

**BEFORE THE  
MISSISSIPPI PUBLIC SERVICE COMMISSION**

In re:

Generic Proceeding to Establish  
"Permanent" Prices for BellSouth  
Interconnection and Unbundled  
Network Elements

Docket No. 97-AD-544

**BELLSOUTH TELECOMMUNICATIONS, INC.'S PROPOSED ORDER**

**COMES NOW**, the Mississippi Public Service Commission ("Commission") and issues the following Order:  
**PROCEDURAL BACKGROUND**

The Commission established this docket for the purpose of establishing rates for unbundled network elements, interconnection services, and collocation offered by BellSouth Telecommunications, Inc. ("BellSouth") under the Telecommunications Act of 1996 ("1996 Act").

Section 251(c) of the 1996 Act imposes certain obligations on incumbent local exchange carriers ("ILECs"), such as BellSouth. These include the obligation to provide: (1) interconnection with the ILEC's network; (2) access to unbundled elements of the ILEC's network, and (3) collocated space in the ILEC's premises (where available) where a competitive local exchange carrier ("CLEC") can locate its equipment. The pricing rules for interconnection and unbundled network elements are contained in Section 252(d) of the 1996 Act. Section 252(d) does not mandate any specific pricing methodology. Rather, it requires that prices be "just and reasonable," which necessitates that prices be "based on cost," be "nondiscriminatory," and "may include a reasonable profit."

The matter came on for hearing on March 30 through April 2, 1998.

AT&T presented the direct and rebuttal testimony of Dr. Richard Cabe, the direct and rebuttal testimony of Don J. Wood, the direct and rebuttal testimony of Jeffrey King (adopting the testimony of Richard Walsh), the direct and rebuttal testimony of Wayne Ellison, the rebuttal testimony of Wayne King, the direct and rebuttal testimony of James Wells, and the rebuttal testimony of Ernest Carter.

BellSouth presented the direct and rebuttal testimony of Alphonso Varner, the direct and rebuttal testimony of Daonne Caldwell and William P. Zarakas, the direct testimony of Dan Baeza, the rebuttal testimony of Dr. William Taylor, the rebuttal testimony of Eno Landry, and the rebuttal testimony of Jamshed K. Madan, Michael D. Dirmeier, and David C. Newton (collectively referred to as "Georgetown Consulting Group").

ACSI presented the rebuttal testimony of Dr. Marvin Kahn.

The testimony of the following witnesses was entered into the record by stipulation: John I. Hirshleifer (AT&T); Richard B. Lee (AT&T); Gerald Crockett (AT&T); Patricia McFarland (AT&T); G. David Cunningham (BellSouth); Dr. Randall S. Billingsley (BellSouth); David Garfield (BellSouth); Walter Reid (BellSouth); Ellis Smith (BellSouth); C. William Stipe (ACSI); Richard Campbell (ACSI).

Based on a careful consideration of the entire record in this matter, the Commission now makes the following findings of fact and conclusions of law:

**FINDINGS OF FACT**

1. BellSouth's cost studies comply with all applicable legal standards.

2. BellSouth's inputs to the cost studies, as modified herein, are reasonable and should be adopted.
3. BellSouth's proposed recurring rates for interconnection and unbundled network elements, as modified herein, are reasonable and should be adopted.
4. BellSouth is not entitled to the Residual Recovery Requirement.
5. BellSouth's proposed nonrecurring rates for interconnection and unbundled network elements, as modified herein, are reasonable and should be adopted.
6. BellSouth's proposed physical collocation rates, as modified herein, are reasonable and should be adopted.
7. BellSouth's proposed rates for virtual collocation and for access to poles, ducts, conduits, and rights-of-way are reasonable and should be adopted.
8. Rates will not be geographically deaveraged at this time.

## **DISCUSSION OF EVIDENCE AND CONCLUSIONS OF LAW**

### **I. BACKGROUND**

The purpose of this docket is to establish BellSouth's rates for interconnection, unbundled network elements, and collocation as required by the 1996 Act. The need for interconnection, unbundling, and collocation results from the decision to open the local telecommunications markets to competition. In order to facilitate the transition to local competition, the 1996 Act establishes several means by which a Competitive Local Exchange Carrier ("CLEC") can make use of BellSouth's network in order to provide local telephone service. First, a CLEC can elect to purchase BellSouth's services at wholesale rates and resell them at retail.<sup>1</sup> Second, a CLEC can purchase unbundled network elements from BellSouth and combine them with its own network elements or with other elements purchased from BellSouth in order to provide service. Finally, a CLEC can build its own facilities-based network and interconnect or collocate with BellSouth's network. This Commission's task is to fix and approve appropriate prices for these various elements and services.

### **II. DISCUSSION**

The Commission finds that rates for interconnection, unbundled network elements, and physical collocation should be based upon BellSouth's existing network configuration recalculated to reflect forward-looking costs. This is the approach embodied in BellSouth's cost studies and in its proposed prices. The Commission does not, however, adopt the Residual Recovery Requirement. The Commission also does not accept certain cost factors as proposed by BellSouth, including the cost of capital, depreciation rates, and utilization (or fill) factors. With respect to those cost factors, which affect the outputs from BellSouth's studies, the Commission has substituted its own cost factors after considering all the evidence presented at the hearing. The Commission hereby adopts BellSouth's cost studies and BellSouth's proposed rates, as modified herein, for interconnection, unbundled network elements, and physical collocation. The Commission also adopts BellSouth's proposed rates for virtual collocation and access to poles, ducts, conduits, and rights-of-way. The Commission rejects the use of the Hatfield Model and the Nonrecurring Cost Model to set rates in this proceeding. The Commission also declines to adopt geographically deaveraged prices at this time.

**A. BellSouth's cost studies comply with all applicable legal standards, and its proposed recurring rates for interconnection and unbundled network elements, as modified herein, are reasonable and should be adopted.**

BellSouth has submitted detailed cost studies that document the costs it estimates that it will actually incur to provide network elements, interconnection, and collocation on a forward-looking basis. In preparing its studies, BellSouth has considered the network it has in place, but has modified it as appropriate to reflect least-cost technology on a going

forward basis.

BellSouth performed Total Element Long Run Incremental Cost ("TELRIC") studies for the following elements and services: (1) unbundled local loops; (2) unbundled local and tandem switching capabilities and local interconnection; (3) unbundled transport facilities (interoffice and local channels, including shared transport and dedicated interoffice facilities) and local interconnection; (4) signaling network (common channel signaling - CCS7); (5) call-related databases and service management systems; (6) operations support systems; (7) operator functions; (8) directory assistance; (9) selective routing (interim solution line class codes); (10) physical and virtual collocation; (11) service provider number portability (interim solutions); (12) access to poles, ducts conduit and rights-of-way; and (13) Advanced Intelligent Network ("AIN") services. (Dir. Testimony of D. Caldwell & W. Zarakas (Hearing Exh. 5), at p. 4).

As explained by Ms. Caldwell and Mr. Zarakas, BellSouth conducted its studies consistent with the 1996 Act and the principles articulated by the Federal Communications Commission ("FCC") in its First Report and Order in CC Docket No. 96-98 (August 8, 1996) ("First Report and Order"). (Dir. Testimony of D. Caldwell and W. Zarakas (Hearing Exh. 5), at p. 10).<sup>2</sup> BellSouth's costs studies are Mississippi-specific, forward-looking, and based on the long run costs that BellSouth would expect to incur in providing interconnection and network elements using the least cost, most efficient technology currently available. BellSouth assumed the existence of its current wire centers and parts of its infrastructure, based on the very reasonable and common-sense notion that new telephone cables will be laid along the same roads and in the same rights-of-way as the current facilities are located, but otherwise assumed the implementation of new technology.

Based upon these cost studies, BellSouth has proposed prices for unbundled network elements and interconnection that, according to BellSouth, comply with all the requirements of the 1996 Act. Specifically, BellSouth characterizes its proposed prices as "just and reasonable," "based on cost," and "nondiscriminatory" in accordance with 47 U.S.C. § 252 (d).

Intervenors, on the other hand, have submitted cost studies that do not use as a basis BellSouth's existing network. In particular, the Hatfield Model advocated by AT&T assumes existing wire centers but otherwise designs a new network. This newly-designed network is a hypothetical network designed for a hypothetical local exchange company. In addition, AT&T presented the Nonrecurring Cost Model which, similar to the Hatfield Model, bases cost estimates on network assumptions that do not reflect the technology that BellSouth is either employing in the network today or will employ in the near future.

The Commission finds that the rates proposed by BellSouth for interconnection and unbundled network elements, as modified herein to reflect the cost factors adjusted by the Commission, comply with all the requirements of the 1996 Act. These rates are "just and reasonable," "based on cost," "nondiscriminatory," and they recognize the actual costs BellSouth is expected to incur in providing service on a going-forward basis.<sup>3</sup> Such rates will fairly and adequately compensate BellSouth for the services, functions, and facilities it is required to provide to CLECs, while facilitating competition in the local exchange market in Mississippi.

With respect to the rates for unbundled switching, the Commission adopts BellSouth's proposal to establish separate rates for a two-wire port with no vertical features, a two-wire port with three vertical features, and a two-wire port with all of the features currently offered by BellSouth. BellSouth's proposal is consistent with the basic principle of cost causation and the requirement that cost studies should be based on the total output of service. This ensures that costs for elements which use the network are treated consistently; vertical features use switch capacity and should bear their proportionate share of the costs. In addition, there are right-to-use fees and other costs associated with vertical features that should be borne by the CLEC making use of the vertical features.

The Commission rejects AT&T's contention that there should be no separate, recurring rate for vertical features. The Commission is not persuaded by AT&T's position that vertical features have no costs above and beyond the cost of the port, particularly when AT&T's own witness Wayne King seemed to acknowledge that there are right-to-use fees and other costs associated with vertical features that may not be included in the initial switch placement. (King, Tr. pp. 535-538). The Commission also notes that AT&T's position recently was rejected by the Louisiana Public Service Commission.<sup>4</sup> The Commission adopts BellSouth's proposed switching prices, which correctly recognize that there are costs associated with provisioning vertical features in the switch, as compared with basic switch functions.<sup>5</sup>

## **B. BellSouth's inputs to the cost studies, as modified herein, are reasonable and should be adopted.**

As noted above, this Commission will use BellSouth's cost studies to set prices in this proceeding for network elements, interconnection services, and physical collocation. The Commission finds, however, that modifications are appropriate to certain categories of cost factors. The cost factors that should be modified are: utilization rates (or fill factors), depreciation, and the cost of capital.

### **1. "Utilization" or "Fill Factors"**

Utilization rates and fill factors mean the same thing. With respect to a facility that can support multiple users, these terms refer to the percentage of the facility's total capacity that is being used. The utilization rates and fill factors are important in cost studies because the cost of a facility is divided among the users. The fewer the users, the higher the cost will be per user. Paragraph 682 of FCC Order 96-325 directs that cost studies be based on "a reasonable projection of actual total usage." BellSouth based its calculations on the average utilization level it expects to experience in the future in provisioning network elements and services.

Intervenors advocate the use of "fill at relief" levels, which are the points at which, for engineering planning purposes, that a facility is so full, that the company will install another facility. The Commission does not believe that the use of "fill at relief" levels is consistent with the FCC approach.

After considering the arguments of both BellSouth and the Intervenors, the Commission finds that utilization rates of 75% for feeder and 50% for distribution are appropriate. These figures are somewhat higher than those proposed by BellSouth. The Commission finds that BellSouth will likely experience higher utilization rates in the future than those that BellSouth has advocated. At the same time, the Commission does not believe the utilization rates advocated by the Intervenors would allow BellSouth to adequately respond to customer requests for service.

### **2. Depreciation**

When it adopted the Price Regulation Evaluation Plan for BellSouth, the Commission specifically addressed the issue of the depreciation rates to use in setting rates for services provided to CLECs. Section A36.2.4 of BellSouth's General Subscriber Services Tariff, which reflects Commission Order No. 95-UA-313 (November 1, 1995), states, in relevant part: "In establishing the cost to be used in the initial rates for interconnection with competitive local service providers . . . , the MPSC depreciation rates in effect immediately prior to the effective date of PREP shall be used." While Section A36.2.4 specifically addresses only interconnection, the Commission finds that use of the MPSC depreciation rates in effect prior to the effective date of PREP is also appropriate to set rates for unbundled network elements and collocation. Accordingly, the Commission rejects both BellSouth's proposed depreciation lives (based on BellSouth's 1995 and 1996 Depreciation Studies) and the Intervenors' proposal (using the depreciation lives prescribed by the FCC in 1993).

### **3. Cost of Capital**

In its cost studies, BellSouth assumed a cost of capital of 11.25%. Dr. Randall Billingsley filed testimony to support BellSouth's position. AT&T recommended an overall cost of capital of 9.43%, based upon the testimony of John Hirshleifer.

The Commission finds that Dr. Hirshleifer's recommendations regarding BellSouth's cost of equity are not reasonable or appropriate and do not reflect a forward-looking approach because they ignore the additional risks BellSouth faces on a going forward basis. At the same time, however, the Commission finds that BellSouth's proposed cost of capital (11.25%) is too high. After considering the evidence presented at the hearing, the Commission finds that an overall cost of capital of 10% is appropriate.

## **C. BellSouth is not entitled to the Residual Recovery Requirement**

BellSouth seeks a Residual Recovery Requirement which is the difference between what BellSouth would recover under pure TELRIC prices of loops and ports and the amount necessary to allow BellSouth to recover all of its embedded investment in loops and ports. The Commission finds that the addition of BellSouth's Residual Recovery

Requirement is not appropriate. The rates for unbundled network elements -- including loops and ports -- should be based on forward-looking, long run incremental cost principles, rather than set at levels designed to recover historic (or embedded) costs. Therefore, the Residual Recovery Requirement should not be included in the rates for loops and ports as proposed by BellSouth.

**D. BellSouth's nonrecurring rates, as modified herein, are reasonable and should be adopted.**

BellSouth's cost studies reflect costs associated primarily with the ordering and provisioning of the unbundled network elements as nonrecurring charges for each such element. They also treat as nonrecurring charges the costs of developing and using the interfaces BellSouth created specifically to permit CLECs access to BellSouth operating support systems ("OSS"). BellSouth's cost studies also have the advantage of consistency. In other words, the model was designed in a manner that would eliminate the duplicate recovery of costs in recurring and nonrecurring rates.

In the cost studies, BellSouth identified the one-time work activities that are typically associated with installing or disconnecting unbundled network elements. For these work activities, BellSouth defined work functions, established work flows, and determined work times. Thereafter, BellSouth developed directly assigned labor costs and accumulated work function costs to determine the total nonrecurring costs for each unbundled network element and interconnection service, with proper recognition of shared and common cost and tax factors. (Dir. Testimony of D. Caldwell & W. Zarakas (Hearing Exh. 5), at pp. 43-44).

In contrast to BellSouth's thorough analysis of nonrecurring costs, ACSI merely proposed that nonrecurring rates be established at levels equal to or less than the nonrecurring rates BellSouth charges its retail customers. (Testimony of Dr. M. Kahn (Hearing Exh.23), at pp. 93-95). This proposal is not based on any analysis of the work times involved in ordering and provisioning network elements and services. Furthermore, it assumes that the ordering and provisioning of unbundled network elements has a retail analogue, which, as even the FCC has recognized, is simply not the case. *See In re: Application of BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in South Carolina*, CC Docket No. 97-208, ¶ 98 (Dec. 24, 1997).

The only other proposal for establishing nonrecurring charges is the AT&T Nonrecurring Cost Model, which attempts to eliminate virtually all nonrecurring charges. The AT&T model is based on default percentages for factors such as the amount of copper facilities, the number of central offices that are staffed rather than unmanned, and the amount of set-up time needed. The values assumed for these items affect the costs that are derived. Yet, AT&T has not used Mississippi-specific data, opting instead to rely on national default values for these items. In addition, the Nonrecurring Cost Model contains unsupported assumptions about dedicated outside plant and automatic flow-through of orders. The Commission finds BellSouth's proposals to be more reasonable and reflective of the nonrecurring costs that BellSouth will incur on a forward-looking basis.

The Commission finds BellSouth's proposed nonrecurring rates to be reasonable, cost-based, and fully consistent with the requirements of the 1996 Act. Accordingly, the Commission adopts the nonrecurring rates proposed by BellSouth, as modified by the adjusted cost factors discussed in the preceding sections of this Order. In addition, the Commission finds that it is not appropriate for BellSouth to recover, at the time service is established with a CLEC, costs associated with disconnecting that service. While there may be legitimate business reasons for recovering costs in that manner from end user customers, the Commission does not believe that the same issues are presented when a CLEC orders service from BellSouth. Therefore, BellSouth shall modify its nonrecurring rate proposal to separate disconnection costs and recover those costs at the time service is disconnected.

The remaining issue related to nonrecurring costs is the issue of the charge for utilizing the OSS interfaces that BellSouth has developed for CLECs to obtain nondiscriminatory access to BellSouth's OSS databases. BellSouth has invested huge amounts of time and resources into developing these interfaces and it is undisputed that only CLECs will use the interfaces. Therefore, the Commission finds that CLECs should pay for the interfaces.

**E. BellSouth's proposed rates for physical collocation, as modified herein, are reasonable and should be adopted.**

Physical collocation is not an unbundled network element, nor is it interconnection under the 1996 Act. It is simply the process by which an CLEC uses space belonging to the ILEC to place "equipment necessary for interconnection or

access to unbundled network elements." 47 U.S.C. § 251(c)(6). Subsection 251(c)(6) imposes upon the ILEC the following duty:

(6) COLLOCATION.-- The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

The duty to provide unbundled access to network elements and interconnection appear in separate sections of the Act. *Compare* 47 U.S.C. § 251(c)(6) *with* 47 U.S.C. § 251(c)(1) and 251(c)(3). Moreover, the pricing standard contained in section 252(d) (calling for prices based on cost without reference to a rate of return proceeding) on its face does not apply to physical collocation, but only to interconnection and unbundled network elements.

The Commission finds that BellSouth's physical collocation cost study is reasonable and consistent with the requirements of the 1996 Act. BellSouth's study accurately estimates the cost that will be incurred to provide physical collocation. Accordingly, the Commission adopts BellSouth's proposed rates for physical collocation, as modified by the adjusted cost factors discussed in the preceding sections of this Order.

**F. BellSouth's proposed rates for virtual collocation and for access to poles, ducts, conduits, and rights-of-way are reasonable and should be adopted.**

Virtual collocation is another process by which the CLEC can obtain access to interconnection and unbundled network elements, particularly when space limitations prohibit actual use of ILEC property for the placing of CLEC equipment. However, unlike many other elements, BellSouth has existing tariff rates for virtual collocation on file with the FCC. Even though BellSouth conducted studies to determine the forward-looking costs of virtual collocation, BellSouth has proposed that the existing tariff rates apply to virtual collocation in order to reduce the opportunity for arbitrage. (Dir. Testimony of Alphonso Varner (Hearing Exh. 1), at pp. 32-33). The Commission concludes that BellSouth's proposal is reasonable.

Under Section 251(b)(4) of the 1996 Act, BellSouth is required to provide access to its poles, ducts, conduits, and rights-of-way on rates, terms and conditions that are consistent with Section 224. In general, that statute requires just and reasonable rates, terms, and conditions for such access. 47 U.S.C. § 224(b)(1). The FCC has established a formula for computing "just and reasonable" rates for pole attachments. The Commission concludes that it is appropriate to adopt the pole rental rate according to the FCC formula, which in Mississippi in 1998 is \$ 4.89 per foot per year. (Dir. Testimony of Alphonso Varner (Hearing Exh. 1), Exh. AJV-2, at 18).

With respect to conduit, BellSouth has an existing tariff rate on file with the Commission for conduit rental. (Mississippi General Subscriber Services Tariff, Section A.5.12.9). Consistent with the Commission's approach to virtual collocation rates, the Commission adopts this existing tariff rate for conduit rental here, which is currently \$2.50 per linear foot per year.

**G. Rates will not be geographically deaveraged at this time.**

The Commission rejects the Intervenors' request for deaveraged rates in this proceeding. The Commission agrees with BellSouth that geographic deaveraging must be preceded by the development and implementation of specific, predictable universal service support mechanisms. Unless universal service support mechanisms are in place and, possibly, BellSouth's existing retail prices have been rebalanced, customers in rural areas would be hurt and competition in rural areas (especially facilities-based competition) would be stymied.

With deaveraged prices, the Intervenors will purchase unbundled network elements where costs are low in order to provide service with the greatest potential for a profit margin. And, where costs are high relative to the current retail prices, as in most small towns and rural areas in Mississippi, the Intervenors will either purchase services for resale at the wholesale discount or, perhaps, not offer service at all. Such a result would be contrary to the stated intent of Congress and the Commission to bring the benefits of competition to all areas of the State. Moreover, there is no legal requirement that prices be deaveraged at this time in order to satisfy the pricing requirements of Section 252(d) of the

1996 Act. The FCC's rule that purported to mandate geographic deaveraging was vacated by the Eighth Circuit Court of Appeals. *Iowa Utilities Board*, 120 F.3d 753 (8th Cir. 1997).

### **III. CONCLUSION**

BellSouth has submitted detailed cost studies that comply with all applicable legal standards. The Commission finds that BellSouth's proposed rates, as modified herein, should be adopted in these proceedings. The Commission rejects Intervenor's recommendations.

**IT IS, THEREFORE, ORDERED** as follows:

1. BellSouth's cost studies comply with all applicable legal standards;
2. BellSouth's inputs to the cost studies, as modified herein, are reasonable and are hereby adopted;
3. BellSouth's proposed recurring rates for interconnection and unbundled network elements, as modified herein and set forth on Appendix A<sup>6</sup> to this Order, are reasonable and are hereby adopted;
4. BellSouth's request for the Residual Recovery Requirement is hereby denied;
5. BellSouth's proposed nonrecurring rates for interconnection and unbundled network elements, as modified herein and set forth on Appendix A to this Order, are reasonable and are hereby adopted;
6. BellSouth's proposed physical collocation rates, as modified herein and set forth on Appendix A to this Order, are reasonable and are hereby adopted.
7. BellSouth's proposed rates for virtual collocation and for access to poles, ducts, conduits, and rights-of-way, as set forth on Appendix A to this Order, are reasonable and are hereby adopted; and
8. Rates will not be geographically deaveraged at this time.

**SO ORDERED** by the Commission, this the \_\_\_ day of \_\_\_\_\_, 1998.

Chairman Bo Robinson voted \_\_\_\_\_; Vice Chairman George Byars voted \_\_\_\_\_; and Commissioner Nielsen Cochran voted \_\_\_\_\_.

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BO ROBINSON, Chairman

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GEORGE BYARS, Vice-Chairman

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NIELSEN COCHRAN, Commissioner

## **Appendix A**

### **Proposed Recurring Rates for Interconnection and Unbundled Network Elements**

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A.1		<i>2-Wire Analog Voice Grade Loop</i>			
A.1.1 A.11.1		2-wire analog voice grade loop - service level 1	21.26	59.25 43.67	84.77 55.01
		Disconnect Charges		16.35 4.60	32.41
A.1.2 A.11.1		2-wire analog voice grade loop - service level 2	25.05	144.01 107.70	169.53 119.04
		Disconnect Charges		40.98 26.95	57.04
A.1.3		2-wire analog voice grade loop - service level 1 - manual order coordination		50.29 50.29	50.29 50.29
		Disconnect Charges		12.64 12.64	12.64 12.64
A.1.4		2-wire analog voice grade loop - service level 1 - order coordination for specified conversion time		45.27	45.27
A.1.5		2-wire analog voice grade loop - service level 2 - order coordination for specified conversion time		45.27	45.27
A.2		<i>Sub-Loop 2-Wire Analog</i>			
A.2.6 A.11.3		NID per 2-wire analog voice grade loop	1.22	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.3		<i>Loop Channelization and CO Interface (inside CO)</i>			
A.3.1 A.3.3		Loop channelization system - digital loop carrier	388.37	421.76 104.58	447.28 115.92
		Disconnect Charges		7.29	23.35
A.3.2		CO channel interface - 2 wire voice grade	1.02	26.23 26.06	26.23 26.06
		Disconnect Charges		10.86 10.78	10.86 10.78
A.4		<i>4-Wire Analog Voice Grade Loop</i>			
A.4.1 A.11.2		4-wire analog voice grade loop	30.55	289.06 238.19	314.58 249.53
		Disconnect Charges		108.14 57.28	124.20 57.28
A.4.2 A.11.4		NID per 4-wire analog voice grade loop	1.34	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.4.3		4-wire analog voice grade loop - order coordination for specified conversion time		45.27	45.27
A.5		<i>2-Wire ISDN Digital Grade Loop</i>			
A.5.1 A.11.1		2-wire ISDN digital grade loop	29.83	326.38 252.00	351.90 263.34
		Disconnect Charges		108.14 57.27	124.20 57.27
A.5.2		NID per 2-wire ISDN Digital Grade Loop	1.22	2.84	28.36

				2.84	14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.5.3		2-wire ISDN digital grade loop - order coordination for specified conversion time		45.27	45.27
A.6		<i>2-Wire Asymmetrical Digital Subscriber Line (ADSL) Loop</i>			
A.6.1 A.11.1		2-wire asymmetrical digital subscriber line (ADSL) loop	14.83	504.82 456.24	530.34 467.58
		Disconnect Charges		105.86 57.25	121.92 57.25
A.6.2 A.11.3		NID per 2-wire asymmetrical digital subscriber line (ADSL) loop	1.22	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.6.3		2-wire ADSL loop - order coordination for specified conversion time		45.27	45.27
A.7		<i>2-Wire High Bit Rate Digital Subscriber Line (HDSL) Loop</i>			
A.7.1 A.11.2		2-wire high bit rate digital subscriber line (HDSL) loop	11.60	504.82 456.24	530.34 467.58
		Disconnect Charges		105.86 57.25	121.92 57.25
A.7.2 A.11.3		NID per 2-wire high bit rate digital subscriber line (HDSL) loop	1.22	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.7.3		2-wire HDSL loop - order coordination for specified conversion time		45.27	45.27
A.8		<i>4-Wire High Bit Rate Digital Subscriber Line (HDSL) Loop</i>			
A.8.1 A.11.2		4-wire high bit rate digital subscriber line (HDSL) loop	14.14	531.21 482.63	556.73 493.97
		Disconnect Charges		105.86 57.25	121.92 57.25
A.8.2 A.11.4		NID per 4-wire high bit rate digital subscriber line (HDSL) loop	1.34	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.8.3		4-wire HDSL loop - order coordination for specified conversion time		45.27	45.27
A.9		<i>4-Wire DS1 Digital Loop</i>			
A.9.1 A.9.2		4-wire DS1 digital loop	69.59	599.09 373.90	624.61 385.24
		Disconnect Charges		133.53 56.25	149.59 56.25
A.9.3		Order Coordination For Specified Conversion Time		48.17	48.17
A.10		<i>4-Wire 56 or 64 KBPS Digital Grade Loop</i>			
A.10.1		4-wire 56 or 64 Kbps digital grade loop	34.95	489.00	514.52

A.11.2				337.93	349.27
		Disconnect Charges		128.36 64.35	144.42 64.35
A.10.2 A.11.4		NID per 4-wire 56 or 64 Kbps digital grade loop	1.34	2.84 2.84	28.36 14.18
		Disconnect Charges		2.84 2.84	18.90 2.84
A.10.3		4-wire 56 or 64 Kbps digital grade loop - order coordination for specified conversion time		45.27	45.27
B.0	6	<b>Unbundled Local Exchange Ports and Features</b>			
B.1		<i>Exchange Ports (Port rates include vertical features where applicable)</i>			
B.1.1 B.1.9		Exchange ports - 2-wire analog line port, residence/business	2.11	22.98 22.98	48.50 34.32
		Disconnect Charges		6.56 6.56	22.62 6.56
B.1.2 B.1.10		Exchange ports - 4-wire analog voice grade port	9.60	22.98 22.98	48.50 34.32
		Disconnect Charges		6.56 6.56	22.62 6.56
B.1.3 B.1.11		Exchange ports - 2-wire analog DID trunk port	14.63	83.09 83.09	108.61 94.43
		Disconnect Charges		13.48 13.48	29.55 13.48
B.1.4 B.1.12		Exchange ports - 4-wire DID trunk port	146.46	117.81 71.18	143.33 82.52
		Disconnect Charges		12.94 12.94	29.00 12.94
B.1.5 B.1.13		Exchange ports - 2-wire ISDN digital line side port	51.91	63.59 63.59	117.46 117.46
		Disconnect Charges		7.04 7.04	18.38 18.38
B.1.6 B.1.14		Exchange ports - 4-wire ISDN DS1 digital trunk port	213.21	244.12 244.12	295.15 295.15
		Disconnect Charges		53.32 53.32	61.83 61.83
B.1.7 B.1.15		Exchange ports - 2-wire analog line port, PBX	2.11	22.98 22.98	48.50 34.32
		Disconnect Charges		6.56 6.56	22.62 6.56
B.1.8 B.1.16		Exchange ports - 4-wire analog - Coin	2.32	22.98 22.98	48.50 34.32
		Disconnect Charges		6.56 6.56	22.62 6.56
		Exchange Port - 2-wire analog (res./bus.) with three features included	5.42	26.04 26.04	51.56 37.38
		Disconnect Charges		8.20 8.20	24.26 8.20
		Exchange Port - 2-wire analog (res./bus.) with all available features included	8.86	44.40 44.40	69.92 55.74
		Disconnect Charges		19.68 19.68	35.74 19.68

C.0	1,6,13	<b>Unbundled Switching and Local Interconnection</b>			
C.1		<i>End Office Switching</i>			
C.1.1		End office switching function per MOU	.0023771		
C.1.2		End office trunk port - shared, per MOU	.0001927		
C.2		<i>Tandem Switching</i>			
C.2.1		Tandem switching function per MOU	.0007834		
C.2.2		Tandem trunk port - shared, per MOU	.0002834		
D.0	1,5,13	<b>Unbundled Transport and Local Interoffice Transport</b>			
D.1		<i>Common Transport</i>			
D.1.1		Common transport - per mile, per MOU	.0000091		
D.1.2		Common transport - facilities termination per MOU	.0004281		
D.2		<i>Interoffice (IO) Transport - Dedicated - Voice Grade</i>			
D.2.1		Interoffice transport - dedicated - 2-wire voice grade - per mile	.0323		
D.2.2		Interoffice transport - dedicated - 2-wire voice grade - facility termination	21.33	106.72	132.24
D.2.3		per month		48.83	74.35
		Disconnect Charges		38.05	49.39
				7.23	18.57
D.3		<i>Interoffice Transport - Dedicated - DSO - 56/64kbps</i>			
D.3.1		Interoffice transport - dedicated - DSO - per mile	.0323		
D.3.2		Interoffice transport - dedicated - DSO - facility termination	20.64	106.72	132.24
D.3.3				48.83	74.35
		Disconnect Charges		38.05	49.39
				7.23	18.57
D.4		<i>Interoffice Transport - Dedicated - DS1</i>			
D.4.1		Interoffice transport - dedicated - DS1 - per mile	.6598		
D.4.2		Interoffice transport - dedicated - DS1 - facility termination	74.40	196.28	221.80
D.4.3				147.31	172.83
		Disconnect Charges		26.56	37.90
				21.61	32.95
D.5	1,13	<i>Local Channel - Dedicated</i>			
D.5.1		Local Channel - Dedicated - 2-wire voice grade	17.83	487.62	513.14
D.5.4				84.35	95.69
		Disconnect Charges		77.69	93.74
				8.95	8.95
D.5.2		Local Channel - Dedicated - 4-wire voice grade	19.03	495.25	520.77

D.5.5				86.56	97.90
		Disconnect Charges		78.58 9.84	94.63 9.84
D.5.3 D.5.6		Local Channel - Dedicated - DS1	38.91	494.83 435.28	554.41 435.28
		Disconnect Charges		46.85 33.02	74.26 33.02
D.5.7 D.5.8		Local channel - Dedicated - DS3	533.33	526.67 493.71	558.16 525.20
		Disconnect Charges		42.41 40.87	67.76 66.22
D.6		<i>Interoffice Transport - Dedicated - DS3</i>			
D.6.1		Interoffice Transport - Dedicated - DS3 - Per Mile	15.02		
D.6.2 D.6.3		Interoffice Transport - Dedicated - DS3 - Facility Termination	744.38	686.74 477.76	751.71 542.73
		Disconnect Charges		125.56 118.79	152.64 145.87
E.0	10	<b>Signaling Networks, Databases and Service Management Systems</b>			
E.1		<i>800/888 Access Ten Digit Screening</i>			
E.1.1		800 access ten digit screening, per call	.0005321		
E.1.2 E.1.9		800 access ten digit screening, reservation charge, per 800 number reserved		8.46 .96	33.98 .96
E.1.3 E.1.10		800 access ten digit screening, per 800 # established without POTS translations		17.04 1.93	42.56 1.93
		Disconnect Charges		11.32 .96	27.37 .96
E.1.4 E.1.11		800 access ten digit screening, per 800 # established with POTS translations		17.04 1.93	42.56 1.93
		Disconnect Charges		11.32 .96	27.37 .96
E.1.5		800 access ten digit screening, customized area of service per 800 #		5.63 2.81	5.63 2.81
E.1.6		800 access ten digit screening, multiple interLATA CXR routing per CXR requested per 800#		6.59 3.77	6.59 3.77
E.1.7 E.1.12		800 access ten digit screening, change charge per request		9.42 .96	34.94 .96
3.1.8		800 access ten digit screening, call handling and destination features		5.63 5.63	5.63 5.63
E.2		<i>Line Information Database Access (LIDB)</i>			
E.2.1		LIDB common transport per query	.0000446		
E.2.2		LIDB validation per query	.0142132		
E.2.3 E.2.4		LIDB originating point code establishment or change		63.63	89.15
E.3		<i>CCS7 Signaling Transport</i>			

E.3.1		CCS7 signaling connection, per 56Kbps	21.58	169.72	195.24
E.3.6					
		Disconnect Charges		134.08	150.13
E.3.2		CCS7 signaling termination, per STP port	161.12		
E.3.3		CCS7 Signaling Usage, Per Call Setup Message	.0000456		
E.3.4		CCS7 signaling usage, per TCAP message	.0001115		
E.3.5		CCS7 signaling usage surrogate, per 56Kbps facility, per LATA per month	406.53		
F.0	2	<b>Operations Support Systems (OSS)</b>			
F.1		<i>Operational Support Systems (OSS)</i>			
F.1.1		OSS Electronic Interface, per order		10.60	
F.1.2		OSS OLEC Daily Usage File: Recording, per Message	.0001179		
F.1.3		OSS OLEC Daily Usage File: Message Distribution, Per Message	.0032089		
F.1.4		OSS OLEC Daily Usage File: Message Distribution, Per Magnetic Tape provisioned	54.62		
F.1.5		OSS OLEC Daily Usage File: Data Transmission (CONNECT:DIRECT), Per Message	.0000354		
G.0	7	<b>Operator Services and Directory Assistance</b>			
G.1		<i>Operator Call Processing</i>			
G.1.1		Operator call processing - operator provided cost per minute - using BST LIDB	1.19		
G.1.2		Operator call processing - operator provided cost per minute - using foreign LIDB	1.24		
G.1.3		Operator call processing - fully automated cost per call - using BST LIDB	.1072884		
G.1.4		Operator call processing - fully automated cost per call - using foreign LIDB	.1253666		
G.1.5		Loading expense per announcement for branded announcement			254.83 254.83
G.1.6		Recording expense per announcement for branded announcement			1,652.00 1,649.00
		Disconnect Charges			9.45 9.45
G.2		<i>Inward Operator Services</i>			
G.2.1		Inward operator services - verification, per minute	1.14		
G.2.2		Inward operator services - emergency interrupt, per minute	1.14		
G.3		<i>Directory Assistance Call Completion (DACC)</i>			
G.3.1		Directory assistance call completion access service, per call attempt	.0425585		
G.4		<i>Number Services Intercept Access Service</i>			

G.4.1		Number services intercept, per query	.0188268		
G.5		<i>Directory Assistance Access Service</i>			
G.5.1		Directory assistance access service call, cost per call	.2617159		
G.5.2		Loading expense per announcement for branded announcement			254.83 254.83
G.5.3		Recording expense per announcement for branded announcement			1,652.00 1,649.00
		Disconnect Charges			9.45 9.45
G.6	5	<i>Directory Transport</i>			
G.6.1 G.6.9		Directory transport - switched local channel DS1	38.91	494.83 435.28	554.41 435.28
		Disconnect Charges		46.85 33.02	74.26 33.02
G.6.2		Directory transport - DS1 level interoffice per mile	.6598		
G.6.3 G.6.10		Directory transport - DS1 level interoffice per facility termination	74.40	196.28 147.31	221.80 172.83
		Disconnect Charges		26.56 21.61	37.90 32.95
G.6.4		Switched common transport per DA access service per call	.0002997		
G.6.5		Switched common transport per DA access service per call per mile	.0000202		
G.6.6		Access tandem switching per DA access service per call	.0023713		
G.6.7		Directory transport - DA interconnection per DA service call			
G.6.8		Directory transport - installation NRC, per trunk or signaling connection			257.73 5.85
		Disconnect Charges			171.49 5.85
G.7	7	<i>Directory Assistance Database Service (DADS)</i>			
G.7.1		Directory assistance database service, cost per listing	.0447		
G.7.2		Directory assistance database service, monthly recurring cost	126.17		
G.8		<i>Direct Access to Directory Assistance</i>			
G.8.1		Direct access to directory assistance service, per month	6,926.00		
G.8.2		Direct access to directory assistance service, per query	.0461336		
G.8.3		Direct access to directory assistance service, service establishment charge			1,097.00
		Disconnect Charges			80.52

G.9	10	<i>Customized Routing (or selective routing)</i>			
G.9.1 G.9.2		Customized routing per unique line class code, per request, per switch		227.99	253.51
H.0	2	<b>Collocation</b>			
H.1		<i>Physical Collocation</i>			
H.1.1		Physical collocation - application cost			6,993.00
		Disconnect Charges			1.70
H.1.2		Physical collocation - space preparation	ICB		
H.1.3		Physical collocation - space construction cost per first 100 square feet	132.65		
H.1.4		Physical Collocation - space construction cost per additional 50 square feet	15.39		
H.1.5		Physical collocation - cable installation cost per cable			2,419.00
H.1.6		Physical collocation - floor space, per square feet - zone A	3.45		
		Disconnect Charges			53.24
H.1.7		Physical collocation - cable support structure, per entrance cable	22.90		
H.1.8		Physical collocation - power, per ampere	6.93		
H.1.9 H.1.20		Physical collocation - 2-wire cross connects	.3996	30.93 29.59	33.58 32.24
		Disconnect Charges		12.76 11.43	14.27 12.94
H.1.10 H.1.21		Physical collocation - 4-wire cross connects	.7992	31.17 29.77	33.82 32.42
		Disconnect Charges		12.83 11.43	14.34 12.94
H.1.11 H.1.22		Physical collocation - DS1 cross connects	2.90	60.42 41.68	63.07 44.33
		Disconnect Charges		12.87 11.54	14.38 13.05
H.1.12 H.1.22		Physical collocation - DS3 cross connects	53.31	57.45 39.81	60.10 42.46
		Disconnect Charges		14.92 11.80	16.43 13.31
H.1.13		Physical collocation - 2-wire POT bay	.1195		
H.1.14		Physical collocation - 4-wire POT bay	.2389		
H.1.15		Physical collocation - DS1 POT bay	.9862		
H.1.16		Physical collocation - DS3 POT bay	5.81		
H.1.17		Physical collocation - security escort - basic, per half hour and additional			42.87 25.54
H.1.18		Physical collocation - security escort - overtime, per ½ hour and additional ½ hour			54.43 32.41
H.1.19		Physical collocation - security escort - premium, per ½ hour and additional ½ hour			65.99 39.28
		<i>Virtual Collocation</i>			

FCC #1		Virtual collocation - application cost			2,848.30
FCC #1		Virtual collocation - cable installation cost per cable			2,750.00
FCC #1		Virtual collocation - floor space per square feet	3.20		
FCC #1		Virtual collocation - floor space power, per ampere	3.48		
FCC #1		Virtual collocation - cable support structure, per entrance cable	13.35		
H.2.6		Virtual collocation - 2-wire cross connects	.1121	30.93 29.59	33.58 32.24
		Disconnect Charges		12.76 11.43	14.27 12.94
H.2.7		Virtual collocation - 4-wire cross connects	.2242	31.17 29.77	33.82 32.42
		Disconnect Charges		12.83 11.43	14.34 12.94
FCC #1		Virtual collocation - DS1 cross connects	7.50	155.00 14.00	155.00 14.00
FCC #1		Virtual collocation - DS3 cross connects	56.25	151.90 11.83	151.90 11.83
FCC #1		Virtual collocation - security escort - basic, per half hour			41.00 25.00
FCC #1		Virtual collocation - security escort, overtime, per half hour			48.00 30.00
FCC #1		Virtual collocation - security escort, premium, per half hour			55.00 35.00
I.0	11	<b>Service Provider Number Portability</b>			
I.1		<i>Service Provider Number Portability - remote call forwarding</i>			
I.1.1		Service provider number portability - remote call forwarding, per number ported	2.34	.6441	.6441
		Disconnect Charges		.0644	.0644
I.1.2		Service provider number portability - remote call forwarding, per additional path	.3838		
I.1.3 I.3.1		Service provider number portability - remote call forwarding, per service order, per end-user location		2.84 2.84	28.36 28.36
		Disconnect Charges		2.84 2.84	18.90 18.90
I.2	11	<i>Service Provider Number Portability - DID</i>			
I.2.1		Service provider number portability - DID per number ported, residence		1.17	1.17
		Disconnect Charges		1.17	1.17
I.2.2		Service provider number portability - DID per number ported, business		1.17	1.17
		Disconnect Charges		1.17	1.17
I.2.3 I.3.1		Service provider number portability - DID per service order, per location		2.84 2.84	28.36 28.36
		Disconnect Charges		2.84 2.84	18.90 18.90
I.2.4		Service provider number portability - DID per trunk termination, initial	13.78	171.68	171.68
		Disconnect Charges		49.86	49.86

I.2.5		Service provider number portability - DID per trunk termination, subsequent	13.78	50.69	50.69
		Disconnect Charges		24.71	24.71
J.0		<b>Other</b>			
J.2	3	<i>Access to Poles, Ducts, Conduits and Rights-of-Way</i>			
J.2.1		Access to poles, per foot, per year	4.89 (FCC)		
J.2.2		Access to conduits, per foot, per year	2.50 (GSST)		
J.2.3		Access to Innerduct, per foot, per year	.4884007		
K.0	10	<b>Advanced Intelligent network (AIN) Services</b>			
K.1		<i>BellSouth AIN SMS Access Service</i>			
K.1.1		AIN SMS access service - service establishment, per state, initial setup			174.03
		Disconnect Charges			135.96
K.1.2		AIN SMS access service - port connection - dial/shared access			53.47
		Disconnect Charges			37.70
K.1.3		AIN SMS access service - port connection - ISDN access			53.47
		Disconnect Charges			37.70
K.1.4		AIN SMS access service - user identification codes - per user ID code			129.83
		Disconnect Charges			79.91
K.1.5		AIN SMS access service - security card, per user ID code, initial or replacement			131.54
		Disconnect Charges			45.77
K.1.6		AIN SMS access service - storage, per unit (100 kilobytes)	.0029		
K.1.7		AIN SMS access service - session, per minute	.0975650		
K.1.8		AIN SMS access service - company performed session, per minute	2.09		
K.2		<i>BellSouth AIN Toolkit Service</i>			
K.2.1		AIN toolkit service - service establishment charge, per state, initial setup			169.31
		Disconnect Charges			135.96
K.2.2		AIN toolkit service - training session, per customer			8,379.00
K.2.3		AIN toolkit service - trigger access charge, per trigger, per DN, term. attempt			39.30
		Disconnect Charges			37.70
K.2.4		AIN toolkit service - trigger access charge, per trigger, per DN, off-hook delay			39.30
		Disconnect Charges			37.70

K.2.5	AIN toolkit service - trigger access charge, per trigger, per DN, off-hook immediate			39.30
	Disconnect Charges			37.70
K.2.6	AIN toolkit service - trigger access charge, per trigger, per DN, 10-digit PODP			106.90
	Disconnect Charges			48.44
K.2.7	AIN toolkit service - trigger access charge, per trigger, per DN, CDP			106.90
	Disconnect Charges			48.44
K.2.8	AIN toolkit service - trigger access charge, per trigger, per DN, Feature Code			106.90
	Disconnect Charges			48.44
K.2.9	AIN toolkit service - query charge, per query	.0256138		
K.2.10	AIN toolkit service - type 1 node charge, per AIN toolkit subscription, per node, per query	.0065161		
K.2.11	AIN toolkit service - SCP storage charge, per SMS access account, per 100 kilobytes	1.79		
K.2.12	AIN toolkit service - monthly report - per AIN toolkit service subscription	16.01		44.02
	Disconnect Charges			31.28
K.2.13	AIN toolkit service - special study - per AIN toolkit service subscription, per study	.0810536		47.21
K.2.14	AIN toolkit service - call event report - per AIN toolkit service subscription	15.93		44.02
	Disconnect Charges			31.28
K.2.15	AIN toolkit service - call event special study - per AIN toolkit service subscription	.0027018		47.21

1. The Commission set the wholesale rate for these resold services in Docket No. 96-AD-0559, in which it directed BellSouth to provide services for resale at a discount of 15.75% off of current tariffed retail rates for residential and business services.

2. The FCC issued the First Report and Order to establish rules for the implementation of 47 U.S.C. §§ 251 and 252 of the Telecommunications Act of 1996. The FCC maintained that it had the authority and the obligation to dictate to the states how to handle pricing of interconnection and unbundled network elements. The United States Court of Appeals for the Eighth Circuit concluded otherwise and vacated the FCC's pricing rules. *Iowa Utilities Board, et al v. Federal Communications Commission*, 120 F.3d 753 (8th Cir. 1997), cert. granted *AT&T Corp. v. Iowa Utilities Board*, Nos. 97-286, et al. (Jan. 26, 1998).

3. Section 252(d)(1)(A)(ii) prohibits certain ratemaking methods, *i.e.*, traditional rate-of-return or rate based proceedings. However, contrary to the intervenors' arguments, the parenthetical phrase in Section 252(d)(1)(A)(ii) does not prohibit consideration of a company's actual or embedded costs. According to the FCC, "the parenthetical, '(determined without reference to a rate-of-return or other rate-based proceeding),' does not further define the type of costs that may be considered, but rather specifies a type of proceeding that may not be employed to determine the costs of interconnection and unbundled network elements." FCC Order 96-325, ¶ 704. Thus, nothing in the 1996 Act precludes the Commission from establishing prices based on BellSouth's actual cost of providing service in Mississippi on a going forward basis, notwithstanding the intervenors' arguments to the contrary.

4. The Louisiana Commission retained an independent consultant to review BellSouth's cost studies. This consultant concluded that BellSouth is required to pay right-to-use fees and incur other costs associated with vertical features that properly should be recovered in the rates for unbundled ports. Docket U-22022, Tr. at 3065-66 (Sept. 24, 1997). The Louisiana Commission accepted the consultant's recommendations.

5. In its July 18, 1997 Order, the Eighth Circuit recognized that vertical features that are provided through the switching hardware and software qualify as separate network elements. *Iowa Utilities Bd.*, 120 F.3d at 809-10. This view comports with the costing methodology proposed by BellSouth.

6. The rates set forth on Appendix A are derived from BellSouth's TELRIC Calculator, Runs 5A and 5B, submitted to the Commission on July 18, 1998, in response to the Second Set of Data Requests of the Mississippi Public Utilities Staff.

