in the best position to assess what types of OSS interfaces are necessary to provide new entrants with a meaningful opportunity to compete as required by the FCC Order.

Q. DO MANUAL PROCESSES FOR HANDLING ORDERS FOR "COMPLEX SERVICES" SATISFY BELLSOUTH'S OBLIGATION TO PROVIDE NONDISCRIMINATORY ACCESS?

A. No. BellSouth has the capability to input its own orders for complex services directly and electronically into BellSouth's OSS. Nondiscriminatory access requires that new entrants have the same capability to input orders for complex services directly and electronically into BellSouth's OSS, regardless of whether BellSouth chooses to use internal manual processes prior to electronic entry. It is that simple. If new entrants have direct order entry capability like BellSouth, the new entrants can automate and eliminate the inefficient manual processes that BellSouth developed in a monopoly environment and improve customer service. Without direct order entry capability, however, BellSouth cannot provide nondiscriminatory access and will be able to hold new entrants captive to BellSouth's own inefficient manual processes. That is not what competition is about.

Q. PLEASE EXPLAIN THE RELEVANCE OF INDUSTRY STANDARDS TO DETERMINING WHETHER BELLSOUTH'S PROPOSED INTERFACES PROVIDE NONDISCRIMINATORY ACCESS TO OSS FUNCTIONS.

A. BellSouth's OSS interfaces must provide new entrants with a meaningful opportunity to compete. Clearly, the telecommunications industry establishes standards because industry standards are important to competition. As the DOJ found, industry standards help reduce costs and facilitate the

development of interfaces, which is critical to competition. See DOJ SBC Evaluation, App. A, at 73-74; DOJ Ameritech Evaluation, App. A, at A-3. The fact that BellSouth claims to be a strong supporter of industry standards demonstrates that such standards are important. The Florida Commission, moreover, determined in the AT&T/BellSouth arbitration that BellSouth's "electronic interfaces should conform to industry standards where such standards exist or are developed."

Q. ARE INDUSTRY STANDARDS IN FINAL FORM AT THIS TIME?

A. The FCC Order recognized the competitive value of nationally standardized interfaces and sought "to ensure continued progress in establishing national standards". See FCC Order 96-325 ¶ ¶ 527-28. Thereafter, however, in its Second Order, the FCC made clear that incumbent LECs cannot delay competition by waiting until national standards have been fully developed before beginning to implement OSS interfaces.

BellSouth could have developed a pre-ordering interface that reflected industry standards even in the absence of final "industry standards." First, as the DOJ noted, the industry is developing EDI-based pre-ordering guidelines. See DOJ Ameritech Evaluation, App. A, A-5 n.6. Since pre-ordering and ordering are not strictly separated processes, it only makes sense that the pre-ordering interface also would be EDI-based so that it would be compatible with the ordering interface. AT&T, moreover, had been negotiating an EDI-based pre-ordering interface for some time before BellSouth ever conceived of LENS, which is not an EDI-based interface. All the signs pointed toward

the industry adopting an EDI-based pre-ordering standard. If it is premature to develop such interfaces, then BellSouth's attempt to enter the long distance market is similarly premature; as the DOJ has recognized, new entrants cannot be provided a meaningful opportunity to compete without EDI access. Nevertheless, BellSouth proceeded to develop LENS and now claims that its only alternative was to develop LENS or no pre-ordering interface at all. That claim simply is not supported by an objective review of the facts.

Q. IS AVAILABILITY OF ADEQUATE DOCUMENTATION RELEVANT TO DETERMINING WHETHER BELLSOUTH'S PROPOSED INTERFACES PROVIDE NONDISCRIMINATORY ACCESS TO OSS FUNCTIONS?

A. Yes. Inadequately documented interfaces do not provide new entrants with a meaningful opportunity to compete. Certainly, a new entrant will have to train personnel, undertake development work on its systems, and make adjustments in those systems to implement system improvements. Properly documented interfaces will facilitate the completion of those necessary tasks in a manner that provides new entrants a meaningful opportunity to compete.

New entrants need adequate information of system requirements sufficiently in advance of implementation in order to train their personnel and develop their own systems. With respect to LENS, BellSouth has not provided adequate information. New entrants also require a documentation change control system so that BellSouth and new entrants can implement changes efficiently and effectively. New entrants, however, have been excluded from

the process of managing programming changes to LENS. That is unreasonable because programming changes have the greatest impact on the end users of LENS -- new entrants. Compounding the problem is the fact that LENS is an immature system that will undergo numerous changes in the next six to nine months. Without adequate documentation of an electronic interface, new entrants will not have a meaningful opportunity to compete.

PROPOSED INTERFACES TO BELLSOUTH'S OPERATION SUPPORT SYSTEMS

GENERAL

Q. IS IT YOUR UNDERSTANDING THAT BELLSOUTH IS PROPOSING TO USE THE SAME ELECTRONIC INTERFACES UNDER ITS DRAFT SGAT AS BELLSOUTH AGREED TO PROVIDE UNDER ITS INTERCONNECTION AGREEMENT WITH AT&T?

A. No. The SGAT does not offer electronic interfaces as required by the Act. It is my understanding that certain interim interfaces available to AT&T under its Interconnection Agreement (like LENS) will be available to new entrants under the Draft SGAT, but as permanent interfaces. The Draft SGAT, however, does not offer the permanent interfaces to new entrants that BellSouth agreed to provide under its Interconnection Agreement with AT&T.

Q. CAN YOU BRIEFLY DESCRIBE THE TYPES OF INTERFACES PROVIDED UNDER THE DRAFT SGAT AND THE INTERCONNECTION AGREEMENT?

A. Yes. The Draft SGAT provides for the following types of OSS interfaces:

Manual Interfaces -- BellSouth's Draft SGAT refers to BellSouth's Ordering Guides. The Ordering Guides are geared toward instructing new entrants on how to complete paper forms that the new entrant would send to BellSouth via facsimile.

Local Exchange Navigation Systems (LENS) -- According to BellSouth, LENS uses "World Wide Web hypertext screens" to allow a new entrant to access several BellSouth systems and then use the output from one BellSouth system as the input for another BellSouth system to perform certain pre-ordering, ordering and provisioning functions. New entrants can access LENS by: (1) dial-up; (2) Local Area Network-to-Local Area Network ("LAN-to-LAN"); and (3) the Internet.

LENS is a human-to-machine interface in that LENS interfaces with the new entrant's service representative rather than directly with the new entrant's OSS. BellSouth intends to use LENS as a permanent interface despite the fact that BellSouth cannot adapt LENS to reflect evolving industry standards.

The Interconnection Agreement between BellSouth and AT&T acknowledges LENS as an interim interface that provides some pre-ordering capability. Under the Interconnection Agreement, AT&T reserved the right to: (1) review LENS specifications as they become available; and (2) elect to use LENS if it is operationally and economically viable. Nevertheless, LENS does not qualify as an electronic interface that would meet the requirements of Section 271.

Ordering Interfaces -- BellSouth proposes to offer an Electronic Data Interchange ("EDI") interface for ordering certain resold services and network elements, and the Exchange Access Control and Tracking ("EXACT") system for ordering interconnection services and other network elements. New entrants may use the EDI interface to transmit certain local service requests to BellSouth and receive an acknowledgment of each request. The EDI interface proposes to use national standards and has three different means of transmitting the EDI message: (1) dial-up; (2) value-added network ("VAN"); and (3) Connect:direct, which transfers files in a batch mode. The EXACT system, which is an existing system used in the access world, also uses national standards. As configured today, EDI and EXACT do not meet the requirements of Section 271.

Maintenance and Repair -- BellSouth proposes to offer access to its Trouble Analysis Facilitation Interface (TAFI) for basic exchange

services and to its Electronic Bonding Interface ("EBI") for other services.

The Interconnection Agreement provides for the following types of OSS interfaces:

Interim Interfaces -- BellSouth agreed to provide AT&T with interim interfaces for Pre-Ordering, Ordering & Provisioning, Maintenance and Repair, and Billing for use until the required permanent electronic interfaces are in place. The interim interfaces are described in greater detail below, but generally do not satisfy the requirements of the Act because they require some varying degree of additional human intervention, lack certain important capabilities, or both. Exhibit JB-1 outlines the interim interfaces in use by AT&T for market entry in Georgia. The same interfaces will be used in Florida.

Permanent Electronic Interfaces -- BellSouth and AT&T agreed to work together to develop and implement an electronic communications interface to replace the interim interfaces. The Interconnection Agreement defines "electronic communications interface" as a machine-to-machine or application-to-application interface, and expressly excludes an interface (such as LENS) that provides a presentation for manual entry. Interconnection Agreement, Attachment 15, ¶ 4.6. The Interconnection Agreement requires

BellSouth and AT&T to develop a project plan and a Joint Implementation Agreement to apply to the permanent electronic interfaces. Interconnection Agreement, Attachment 15, ¶ 9.1. BellSouth and AT&T agreed to use "best efforts" to implement such interfaces by December 31, 1997. Interconnection Agreement, Attachment 15, ¶ 4.6. BellSouth and AT&T also agreed to adapt the permanent electronic interfaces based on evolving industry standards. Interconnection Agreement, Attachment 15, ¶ 4.7. Exhibit JB-2 outlines the target view for the permanent electronic interfaces. When completed, fully tested and implemented, such interfaces should satisfy the requirements of the Act.

Q. ARE THERE SIGNIFICANT DIFFERENCES BETWEEN LENS AND THE PERMANENT ELECTRONIC INTERFACES DESCRIBED IN THE INTERCONNECTION AGREEMENT?

A. Yes. The permanent electronic interfaces should provide AT&T and other new entrants with nondiscriminatory access to BellSouth's OSS functions. LENS, however, is a classic example of a design that might meet the supplier's (BellSouth's) requirements but does not meet the customer's (new entrant's) requirements. LENS has significant deficiencies in each of the five characteristics of a nondiscriminatory interface that render it insufficient to comply with the Act. Some of the major deficiencies in LENS are:

Electronic -- LENS is not electronic because it is a human-to-machine interface.

Functionality -- LENS does not have the capability to perform the same functions as BellSouth's OSS.

Documented -- LENS is not sufficiently documented because BellSouth has not provided adequate technical specifications to allow a new entrant to build compatible systems.

Capacity -- LENS does not have sufficient pre-ordering capacity to meet the combined market demands of new entrants.

Standards -- LENS is a proprietary system that does not reflect existing and emerging industry standards.

Q. HAVE OTHER STATE COMMISSIONS DETERMINED WHETHER AN INCUMBENT LEC'S WEB-BASED INTERFACE CAN PROVIDE NONDISCRIMINATORY ACCESS TO OSS?

A. Yes. Like BellSouth, U.S. West has proposed a web-based interface to provide access to its OSS. Several state commissions have found that U.S. West's web-based interface did not meet the requirements of Section 251 or its implementing regulations. For example, the South Dakota Public Utilities Commission found that the web-based interface is a "human interface," provides "inferior" service, and "does not comply with the federal Act or the FCC First Report and Order." South Dakota Public Utilities Commission, Findings of Fact and Conclusions of Law Order, Docket No. TC96-184, at 25 (Mar. 20, 1997). Similarly, the North Dakota Public Service Commission found that "the web-based interface does not meet the requirements of the FCC's First Report." North Dakota Public Service Commission, Arbitrator's Decision, Case No. PU-453-96-497, at 57 (Mar. 19, 1997). Likewise, the

Montana Public Service Commission found merit in each of AT&T's criticisms regarding the deficiencies in the web-based interface. Montana Public Service Commission, Arbitration Decision and Order (No. 5961b), Docket No. D96.11.200, at 56 (Mar. 20, 1997). These deficiencies included: (i) that "the web page solution is a human interface and is prone to error;" and (ii) "the web page solution provides service inferior to that which U.S. West provides itself." Id. at 55. BellSouth's LENS system suffers from all of these infirmities.

Q. YOU STATE THAT LENS INVOLVES A HUMAN-TO-MACHINE INTERFACE WHEREAS THE PERMANENT ELECTRONIC INTERFACES INVOLVE A MACHINE-TO-MACHINE INTERFACE. PLEASE EXPLAIN.

A. Webster's dictionary defines "interface" as a point at which independent systems interact. Logically, an "electronic interface" is a point at which two independent systems interact electronically. LENS does not meet that definition of an electronic interface because it requires a new entrant's service representative to manually operate BellSouth's electronic OSS (i.e., human-to-machine) rather than allowing the new entrant's electronic OSS to interact or interoperate with BellSouth's electronic OSS (i.e., machine-to-machine). **Because LENS does not allow BellSouth's and the new entrant's OSS to interact electronically, the new entrant's service representative must manually input data into BellSouth's OSS, and then manually input that data again into the new entrant's OSS.** The new entrant's service representative effectively becomes the "interface" between the new entrant's

OSS and BellSouth's OSS in lieu of a direct electronic interface. These extra steps, which are not required of the LEC, introduce additional costs, delays, and human error and therefore are discriminatory.

An example will help illustrate how the new entrant's service representative becomes the interface. LENS is somewhat analogous to a remote terminal to BellSouth's OSS where a new entrant's service representative will work instead of a BellSouth service representative. A new entrant's service representative should be able to use LENS to obtain pre-ordering data from BellSouth's OSS, transfer that data electronically into a service order, and input the service order into BellSouth's OSS. The new entrant's service representative will need to use the service order to create certain records in the new entrant's OSS, such as a customer service record. The service order, however, resides only in BellSouth's OSS, and LENS cannot electronically transmit the service order from BellSouth's OSS to the new entrant's OSS. The new entrant's service representative, therefore, must manually input the service record data twice: once into BellSouth's OSS and once into the new entrant's OSS. LENS effectively requires the new entrant's service representative to become the human "interface" between BellSouth's OSS and the new entrant's OSS.

Q. DOES THE FACT THAT LENS IS A HUMAN-TO-MACHINE INTERFACE IMPACT THE DETERMINATION OF WHETHER LENS WILL PROVIDE NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS?

A. Yes. LENS cannot provide nondiscriminatory access to BellSouth's OSS. As explained above, LENS requires double data entry by new entrants. Double data entry increases the risk of errors and the transaction time required to process a new customer, which in turn increase a new entrant's costs. BellSouth will not have to enter data twice when performing the same OSS functions. In addition, LENS does not provide a new entrant with the same on-line, front end edits available in BellSouth's Regional Negotiation System ("RNS") or Direct Order Entry ("DOE") system. On-line edits in RNS and DOE check for errors and prevent the release of orders to the Service Order Control System ("SOCS") until the service representative corrects such errors. LENS only looks for the presence of data in required fields and, therefore, would release orders with errors that RNS and DOE would not release. Consequently, many errors in LENS orders are identified after LENS releases the order and the new entrant's service representative is off-line with respect to that particular order. Without on-line edits, new entrants are more likely to submit orders that are later rejected and must be resubmitted. The cycle time for that process will cause delays in providing service to customers, as well as increase transaction costs. That is discriminatory.

Where LENS does provide on-line edits, it does so inefficiently. First, LENS does not highlight mandatory fields to distinguish them from optional fields. Highlighting mandatory fields would reduce omissions. Second, LENS only displays one error at a time. If a particular screen had three errors, a new entrant would have to repeat essentially the same process three times. If LENS could display all of the errors initially, new entrants could correct the

errors more efficiently and effectively. These differences may appear insignificant at first, but the fact is that BellSouth will enjoy the use of systems that do not suffer from these infirmities. BellSouth will not incur this delay and expense when offering service to its customers.

Q. YOU ALSO STATE THAT LENS IS A PROPRIETARY SYSTEM. DOES THAT AFFECT BELLSOUTH'S ABILITY TO PROVIDE NONDISCRIMINATORY ACCESS TO ITS OSS THROUGH LENS?

A. Yes. LENS is a proprietary system because BellSouth owns and controls the design of LENS and has no obligation to conform to any industry standards or guidelines. That creates several problems. Under a proprietary system, the RBOC can make unilateral changes to the system. Unilaterally imposed changes can be expensive and disruptive for new entrants. 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. A new entrant can plan and implement its operations more efficiently and effectively if the OSS interface is stable.

Another drawback to proprietary systems like LENS is that such systems typically are unique to that particular carrier. Consequently, new entrants who conduct business with more than one carrier have to operate with multiple OSS interfaces, which increases a new entrant's costs and decreases its operational effectiveness and efficiency. Systems based on national standards alleviate that problem.

Finally, information about proprietary systems generally is not publicly available. For example, AT&T has requested the technical specifications for LENS as provided for under the parties' Interconnection Agreement and the FCC's Second Order on Reconsideration. BellSouth, however, has not provided AT&T with the LENS technical specifications. Instead, BellSouth provided AT&T with the LENS functional requirement specification, but that document is proprietary and does not provide the information a new entrant needs to use LENS effectively. BellSouth also has never provided AT&T with a description of the changes BellSouth plans to make to LENS, or the results of testing BellSouth claims it has conducted for LENS. Without easily accessible information about LENS, it is impossible for new entrants to integrate LENS into their own operations.

Q. ARE THERE SOFTWARE PROGRAMS OR PROGRAMMING TECHNIQUES THAT WOULD ELIMINATE THE DISADVANTAGES AND DRAWBACKS OF THE LENS INTERFACE?

A. No. There are two techniques which have been proposed by BellSouth as possible methods to eliminate the disadvantages and drawbacks of web server-based interfaces such as LENS. These proposed techniques are "Screen Scraping" and the use of a "Tag Value" data stream from LENS instead of a screen format. Each technique places an additional costly development burden upon new entrants to compensate for the deficiencies of BellSouth's LENS. Specifically, new entrants must: (1) develop, test and implement the "front end" Screen Scraping software or Tag Value translator,

and (2) develop, test, and implement modifications to its own operations support systems to accept and process the unique non-standard data elements used by the BellSouth LENS.

Neither technique reduces the adverse impact associated with the proprietary nature of LENS. To the contrary, both techniques increase the costs and operational disruptions associated with a BellSouth unilateral decision to make a change in LENS. For example:

Increased Costs -- A new entrant using LENS without Screen Scraping or a Tag Value data stream will incur training costs when BellSouth makes a change. A new entrant using LENS with Screen Scraping or a Tag Value data stream, however, will incur training costs plus the costs to develop, test and implement software changes to the new entrant's front end systems and its operations support systems.

Longer Operational Disruptions -- When BellSouth changes LENS, it will cause an operational disruption for all new entrants that use LENS. Depending on the change, the operational disruption could range from simple confusion to a complete loss of capability to place an order with BellSouth. The operational disruption will be longer for any new entrant using Screen Scraping or Tag Values because it will take longer to modify the new entrant's systems to accommodate BellSouth's change.

Although there are disruptions with any interface change in a standards environment, they are known in advance, which is not the case with BellSouth. The risk of increased costs and longer operational disruptions resulting from BellSouth's unilateral changes to LENS is a strong disincentive to new entrants investing resources to supplement LENS with Screen Scraping or Tag Value technology. That is particularly true because BellSouth requires new entrants to use the most current version of LENS (which is constantly changing) instead of allowing new entrants to choose to use older, but stable versions of LENS.

In any event, a new entrant cannot implement either of these techniques if BellSouth does not provide the specifications for LENS, the Web page screens it produces, or the Tag Values that will be sent in place of the screens. AT&T and BellSouth have been engaged in meetings to utilize the Tag Value method since January, 1997. Following AT&T's escalation of the issue to the BellSouth's executive level, BellSouth produced Tag Value documentation on March 20, 1997. Less than three weeks later (April 8, 1997), BellSouth retracted that documentation declaring their own work impractical. On April 15, 1997, BellSouth abandoned its efforts to develop the alternatives presented in their "White Paper" dated September 6, 1996. BellSouth later provided a set of descriptions of their LENS web pages that supposedly were current as of April 25, 1997. The LENS design, however, is frequently and constantly changing because of its immaturity and instability. These changes make it commercially impracticable, if not virtually impossible for any new

entrant to develop systems that will allow new entrants to integrate their OSS with LENS. New entrants cannot hit a moving target.

Q. DOES BELLSOUTH PROVIDE FOR TESTING OF LENS THAT IS SIMILAR TO THE TESTING OF PERMANENT ELECTRONIC INTERFACES REQUIRED UNDER THE INTERCONNECTION AGREEMENT?

A. No. BellSouth does not provide for any joint testing of LENS with a new entrant. In contrast, the Interconnection Agreement memorializes BellSouth's and AT&T's mutual understanding that "end-to-end testing and load testing are necessary processes in the implementation of electronic interfaces and in establishing what further work needs to be done to insure that AT&T will receive electronic interfaces at parity with what BellSouth provides itself, its Affiliates, and its customers." Interconnection Agreement, Attachment 15, ¶ 8.3. In the Interconnection Agreement, both "AT&T and BellSouth agree[d] that no interface will be considered as operational until end-to-end integrity . . . or other mutually acceptable documentation is completed to the satisfaction of both Parties." Interconnection Agreement, Attachment 15, ¶ 8.1. Without joint testing with new entrants, new entrants cannot determine whether they can use LENS effectively, and BellSouth cannot demonstrate that LENS provides new entrants with nondiscriminatory access to BellSouth's OSS.

Q. WHAT IS THE STATUS OF LENS?

A. It is difficult to determine the status of LENS. BellSouth claims that LENS was "available" on April 28, 1997. LENS, however, cannot reasonably be

considered available because: (1) the LENS design is not stable and will not be stable for at least six to nine months; (2) new entrants cannot readily obtain access to LENS; and (3) LENS has not been adequately tested.

The LENS Design Is Not Stable -- The BellSouth project manager for the LENS program wrote a letter to AT&T on May 19, 1997 advising that the LENS design was not stable, and would not be stable for six to nine months. Exhibit JB-3. LENS cannot be considered "available" when the design is not stable.

During LENS Demonstrations for AT&T and the industry conducted by BellSouth on May 5 and May 13, 1997, BellSouth's employees referred to and commented on at least 28 corrections and enhancements to LENS (which is not a complete list of LENS deficiencies). They characterized these variously as being either required to fix known problems, improve operations and usefulness, or planned to provide parity with existing BellSouth OSS. Exhibit JB-4 lists these 28 items and their status as known by AT&T on July 17, 1997. Many are still not available.

Access to LENS Is Not Readily Obtainable -- Another reason LENS cannot be considered "available" is that new entrants cannot readily obtain access to LENS. If a new entrant cannot obtain access to LENS after seven weeks, LENS can hardly be considered "available." AT&T, however, has tried unsuccessfully for almost seven weeks to obtain access to LENS. A

description of this saga will demonstrate why LENS cannot be considered "available."

May 6, 1997	AT&T orders two dial-up identification numbers.
May 7, 1997	AT&T orders two additional identification numbers. BellSouth advises AT&T that it will take two weeks to obtain the identification numbers.
May 21, 1997	AT&T calls BellSouth but speaks to Account Team regarding identification numbers. Account Team could not provide AT&T the identification numbers or any information regarding the status of the identification numbers.
May 23, 1997	AT&T calls BellSouth but BellSouth could not provide AT&T the identification numbers or any information regarding the status of the identification numbers.
May 23, 1997	AT&T receives user identification number and passwords for four users by U.S. mail, but no

	Secure Identification Card, which is required for dial-up access.
May 26, 1997	AT&T receives Secure Identification Card by U.S. mail.
June 3, 1997	One AT&T user attempts unsuccessfully to log onto LENS. AT&T user calls BellSouth user support group for assistance. After speaking with BellSouth, AT&T again unsuccessfully attempts to log onto LENS. AT&T again calls BellSouth user support group, but had to leave a message after reaching after-hours recording.
	A second AT&T user calls BellSouth user support group to obtain a Uniform Resource Locator (URL) which is required by the LENS login procedure. BellSouth's user support group advises second AT&T user that URL would be provided to users during LENS training, which had not yet been scheduled.
June 4, 1997	BellSouth user support group calls AT&T and advises that AT&T's identification numbers had been changed.

June 6, 1997	AT&T calls BellSouth to obtain URL.
June 9, 1997	BellSouth advises AT&T that URL will be forthcoming.
June 10, 1997	AT&T receives URL.
June 12, 1997	AT&T's repeated attempts to log onto LENS are unsuccessful. AT&T calls BellSouth user support group but had to leave message after reaching after-hours recording. BellSouth leaves message with AT&T inquiring about AT&T's ability to log onto LENS. AT&T returns call and leaves message that AT&T could not log onto LENS and that AT&T would meet with its system administrator to trouble shoot problem on June 13th.
June 13, 1997	BellSouth user support group advises AT&T that user support group cannot support users that have not attended LENS training. AT&T system administrator determines that URL is not responding. AT&T calls LENS project manager to advise of continuing problems.

	BellSouth subject matter expert calls AT&T user to walk through the log on process. BellSouth advises AT&T user that BellSouth had incorrectly issued an identification number for access to BellSouth secure router which would not provide access to LENS. BellSouth stated that BellSouth would take corrective action.
June 17, 1997	At a training session, BellSouth provided AT&T with valid user identification cards.

Access to LENS on a Regional-Basis Is Uncertain -- LENS appears to be incapable of accepting and automating profiles from a new entrant doing business in more than one geographic area at a time. AT&T recently initiated a request for IDs to use on a LAN-to-LAN connection. The forms provided by BellSouth request a number of items which were not required for the dial-up IDs. Additional items include: ACNA (Access Customer Name and Address Code), BAN (Billing Account Number), ACTL (Access Customer Terminal Location Code). The forms assume one entry for each of these items per LAN connection. ACNA is a constant, but BAN and ACTL are variables and multiple in nature. For example, AT&T will have four BANs per RAO (Revenue Accounting Office), BellSouth has 12 RAOs so AT&T will have 48 possible BANs. When questioned, BellSouth personnel indicated that they had not yet processed a request for LAN IDs and were not sure what was required. It is likely that new entrants will have to input

administrative, billing and contact information manually into LENS instead of having LENS populate these fields automatically based on the identity of the user, and the applicable NPA/NXX. This will be a time consuming and inefficient process and is not at parity with BellSouth's internal processes.

LENS Has Not Been Adequately Tested -- It is also premature to consider LENS an operable interface before the completion of appropriate testing. BellSouth claims that BellSouth has tested LENS internally, which is a necessary part of the process but should not be the total process. BellSouth, however, has not shared its internal testing procedures or its test data with AT&T. Moreover, it is difficult to understand how LENS could pass any meaningful internal tests if the LENS design is not yet stable. In any event, LENS has not been subject to inter-carrier testing. As noted by the Attorneys General from 13 states including Florida:

> Testing of the systems by the BOC is not enough to provide reasonable assurance that they will function as planned with the systems of the CLECs. It will require some experience with the systems on a day-to-day basis under conditions of genuine local competition in order to assess their adequacy on this measure.
>
> Even if a BOC acts with the best of intentions, it seems likely that the necessarily complex OSS functions it designs and implements will require some shakedown and debugging period before they interact smoothly with the systems of the CLECs. InterLATA approval should not be granted before the debugging has been successfully

completed, since the prospect of such approval provides a strong incentive for the BOC to focus on this problem and devote the resources necessary to resolve it.

Reply Comments of the Attorneys General, SBC Communications § 271 - Oklahoma (May 27, 1997), at 8-9. As discussed above, the DOJ reached a similar conclusion. See DOJ Evaluation, App. A, at 85-89. Again, it is simply premature to conclude that LENS is ready for commercial use by CLECs.

Q. WHAT IS THE STATUS OF THE ELECTRONIC INTERFACES REQUIRED UNDER AT&T'S INTERCONNECTION AGREEMENT?

A. Most of the interim interfaces that AT&T will be using to enter the market as a reseller are in place. These interim interfaces, however, do not provide AT&T with nondiscriminatory access to BellSouth's OSS.

With respect to the permanent electronic interfaces, BellSouth and AT&T are conducting joint planning meetings to develop project plans and joint implementation agreements. BellSouth and AT&T recently signed a Joint Implementation Agreement ("JIA") for Long Term Pre-ordering Interfaces. That JIA provides for the following eleven (11) steps of "external" joint testing to address interoperability between gateway-to-gateway and end-to-end systems. The first test (the OSI Stack Conformance testing) relating to the long-term pre-ordering interfaces between BellSouth and AT&T is scheduled to begin on July 15, 1997. The last test (the Beta Trial) is scheduled to begin on January 2, 1998.

1. OSI Stack Conformance Testing (this test is internal to each company)
2. Network-to-Network Testing
3. Stack-to-Stack Testing
4. EDI Testing
5. Pre-Order Application Conformance Testing
6. End-to-End Testing
7. Soak and Load Testing
8. End-to-End Testing
9. Network Validation Testing
10. Operational Readiness Testing
11. Beta Trial

Exhibit JB-5 depicts the relationship between these tests and the supplier's (BellSouth's) and customer's (AT&T's) gateways, operations support centers, and work centers, and the interconnecting network.

The JIA test plan is associated with a highly sophisticated interface almost in complete conformance with the ultimate industry concept of being fully electronically bonded. Nevertheless, the principles of testing reflected in the JIA test plan are applicable to any interface between two companies from a manual telephone-based process to a fully electronically bonded process. Testing occurs from the inside out, from simple to complex, adding more pieces of the process with each step until both customer and supplier are satisfied that the interface meets their business needs and requirements.

A similar test plan was used for the EDI interface now being used by AT&T for Market Readiness Testing in Georgia. Market Readiness Testing is a form of Beta Trial. Service Readiness Testing also occurs within Beta Trials. AT&T expects that the interfaces required by the Interconnection Agreement, once fully implemented, will provide AT&T with nondiscriminatory access to BellSouth's OSS. Expectations, however, are not sufficient to demonstrate actual availability and operability of access to BellSouth's OSS.

INDIVIDUAL INTERFACES

Q. WOULD YOU DISCUSS THE DIFFERENT INTERFACES FOR EACH MAJOR OSS FUNCTIONAL AREA?

A. Yes. I discuss below BellSouth's proposed interfaces for each of the major OSS functional areas (pre-ordering, ordering and provisioning, maintenance and repair, and billing). I also describe the specific reasons why BellSouth's proposed interfaces do not currently provide new entrants with nondiscriminatory access to BellSouth's OSS.

PRE-ORDERING INTERFACE

Q. WHAT IS PRE-ORDERING?

A. The FCC Rules define "Pre-Ordering" and "Ordering" together. Under the FCC Rules, pre-ordering and ordering "includes the exchange of information between telecommunications carriers about current or proposed customer

products and services or unbundled elements or some combination thereof." 47 C.F.R. § 51.5. In other words, pre-ordering is the exchange of information necessary to prepare an order, whereas ordering is the actual transmission of the order, along with attendant acknowledgments, notices, and status reports. Pre-ordering ordinarily takes place while the customer is on the telephone. Pre-ordering functions include: (1) determining the customer's existing services; (2) determining the services and features available to that customer; (3) validating the customer's address; (4) assigning a telephone number; and (5) scheduling appointments for required site visits and establishing due dates for the commencement of services.

Q. IS "PRE-ORDERING INFORMATION" NECESSARY TO COMPETE FOR EXISTING CUSTOMERS?

A. Yes. First, BellSouth requires a valid street address for every order, even if the customer is only switching service providers. New entrants, therefore, need access to BellSouth's OSS for address validation (the Regional Street Address Guide known as RSAG). Second, new entrants must be able to offer potential customers the ability to choose the services that each customer wants and needs. New entrants will not have a meaningful opportunity to compete with BellSouth for its existing customers if new entrants can only offer potential customers the ability to "switch as is" because the new entrant cannot perform critical pre-ordering functions. Third, new entrants need pre-ordering information for their records even if the customer only wants to switch service providers. Fourth, new entrants need to access pre-ordering information even after the CLEC has already obtained new customers, e.g., to

offer its new customers new features, services, and promotions. Finally, the Act requires BellSouth to provide new entrants with access to pre-ordering functions. BellSouth's obligations under the Act are not diminished by the possibility that some customers may only want to switch service providers.

Q. DOES LENS PROVIDE A NEW ENTRANT WITH THE SAME PRE-ORDERING CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. No. LENS will not provide new entrants with nondiscriminatory access to BellSouth's OSS for pre-ordering functions. As explained above, there are significant gaps between a new entrant's pre-ordering capabilities using LENS and BellSouth's own pre-ordering capabilities with respect to the five characteristics of a nondiscriminatory interface.

ELECTRONIC -- As discussed above, LENS is a human-to-machine interface that does not allow electronic communication between BellSouth's OSS and a new entrant's OSS. One of the consequences of this defect is that new entrants have to record manually the pre-ordering information obtained from LENS in the Inquiry Mode for manual input into an EDI order. The LENS User Guide suggests that new entrants can print out the LENS screens to record the pre-ordering information. That creates many problems. First, service representatives typically do not have printers. New entrants would have to buy printers for each service representative to create that capability. Second, as we all know, printers experience problems relatively often -- the paper jams, it runs out of paper, etc. A new entrant would have to hold a customer on the line while the printing problem is fixed. Third, in the Inquiry

Mode, LENS does not "remember" information. Consequently, a new entrant would have to print out numerous screens rather than one summary screen. That is not practical. Finally, the new entrant still has to input the pre-ordering information manually into an EDI order. In other words, after going through the lengthy process of obtaining the information through LENS, the new entrant has to go through another lengthy process of sorting through the computer print-outs to re-input that information manually into an EDI order. Clearly, this duplicative and manual process does not meet the requirements of the Act.

FUNCTIONALITY -- As discussed below, LENS does not provide new entrants with the same capabilities as BellSouth, nor does LENS provide new entrants with the capabilities necessary for new entrants to compete effectively. In fact, BellSouth has estimated that LENS will not be stable for six to nine months. In other words, LENS still must undergo numerous changes before LENS can provide the functionality that even BellSouth believes are appropriate. Discussed below are some of the deficiencies in LENS:

General

1. LENS does not operate efficiently. BellSouth did not design LENS with the new entrant in mind. It is my understanding that BellSouth did not even consult with new entrants when designing LENS. As a result, there are many instances where LENS does not operate efficiently. For example, LENS does not allow a new entrant to reach all fields by tabbing, which usually is the most efficient way

for a service representative to move from field to field. LENS also does not allow a new entrant to select address information from the drop-down dialog box, which is a feature that is available in AT&T's interim address validation interface, and presumably is available to BellSouth. These types of design defects makes LENS more cumbersome to use.

Address Validation

1. LENS requires new entrants to validate addresses repeatedly. -- In its Inquiry mode, LENS requires a new entrant to validate a customer's address repeatedly in order to perform various pre-ordering functions. LENS requires a new entrant to validate the address at the beginning of the every pre-ordering process except viewing customer service records. As a result, a new entrant must validate a customer's information four times during the pre-ordering process. That unnecessary repetition wastes time and invites errors.

2. LENS does not allow CLECs to assign house numbers for unnumbered addresses. Without that capability, a new entrant's service representative must contact BellSouth to perform the assignment function for the new entrant. That manual process will adversely affect the new entrant's ability to provide timely, accurate and inexpensive service to its customers.

3. LENS does not display the same type of information that is available to BellSouth's service representatives. For example, RNS displays driving instructions and a neighbor's phone number and DOE

provides the identification of the serving central office. LENS does not display this information.

Telephone Number Selection

1. LENS is unable to perform certain telephone number searches as advertised. -- BellSouth claims that LENS can perform nine kinds of telephone number searches: Random Numbers; Vanity Numbers; Easy Numbers; Ascending Line Digits (i.e, 1234, 2345, 3456); Descending Line Digits (i.e., 9876, etc.); Identical Line Digits (i.e., 2222, etc.); Sequential Line Numbers (i.e., XXX1, XXX2, XXX3); Special Number Patterns; and Number Exclusions. Of those nine searches, LENS has not been able to accomplish five types of searches (Ascending Line Digits, Descending Line Digits, Identical Line Digits, Sequential Line Numbers, and Number Exclusions). With respect to Special Number Patterns, LENS cannot perform this type of search unless the new entrant knows the NXXs available in the relevant central office, but LENS does not provide that information. In sum, LENS appears capable of fully performing only three types of number searches: random numbers, vanity numbers, and easy numbers.

2. LENS does not provide new entrants with the same options as BellSouth for selecting telephone numbers. -- LENS does not allow new entrants to select the options of Ringmaster, Hunting and Specific NXX. BellSouth's service representatives have that capability.

3. LENS does not provide equivalent access to telephone numbers. --LENS will limit new entrants to the lower of 100 reserved telephone numbers, or five percent of the available numbers for any given central office. BellSouth deems that a new entrant "reserves" a telephone number when the new entrant chooses a telephone number in the LENS Inquiry Mode for use in EDI or manual ordering. That telephone number is not transformed from "reserved" status to "selected" status until the service order with that telephone number is entered into BellSouth's Service Order Completion System ("SOCS"). It could take minutes or days for a service order to be entered into SOCS. In contrast, BellSouth deems a telephone number to be "selected" instead of "reserved" when BellSouth itself chooses a telephone number or a new entrant chooses a telephone number in the LENS Firm Order Mode. As a practical matter, the 100 number limit will affect only large new entrants because the larger new entrants are more likely to submit EDI orders in quantities that could trigger the 100 number limit. That discriminates against larger new entrants.

The impact of this discrimination is real. During my evaluation of LENS, I attempted to choose a telephone number in a particular central office via the LENS Inquiry Mode. My attempt was unsuccessful. I made the same attempt in the Firm Order Mode and LENS presented a list of available numbers. In other words, telephone numbers that are available to BellSouth and new entrants using LENS in the Firm Order Mode are not available to new entrants that use the industry standard, EDI ordering interface. If BellSouth's

limitation of 100 telephone numbers per central office affects a new entrant now at minimal order volumes, imagine the adverse impact it will have when the new entrant starts placing hundreds or thousands of orders per day.

4. LENS does not provide new entrants with the same capability to reserve telephone numbers -- BellSouth can use its OSS to reserve more types of telephone numbers than a new entrant using LENS. For example, BellSouth can reserve up to 25 numbers using its OSS, but a new entrant using LENS cannot reserve more than six telephone numbers at a time. BellSouth also can use its OSS to reserve multi-line hunt group numbers, but new entrants cannot use LENS to reserve these numbers. Furthermore, a new entrant will incur charges for conducting searches whereas BellSouth will not incur charges for conducting the same searches. Specifically, BellSouth will impose search and assign charges on new entrants both when the new entrant itself conducts searches, and when BellSouth must conduct the search for a new entrant because LENS does not provide that search capability. Yet, BellSouth does not charge itself for such searches. While BellSouth may incur some minimal cost for conducting searches for a new entrant, that cost is not the same as the search and assign charge. BellSouth, moreover, does not incur any additional cost, but receives additional revenue, when a new entrant conducts its own search. That is discriminatory.

Products and Services

1. LENS does not allow new entrants to obtain Primary Interexchange Carrier ("PIC") information efficiently. -- LENS presents a random list of available long distance carriers, which may consist of over 300 carriers, with no search capability. A new entrant, therefore, may have to view over 30 screens (10 carriers per screen) in order to find the appropriate code for the long distance carrier the customer would like to select. Finding a single carrier in a list of over 300 carriers can take a considerable amount of time and is prone to errors. At the very least, LENS should list the available long distance carriers alphabetically or provide a search capability.

2. LENS does not provide complete products and services information. -- Like the PIC information, LENS does not present its lengthy list of products and services (typically over 100 items) in any particular order that would facilitate locating information about a specific product or service in a timely and accurate manner. LENS also does not list the services available to a particular customer when LENS is in the Firm Order Mode. Instead, LENS only identifies the products and services that can be ordered through LENS. For example, the LENS Inquiry Mode identified 114 products and services that were available in a particular central office, but identified only 8 products and services in its Firm Order Mode. Consequently, new entrants using LENS in the Firm Order Mode will not have an accurate list of the available products and services.

LENS does not provide complete products and services information in the Inquiry Mode either. In addition to identifying a

particular product or service, new entrants need the capability to obtain additional information beyond whether the service is available for resale to place orders. LENS provides information (extended name, availability status, availability date, USOC, and tariff notes) for certain services. For other services like "ESSX" and "Multiserv," this information is not available. Interestingly, LENS was unable to retrieve product and service information for "ESSX" and "Multiserv" during LENS demonstrations on May 5 and May 13, 1997. After several minutes of waiting for the requested information, LENS had to be shut down and restarted. BellSouth Witness Calhoun previously testified that BellSouth had corrected this problem. It now appears that BellSouth's "solution" to this problem simply was not to provide product and service information for services like "ESSX" and "Multiserv."

3. LENS does not support certain products as a pre-ordering function. --BellSouth can select certain products (inside wiring and jacks) as pre-ordering elements in RNS, but LENS does not provide that functionality. Similarly, BellSouth can select certain business products (hunting) as a pre-ordering element in DOE, but LENS does not provide that functionality. LENS' lack of this product and services functionality adversely affects its capability to provide due date and appointment scheduling functionality when new entrants operate LENS in the inquiry mode.

4. LENS does allow new entrants to select more than one service or product at time. -- LENS requires that new entrants select

services and products individually rather than as a group. LENS does not allow a new entrant to highlight several products and services for selection at one time. As a result, a new entrant must repeat the selection process for each individual product and service. Multiple selections cause delays and increase the chance that a new entrant may duplicate or omit a selection.

Direct Order Entry Support Applications Program ("DSAP")

1. LENS does not provide access to calculated due dates in the inquiry mode.-- BellSouth service representatives can ascertain the earliest available due date by using DSAP, which applies an algorithm to a number of variable inputs (including the number of lines, type of service, work load, and availability of network facilities) in order to calculate the due date. If the earliest available due date does not meet the customer's needs, the BellSouth service representative can use DSAP to ascertain alternative dates. Once the customer accepts a proposed due date, the BellSouth service representative can reserve that due date using BellSouth's Service Order Completion System ("SOCS"). New entrants' service representatives, on the other hand, do not have access to DSAP when using LENS for pre-ordering and EDI for ordering, which BellSouth projects will account for 80 percent of all service orders. Instead, LENS provides new entrants with a table of projected service intervals for the applicable central office instead of the earliest available due date calculated by DSAP. That is discriminatory.

The new entrant's inability to access DSAP when using LENS for pre-ordering will have a significant effect on customers. First, the new entrant's customers may receive a later due date or appointment than a similarly situated BellSouth customer because the new entrant does not have access to DSAP during pre-ordering. Second, the entrant's customers likely will experience a higher percentage of due date and appointment rescheduling than a similarly situated BellSouth customer. The reason for that is the new entrant does not know until hours after submitting an order whether the due dates and appointments provided to customers are actually available. If the due date or appointment is not available, the new entrant must contact the customer and go through the scheduling process again when the date or appointment selected by the BellSouth's SOCS does not meet the customers' requirements.

2. LENS does not provide due dates or appointment intervals for network elements. --BellSouth has not provided due date or appointment intervals for network elements. A new entrant cannot provide its customers with accurate due dates and appointments for orders involving network elements without such intervals.

3. LENS does not allow new entrants to schedule appointments windows in specified four hour blocks. --LENS only allows new entrants to specify AM or PM appointments. BellSouth can offer its customers any four hour block, e.g., 10 A.M. to 2 P.M.

DOCUMENTED -- BellSouth has not adequately documented the LENS interface. Specifically, BellSouth has not provided the technical specifications necessary for new entrants to develop or modify their own internal OSSs to be able to communicate electronically with LENS. The LENS design, moreover, is not yet stable, and will not be stable for at least 6 to 9 months. Even if BellSouth were to provide technical specifications, however, those specifications would quickly become obsolete because of the continuing design changes. As a result, it would not be practical for new entrants to develop or modify their internal systems until LENS is stable. Even then, BellSouth does not have any change control processes in place that would: (a) manage design changes effectively and efficiently from the collective viewpoints of BellSouth and new entrants; and (b) communicate the design changes sufficiently in advance to provide new entrants with a meaningful opportunity to adjust their systems. Currently, new entrants have little if any involvement in the change process.

Another area where LENS documentation is deficient is in the area of training. BellSouth proposes to provide representatives from each new entrant with two or three days of training, and then those representatives would train the new entrants' employees. In contrast, BellSouth provides weeks of training to its service representatives.

CAPACITY -- BellSouth claims that LENS has the capacity to process 1000-1200 orders per day, and multiple pre-ordering transactions associated with 5000 orders per day (1000 LENS and 4000 EDI orders) for the nine state

BellSouth region. BellSouth has not provided any data to demonstrate that LENS has adequate capacity to handle the combined market volumes for all new entrants. Without information regarding how BellSouth tested the capacity of LENS and the data resulting from that testing, the Commission cannot be sure that LENS has the requisite capacity.

STANDARDS -- As discussed above, LENS is a proprietary system that does not comply with any industry standards. EDI has been endorsed as the data element structure for the pre-ordering industry standard. That only makes sense because EDI is the industry standard for ordering, and service orders are populated with pre-ordering information. BellSouth, however, proposes to use a pre-ordering interface (LENS) that is not compatible with the industry standard EDI ordering interface, even though BellSouth projects that 80 percent of all service orders will flow over the EDI interface. That makes no sense, unless BellSouth is trying to make it difficult for new entrants to place service orders.

Q. WHAT KIND OF ELECTRONIC INTERFACES FOR PRE-ORDERING HAS BELLSOUTH AGREED TO PROVIDE UNDER ITS INTERCONNECTION AGREEMENT WITH AT&T?

A BellSouth has agreed to provide interim interfaces until the permanent electronic interfaces are operational. Provided below is a brief description of the required interim interfaces and permanent electronic interfaces.

Interim Pre-Ordering Interfaces

a. Address Validation -- BellSouth provides on-line, LAN-to-LAN connectivity to BellSouth's Regional Street Address Guide ("RSAG").

b. Service Feature Availability -- BellSouth provides AT&T a copy of its Products/Services Inventory Management System ("P/SIMS") files via a batch mode transmission.

c. Telephone Number Assignment -- Upon AT&T's request, BellSouth provides AT&T with a file consisting of a block of 100 reserved telephone numbers via a batch mode transmission.

d. Appointment Scheduling -- BellSouth provides AT&T with paper standard interval guidelines for use in scheduling appointments for the installation of resold services.

e. Customer Service Record ("CSR") Requests -- BellSouth provides CSRs after receiving customer consent via three way call (customer, AT&T and BellSouth), or facsimile of the customer's Letter of Agency.

Permanent Pre-Ordering Interfaces

The Interconnection Agreement provides for a single transaction-based, electronic communications interface that is capable of performing a full range of pre-ordering functions for both resold services and network elements. When the permanent interfaces are in place, AT&T would be able to populate its service order and other records with the pre-ordering information obtained via the permanent electronic interface.

Q. WILL THE INTERIM INTERFACES UNDER THE INTERCONNECTION AGREEMENT PROVIDE AT&T OR ANY OTHER NEW ENTRANT WITH THE SAME PRE-ORDERING CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. No. The interim pre-ordering interfaces have many deficiencies and, as a result, do not provide for nondiscriminatory access to BellSouth's OSS for pre-ordering. For example:

> **Telephone Number Assignment** -- Because the interim interface limits AT&T to a defined block of 100 telephone numbers, AT&T cannot satisfy its customers' requests for special numbers (e.g., contiguous blocks of numbers, vanity numbers, easy numbers, etc.) without the manual intervention of BellSouth service representatives. The interim interface also requires AT&T to create and maintain a "shadow" telephone number inventory system to keep track of the available telephone numbers for each central office for the purposes of assigning telephone numbers and replenishing AT&T's inventory. In contrast, a BellSouth representative can access all available telephone numbers without manual intervention, and its OSS automatically maintains an inventory of telephone numbers. That is discriminatory, does not offer entrants substantially the same time and manner of access as BellSouth, and therefore does not comply with Section 251 of the Act.

Appointment Scheduling -- The interim interface simply is a document that lists standard estimated intervals for performing a particular task. The interim interface, therefore, may project an appointment that: (1) is not actually available; or (2) is not the first available appointment. The interim interface, moreover, does not allow AT&T to reserve an appointment when AT&T is taking the customer's order. Instead, AT&T must send the order with a projected appointment to BellSouth and wait until BellSouth sends AT&T a Firm Order Confirmation ("FOC"). If the FOC indicates that the projected appointment is not available, AT&T must contact the customer and start the process again (i.e., send BellSouth a supplemental order with a new projected appointment, wait for a FOC, and repeat the process if the new projected appointment is not available). BellSouth, on the other hand, can determine what appointments are actually available, and reserve that appointment with the customer on the line. That is discriminatory.

Customer Service Records -- The interim interface does not provide AT&T direct access to CSRs, when such access is authorized by the customer. AT&T, therefore, must use cumbersome manual processes that take more time and resources than the electronic access that BellSouth provides itself. That is discriminatory.

Q. WILL THE PERMANENT ELECTRONIC INTERFACES PROVIDE AT&T OR ANY OTHER NEW ENTRANT WITH THE SAME PRE-

ORDERING CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. Hopefully, but it is premature to make that conclusion. Only after BellSouth and AT&T jointly test the permanent electronic interfaces as required by the Interconnection Agreement, and compare the performance of those interfaces with the internal performance of BellSouth's OSS (i.e., without interfaces), will empirical data demonstrate whether BellSouth is providing AT&T with nondiscriminatory access to BellSouth's OSS for pre-ordering functions. BellSouth, however, has indicated that it may not provide AT&T with certain capabilities. For example, BellSouth has indicated that it does not intend to provide full access to DSAP (Direct Order Entry Support Applications Program) , and intends to apply the telephone number reservation restrictions previously discussed. Nondiscriminatory access to OSS functions cannot exist if BellSouth continues down its stated path.

ORDERING & PROVISIONING

Q. WHAT IS ORDERING AND PROVISIONING?

A. Ordering is the process of placing a request into the incumbent LEC's OSS for a set of products and services or unbundled network elements or combination thereof. After processing an order, the incumbent LEC will begin the provisioning process.

The FCC Rules state that provisioning "involves the exchange of information between telecommunications carriers where one executes a request for a set

of products and services or unbundled network elements or combination thereof from the other with the attendant acknowledgments and status reports." 4 C.F.R. § 51.5. In other words, provisioning is the process of implementing the order for telecommunications service. The attendant acknowledgments and status reports associated with provisioning include initial order verification, firm order confirmation, the monitoring of service order status, the reporting of service order jeopardies, and notification of order completion.

Q. DOES THE DRAFT SGAT ADDRESS ELECTRONIC INTERFACES FOR ORDERING?

A. Yes, in a limited fashion. The Draft SGAT states:

> BellSouth provides CLECs electronic options for the exchange of ordering and provisioning information. The Exchange Access Control and Tracking System (EXACT) is for service requests involving interconnection trunking and many unbundled network elements. BellSouth provides an Electronic Data Interchange (EDI) arrangement for resale requests and some unbundled network elements. As an alternative to the EDI arrangement, BellSouth also provides through LENS an ordering and provisioning capability that is integrated with the LENS pre-ordering capability.

Draft SGAT at 8. In other words, the Draft SGAT does not provide for electronic interfaces that would satisfy the Act.

Q. WILL LENS PROVIDE A NEW ENTRANT WITH NONDISCRIMINATORY ACCESS TO ORDERING AND PROVISIONING FUNCTIONS?

A. No. BellSouth has estimated that LENS will not be stable for six to nine months. In other words, LENS still must undergo numerous changes before LENS can provide the functionality that even BellSouth believes is appropriate. Discussed below are some of the reasons why LENS does not meet the criteria of a nondiscriminatory interface:

> **ELECTRONIC** -- As discussed above, LENS is a human-to-machine interface that does not allow electronic communication between BellSouth's OSS and a new entrant's OSS. Consequently, when a new entrant submits an order via LENS, that order must be manually entered into the new entrant's own internal OSS. Further, LENS cannot process electronically orders even for the so-called "simple" network elements that LENS purportedly supports. Although BellSouth has suggested that new entrants can order "simple" network elements through LENS using the "remarks" section, the remarks sections are unformatted and information contained therein must be processed manually by BellSouth. This is not electronic ordering.

FUNCTIONALITY -- LENS does not provide new entrants with the same capabilities as BellSouth, nor does LENS provide new entrants with the capabilities necessary for new entrants to compete effectively. For example:

1. LENS Does Not Have The Capability To Perform Many Ordering Activities. As reflected in Exhibit JB-6, LENS does not perform many of the ordering activities that are standard in the industry and which BellSouth performs for itself, such as ordering suspension or restoration of service, changes or modifications to existing services, or inside or outside moves.

New entrants that order services through LENS will have to fax service orders for those activities which LENS is not capable of performing. For example, a new entrant will have to fax a service order to BellSouth if the new entrant's customer wants to add a new feature like call waiting or change their directory listing. Similarly, a new entrant has to fax an order to suspend and restore service for seasonal businesses. These are just two of the many situations where LENS cannot provide nondiscriminatory access to BellSouth's OSS functions.

2. LENS Does Not Support Most of the Industry-Standard Requisition Types. Industry groups have identified ten requisition types to identify the kinds of products and services a new entrant can

order. As depicted in Exhibit JB-7 LENS supports only one of the ten industry standard requisition types.

Because LENS does not have the capability to support most types of requisitions, service orders for these types of requisitions will not be processed electronically.

3. LENS Does Not Have the Ordering Capability To Support Many Resale Services. LENS does not have capability that would allow new entrants to order all of the services that are available for resale. In one particular central office, for example, LENS allows a new entrant to order only eight services for resale: POTS, Touchstar, Touchtone, Customized Call Restriction, Memory Call Enhanced, Remote Call Forwarding, Custom Calling, and Ringmaster. In the Inquiry Mode, however, LENS reveals that there actually are one hundred fourteen (114) different services that are available at that central office. BellSouth has the capability to submit electronic orders for all of those 114 services, while new entrants may only order eight. LENS cannot be considered nondiscriminatory if it enables new entrant to order electronically only eight types of resale services while BellSouth can order electronically 114 types of services in its retail operations. Provided in Exhibit JB-8 is a table of the 114 types of services. Services that can be ordered through LENS (and therefore are the only services that are listed as available in the Firm Order Mode of LENS) are bolded and underlined:

4. New Entrants Cannot Perform Equivalent Provisioning Functions through LENS. LENS will not provide new entrants with the capability to receive detailed firm order confirmation ("FOC") or Completion Notices ("CN") that are comparable to the information to which BellSouth has easy access. While LENS will show that a new entrant ordered something, it will not tell the new entrant what was actually ordered. Once the order has been entered into BellSouth's LENS, it literally disappears. A new entrant, therefore, cannot pull up the order record as can BellSouth, to determine the status of the order. LENS will allow a new entrant to view the status of an order (like "Order Rejected for Error"), but cannot view the order itself, as can BellSouth. A new entrant, moreover, cannot cancel or change an order that has been passed to BellSouth's Local Carrier Service Center ("LCSC") for manual processing or an order that has been rejected for error. In short, the provisioning functionality of LENS has little if any practical usefulness. Not only must new entrants incur the time and expense of entering duplicate records of orders placed on LENS, but those records – because they will be on the entrants' own systems – cannot provide the functionality of records available to BellSouth.

5. LENS Does Not Have The Capability To Order Most Directory Listing Options. As reflected in Exhibit JB-9 LENS, does not provide new entrants the capability to order most of the directory listing options that BellSouth can order electronically.

A new entrant using LENS to submit orders would have to fax BellSouth an order for most directory listing options, assuming that the new entrant even knew that these options were available. In contrast, BellSouth can submit orders for these options electronically. Clearly, this disparity will cause additional expense and delay to the new entrant, and does not allow new entrants to serve their customers in substantially the same time and manner as BellSouth.

DOCUMENTED -- As discussed above in the pre-ordering section, BellSouth has not adequately documented the LENS interface.

The Draft SGAT similarly defines ordering and provisioning, stating that "Service ordering provides the CLEC order entry functions, including supplements, and the capability to establish directory listings." Draft SGAT at 6. The Draft SGAT also states that "Provisioning information available to CLECs include firm order confirmation and completions." Draft SGAT at 7.

CAPACITY -- As discussed above, LENS does not have adequate capacity to handle the combined market volumes for all new entrants. The LENS server apparently has a capacity of 1200 transactions per day.

STANDARDS -- The industry standard for ordering is EDI. LENS does not comply with that standard.

Q. HOW DO THE DEFICIENCIES IN LENS AFFECT A NEW ENTRANT AND ITS CUSTOMERS?

A. A new entrant must use manual processes to submit orders and receive provisioning information for those services and other products that cannot be ordered via LENS. In addition, new entrants must use manual processes to input LENS information from LENS into the new entrants' OSS because LENS, as previously discussed, is a human-to-machine interface. Manual processes are more expensive, slower, and more prone to errors, all of which adversely affect the new entrant's ability to provide its customers with service at the same level of quality service that BellSouth can provide its customers. This is not merely an academic issue – new entrants must compensate for lack of electronic ordering parity by adding more manual processes, which take additional time, cost more money, and inconvenience customers. BellSouth is not similarly handicapped. In short, LENS does not provide a new entrant with nondiscriminatory access to BellSouth's OSS or a meaningful opportunity to compete.

Q. DOES THE EDI INTERFACE PROVIDE NEW ENTRANTS WITH NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS FOR ORDERING AND PROVISIONING FUNCTIONS?

A. No, it does not. BellSouth's EDI ordering interface does not meet the criteria of a nondiscriminatory interface:

> **ELECTRONIC** -- BellSouth's EDI Ordering interface most likely will involve manual intervention by both the new entrant and

BellSouth. The EDI ordering interface requires additional human intervention on the part of new entrants because it is not integrated with an electronic interface for pre-ordering functions. New entrants, therefore, must manually input pre-ordering information into the EDI service order. In contrast, BellSouth's OSS for ordering is integrated with its OSS for pre-ordering, which allows BellSouth to populate its service records electronically with pre-ordering information.

BellSouth's EDI ordering interface also may require additional human intervention by BellSouth. BellSouth claims that its Local Exchange Service Order Generation ("LESOG") is operational and will allow BellSouth to process EDI orders without manual intervention (i.e., without the BellSouth service representative manually inputting the EDI service order into BellSouth's OSS). BellSouth, however, has refused to provide AT&T with any data about the number of AT&T EDI orders that LESOG has processed electronically . If new entrants must use interfaces that require manual intervention where BellSouth provides itself electronic access to its OSS ordering and provisioning functions, BellSouth is not providing new entrants with nondiscriminatory access to BellSouth's OSS. Again, this issue is not merely academic. The addition of manual processes means that new entrants' orders cannot be completed as promptly as BellSouth's orders.

FUNCTIONALITY -- Only the Phase I version of BellSouth's EDI interface is actually being used. Since December 1996, BellSouth has issued four versions of its Local Exchange Ordering Implementation Guide describing the Phase II EDI interfaces. BellSouth has indicated that a fifth version is in progress to address errors in the fourth version. Put simply, new entrants cannot yet use BellSouth's Phase II EDI interface. Described below are some of the functional deficiencies of BellSouth's EDI interface:

Scope of Capabilities -- BellSouth's Phase I EDI interface allows a new entrant to submit, modify and cancel orders for certain resold services, and to receive inferior types of Firm Order Confirmations (FOCs), Completion Notices (CNs) and functional acknowledgments. A new entrant, however, cannot receive all types of notices through EDI that BellSouth itself receives electronically. For example, BellSouth will send error notices, reject notices, jeopardy notices, and status reports to new entrants via facsimile or telephone. The new entrant then must manually input these notices and reports into its OSS before the new entrant can respond to the notices, thus increasing its costs and delays. Furthermore, FOCs and CNs that BellSouth provides via EDI are inferior to those generated for BellSouth. New entrants will receive only notice of confirmation or completion, but BellSouth's internal functional equivalents to FOCs and CNs are detailed in that they identify

what was ordered or what was installed. New entrants must engage in manual follow-up to obtain this information. That is discriminatory.

Breadth of Capabilities -- BellSouth's EDI interface supports POTS and vertical services for residential and business customers, PBX trunks, and Direct Inward Dialing trunks. A new entrant, however, cannot order all of the services through EDI that BellSouth now orders electronically to support its retail operations. For example, a new entrant cannot use EDI to order private line services, Centrex-like services, ISDN services, or complex business services of any sort. New entrants, moreover, cannot order network elements via the EDI interface. That is discriminatory.

Real-Time or Near Real-Time Capability -- BellSouth's Ordering Guides provide that new entrants can reach BellSouth's EDI interface by sending messages through one of three delivery methods: (1) one or more Value Added Network ("VAN") providers; (2) dial up port; or (3) private line connection using Direct:Connect software. All three delivery methods involve a batch process, which means that BellSouth cannot process a new entrant's EDI order for up to 30 minutes after the new entrant transmitted its EDI order to BellSouth. Once more, this disparity increases costs and delays in the new

entrant's ordering process. In its Interconnection Agreement with AT&T, BellSouth agreed to provide a different delivery method (a dedicated T1 private line facility using TCP/IP software) that reduces the delivery time sufficiently to be considered "near real-time." They have not delivered such a method at this time. Without this faster delivery method (which uses off-the-shelf standards-based solutions), BellSouth's EDI interface cannot provide new entrants with nondiscriminatory access to BellSouth's OSS.

Q. HOW DO THE DEFICIENCIES OF THE EDI INTERFACE AFFECT A NEW ENTRANT AND ITS CUSTOMERS?

A. Because of the deficiencies of BellSouth's EDI interface, a new entrant will have to use manual processes to perform certain ordering and provisioning functions for its customers where BellSouth can use faster and less expensive electronic processes to perform the same functions for similarly situated BellSouth customers. A new entrant, for example, must use manual processes to submit orders and obtain provisioning information for many services (including most private line services, Centrex-like services, ISDN services and complex business services). BellSouth can order such services electronically. A new entrant also must use manual processes to perform certain functions and receive certain information for all services that the EDI interface cannot perform (such as error, reject and jeopardy notices, or providing detailed FOCs and CNs). BellSouth performs these functions for itself electronically. Furthermore, a new entrant must manually input

information obtained via BellSouth's pre-ordering interfaces into the EDI order. BellSouth can electronically input pre-ordering information into its own orders. These manual processes do not provide nondiscriminatory access to BellSouth's OSS because the manual processes are more expensive, slower, and more prone to errors than the electronic processes that BellSouth provides for itself. In addition, BellSouth begins to process its own orders immediately upon transmission, but a new entrant's order may wait up to 30 minutes after transmission before BellSouth begins to process the new entrant's EDI order. All of these deficiencies will adversely affect a new entrant's ability to provide its customers with the requested services in a timely and cost effective manner that is at parity with BellSouth.

Q. WHAT ORDERING AND PROVISIONING INTERFACES HAS BELLSOUTH AGREED TO PROVIDE AT&T UNDER THE INTERCONNECTION AGREEMENT?

A. BellSouth has agreed to use its best efforts to provide AT&T with permanent interfaces for ordering and provisioning by December 31, 1997. Until the permanent interfaces are operational, BellSouth has agreed to provide interim EDI interfaces and the Access Service Request ("ASR") process using EXACT. These interim interfaces and processes do not allow AT&T to serve customers in substantially the same time and manner as does BellSouth, as shown below.

Interim EDI Interfaces -- The interim EDI interfaces include a Phase I and a Phase II. Phase I provides AT&T with the EDI capability to

order business and residential POTS (including vertical features), PBX trunks and DID trunks. Under Phase I, BellSouth and AT&T will use a Value-Added Network to transmit EDI transactions. Phase II, once fully implemented, would provide AT&T the EDI capability to order all services available for resale under BellSouth's General Subscriber Tariff and Private Line Tariff, and some customer specific network elements. Under Phase II, BellSouth and AT&T will transmit EDI transactions via a dedicated T1 private line facility using TCP/IP software. As shown below, the Phase I interim interface is not yet fully implemented.

Interim ASR Process -- AT&T will use the interim ASR process to order certain network elements via EXACT. The interim ASR process involves the same process that interexchange carriers currently use in the access world. In addition, AT&T will use manual work-arounds to supplement the ASR process where necessary. BellSouth and AT&T are currently identifying and negotiating the need for manual work-arounds.

Permanent Interfaces-- For resale and customer-specific network elements (e.g., loops, ports, local number portability, etc.), BellSouth has agreed to provide AT&T a permanent EDI interface that contains enhancements over the Phase I and Phase II interim EDI interfaces. For the remaining network elements, BellSouth has agreed to provide AT&T a permanent interface that contains enhancements over the existing ASR process. BellSouth also has agreed to adapt the

permanent EDI and ASR process to comply with standards adopted by appropriate industry groups within seven months after adoption of such standards. These permanent interfaces are not expected to be in place before year-end 1997.

Q. WHAT IS THE CURRENT STATUS OF THE INTERIM EDI INTERFACES?

A. **PHASE I** is not yet fully implemented. BellSouth and AT&T currently are conducting joint testing of the region-wide Phase I EDI interface in Georgia. The testing program consists of three sequential tests: (1) end-to-end testing; (2) service readiness testing; and (3) market readiness testing. BellSouth and AT&T have completed end-to-end testing for both resold business and residential services. End-to-end testing involves transmitting and receiving an EDI order, but the testing stops before BellSouth provisions the order.

BellSouth and AT&T have been involved in Service Readiness Testing ("SRT") in Georgia for both resold business and residential services. SRT involves sending an order through the entire system, but AT&T does not bill the end users . In other words, AT&T places the order, BellSouth actually provisions the order, and sends AT&T a bill. SRT takes place in a controlled environment. Selected AT&T employees use a script to place an order, and only eight residential orders and eight business orders can be "in the system" at any given time. AT&T has completed SRT for residential services in Georgia.

During the first week of May 1997, BellSouth and AT&T entered Market Readiness Testing ("MRT") in Georgia. MRT is similar to SRT, but on a larger scale and involves AT&T billing the end user. Instead of just 100 residential and 100 business customers, MRT is open to all AT&T employees and selected business customers. AT&T's tariff for residential services in Georgia became effective on June 24, 1997.

Since the EDI Interface serves the entire BellSouth territory, the cycle of testing to support market entry in Florida does not need to be as extensive as the initial entry testing in Georgia. This is true because the underlying technology is identical, and only situations unique to the Florida market will need to be tested. Testing to support market entry in Florida is not yet underway.

PHASE II -- BellSouth has reported to the Georgia PSC that its Phase II EDI interface (which BellSouth developed unilaterally) was "ready" on December 15, 1996. BellSouth's Phase II EDI interface, however, does not provide EDI capability to order all services available for resale under BellSouth's General Subscriber Tariff and Private Line Tariff, and a dedicated T1 private line facility using TCP/IP software is not in place. Since December 15, 1996, moreover, BellSouth has issued three different implementation guides that have significantly changed its "ready" Phase II EDI interface, including significant changes in basic coding philosophy. BellSouth has informed me and I have seen draft pages of a fourth implementation guide scheduled for release in the immediate future to align with the latest standards. As I have

said before, new entrants cannot hit a moving target. Even assuming that the Phase II EDI interface was somehow "ready," it likely will be several months before any new entrant can complete the necessary steps to be able to use BellSouth's unilaterally developed Phase II EDI interface. AT&T does not expect to be able to test the Phase II EDI interface with BellSouth until late in the third quarter of 1997. Thus, while several carriers (including AT&T, Sprint, Cellular Holding, National Telecommunications of Florida, and DeltaCom) have expressed interest in the Phase II EDI interface, no carriers are in the position to conduct the necessary testing or use that interface. If no one can use the Phase II EDI interface, it is not yet "ready."

Q. WHAT ARE THE PRELIMINARY TESTING RESULTS FOR THE PHASE I EDI INTERFACE?

A. So far, the SRT generally has succeeded in identifying "bugs" in the system. Integrating BellSouth's and AT&T's ordering systems and procedures has been a difficult task. If AT&T had tried to enter the market without testing, it would have been a disaster. The "bugs" would have caused poor customer service, which in turn would have severely damaged the AT&T brand and its market image. I expect that BellSouth and AT&T will continue to work together to resolve problem areas as they arise. That is the purpose of testing. Until testing is complete, however, the Phase I EDI interface is not ready for full-scale market entry.

During testing AT&T discovered that BellSouth had not correctly implemented an agreed field for directory listings. BellSouth maintains they

never agreed to the field size in question. Manual work arounds will be implemented to allow multiple listing types to be processed. These work arounds will restrict AT&T's ability to serve its customers.

Q. AT THE PRESENT, DO BELLSOUTH'S OPERATIONS SUPPORT SYSTEMS ALLOW NEW ENTRANTS TO PERFORM PREORDERING AND ORDERING IN SUBSTANTIALLY THE SAME TIME AND MANNER AS BELLSOUTH?

No. Attached to my testimony are two exhibits (Exhibits JB-10, JB-11) that contain performance data from AT&T's SRT/MRT with BellSouth in Georgia and a comparative analysis of that performance. Collectively, these exhibits demonstrate that BellSouth's performance as a supplier of local resold services has been inconsistent and has not achieved the initial targets contained in AT&T's interconnection agreement with BellSouth. There's no reason to expect better performance in Florida. Without data regarding BellSouth's internal performance, AT&T cannot determine how BellSouth's performance as a retailer compares with its performance as a wholesaler. All indications, however, suggest that BellSouth's wholesale performance is inferior to its retail performance, and thus it does not provide new entrants with the ability to compete effectively.

Q. PLEASE DESCRIBE THE EXHIBITS.

Exhibit **JB-????** is a set of data currently under development to depict the provisioning performance of BellSouth from the perspective of AT&T's customer on a weekly basis from March 17, 1997, to the present. These nine

charts depict Volumes, Firm Order Confirmation Receipt, Firm Order Confirmation Receipt by Interval, Completion Notice Receipt, Completion Notice Receipt by Interval, New Order Completions, Migration Order Completions, Completion Intervals, and Back Log **JB - ???** will be updated at or before the hearing with most current set of charts existing at that time reflecting performance across a broader range of measures and current to that point in time. This exhibit shows that from the perspective of AT&T, BellSouth is not meeting its commitment to return FOCs within 24 hours (Page 3) or its commitment to return CNS within 1 day (Page 5). From the perspective of AT&T's end-user, BellSouth is not completing new installations on the requested due date (Page 7) or migration orders on the requested due date (Page 8).

Exhibit **JB - ???**is a set of ten charts comparing BellSouth's current month and year-to-date performance in provisioning and maintenance to their peers and the national composite. Exhibit **JB???** also will be updated at or before the hearing. This exhibit shows that BellSouth is unable to meet its own committed due dates for consumer and business work orders. For example, Page 1 shows that BellSouth completed only 49% of work orders on time, and Page 2 shows that only 60.5% of business work orders were completed on time. Moreover, installation intervals for both consumer and business installations exceed 13 days on average (Page 3 and Page 4). Additionally this exhibit shows that BellSouth's average cycle time to restore service to a customer who is out of service is 72.5 hours, about three times longer than the target time of 24 hours (Page 5). BellSouth's average cycle

time to repair service for a customer having service difficulties is 86.9 hours, 20 percent longer than the target time of 72 hours (Page 9).

These exhibits clearly show that BellSouth is not providing new entrants with the ability to compete effectively.

MAINTENANCE AND REPAIR

Q. WHAT IS MAINTENANCE AND REPAIR?

A. The FCC Rules provide that maintenance and repair "involves the exchange of information between telecommunications carriers where one initiates a request for maintenance or repair of existing products and services or unbundled network elements or combination thereof from the other with attendant acknowledgments and status reports." 4 C.F.R. § 51.5. In other words, maintenance and repair involves the monitoring and fault management activities that assure the proper functioning of local services. These activities include trouble reporting, and the testing, monitoring and correction of reported troubles.

The Draft SGAT does not track this definition exactly. Instead, it refers to "maintenance and repair" as "service trouble reporting and repair," and states:

> Service trouble reporting and repair allows CLECs to report and monitor service troubles and obtain repair services. BellSouth provides CLECs service trouble reporting availability and monitoring in a nondiscriminatory manner that provides CLECs the same ability to report and monitor service troubles that

BellSouth provides itself. BellSouth also provides CLECs an estimated time to repair, an appointment time or a commitment time, as appropriate, on all trouble reports.

Draft SGAT at 7. In other words, BellSouth will allow CLECs to make and monitor trouble reports, but they will not be able to test and correct trouble reports, as can BellSouth.

Q. WHAT KIND OF ELECTRONIC INTERFACES FOR MAINTENANCE AND REPAIR IS BELLSOUTH PROPOSING TO OFFER UNDER ITS DRAFT SGAT?

A. The Draft SGAT states that "BellSouth provides two options for electronic trouble reporting. For exchange services, BellSouth offers CLECs access to the Trouble Analysis Facilitation Interface (TAFI). For individually designed services, BellSouth provides electronic trouble reporting through an electronic communications gateway." Draft SGAT at 8. The electronic communications gateway referred to in the Draft SGAT is not yet available, and is not expected to be developed until December, 1997. In the meantime, new entrants supposedly can report troubles for "designed" or "special" services through the Electronic Bonding Interface ("EBI") currently used by interexchange carriers for access services.

Q. WILL EBI AND TAFI PROVIDE A NEW ENTRANT WITH NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS FOR MAINTENANCE AND REPAIR FUNCTIONS?

A. No. As explained below, TAFI and EBI do not possess all of the five characteristics of a nondiscriminatory interface.

ELECTRONIC

1. TAFI is a human-to-machine interface. Like LENS, TAFI does not allow electronic communication between BellSouth's OSS and a new entrant's OSS. Consequently, when a new entrant submits a trouble report via TAFI, that order must be manually entered into the new entrant's own internal OSS. That is discriminatory because TAFI does not enable new entrants to perform maintenance and repair functions in substantially the same time and manner as BellSouth -- new entrants must manually input the data twice whereas BellSouth manually inputs the data only once. Once more, BellSouth's lack of necessary and appropriate electronic interfaces creates additional costs and delays not experienced by BellSouth.

2. EBI is not fully automated. EBI allows a new entrant to transmit orders electronically, but BellSouth then must manually enter trouble reports for resold services and certain network elements into BellSouth's internal OSS. Manual intervention is necessary because BellSouth has not coded its systems to process those types of maintenance orders. Consequently, EBI operates only like a fancy facsimile machine that suffers from the same problems (slower, less accurate, more costly) that inevitably result from manual intervention.

As discussed above, manual intervention increases new entrants' costs and causes delays in their ability to provide service to their customers.

FUNCTIONALITY -- TAFI and EBI do not provide new entrants with the electronic capability to submit and receive status on a significant portion of the new entrants' trouble reports BellSouth, on the other hand, can submit orders and obtain status electronically for all of its trouble reports. TAFI only supports basic local exchange services, which accounts for approximately 82 percent of BellSouth's trouble reports. The remaining trouble orders (approximately 18 percent) will require manual intervention by BellSouth repair attendants, and therefore will increase delays experienced by new entrants' customers.

CAPACITY -- TAFI does not have adequate capacity to handle efficiently and effectively the combined operational requirements of all new entrants. BellSouth claims that TAFI currently has the capacity to support 195 simultaneous users if BellSouth activates its "hot spare" arrangement. The combined operational requirements for new entrants, however, is much higher than TAFI's claimed capacity. Each new entrant needs to be able to have all of their repair attendants logged into TAFI simultaneously just as BellSouth does. Otherwise, a new entrant's repair attendant will have to log onto TAFI every time they receive a trouble report for a customer in BellSouth territory, causing more cost and delay not experienced by BellSouth. AT&T

alone has hundreds of repair attendants, any one of which may receive a trouble report from an AT&T customer in BellSouth territory. Other new entrants, particularly the larger national carriers, also would have large numbers of repair attendants who would need to be logged into TAFI in order to provide timely service to their customers.

STANDARDS -- EBI is an industry standard, but TAFI is not. Since April 1996, AT&T has been requesting that BellSouth provide TAFI functionality through the EBI interface. BellSouth, however, has refused to provide that arrangement. As a result, new entrants have the Hobson's choice of using an industry standard interface that has currently has no functionality with respect to resold services and certain network elements (EBI), or a non-standard human-to-machine interface that generally has adequate functionality for the resold services that it supports.

Q. WHAT KIND OF ELECTRONIC INTERFACES FOR MAINTENANCE AND REPAIR HAS BELLSOUTH AGREED TO PROVIDE UNDER ITS INTERCONNECTION AGREEMENT WITH AT&T?

A. BellSouth has agreed to provide AT&T with interim interfaces until BellSouth develops the permanent electronic interfaces for maintenance and repair. Under the Interconnection Agreement, the interim interfaces for

Maintenance and Repair consists of: (a) telephone calls between AT&T and BellSouth; and (b) BellSouth's TAFI for POTS.

With respect to the permanent electronic interface, the Interconnection Agreement provides that BellSouth and AT&T shall establish an electronic bonding interface that enables AT&T to: (1) enter maintenance orders into BellSouth's maintenance system; (2) retrieve and track current status of maintenance orders; (3) receive estimated-time-to-repair on a real-time basis; (4) initiate a technician dispatch; (5) receive timely notice if the BellSouth repair person missed or will miss a repair appointment; (6) retrieve all time and material charges upon closing a maintenance order; and (7) perform electronic tests at time of order entry and receive test results. The Interconnection Agreement provides for a single electronic bonding interface for Maintenance and Repair to handle both resold services and network elements.

Q. WILL THE INTERIM INTERFACES PROVIDE AT&T OR ANY OTHER NEW ENTRANT WITH THE SAME MAINTENANCE AND REPAIR CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. No. The interim interfaces will not provide AT&T with the same maintenance and repair capabilities as BellSouth provides itself through BellSouth's OSS. The same defects exist in the interim interfaces provided to AT&T for maintenance and repair functions that exist in TAFI and EBI.

Q. WILL THE PERMANENT ELECTRONIC INTERFACES PROVIDE AT&T OR ANY OTHER NEW ENTRANT WITH THE SAME MAINTENANCE AND REPAIR CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. Hopefully, the permanent electronic interfaces will provide AT&T with nondiscriminatory access to BellSouth's OSS for maintenance and repair functions. It is, however, too early to tell, since the permanent electronic interface is still in the development phase. AT&T provided its functional requirements to BellSouth on July 24, 1996. Under the current schedule, BellSouth and AT&T must use their best efforts to implement the permanent electronic interface by December 31, 1997. Until the permanent interface is fully implemented, AT&T will not have nondiscriminatory access to BellSouth's OSS for maintenance and repair functions.

BILLING

Q. WHAT IS BILLING?

A. The FCC Rules provide that billing "involves the provision of appropriate usage data by one telecommunications carrier to another to facilitate customer billing with attendant acknowledgments and status reports. It also involves the exchange of information between telecommunications carriers to process claims and adjustments." 4 C.F.R. § 51.5. In other words, billing involves the process by which an incumbent LEC records and transfers data that enables a new entrant: (1) to bill its customers for telecommunication services (i.e., customer usage data) or other telecommunications carriers for

access and call termination/transport; and (2) to pay the incumbent LEC for services rendered.

Q. WHAT KIND OF ELECTRONIC INTERFACES FOR BILLING IS BELLSOUTH PROPOSING TO OFFER UNDER ITS DRAFT SGAT?

A. It is not clear. The Draft SGAT provides that "[b]illing for interconnection services will be through the Carrier Access Billing System ('CABS')." Draft SGAT at 5. The Draft SGAT, however, does not state how BellSouth will bill new entrants for network elements. With respect to billing for resale services, the Draft SGAT states that detailed guidelines for billing of resold services are contained in BellSouth's Resale Ordering Guide. Draft SGAT at 24. BellSouth's Resale Ordering Guide, however, does not address how BellSouth proposes to bill a new entrant.

With respect to customer usage data, the Draft SGAT states:

> Customer daily usage data provides detailed information for determining billable usage for services such as directory assistance or toll calls associated with a resold line or a ported telephone number. This usage option allows CLECs to bill their end-user customers at their discretion, rather than on BellSouth's billing cycles. It also allows a CLEC to establish toll limits, detect fraudulent calling or analyze the usage patterns of its customers.

Draft SGAT at 7. To establish Daily Usage File Service, BellSouth's Ordering Guides provide that new entrants must enter into a separate contract with BellSouth. Whether that separate contract will comply with the Act is unknown because the Ordering Guides do not include such a contract. It is also unknown whether the charges for Daily Usage File Service are cost-based.

Q. WILL THE DRAFT SGAT PROVIDE A NEW ENTRANT WITH NONDISCRIMINATORY ACCESS TO BELLSOUTH'S OSS BILLING FUNCTIONS?

A. No. The Draft SGAT does not specify how BellSouth will bill new entrants for network elements and resold services. It is my understanding that BellSouth does not yet have the capability to record usage data or generate mechanized bills for many network elements. In addition, BellSouth does not have the capability to generate Carriers Access Billing Systems (CABS) formatted bills for resold services. Without CABS formatted bills, new entrants will receive two types of bills (Customer Record Information System (CRIS) and CABS) instead of a single bill (CABS), which will adversely affect a new entrant's billing operations. Auditing two bills is more difficult than auditing one bill, and therefore new entrants will incur more costs and expend more resources to perform billing functions using the interim interface than the permanent interface.

Q. WHAT KIND OF ELECTRONIC INTERFACES FOR BILLING HAS BELLSOUTH AGREED TO PROVIDE UNDER ITS INTERCONNECTION AGREEMENT WITH AT&T?

A. BellSouth has agreed that, no later than August 3, 1997, BellSouth will provide AT&T with bills for all services (e.g., interconnection, network elements, and resold services) using only CABS or the CABS format. BellSouth, however, has indicated that CABS formatted bills will not be available for certain network elements until much later. On an interim basis until that time, BellSouth has agreed to provide AT&T with bills in CRIS/CLUB ("Customer Large User Bill") format for certain services, and CABS bills for other services. With respect to customer usage data, BellSouth has agreed to provide AT&T with customer usage data in a standard format via a batch file transfer.

Q. WILL THE INTERIM INTERFACES PROVIDE AT&T OR OTHER NEW ENTRANTS WITH NONDISCRIMINATORY ACCESS TO BELLSOUTH OSS FOR BILLING FUNCTIONS?

A. No. As discussed above, BellSouth's interim interfaces do not provide nondiscriminatory access to BellSouth's OSS for billing functions because: (1) BellSouth does not have the capability to record usage or generate mechanized bills for many network elements; and (2) BellSouth does not provide CABS formatted bills for resold services. These deficiencies prevent new entrants from serving their customers in substantially the same time and manner as BellSouth.

Q. WILL THE PERMANENT ELECTRONIC INTERFACES PROVIDE AT&T OR ANY OTHER NEW ENTRANT WITH THE SAME BILLING CAPABILITIES THAT BELLSOUTH PROVIDES ITSELF?

A. The permanent electronic interfaces should provide AT&T with nondiscriminatory access to BellSouth's OSS for billing, but it is too early to tell. For example, BellSouth does not have the methods and procedures in place for recording usage data that is necessary for the billing of many network elements. BellSouth, moreover, continually cancels meetings regarding key billing issues. As a result, AT&T cannot be certain that BellSouth's billing system will have the technical capability to provide nondiscriminatory access until that system is operational, as defined by the Interconnection Agreement. Additionally, BellSouth must measure the performance of its billing systems to determine whether the billing services that BellSouth provides AT&T is at least equal in quality to the billing services that BellSouth provides itself internally. Only empirical data will prove that BellSouth is providing nondiscriminatory access to its OSS for billing functions.

SUMMARY

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. BellSouth must provide nondiscriminatory access to its OSS in order to comply with Sections 251 and 271 of the Act. Nondiscriminatory access to OSS is an integral part of providing access to unbundled elements, as well as

making services available for resale. At the present time, BellSouth cannot do so.

To provide nondiscriminatory access, BellSouth must make available electronic interfaces to BellSouth's OSS that: (1) enable a new entrant to perform the same or equivalent OSS functions in the substantially the same time and manner as BellSouth; and (2) provide new entrants with a meaningful opportunity to compete. To date, however, BellSouth has not provided any new entrant with nondiscriminatory access to BellSouth's OSS. BellSouth's proposed interfaces do not enable new entrants to perform OSS functions in substantially the same time and manner as BellSouth because more human intervention is required for the new entrant to perform OSS functions than BellSouth. This additional human intervention is a consequence of BellSouth's interfaces being human-to-machine (LENS and TAFI specifically), lacking the same functional capabilities as BellSouth's OSS (all OSS interfaces), and not providing integrated, industry standard interfaces (EDI and LENS, TAFI and EBI). In addition, BellSouth has not demonstrated that its proposed interfaces (LENS and TAFI) have sufficient capacity to meet the combined operational requirements of all new entrants. Furthermore, BellSouth's proposed interfaces do not comport with industry standards and are not adequately documented, which substantially diminishes if not eliminates any meaningful opportunity for new entrants to compete with BellSouth.

BellSouth has not provided any empirical evidence that its interfaces meet the requirements of the Act. BellSouth's interfaces have not been sufficiently tested and have little if any operational experience in the real world. BellSouth, moreover, has not measured its performance as a retailer and a wholesaler in order to provide an objective comparative standard against which to judge nondiscrimination.

For these reasons and the reasons explained above, I recommend that the Florida Commission find that BellSouth's proposed OSS interfaces do not yet comply with the provisions of Section 251 of the Act. Specifically, I recommend that the Commission make a negative determination for Issue Nos 2, 3, 3(a), 9, 10, 12, 15, and 15(a).

Q. DOES THAT COMPLETE YOUR TESTIMONY?

A. Yes.

Market Entry Interfaces with BellSouth for LSR

Process	Interface	Functions
Pre - Ordering	On - Line	• Service Availability and Street Address Validation
	File Transfer	• Central Office Features and Functions • Telephone Numbers for Assignment
	Manual	• Due Date and Appointment Scheduling • Customer Service Records
Ordering/Provisioning	EDI Transmission Interface. Batch Mode. (BST rekeys orders not mechanized on their end.)	• Now - Consumer and Business POTs and Features, PBX Trunks and DID • Error, Reject, Jeopardy Notices are by Fax • Future - Additional Services/Notices
Maintenance & Repair	Manual	• Analysis and Repair of Service Defects
End User Billing	EMR	• Usage Data Transfer
Carrier Billing	CRIS - Paper CABS in August	• Wholesale Bill
Local Account Maintenance	CARE Transaction	• OUTPLOC • PIC Change • Redirect IXC PIC Change

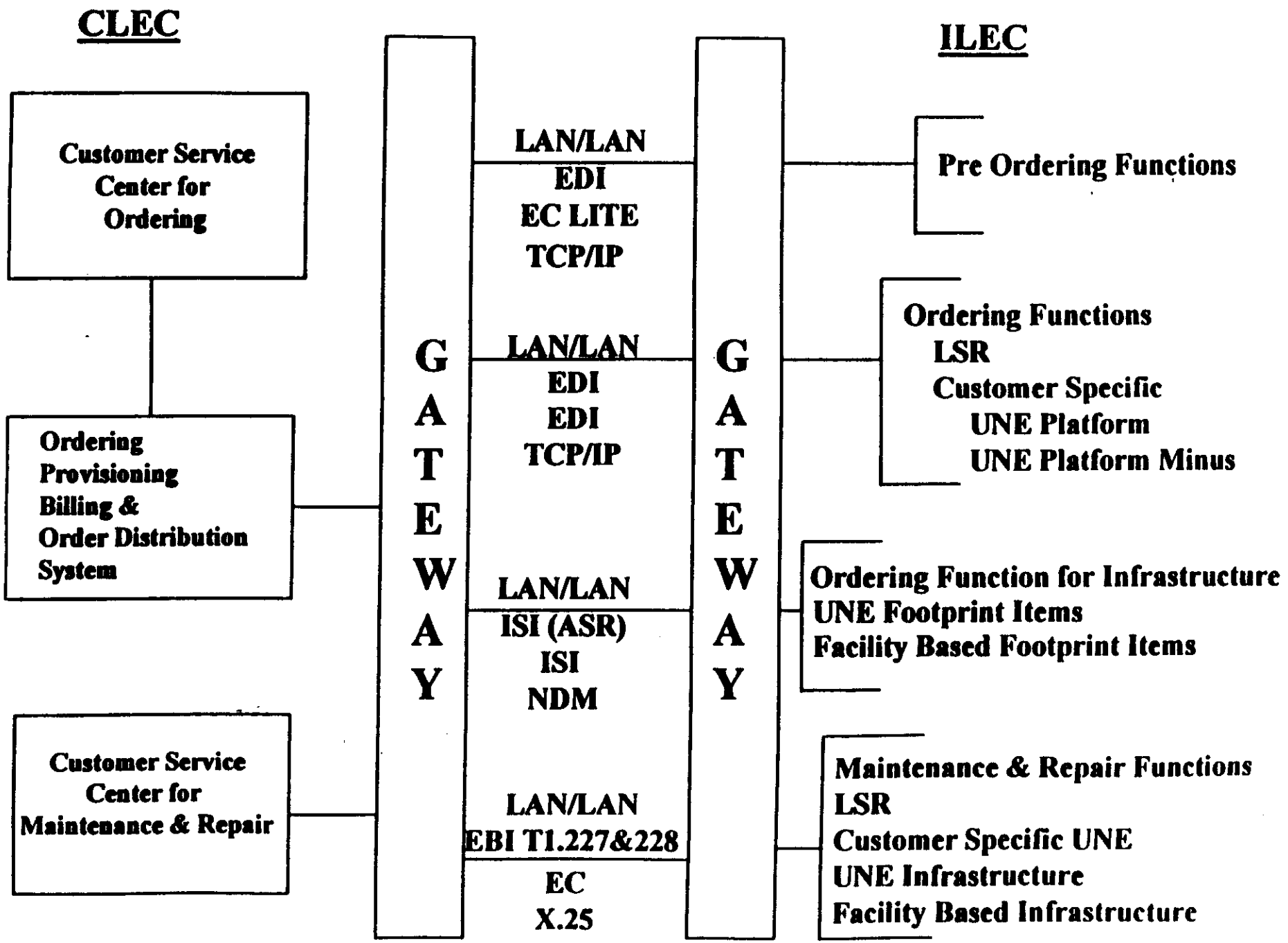
FPSC EXHIBIT NUMBER
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-1
MARKET ENTRY INTERFACES WITH BELLSOUTH for LSR
PAGE 1 of 1

TARGET INTERFACE FUNCTIONALITY (12/31/1997)

•Pre-Order Transactional	*Real Time EDI/EC-Lite*
•Pre-Order Batch	*Batch NDM/C:D*
•Ordering Transactional	*Near Real Time EDI/EDI*
•Ordering Batch	*Batch ASR NDM/C:D*
•Provisioning	*Reverse feed over the Ordering Interface*
•Maintenance	*Real Time EBI*
•Usage Transfer	*Batch EMR NDM/C:D*
•Billing (Resale and UNE)	*Batch CABS NDM/C:D*
•Local Account Maintenance	*Batch CARE NDM/C:D*

FPS EXHIBIT NUMBER
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT-JB-2
TARGET INTERFACE FUNCTIONALITY
PAGE 1 of 2

Target State View For Industry



Clark, Cindy

From: Cassandra A. Daniels
Sent: Monday, May 19, 1997 8:08 PM
To: Clark, Cynthia
Cc: Linda W. Tate
Subject: Responses from May 12th Memo - Resend

Cindy,

Please find attached responses to your May 12th memo.

---------- Attachment ----------

****

The following Microsoft Word For Windows V6 document is uuencoded.
You may use the UNIX uudecode utility to translate
it to its native format.

****

---------- Attachment ----------

CINDY.DOC

May 19, 1997

Ms. Cindy Clark
AT&T
1200 Peachtree St. NE
Atlanta, GA 30308

Dear Cindy,

We appreciate the opportunity to demonstrate the functionality of the Local Exchange Navigation System to your associates. As you know, LENS is a newly developed system, and as such will require several iterations of enhancements before it can be considered a mature system. It is our desire and goal to provide functionality that mirrors our own service centers, which will require multiple, and sometimes frequent changes to LENS.

Your May 12th memo mentioned viewing a number of irregularities during the demo on May 5. The problems with LENS not displaying directional prefix and directional suffix information was corrected prior to the LENS hands-on sessions on May 13. I am aware of a minor problem, with LENS not displaying the RSAG valid city during the validation process for an inquiry,. However, the correct abbreviation is system populated on the Local Service Request during the firm order process. We will have the city discrepancy corrected prior to the June 30th release.

We have a number of LENS enhancements identified, however, not all have been analyzed and prioritized. We are willing to share the enhancements planned for the June, 1997 release with our customers, with the following caveat. The local service environment is ever changing, which sometimes necessitates that we change our priorities to comply with state regulatory mandates and to best meet the needs of our customers to provide the best possible service to the ultimate customer, the end user. As long as we have an understanding that what is shared is subject to change with little or no advance notice, we will be glad to share our planned enhancement schedule. I will provide a list of changes currently scheduled for the June release via a separate memo. We have not planned capabilities beyond the end of second quarter, to date.

Our current thoughts to provide notification to LENS users of planned upgrades will be via an informational letter. In a future phase of LENS, we plan to have this information available on-line via the release notes option. We also plan to distribute updated pages to the LENS user guide, to provide more than sufficient information that may be used as training.

As with any new system, it will be at least 6-9 months before the firm order portion can be considered stable. With the exception of displaying zip code, adding the ATLAS confirmation number, providing the capability to allow CLECs to assign house numbers for unnumbered addresses, and adding some fields specific to neighborhood directories and directory closing dates, I believe the inquiry or pre-order capabilities are stable. Adding zip code is scheduled for the June release and no dates have been determined for the other modifications. Of course, if the applications we access upgrade to provide additional functionality, LENS would be modified to take advantage of the added capabilities.

We currently have development, test/training and production systems which must be maintained. I believe adding a fourth environment not to be in the best interest of the LENS users. As stated previously, the majority of enhancements will impact the ordering capabilities in LENS, not the pre-order portions which AT&T plans to utilize. I would suspect the majority of LENS users would be anxious to have increased ordering capabilities made available to them as soon as they were tested and documented. I understand your training concern but again state the majority of changes would impact ordering, not the pre-order process, so at this time I don't believe we would be able to maintain multiple release levels in production.

I hope this addresses your concerns, but if not don't hesitate to contact me with additional LENS questions.

Sincerely,

Cassandra Daniels

CC: Linda W. Tate

CORRECTIONS AND ENHANCEMENTS TO LENS

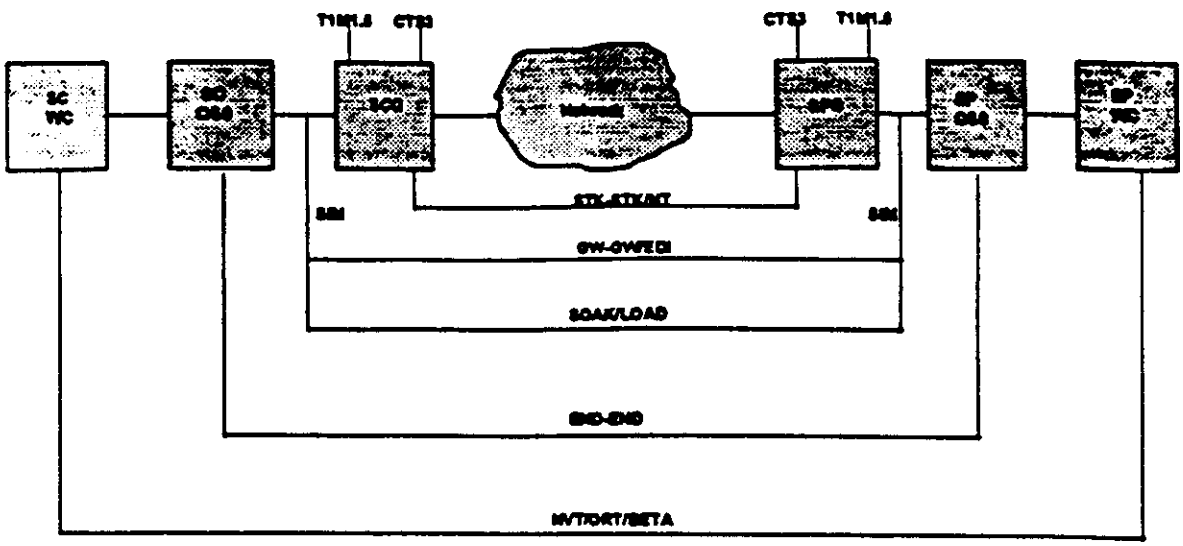
NOTED BY BELLSOUTH ON MAY 5 AND MAY 13, 1997

Correction/Enhancement	Status As Of July 17, 1997
Display of Correct RSAG Community Name	Corrected
Full Availability of Hunting Options	Unavailable
Access to Customer Service Records	Available (excluding Georgia and Louisiana)
Display of RSAG Street Directional	Corrected
On-line Edits for Content	Unavailable
Directory Listing Options	Unavailable
Information on Directory Book Identification and Book Close Dates	Unavailable
FIDs (Feature Identifiers) On-line	Unavailable
Network Elements and Combinations	Unavailable
Complex Orders - SynchroNet, ISDN, etc.	Unavailable
Ability to Change a Pending Order	Unavailable
Typing Input for PIC Selection	Available - Firm Order Mode Only
Reserve More Then 6 Numbers / Place Orders for More Than 6 Lines	Unavailable
Multiline Hunt Groups	Unavailable

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-4
Corrections and Enhancements to LENS
Page 2 of 2

Larger Number of Services/Features Available for Mechanized Ordering	Unavailable
On-line Check for Compatibility of Features Selected	Unavailable
Typing Input for Services/Features	Unavailable
Flexible Reservation Period for Numbers	Unavailable
Ability to Request Specific Quantity of Numbers in Sequence	Unavailable
UNEs and Combinations on a Single Order	Unavailable
ZIP Codes	Corrected
Conforming Format for Date Input	Unavailable
Access to Status Information on EDI Orders	Unavailable
Ability to Select Alternative Address as Displayed by RSAG	Unavailable
Correct Need to "Reset" to Obtain Valid RSAG Addresses When Correcting Inputs	Corrected
Display of Carrier Name with Selected PIC Code	Unavailable
Select Services and Features for All Lines In One Pass	Available if Selected Before Making First Selection
Expanded Pre-population of Identification Fields from User/Company Profile	Limited

Electronic Communications Conformance & Intercompany Testing



OSI Stack Conformance Testing - internal testing of conformance to Open Systems Interface Standards.

Network to Network Testing - verification of connectivity, hardware and software required to route and send messages between systems across the selected transmission network.

Stack to Stack Testing - verification that the OSI Network Management software stacks can communicate with each other and successfully manage communications for the systems which must talk to each other.

EDI Testing - verification that the EDI translators have been properly mapped to encode, decode and synchronize transaction sets both sending and receiving.

Pre-Order Application Conformance Testing - internal testing by each partner of conformance to T1M1 standards prior to the next test.

Gateway to Gateway Testing - verification that interoperability between the Gateways exists.

Soak and Load Testing - verification that the Pre-Order Applications and the Gateways can sustain operation under load for a defined period of time.

End-to-End Testing - verification that application information can be successfully exchanged under various test scenarios including both valid and invalid conditions.

Network Validation Test - verification that the network can support work in the production environment.

Operational Readiness Testing - scripted test scenarios in production mode using both "sunny day" and "rainy day" conditions.

Beta Trial - First use of complete system on real, non-scripted contacts to validate: User Requirements & Features/ Functionality/ Methods and Procedures/ OA&M Procedures/ Recovery Procedures/ Processes/ Business Case Metrics/ Data Quality/ Measures of Success/ Production Support Procedures/ System Security Requirements

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-6
LENS Capability-Ordering Activities
Page 1 of 1

ACTIVITY TYPE	BellSouth OSS	Industry Standard	LENS
New Installation	Yes	Yes	Yes
Change/Modification to Existing Service	Yes	Yes	No
Inside Move – Physical Termination within Building	Yes	Yes	No
Outside Move & End User Location Disconnect	Yes	Yes	No
Disconnect	Yes	Yes	Yes
Record Activity – Administrative Changes	Yes	Yes	No
Conversion to New Local Service Provider with Changes	Yes	Yes	Yes
Conversion to New Local Service Provider "As Is"	Yes	Yes	Yes
Suspend Service	Yes	Yes	No
Restore Service	Yes	Yes	No

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-7
LENS Support-Industry Standard
Requisition Types
Page 1 of 1

Requisition Types	Industry Standard	LENS
Loop	Yes	No
Loop with Interim Number Portability	Yes	No
Interim Number Portability	Yes	No
Unbundled	Yes	No
Resale	Yes	Yes
Port	Yes	No
Directory Assistance	Yes	No
Directory Listing – White	Yes	No
Directory Listing – Yellow	Yes	No
Port/Loop Combination	Yes	No

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-8
114 Services Available to Customers
Page 1 of 4

LIST OF 114 SERVICES AVAILABLE TO CUSTOMERS IN SAMPLE CENTRAL OFFICE, EIGHT OF WHICH MAY BE ORDERED VIA LENS (AS SHOWN IN BOLD)

MEMORY CALL	SYNCHRONET MULTIPOINT	CALL DETAIL
FAX	800 SVC-CXR SEL ON REV CH	MWI VISUAL
COURTESY COMPLETE	NUMBER PORTABILITY RCF	SHARED SPEED CALLING
PRESTIGE I	BELLSOUTH.NET	MULTISERVE EBS
MULTILINE HUNT GROUP	UNIF ACCESS NUMBER	***CUSTOMIZED CODE RESTRICTION***
SURROGATE CLIENT NUMBER	MLHG OVERFLOW	TOUCHSTAR PULSE SGN
TOUCHSTAR	***TOUCHTONE***	MULTISERVE ACD
SAVER SERVICE	CALL PATTERNS	CUSTOMIZED DIALING PK
MEGA-LINK ISDN	MULTISERVE SERVICE	SPECTUS-COM'L QUAL VIDEO
ALTERNATE ROUTING	AUTO NUMBER IDENTIFICATION	EOEAS

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-8
114 Services Available to Customers
Page 2 of 4

BELLSOUTH LONG DISTANCE	FLEXSERVE SERVICE	ACCUPULSE
ESSX ISDN-NATIONAL	AMS-SVC ORDER REQUESTS	PRESTIGE COMM SERVICE
DID WITH USER TRANSFER	CUTOFF ON DISCONNECT	***MEMORY CALL ENHANCED***
MAKE BUSY/NIGHT TRANSFER	SMPL MSG DESK INTERFACE	MESSAGE RATE SERVICE
MSG WAITING IND AUDIBLE	QUICKSERVICE	ISDN-IND LINE SVC - CUSTOM
PRESTIGE SINGLE LINE	INTRALATA EQUAL ACCESS	ESSX
CONDITIONING	VOICE ACTIVATED DIALING	ZIPCONNECT
C.O. BLOCK W/OPR SCREEN	INTERSWITCH SMDI	PPSN-REV CHG ACC
ADWATCH	ROUTE DIVERSITY	PULSELINK
ESSX ISDN-CUSTOM	DID	MWI NO RATE HTG TEMP FIX
MSG WAITING IND AUD/VIS	AREA PLUS SERVICE	LOCAL MEASURED SVC

MWI ACTIVATION (VISUAL)	ISDN-IND SVC-NATL	SELECT CLASS CALL SCREEN
TRNK SIDE ACCESS	MWI ACTIVATION (AUDIBLE)	CALL DETAIL INFORMATION
PATHLINK	MLHG CO ANNOUNCE	VISUAL DIRECTOR
HIGH CAP DIGITAL SVC	VOICE GRADE LINE / CKT SW BSA	PRESTIGE DELUXE
MLHG ACCESS TO EACH PORT	BRIDGING	IPP
WARM LINE	REV BLLG ON CKT/PKT ACC	QUEUING
FASTER SIGNALING ON DID	CUST SERVICE AREA (ACCS)	AUTO NMBR IDENT VIA FGD
AUTO NMBR IDENT VIA FGB	HOT LINE	DTMF SIGNALING ON DID
BACK-UP LINE	UNIF UCD LINE HUNTING	PPSN-RPOA PRESELECT
AIN TOOLKIT	TRUNK SIDE ACC (TANDEM)	ISDN-IND LINE SVC-NATL2
REMOTE CALL FORWARDING	PRESTIGE II	AUTO PROTECTION SWITCHING
SWITCH ACCESS	SYNCHRONET SERVICE	DID TRUNK QUEUING

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-8
114 Services Available to Customers
Page 4 of 4

CCSAC+	UNIF 7D ACC NUM RCF	***RINGMASTER***
MEGA-LINK ISDN NATL2	WATSSAVER SERVICE	PATHLINK (NI-2)
CRISIS LINK	***CUSTOM CALLING***	CLLD DN VIA 900 NXX
800 SVC TO DID LINE		

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-9
Disparate Directory Listing Capability
Page 1 of 2

Disparate Directory Listing Ordering Capability

BellSouth may order electronically full range of 21 directory listing options, while new entrants may order only four of such options via LENS.

Directory Listing Options	BellSouth	LENS
Listed Name	Yes	Yes
Non-published	Yes	Yes
Non-listed	Yes	Yes
Additional Listing	Yes	Yes
RingMaster	Yes	No
Alternate Call	Yes	No
Answering Service	Yes	No
Cross Reference	Yes	No
Designer Bold	Yes	No
Designer Bold Plus	Yes	No
Designer Script	Yes	No
Designer Script Plus	Yes	No
Designer Extra Line Standard	Yes	No

FPSC Exhibit Number _____
FPSC Docket 960786
Bradbury Exhibit JB-9
Disparate Directory Listing Capability
Page 2 of 2

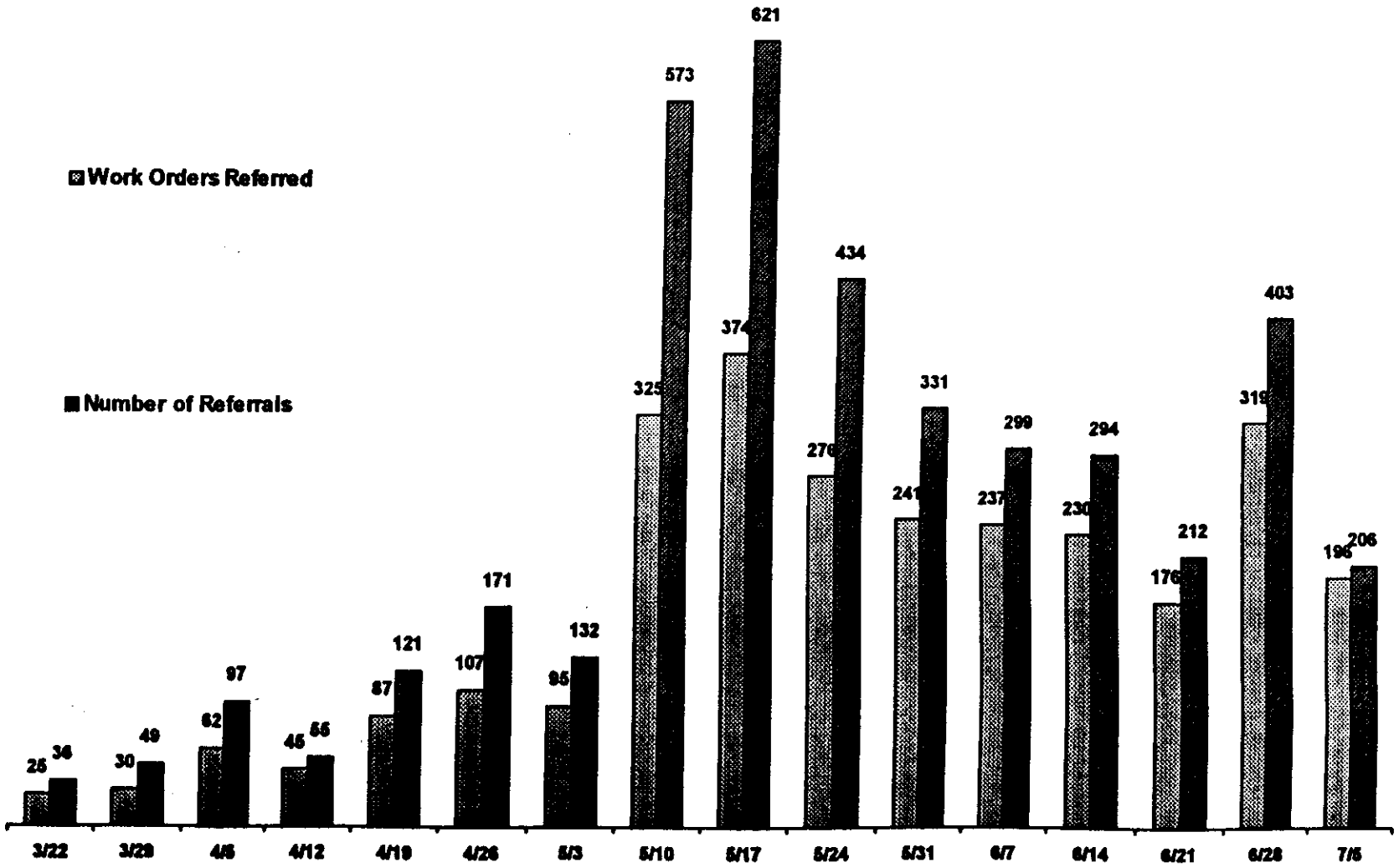
Designer Extra Line Bold	Yes	No
Designer Extra Line Script	Yes	No
Foreign Listing	Yes	No
Foreign Cross Reference	Yes	No
Stylist	Yes	No
Indentions	Yes	No
Captions	Yes	No
Designation	Yes	No

PROVISIONING PERFORMANCE:

BellSouth TELECOMMUNICATIONS

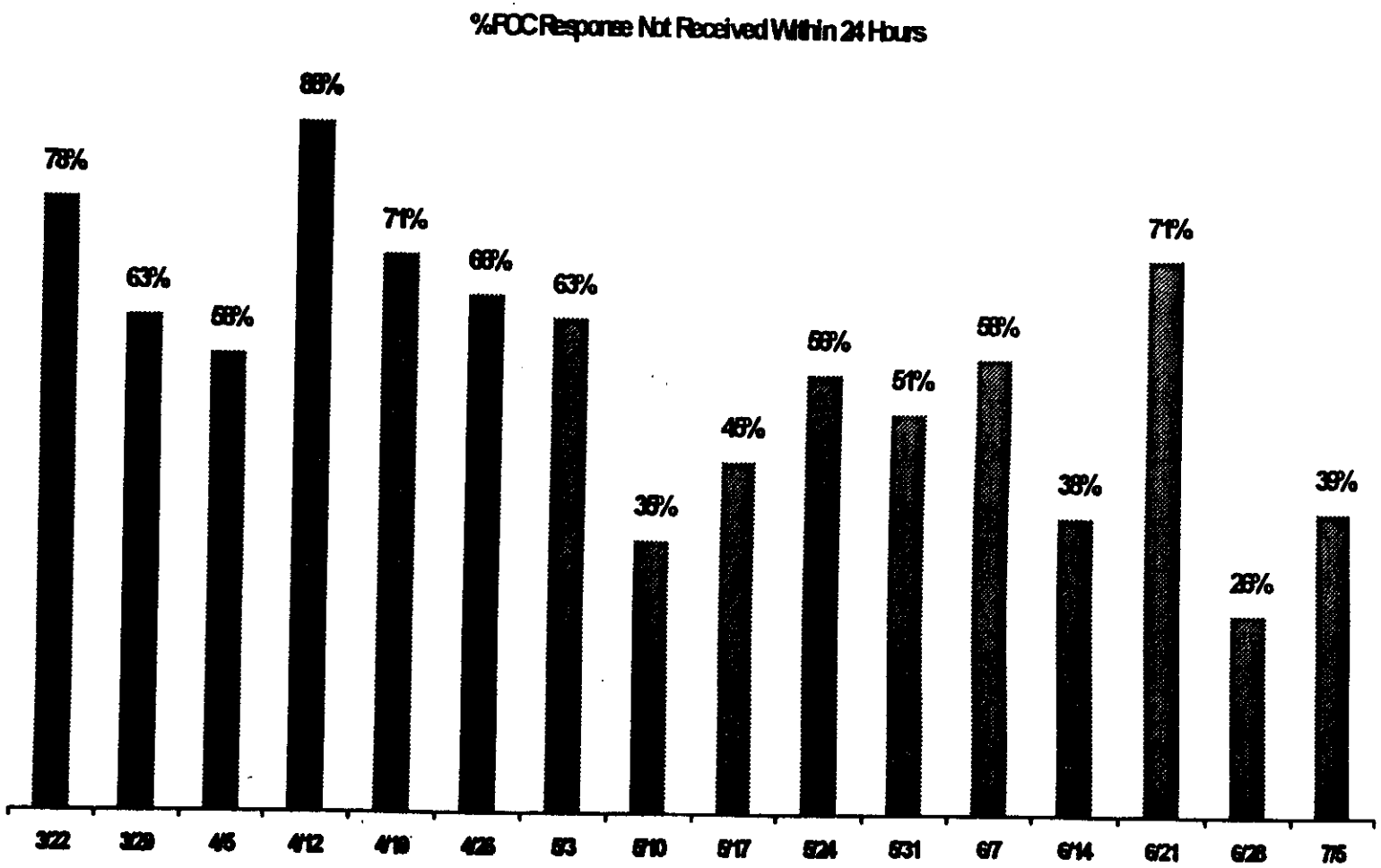
(3/17/97 Through 7/05/97)

BellSouth Performance
Volume Of Work Orders & Referrals



FPSC EXHIBIT NUMBER
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-10
PROVISIONING PERFORMANCE-
BELLSOUTH TELECOMMUNICATIONS
PAGE 2 of 10

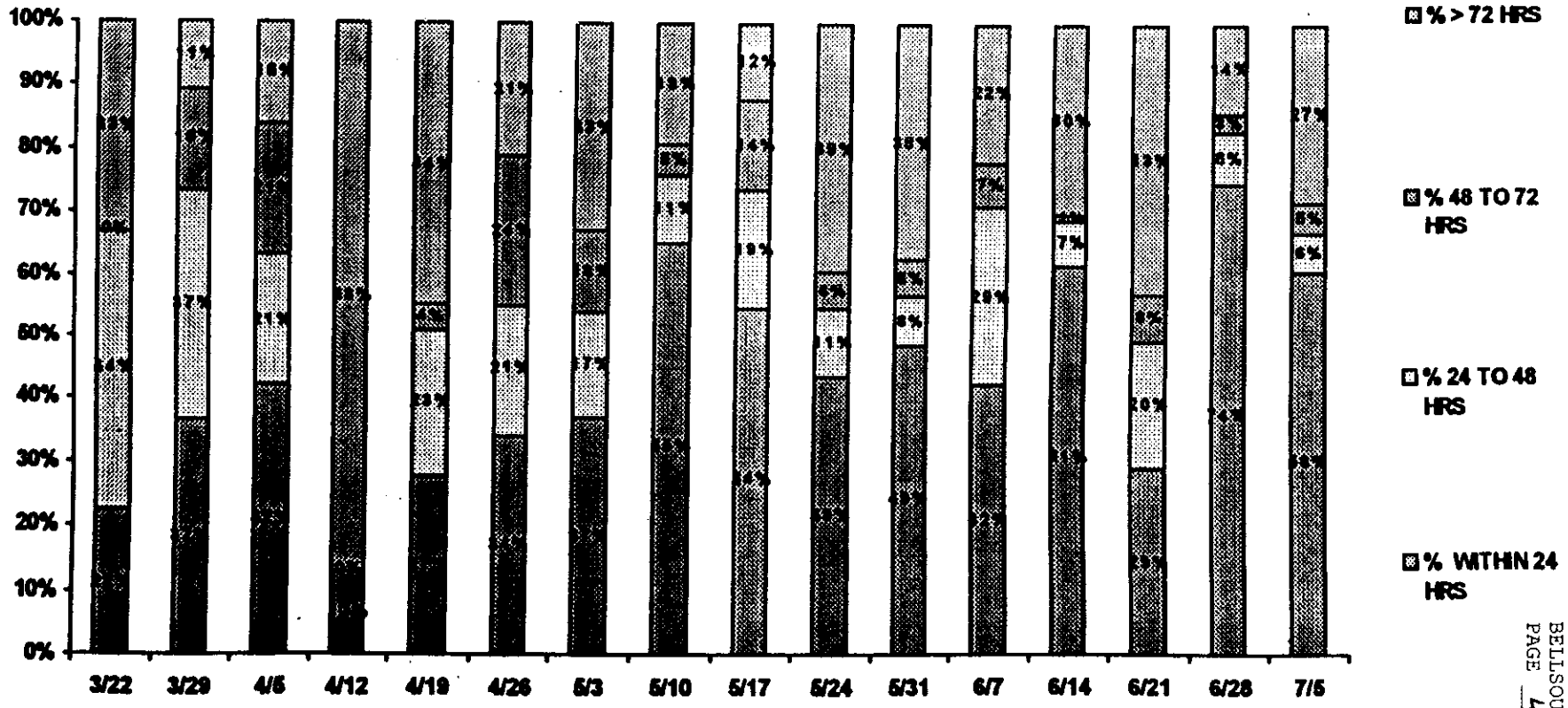
BellSouth Performance
Order Response Turnaround - Firm Order Confirmations



BellSouth Performance

Order Response Turnaround - FOCs

Weekly % Of FOC's Received By Intervals



week ending	3/22	3/29	4/5	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	6/28	7/5
NUMBER OF WORK ORDERS REFERRED EACH WEEK:	25	30	62	45	87	107	95	325	374	276	241	237	230	176	319	196

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-10
PROVISIONING PERFORMANCE-
BELLSOUTH TELECOMMUNICATIONS
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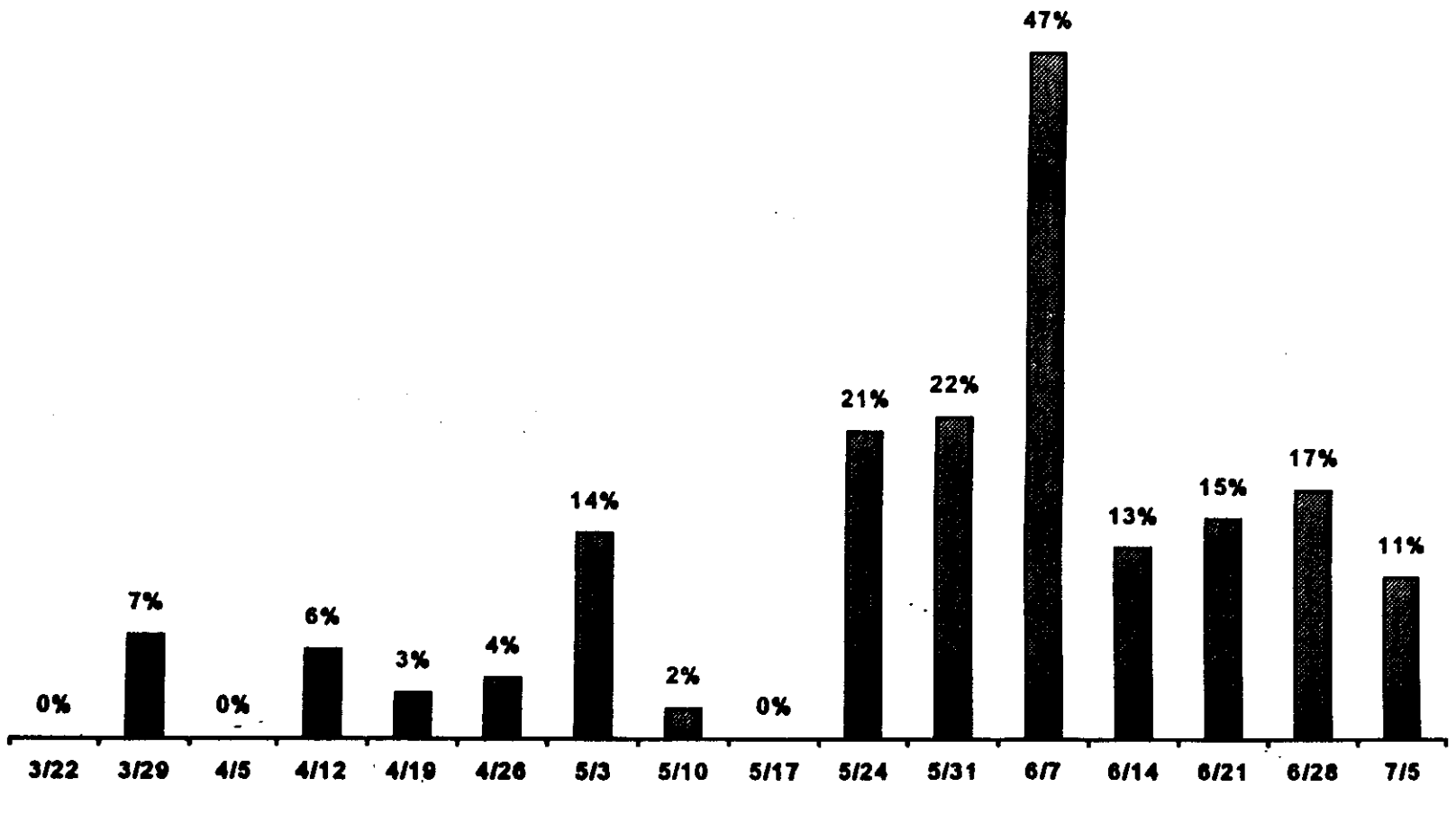
BellSouth Performance

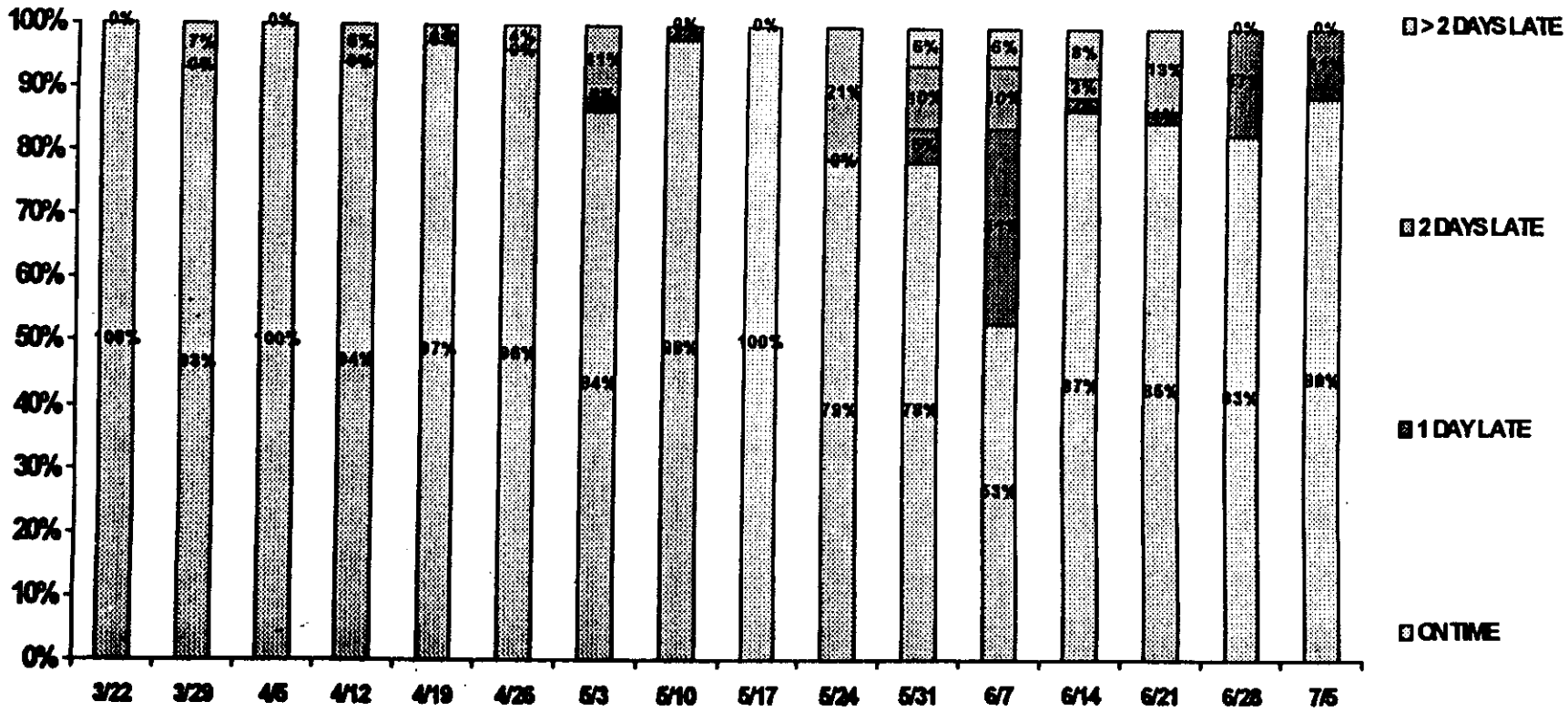
Completion Notice Turnaround



BellSouth Performance

Completion Notice Turnaround

Weekly % Of Completion Notices Received By Intervals



NUMBER OF TOTAL ORDERS COMPLETED EACH WEEK:

6	15	10	16	34	25	44	46	108	66	77	103	133	108	96	66

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-10
PROVISIONING PERFORMANCE-
BELLSOUTH TELECOMMUNICATIONS
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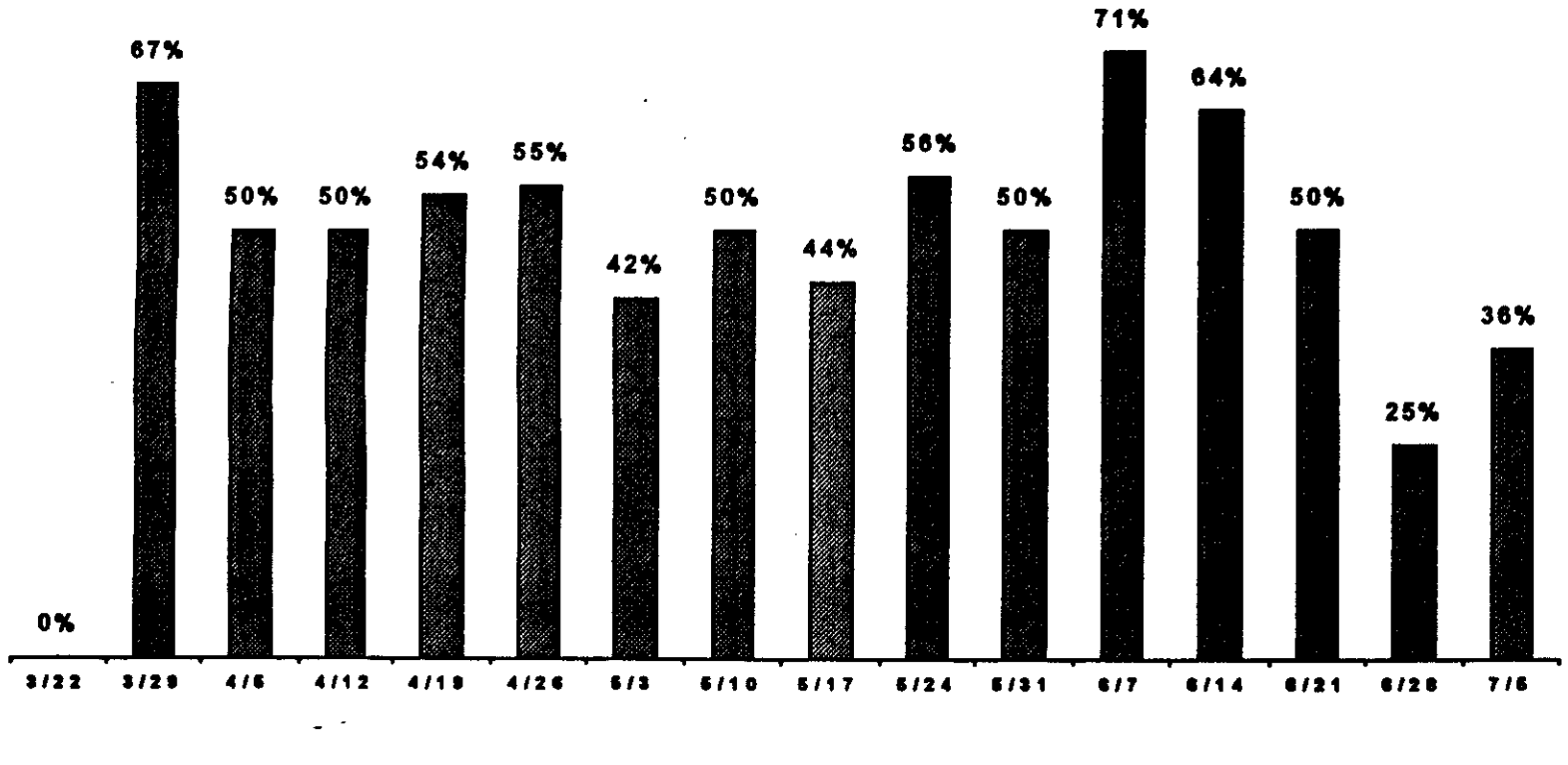
BellSouth Performance

New Order Completions



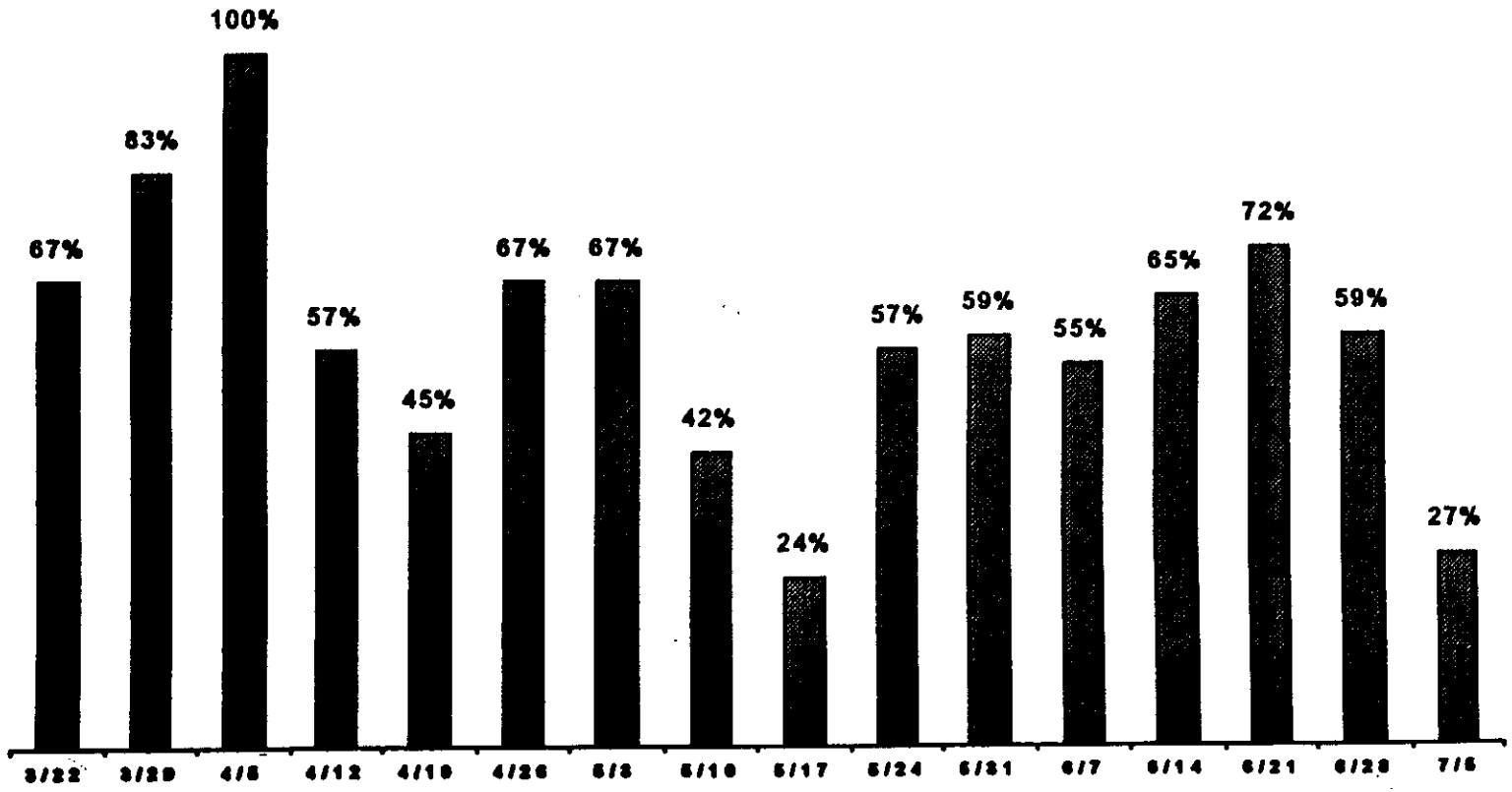
NUMBER OF NEW ORDERS COMPLETED EACH WEEK:

3	3	4	6	13	11	24	24	9	9	8	7	11	6	4	11

BellSouth Performance

Migration Order Completions

% Migration Ordrs Not Completed On Due date

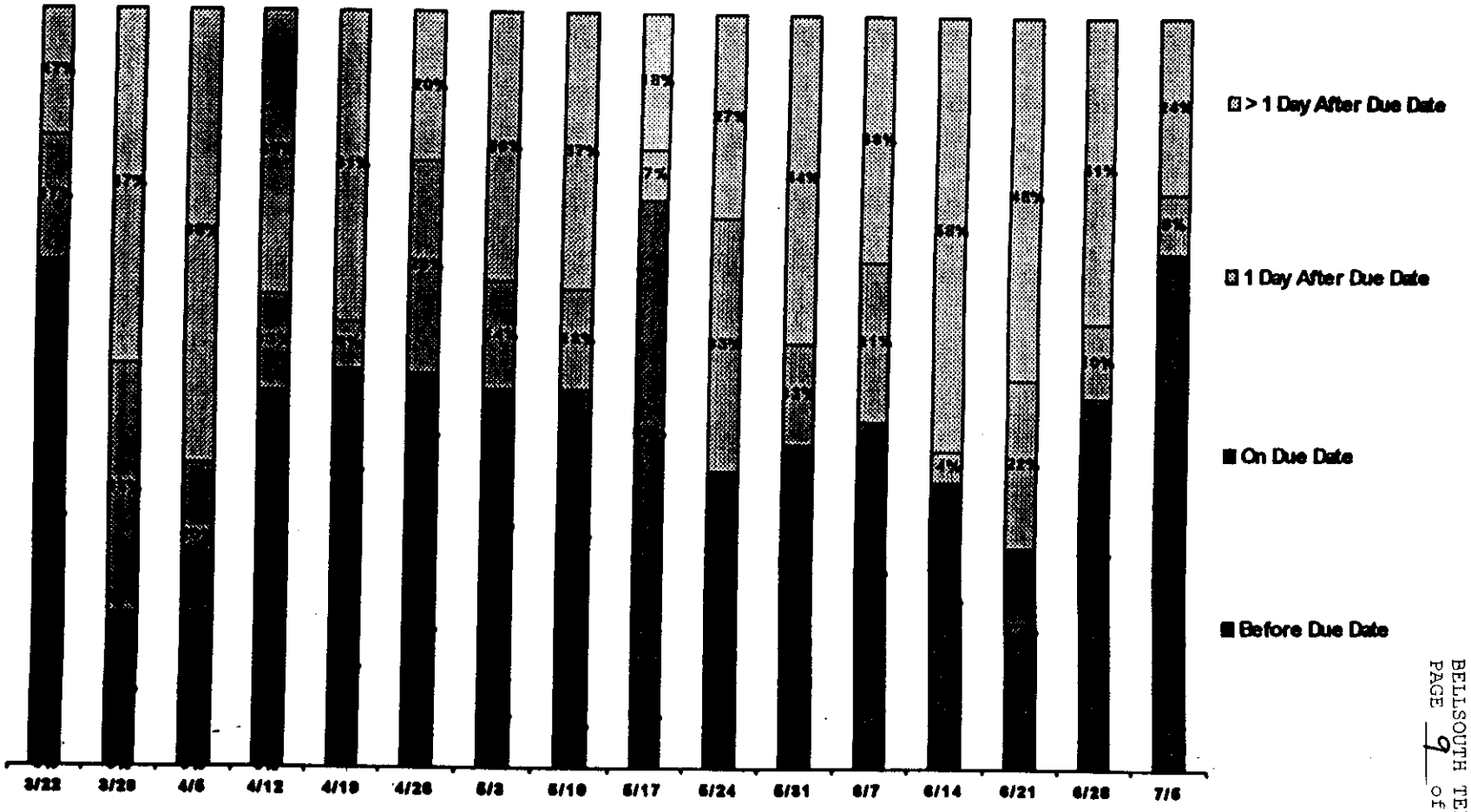


week ending	3/22	3/29	4/5	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	6/28	7/5
NUMBER OF MIGRATION ORDERS COMPLETED EACH WEEK:	3	12	6	7	11	6	9	12	93	49	59	87	110	76	63	44

FPSC EXHIBIT NUMBER
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-10
PROVISIONING PERFORMANCE-
BELLSOUTH TELECOMMUNICATIONS
PAGE 8 of 10

BellSouth Performance

Completion Intervals



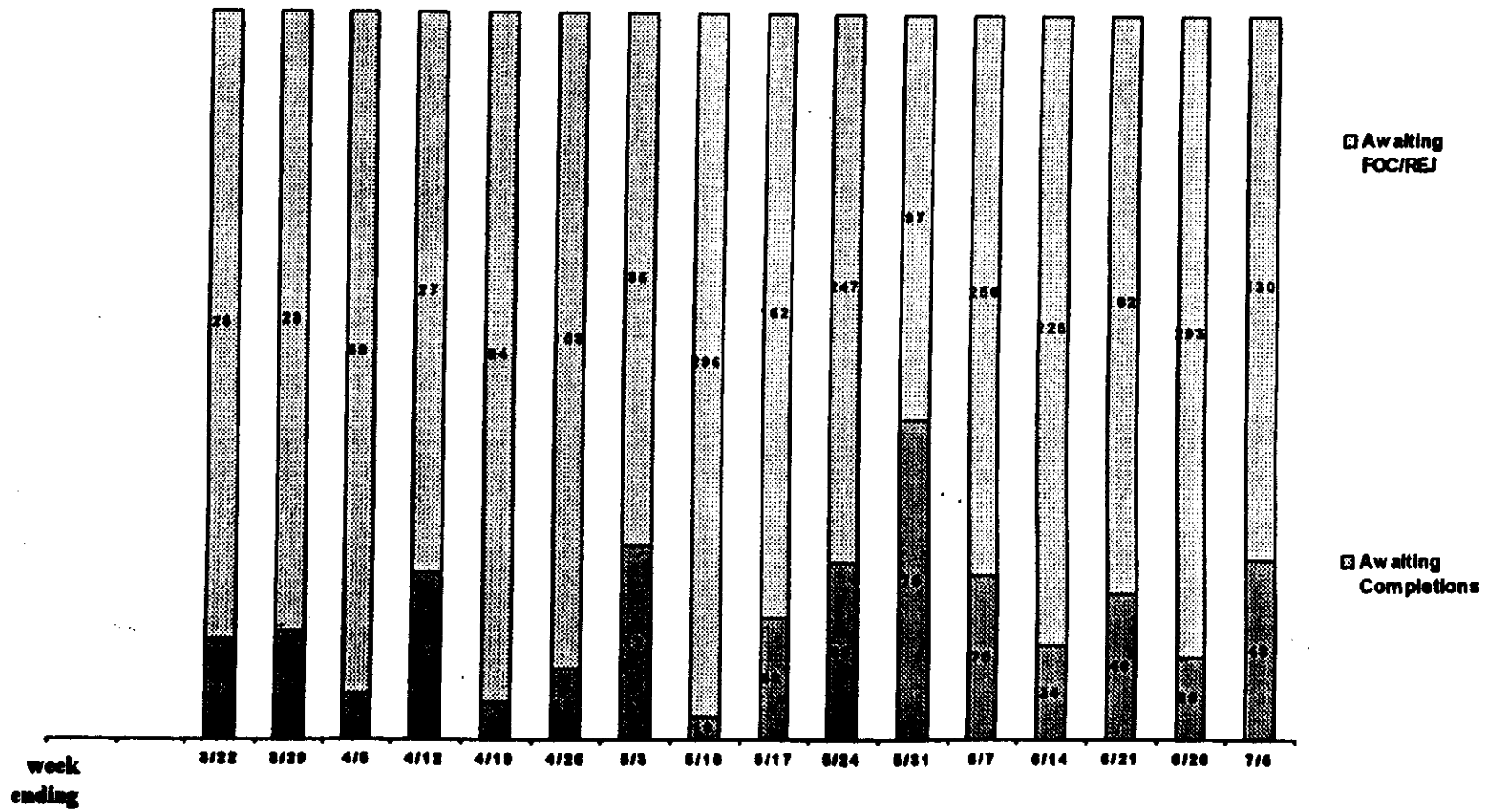
week ending	3/22	3/29	4/6	4/12	4/19	4/26	5/3	5/10	5/17	5/24	5/31	6/7	6/14	6/21	6/28	7/5
NUMBER OF TOTAL ORDERS COMPLETED EACH WEEK:	6	15	10	16	34	25	44	46	108	66	77	103	133	108	96	66

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-10
PROVISIONING PERFORMANCE-
BELLSOUTH TELECOMMUNICATIONS
PAGE 9 of 10

BellSouth Performance

Back Log

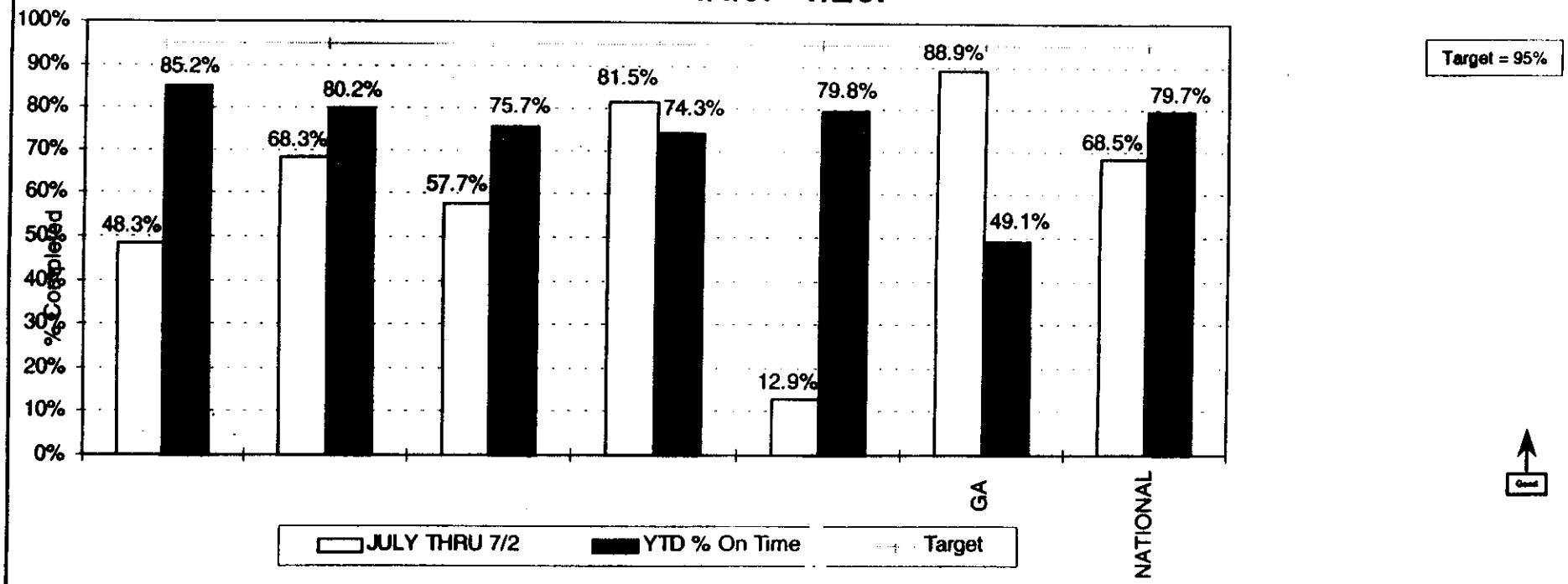
Number Of Orders Awaiting Response Or Completion After 24 Hours



Supplier Provisioning Performance Summary
Provisioning Timeliness - Consumer

% Work Orders Completed By Supplier Committed Due Date [1.]

1/1/97 - 7/2/97

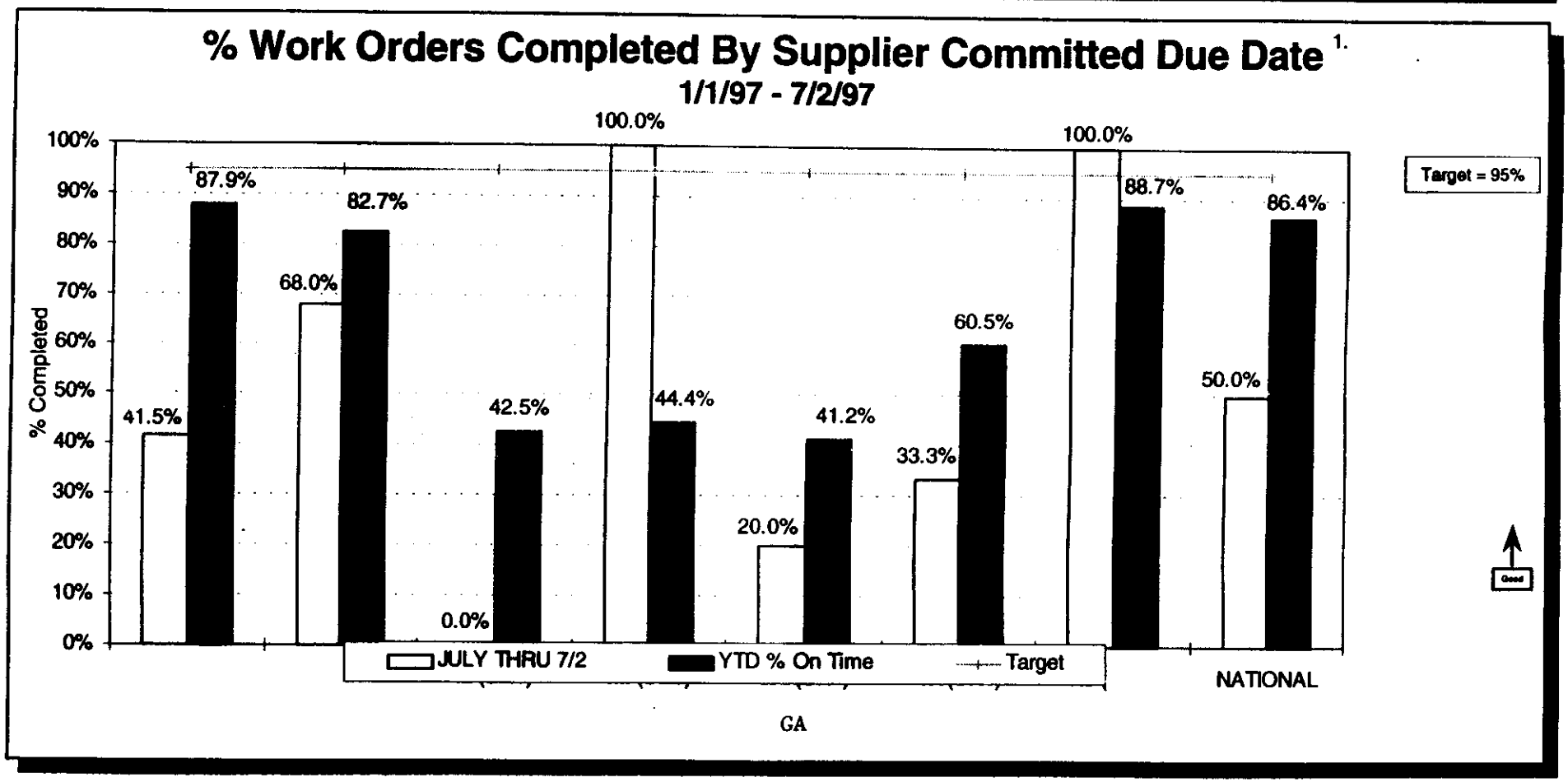


Notes:

1. Measures the LSP's success in meeting their commitment date (FOC date);
   Source = Actiview IRA-CTR-012S
   Monthly data only reflects activity posted during calendar month.
2. Not a complete month. Reflects July through 7/2/97.
3. Includes SRT/MRT; YTD includes all posted activity.

FPSC EXHIBIT NUMBER ____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 1 of 10

Supplier Provisioning Performance Summary
Provisioning Timeliness - Business

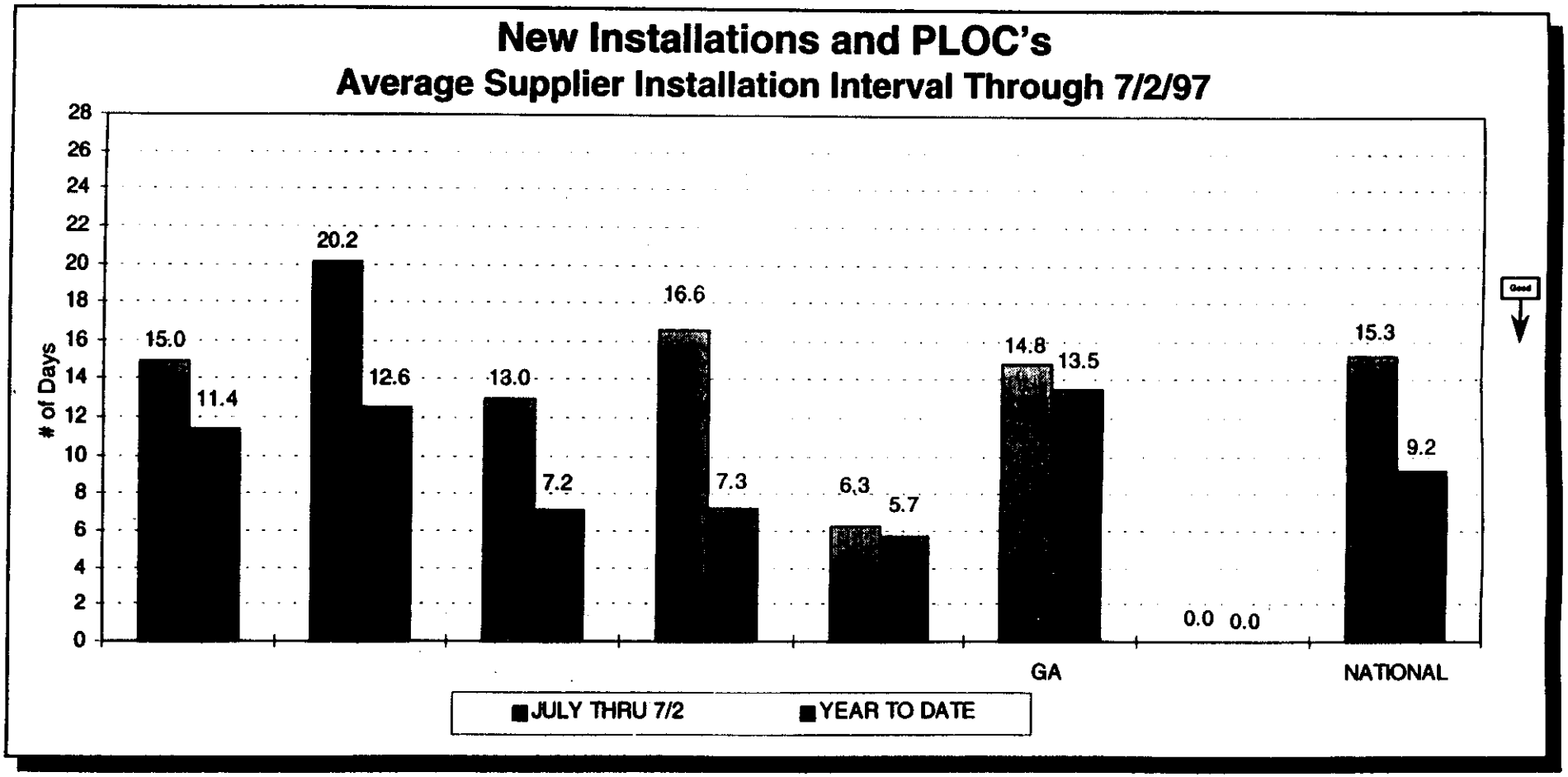


Notes:

1. Measures the LSP's success in meeting their commitment date (FOC date) Source = Actiview IRA-CTR-012S Monthly data only reflects activity posted during calendar month.
2. Not a complete month. Reflects July through 7/2/97.
3. Includes SRT/MRT; YTD includes all posted activity.

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 2 of 10

Supplier Provisioning Performance Summary
Average Supplier Installation Cycle Time [1.] - Consumer



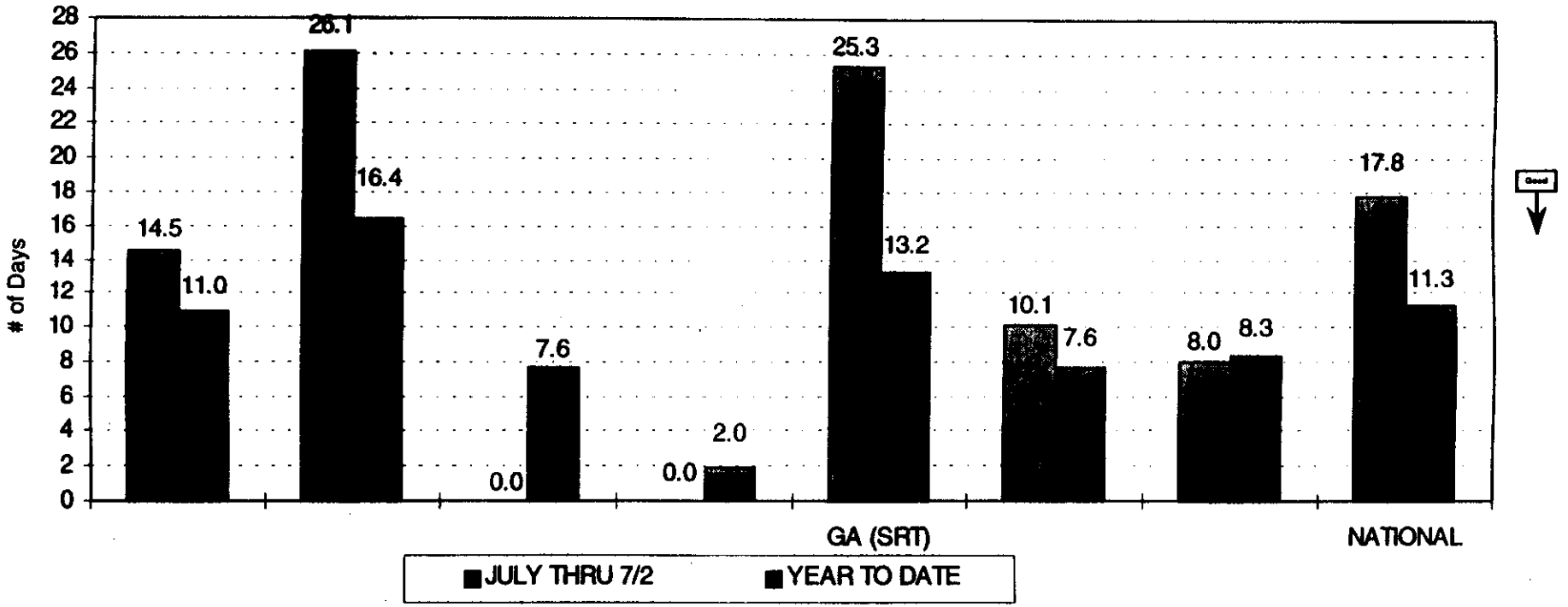
Notes:

1. This is not end to end cycle time; reflects time from 'work order referral to LSP' to 'customer provisioned date';
   Source = Actiview IRA-CTR-012S

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 3 of 10

Supplier Provisioning Performance Summary
Average Supplier Installation Cycle Time [1] - Business

New Installations and PLOC's
Average Supplier Installation Interval Through 7/2/97



Notes:

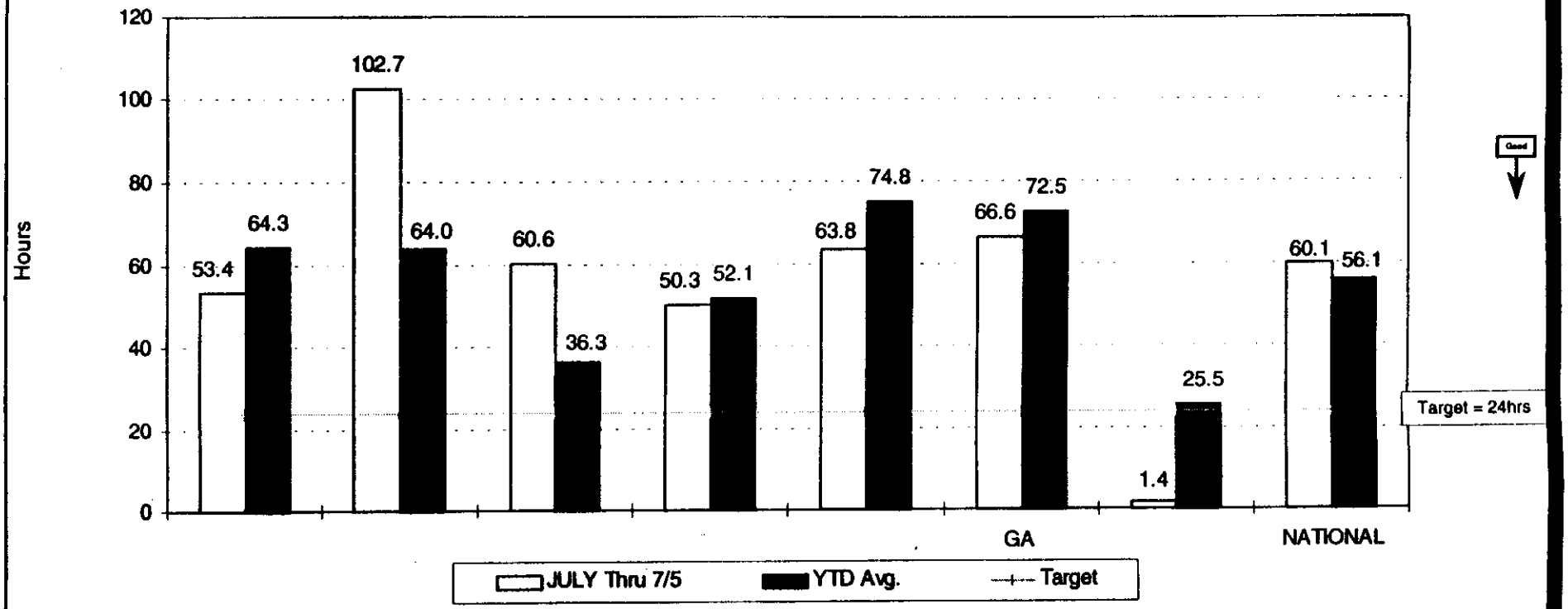
1. This is not end to end cycle time; reflects time from 'work order referral to LSP' to 'customer provisioned date'; Source = Actiview IRA-CTR-012S

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 4 of 10

End to End Maintenance Performance Summary
Cycle Time to Repair - Consumer

Average Cycle Time to Complete[1.] Severity 1[2.] Customer Troubles [3.]

1/1/97 - 7/5/97



Notes:

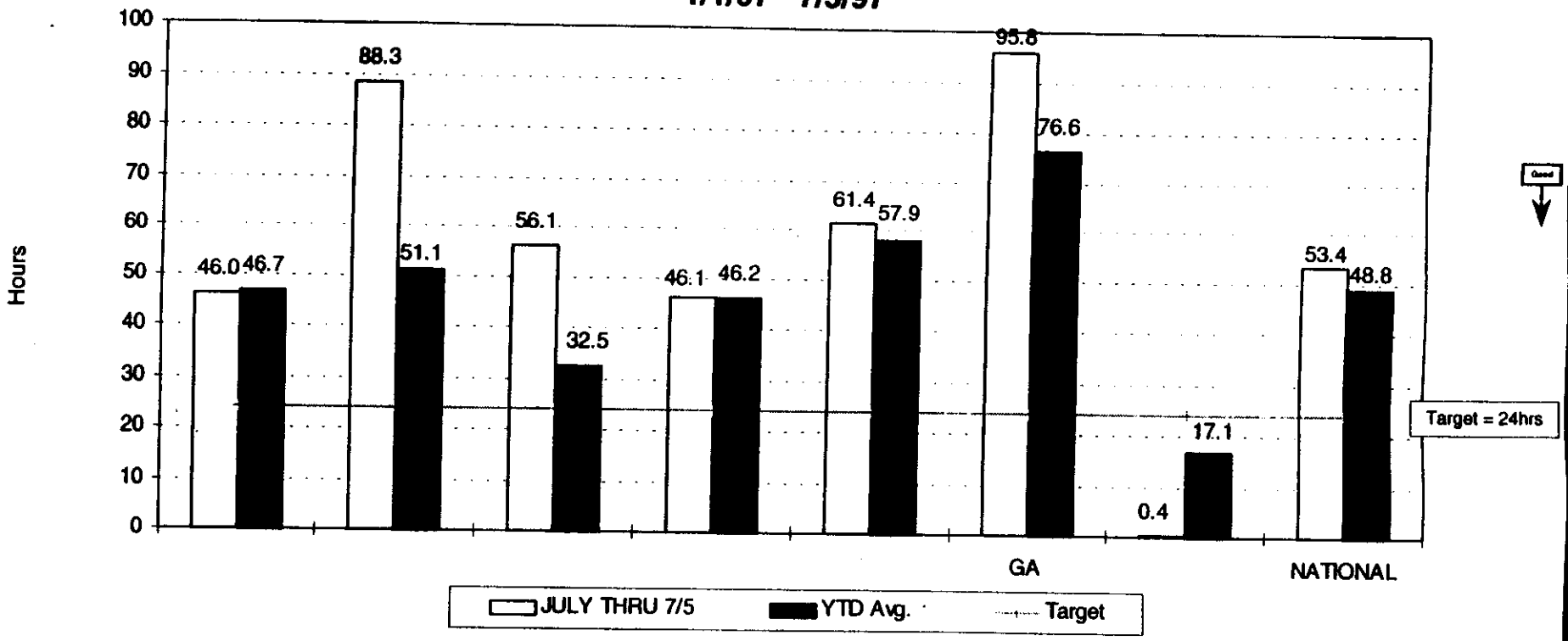
1. Reflects time from creation of customer trouble ticket (CTT) to last work order completed for that trouble ticket. (It does not include the customer verification that the trouble was closed.)
2. Severity 1 = Customer is out of service
3. Source = Actiview IRA-MTC-003S
4. Not a complete month. Reflects July through 7/5/97

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 5 of 10

Supplier Maintenance Performance Summary
Cycle Time to Repair - Consumer

Average Cycle Time[1] for Suppliers to Complete Severity 1[2] Work Orders[3]

1/1/97 - 7/5/97

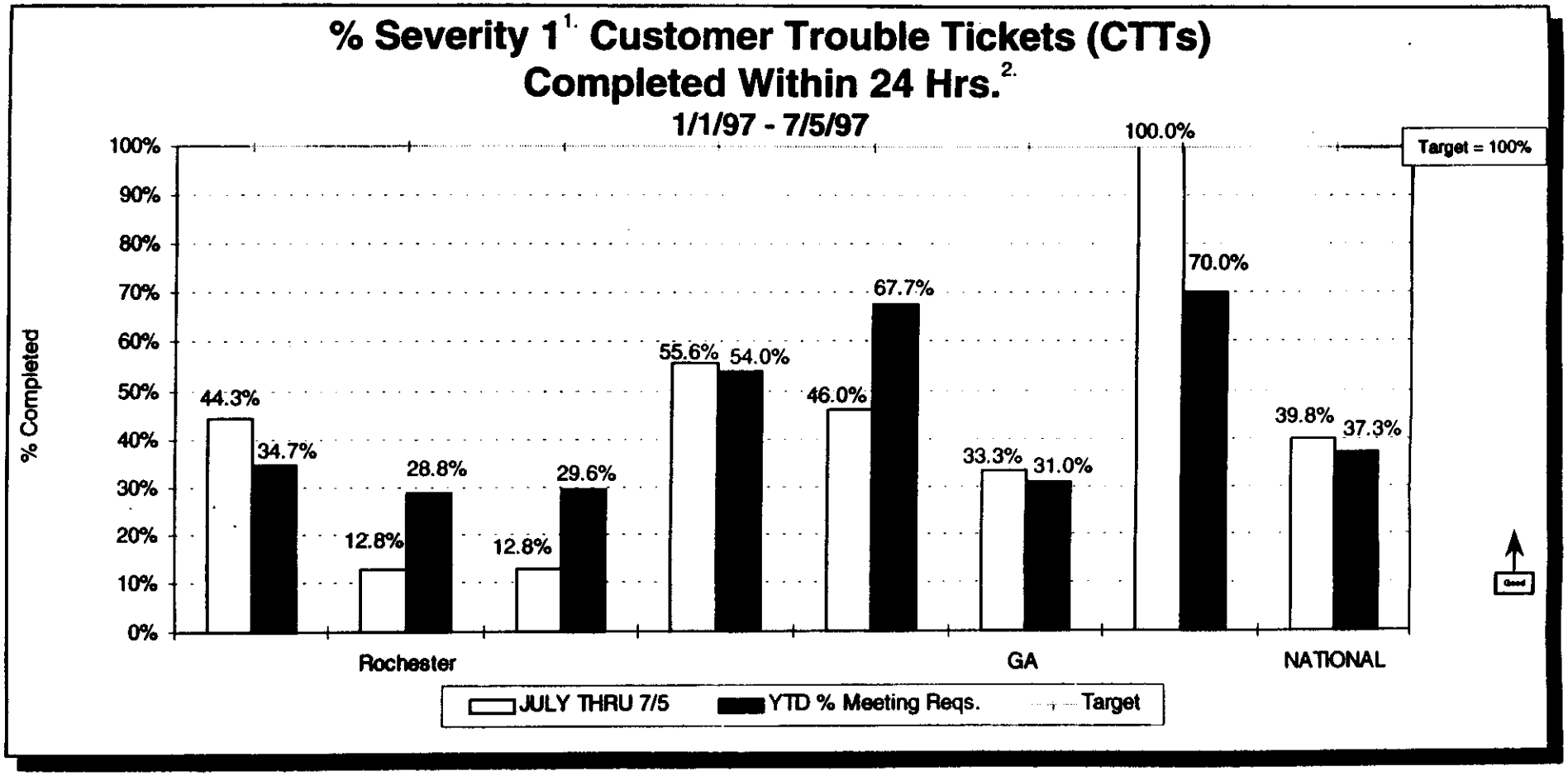


Notes:

1. Reflects time from referral of work order to LSPs to completion of work order. Measures Work Orders only associated with closed customer trouble tickets. This measure is not an end to end cycle time, see end to end cycle time chart.
2. Severity 1 = Customer is out of service
3. Source = Actiview IRA- MTC-010S
4. Not a complete month. Reflects July through 7/5/97

FPSC EXHIBIT NUMBER ____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 6 of 10

End to End Maintenance Performance Summary
Repair Timeliness - Consumer



Notes:

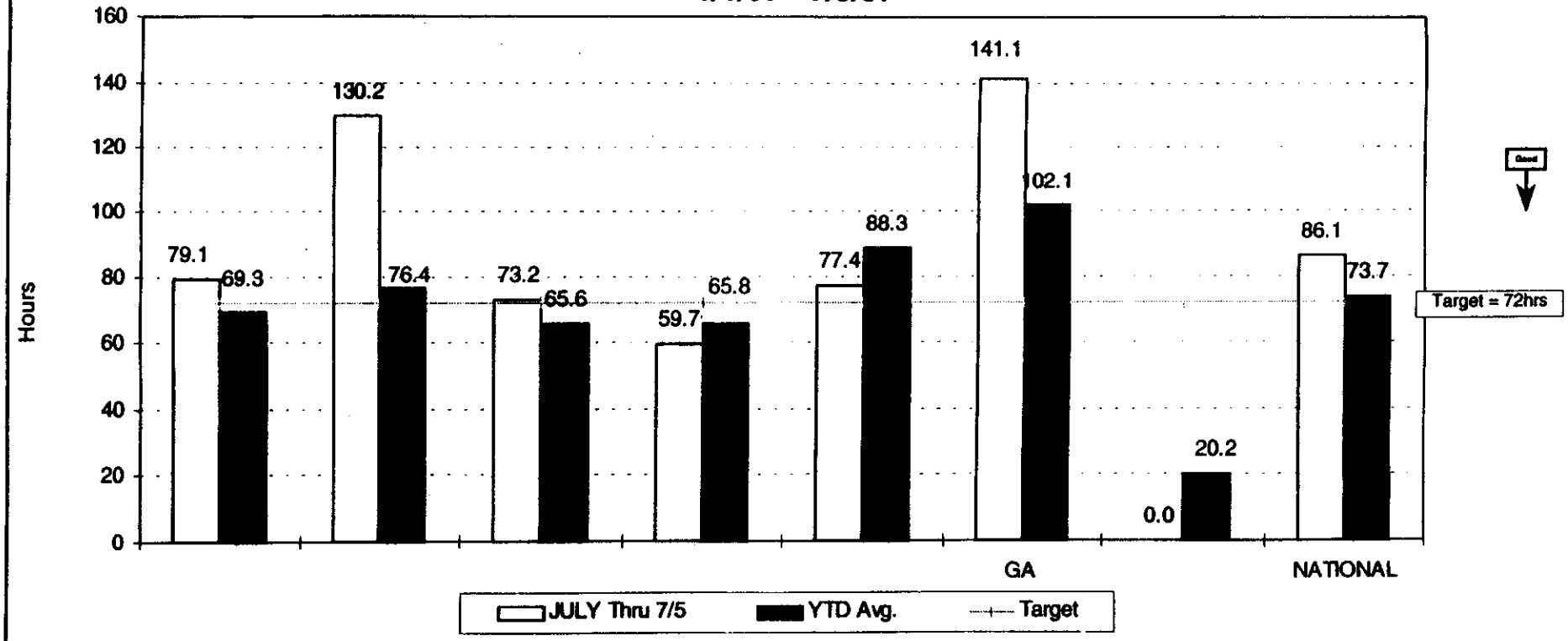
1. Severity 1 = Customer is out of service
2. Source = Actiview IRA-MTC-003S
3. Not a complete month. Reflects July through 7/5/97

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 7 of 10

End to End Maintenance Performance Summary
Cycle Time to Repair - Consumer

Average Cycle Time to Complete[1.] Severity 2-4[2.] Customer Trouble Tickets (CTTs)[3.]

1/1/97 - 7/5/97



Notes:

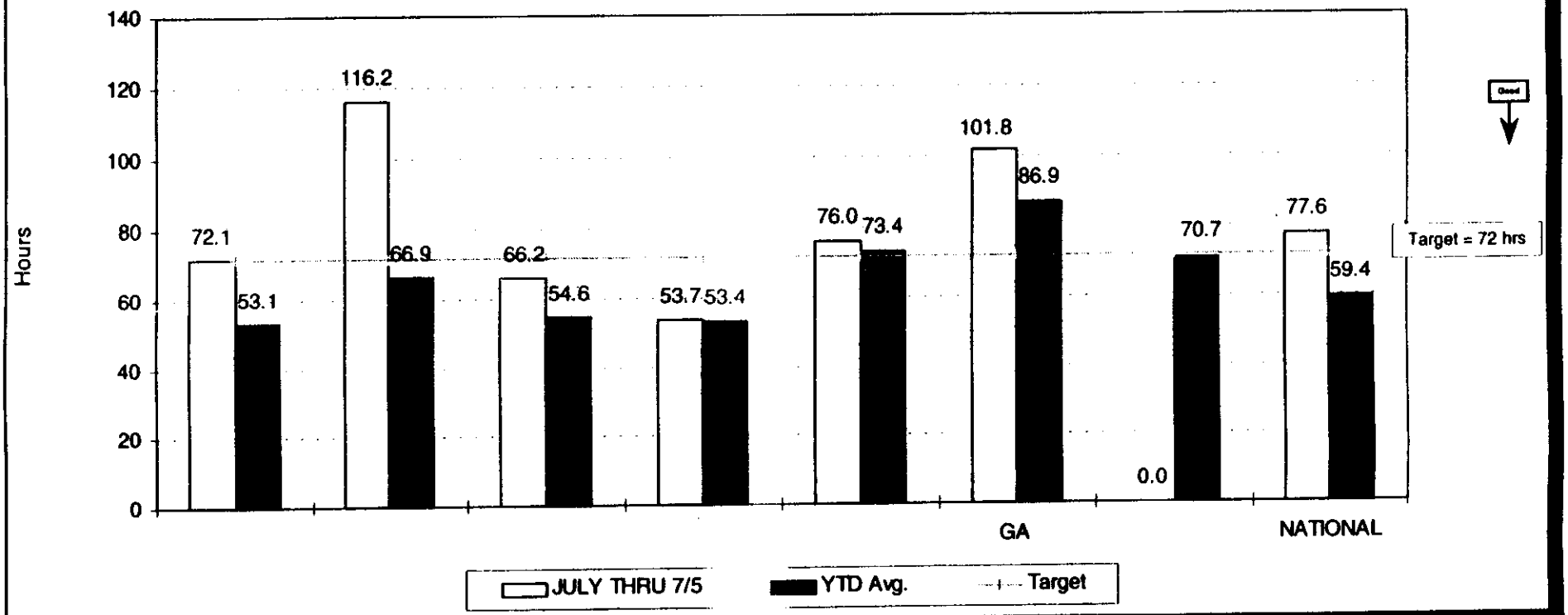
1. Reflects time from creation of customer trouble ticket (CTT) to last work order completed for that trouble ticket. (It does not include the customer verification that the trouble was closed.)
2. Severity 1 = Customer is out of service
3. Source = Actiview IRA-MTC-003S
4. Not a complete month. Reflects July through 7/5/97

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 8 of 10

Supplier Maintenance Performance Summary
Cycle Time to Repair - Consumer

Average Cycle Time[1] for Suppliers to Complete Severity 2-4[2] Work Orders[3]

1/1/97 - 7/5/97



Notes:

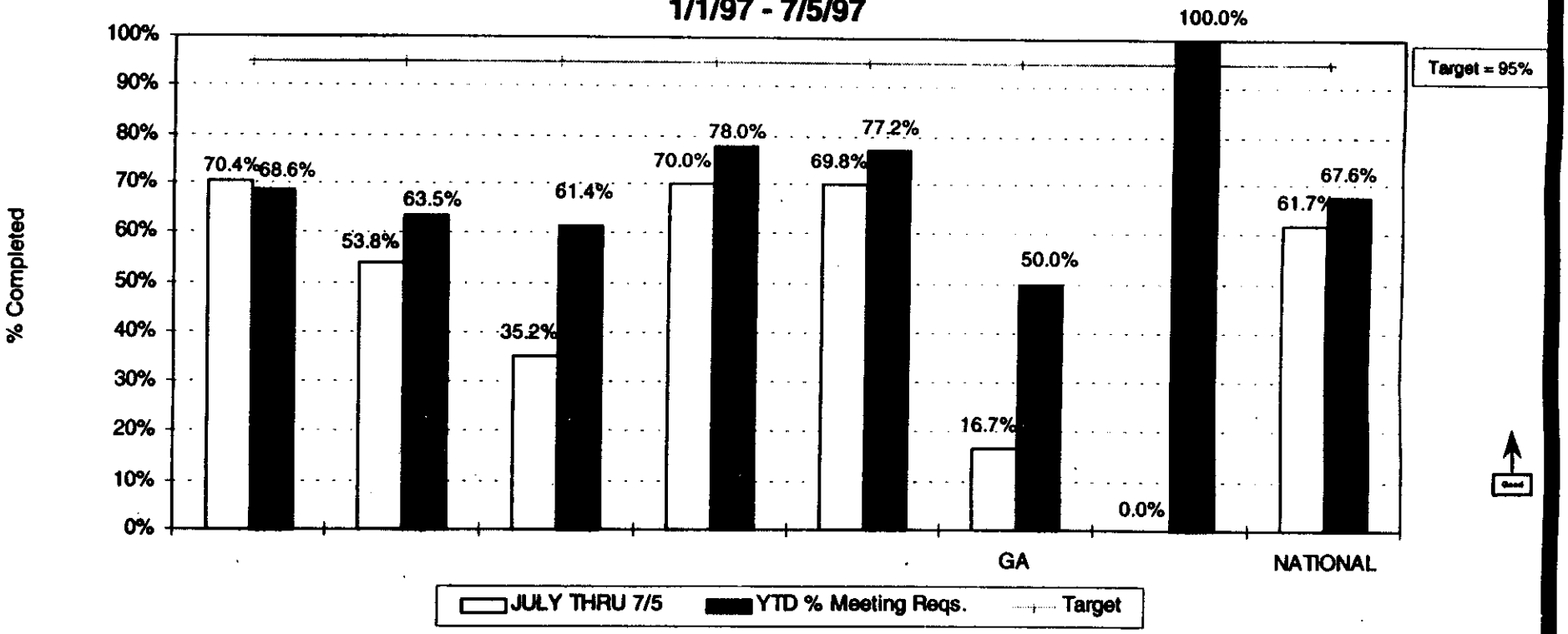
1. Reflects time from referral of work order to LSPs to completion of work order. Measures Work Orders only associated with closed customer trouble tickets. This measure is not an end to end cycle time, see end to end cycle time chart.
2. Severity 2-4 = transmission problems, partial loss of service or non-working feature
3. Source = Actiview IRA- MTC-010S
4. Not a complete month. Reflects July through 7/5/97

FPSC EXHIBIT NUMBER _____
FPSC DOCKET 960786-TL
BRADBURY EXHIBIT JB-11
SUPPLIER PROVISIONING
PERFORMANCE SUMMARY
PAGE 9 of 10

End to End Maintenance Performance Summary
Repair Timeliness - Consumer

% Severity 2-4[1] Customer Trouble Tickets (CTTs) Completed Within 72 Hrs.[2]

1/1/97 - 7/5/97



Notes:

1. Severity 2-4 = transmission problems, partial loss of service or non-working feature
2. Source = Actiview IRA-MTC-003S
3. Not a complete month. Reflects July through 7/5/97

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