

networks can be completed. The intent is also that existing ILEC network elements will be used by new facilities-based competitors to fill out their networks. If new ILEC hardware, software or operating systems must be specifically developed in response to an LSP request, and then must be deployed before a new point of interconnection or new unbundled element can be made available, then such interconnection/unbundling is not currently "technically feasible."⁴⁶

VI. INITIAL UNBUNDLED NETWORK ELEMENTS SHOULD BE LIMITED TO THOSE SUGGESTED IN THE NPRM. (NPRM - II.B.2.)

Considerable confusion exists regarding how switching functions should be unbundled. The Commission defines the "port" as a concept modeled after the New York PSC approach whereby a "port is effectively equivalent to the LEC's bundled retail local service offering minus the loop." (NRPM, para. 101) This is not the proper definition of a "port." A port merely provides access to switching functions and vertical services. It represents the non-traffic sensitive facility costs necessary to access a switch from a loop. As such, it is ordinarily priced on a flat-rate basis. SWBT's "local switching" element recovers traffic sensitive costs of providing switching usage. SWBT's local switching unbundled network element would typically be priced on a usage basis consistent with the manner in which costs are incurred.

⁴⁶ The Network Reliability Council (NRC) encourages carriers to use the findings and recommendations contained in the NRC II Report, entitled "Network Reliability: The Path Forward," when negotiating interconnection arrangements to minimize risks associated with network reliability issues. NRC, p. 20. SBC agrees with NRC's conclusion that the responsibility for development of standards should be shared by the standards bodies, industry fora, service providers, and equipment manufacturers, with little role for either the FCC or state commissions. NRC recommends that LSPs participate in the organizations involved with standard-setting. Along the same lines, the Commission should not require interconnection methods based upon mere trials in the states. National implementation of new interconnection methods should only follow once an experiment has been concluded and standards have been developed by the industry.

Contrary to the views expressed by some commentators,⁴⁷ vertical services are not unbundled elements nor are they part of an unbundled element. Unbundled network elements are unbundled facilities that are used to construct networks for the provision of retail services. In contrast, vertical services (e.g., call forwarding, call waiting, etc.) are retail services offered to retail subscribers. The Act requires these services to be offered to carriers under the resale standard (i.e., retail price less avoided costs). “Retail services” and “unbundled network elements” are, therefore, mutually exclusive items. The “platform” model, whereby providers purchase a portion of a LEC switch, is inconsistent with the Act because stand-alone retail services are included in the capacity purchased. Because vertical services are retail offerings, ILECs are under no obligation to offer them under the unbundled network element provisions of the Act.

SBC explained in its initial Comments the technical infeasibility of sub-loop unbundling⁴⁸ and why the sharing or partitioning of switching capacity is not technically possible in nearly half of its network. (SBC, pp. 40-43) Many other commentators made similar, persuasive arguments,⁴⁹ or conceded that sub-element unbundling is not needed at this time. (Sprint, p. 31) ILEC networks were designed to operate as a whole, not to be administered and maintained by multiple entities. Therefore, a minimum set of unbundled elements is all that can be, or needs to be, specified to facilitate competitive entry at this time.

SBC supports the following set of unbundled network elements: loop, loop cross-connect, switched port, local switching, and local switching transport. This set both satisfies the requirements of the Act, including the § 271 checklist, and is technically feasible for ILECs to

⁴⁷ MCI, p. 30; MFS, p. 46; CompTel, p. 46.

⁴⁸ SBC, pp. 38-40. Also see the attached Affidavit of Joseph H. Weber.

⁴⁹ Ameritech, pp. 36-42; BellSouth, pp. 39-42; SNET, p. 18; Nortel, p. 5 n.7, p. 7; NYNEX, pp. 68-71; U S West, pp. 48-57

provision. Any additional unbundling should be determined by individual carrier negotiations and a bona fide request process. Requiring ILECs to unbundle a multitude of network elements is not necessary to further competition in the local market. Additional unbundling requirements beyond those specifically required by the Act would only serve to impose unnecessary obligations on the ILECs and slow down competition in the local exchange markets.

In addition to SWBT providing local exchange service as an ILEC, another SBC subsidiary, Southwestern Bell Mobile Systems (SBMS), has become certified to offer landline local exchange service in Illinois and New York as an LSP. SBMS has evaluated the unbundled network elements necessary for it to operate in competition with the ILECs in those states. In most circumstances, SBMS has determined that it can competitively offer landline local exchange service by buying only unbundled loops and the loop cross-connects from the ILEC. SBMS has determined that unbundled switch elements (*i.e.*, switch port and local switching) frequently are not necessary elements for its provision of competitive local exchange service.⁵⁰

The unbundled loop and the loop cross-connect are also sufficient to enable new switch-based local service providers to provide operator call completion and directory assistance services. LSPs may elect to provide these services on their own, or under voluntarily negotiated agreements with SWBT. The Commission is well aware that many carriers have demonstrated the technical and economic feasibility of providing operator call completion services independent from ILEC operations. Other carriers have also established their own separate directory assistance databases and related services -- independent from ILEC operations.⁵¹ The ILECs should not be required

⁵⁰ See attached Affidavit of Dane Ershen, Vice President-Network Operations, SBMS.

⁵¹ In April 1995, AT&T began offering a domestic and international long distance directory assistance service called "Directory Assistance for Any DistanceSM." This service, which also offers optional automatic call completion, is available to callers by dialing 1-900-555-1212. Teltrust is marketing "FYI" National Directory Assistance, which offers residential and business searches for

to “unbundle” operator call completion services, or directory assistance services, as network elements.

Given that “high-margin” services are made possible through the switch, new entrants will likely purchase their own switching facilities. This has been SWBT’s experience to date in its negotiations with most new entrants: generally speaking, new entrants have not sought to negotiate the price of anything except loop-related network elements. No new entrant will expend capital on elements that produce little marginal value. Instead, new entrants will spend their capital dollars in a way that maximizes their profits, namely, on switches.

Granular unbundling of network elements is not only unnecessary, it is not permitted under the terms of the Act because it is technically infeasible. (GTE, p. 26) AT&T contends that it needs more than the five network elements proposed by SBC in order to offer competing local exchange service (AT&T, p. 17), but there is no evidence on the record that AT&T or any other competitor will need to purchase switch unbundling, much less granular switch unbundling, unless it intends to attempt to avoid the Commission’s Part 69 access structure.⁵² As the Commission tentatively concluded and as shown above, such attempts must not be countenanced by the Commission.

any location within the continental United States. Hebenstreit Communications offers enhanced directory assistance services to the wireless industry.

⁵² The attached Affidavit of Joseph H. Weber demonstrates that the so-called “switch platform” concept has not yet been sufficiently developed to even rise to the level of being a technical issue.

VII. PRICING FOR INTERCONNECTION AND NETWORK ELEMENTS MUST RECOVER REASONABLY COMPENSATORY ILEC COSTS. (NPRM - II.B.2.)

Several parties recognize the propriety of prices exceeding TSLRIC for ILEC interconnection and unbundled network elements.⁵³ Nevertheless, some commentators still contend that ILEC prices for interconnection and unbundled network elements must be held strictly equal to TSLRIC to avoid distorting, or completely thwarting, the competitive process in local exchange markets.⁵⁴ Including a contribution toward the recovery of common costs and overhead expenses in the price of goods and services sold as inputs to the production processes of other businesses is not an anticompetitive practice.⁵⁵ Furthermore, pricing interconnection and unbundled network elements at TSLRIC is financially irresponsible. AT&T and MCI, which operate in a competitive long distance market, certainly do not price their services at TSLRIC.

A. Pricing Interconnection And Network Elements At TSLRIC Is Not Compensatory. (NPRM - II-B.2.)

TSLRIC pricing of interconnection and unbundled network elements is financially irresponsible and not compensatory because it precludes any contribution to joint and common costs, and does not allow the recovery of sunk costs associated with the existing network. It is clear that whenever joint and common costs exist, the total of the TSLRICs of the various

⁵³ Office of the Ohio Consumers' Counsel, p. 24; MDPU, p. 11; Florida PSC, p. 27; Sprint, p. 43.

⁵⁴ MCI, p. 61; CompTel, p. 68; Cable & Wireless, Inc., p. 35; AT&T, pp. 48-49; TCI, p. 29; TimeWarner, p. 52; DOJ, pp. 31-32; NCTA, p. iv.

⁵⁵ William J. Baumol & J. Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 YALE J. ON REG. 171 (1994). Baumol and Sidak contend (p. 171) that "the local exchange carrier must be permitted to sell necessary inputs to its competitors in the market for final telecommunications products at a price that reflects all its costs, including opportunity costs." See also Ameritech, p. 69; Bell Atlantic (Declaration of Robert W. Crandall), p. 11; BellSouth, p. 54; Cincinnati Bell Telephone, p. 25; NYNEX, p. 52; Pacific, p. 68; U S West, (Harris & Tau), pp. 19-20; USTA, p. 45.

network components do not sum to the total costs of the firm, a fact that is tacitly acknowledged even in the strongly worded affidavit of William T. Baumol, et al., filed as Exhibit C by AT&T.⁵⁶ It is equally true that for ILECs (or any other firm, regulated or not) to attract equity capital from capital markets, sunk costs must be recovered. These costs cannot simply be ignored merely because prospective entrants to telecommunications markets desire the lowest possible “cost-based” prices. Thus, TSLRIC pricing of interconnection and unbundled network elements, while beneficial to the profits of firms fortunate enough to wangle such a low rate, is not compensatory to the ILEC and would constitute an unlawful taking.⁵⁷

Furthermore, although it is true that in a vigorously competitive market prices will trend downward toward TSLRIC, that does not mean that prices will equal TSLRIC or that mandating TSLRIC-based pricing for ILEC interconnection and network elements, on a “flash cut” basis, would automatically result in a more competitive telecommunications market. It would, however, likely result in legally valid confiscation claims by ILECs.

B. Pricing Interconnection And Network Elements Above TSLRIC Is Not Anticompetitive. (NPRM - II.B.2.)

No supplier of wholesale inputs in the U.S. economy which sells its products at cost with no markup can survive long-term. Input prices that include markups above TSLRIC do not

⁵⁶ Comments of AT&T, Exhibit C, Affidavit of William J. Baumol, Janusz A. Ordover, and Robert D. Willig (advocating the TSLRIC pricing of interconnection, but providing the caveat: “We also emphasize the need to take care in allowing any ‘add-ons’ for recovery of costs common to or shared among more than one network element (and therefore properly excluded from a network element TSLRIC estimate) to assure that quantification and allocation of such ‘common’ costs is consistent with the competitive market model”). Baumol, et al. acknowledge that prices must exceed TSLRIC if there are scale and scope economies, but then assert, incorrectly, that these latter economies are not substantial. See the attached Affidavit of Peter Temin.

⁵⁷ See Penn Central Transp. Co. v. New York City, 438 U.S. 104 (1978). See also the Affidavit of Richard A. Epstein attached to Bell Atlantic’s Reply Comments.

necessarily distort competition in the industries purchasing the inputs.⁵⁸ In the telecommunications industry, regulators, IXCs, and others now perceive the long distance market as vigorously competitive. Apparently, competition in the toll market has not been significantly distorted by numerous long distance resellers purchasing IXCs' WATS and WATS-like services (the resellers' primary input) at prices above the IXCs' TSLRIC.

Prices set equal to TSLRIC are claimed to replicate prices that would result from vigorously competitive markets (Baumol, Ordoover, and Willig Affidavit, p. 2). Since the FCC has deemed the long distance market highly competitive,⁵⁹ theoretically, IXCs' toll prices should therefore be equal to TSLRIC. If that were so, optional calling plans, customer-specific pricing, and other discount offerings would push prices below TSLRIC. Prices maintained below incremental cost for extended periods of time are typically associated with either extensive financial losses and/or anticompetitive activity. Neither of these conditions appears to be present in the long distance market today. Therefore, the IXCs' prevailing toll rates must exceed TSLRIC, without altering the general perception that the market remains highly competitive.

C. Cost Definitions Proposed In This Docket Are Ill-Defined And Rates Based On Such Costs Would Be Non-Compensatory. (NPRM - II.B.2.)

Some commentators would whipsaw ILECs using their inconsistent costing arguments. When costs are to be used for pricing interconnection and unbundled network components, certain

⁵⁸ MCI's concern (pp. 66-67) that ILEC interconnection and network element prices above TSLRIC will require the firms purchasing these services to pass along some small portion of ILEC common cost recovery to their customers is grossly overstated. Some small portion of overhead expenses incurred by switch and cable manufacturers, electric utilities, software firms, and all other businesses supplying inputs to IXCs affect, to some extent, the output prices of all businesses using long distance as an input. Since this process is not anticompetitive, perhaps IXCs and others do not object to ILECs recovering their overhead expenses -- just not from the prices paid by the IXCs.

⁵⁹ Order, In the Matter of AT&T Corporation to be Reclassified as a Non-Dominant Carrier, 11 FCC Rcd 3271 (1995).

commentors make a concerted effort to use definitions that minimize such costs. Commentors seeking to gain access to ILEC unbundled network components at a TSLRIC price define TSLRIC as a textbook "long-run," forward-looking cost that embodies the most efficient technology, assuming that ILEC backbone networks do not exist, and that costs can be computed anew on a "scorched earth" basis. This serves to dampen the cost figures and, hence, supports low interconnection rates. It makes little sense, however, to assume that ILECs are always in a long-run situation (i.e., that existing equipment can be replaced at will with more efficient technology). ILEC networks include a mix of technologies and forward-looking costs that depend in part upon existing ILEC network configurations.⁶⁰ The fantasy land of TSLRIC, as defined by some commentors, bears little relation to real ILEC decisions, or to real ILEC costs.

Conversely, when costs are to be subtracted from ILEC retail prices in computing the discounted price of resold ILEC services, commentors define costs to make them as high as possible. Cable and Wireless provides ample demonstration of how costs in this docket are merely a pawn used to support the rates a commentor desires ("avoided costs should include an allocation of general overhead expenses and common costs," Cable and Wireless, p. 46). In reality, of course, joint, common and overhead costs are not avoided when providing services for resale. SBC advocates leaving price determinations up to the negotiating carriers, with a "zone of reasonableness" used to facilitate findings of lawfulness on occasions when a regulator becomes involved. (SBC, pp. 98-99)

⁶⁰ Florida PSC, pp. 26-27 ("We do not believe it is reasonable for TSLRIC calculations to assume that a LEC has complete freedom to re-optimize its input mix and facilities when a service is added to the existing product mix")

D. Approving Rates Utilizing A “Zone of Reasonableness” Would Streamline The Regulatory Process. (NPRM - II.B.2.)

As SBC stated in its comments, rates should be presumed lawful if they fall within a “zone of reasonableness” between an established floor and a price ceiling. This would provide a streamlined and efficient mechanism to gain approval for negotiated interconnection and network element rates. Only when special circumstances dictate that a carrier establish rates outside this range would additional support be required from the presenting ILEC. This would result in regulatory resources being used only where necessary and would be consistent with the deregulatory intent of the Act.⁶¹

VIII. COMPENSATION FOR TERMINATION AND TRANSPORT MUST BE MUTUAL AND RECIPROCAL AND BASED ON APPROXIMATE ADDITIONAL COSTS AS NEGOTIATED BY THE PARTIES. (NPRM - II.C.5.)

Several commentors argue that the Commission should mandate a specific interconnection or transport and termination compensation structure, such as bill-and-keep.⁶² Others argue that the actual costs an ILEC incurs in providing interconnection and transport and termination services should not be considered in negotiating or arbitrating compensation. (MFS, p. 84; TCG pp. 76-79) These arguments share one common characteristic: they ignore the terms of the 1996 Act.

As explained in SBC’s Comments, Congress has made it clear that no specific interconnection rate structure including either a symmetrical rate structure or bill-and-keep, can be imposed upon interconnecting telecommunications carriers. (SBC, pp. 98-99) First, through

⁶¹ The attached Affidavit of Peter Temin shows conclusively that the Hatfield study, relied upon by numerous parties to support their “low ball” ILEC costing strategy, is predicated upon several fatal flaws and should be rejected by the Commission once and for all. See also Affidavit of Richard A. Epstein attached to Bell Atlantic’s Reply Comments.

⁶² MCI, p. 48; TimeWarner, p. 102; DOJ, p. 34; ALTS, p. 45.

its negotiation, mediation, arbitration, and agreement approval processes, the Act establishes pricing standards only when there is no agreement between an ILEC and a requesting telecommunications carrier. Second, neither mandated symmetrical rates nor mandated bill-and-keep ensure “the mutual and reciprocal recovery by each carrier of costs associated with transport and termination.” (47 U.S.C. § 252(d)(2)(A)(i)) Third, while the Act specifically permits agreements among interconnecting LECs that “waive mutual recovery (such as bill-and-keep arrangements)” (47 U.S.C. § 252(d)(2)(B)(i)), any such arrangement must be the voluntary result of negotiation and the decision of the parties to accept such “rates.” Neither bill-and-keep nor any other specific pricing standard can or should be mandated by the Commission through this NPRM or as a product of the § 252 process.

MFS contends that the “artificial distinction between ‘tandem’ and ‘end office’ termination” should not exist. (MFS, p. 79) There is nothing “artificial” about this distinction. MFS does not dispute that a cost differential exists between tandem and end office termination based upon existing network configurations; instead, MFS argues that the existing network is “inefficient,” and that new entrants should not pay for an allegedly outdated network configuration. Although this aspect of interconnection, like all others, is subject to negotiation, if new entrants or other carriers desire to purchase interconnection and transport and termination services without the additional costs of tandem interconnection, they can build out their own network to all ILEC end offices in the local calling area or purchase local switched transport from the ILECs or alternative carriers. Otherwise, ILECs are entitled under the express terms of the Act to recover the actual cost of interconnection and transport and termination services, and interconnectors are obligated to pay for facilities they use. (47 U.S.C. § (d)(2)(A)(i)) Outside of the negotiation process, to the extent that tandem and end office terminations have different costs, different prices are required.

Moreover, MFS ignores the historical underpinnings of ILEC networks to provide service to ILEC customers efficiently under an entirely regulated structure, and without regard to competitive use. Significant investments have been made to ensure that efficient, ubiquitous service could be provided. The historical regulatory foundations, and the costs they created, should not be swept away without compensating ILECs appropriately.

Importantly, Congress did not establish a standard for the pricing of transport and termination that contemplated a network different from that which exists today. Rather, Congress contemplated that reciprocal compensation would be paid for the transport and termination of calls based upon the “mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier’s network facilities . . . on the basis of a reasonable approximation of the additional costs of terminating such calls.” (47 U.S.C. § 252(d)(2)(A)) This language requires the recovery of the actual costs incurred, albeit without any formal rate case.

TCG argues that the Commission should accept its analysis that transport and termination of new entrant calls will impose few, if any, additional costs on an ILEC, based upon the diversion of traffic by wireline local exchange competition from the ILEC’s network to other networks. TCG argues that additional “excess” capacity is produced with every new entrant’s facility that is put in place. (TCG, pp. 81-83) TCG therefore contends that, to the extent excess capacity exists within the ILEC network, there is no cost associated with that network’s use.

TCG’s argument quickly degenerates to absurdity, however, when it is extended to all telecommunications carriers. Projecting TCG’s rationale across the entire industry leads to the result that providing telecommunications services in the U.S. is costless, since no network operates at full capacity at all times. Every firm, including TCG, operates at some level below full capacity to accommodate increases in demand associated with growth of the business, competitive successes (*i.e.*, winning customers from rivals), and anticipated peak period demand spikes (*e.g.*,

the increase in toll calls each Mother's Day.) This, however, certainly cannot be construed as evidence that these networks are costless to operate. The self-serving nature of TCG's argument is clear since TCG surely would not contend that its own costs, and therefore prices, should be zero.

Appropriately designed incremental cost studies estimate the forward looking costs of providing telecommunications services, given that expected demand for such services exceeds zero. If, for example, demand growth is projected to exceed the limits of the network facilities in place, additional investment (hence cost) will be required to accommodate growing demand for service. However, increases in customer demand do not correspond exactly to the engineering capacity of telecommunications network equipment. Thus, while one switch might not accommodate all of the traffic in a given wire center, two switches in that wire center would not both operate at 100 percent of their engineered capacity. The Commission must not be persuaded that investing in the second switch in such a scenario reduces ILEC network operating costs to zero. The Commission should reject TCG's excess capacity arguments.

**IX. FCC RULES SHOULD NOT INFRINGE ON STATE JURISDICTION.
(NPRM - II.A.)**

Some parties⁶³ support the Commission's proposed broad-sweeping assertion of federal jurisdiction over many areas covered in the Act which appear to fall within the legal jurisdiction of the states (e.g., NPRM, paras. 37-39) under the Communications Act. (47 U.S.C. § 151, et seq. (1934) as amended; see especially § 152(b)) However, a large number of commenting parties (including many who are not representatives of state commissions) urge the Commission not to

⁶³ ACS, p. 3; ALTS, pp. 2-4; Comcast, pp. 5-6.

engage in such overreaching, for several compelling reasons.⁶⁴

For example, as TCI noted, "states continue to have an important role under the 1996 Act. Indeed, they are responsible for ensuring that the Act's mandates are carried out in each jurisdiction. . . ." (TCI, p. 10) Ameritech observed that "federal rules that are inconsistent with the decisions of states at the forefront of local exchange competition would likely delay further development of competition. It would put competition on hold while states were forced to revisit existing rules and reopen proceedings that in many cases took years to complete." (Ameritech, p. 10)

The Florida PSC strongly urges the Commission to agree that the state commissions are best suited to resolve complaints involving §§ 251 and 252 of the Act: "Section 252 clearly places the state commissions in the primary role over [interconnection] agreements. Yet there is even a stronger practical basis. The FCC does not hold hearings around the country and consequently does not have a hands-on knowledge of the operations of the telecommunications companies." (Florida PSC, pp. 10-11) Parties other than state commissions echoed the same sentiment. GTE identified several important practical factors that weigh heavily in favor of much greater deference to states than is reflected in the NPRM:

Deference to the states is particularly warranted because PUCs generally develop rules using procedures that allow for comprehensive fact-finding based upon local conditions. They afford parties an opportunity to provide oral and written expert testimony and to cross-examine opposing experts. They also frequently utilize informal procedures, such as workshops, that enable parties to attempt to work out their differences under the aegis of the PUC. These methods maximize the likelihood that rules will accord with economic and technological realities. (GTE, p. 10)

⁶⁴Ameritech, p. 10; Florida PSC, pp. 10-11; GTE, p. 10; Pacific, p. 8; SBC, pp. 15-16, 23-24; TCI, p. 10; Mo. PSC, pp. 4, 15, 11; OCC, p. 12; Texas PUC, pp. 4, 8-9; Arizona Corp. Comm., pp. 13-17; Alltel, pp. 4-5; Citizen Utilities Co., p. 5; Connecticut Dept. of Public Utility Control, pp. 5-6; Michigan Exchange Carriers Assoc., p. 5; Nat'l Assoc. of State Utility Consumer Advocates, pp. 6-8.

Pacific points out how "critical" it is that "States retain oversight to determine costs and set the prices of local exchange services, and enforce the statutory distinctions between interconnection, network elements, wholesale services, and transport and termination of local calls." (Pacific, p. 8) It then goes on to emphasize that "Section 252 of the Act specifically charges State commissions with 'determining' local rates, while two other complementary Sections -- 2(b) and 251(d)(3) -- specifically fence off State rates and rules from the FCC's authority." (*Id.*)

Finally, although the NLRM appears to regard lightly the areas of jurisdiction marked off to the states by the law, the Commission's Chairman has acknowledged the value and expertise accorded the industry by state commissions:

I am well aware that the states are laboratories for democracy, and for communications deregulation . . . You'd know as much about local exchange issues as anyone -- a lot more than many of us at the FCC. (Speech by Reed Hundt to NARUC, February 27, 1996, 1996 LEXIS 1016 at *2-*3)

The Commission should harmonize its view of the state commissions' jurisdiction with its view of their expertise.

To SBC, this area is among the most important for the Commission to address correctly. If the Commission does not grant due deference to state jurisdiction in implementing the 1996 Act, litigation between federal and state agencies inevitably will follow. A legal battle over the fundamental boundaries of state and federal jurisdiction under the Communications Act undoubtedly would raise complex, extraordinarily difficult issues that would require a great deal of time for the judicial system to fully and finally resolve. Commencing such a legal struggle at this particular time could only result in significant delay in attaining the pro-competitive goals that Congress, the Commission, the state commissions, and the nation's carriers all share.

SBC urges the Commission to seriously reconsider its tentative conclusions in the area of federal versus state jurisdiction under the 1996 Act, and to refrain from asserting federal authority

over any areas that Congress intended to be, and that properly are, within the exclusive jurisdiction of the states.

X. FEDERAL GUIDELINES SHOULD RESTRICT ARBITRATIONS TO THE ISSUES PRESENTED AND TO THE NEGOTIATING PARTIES ONLY. (NPRM - III.A.)

Although adoption of numerous "national standards" for implementing the Act is inappropriate and unnecessary (as shown in SBC's Comments, pp. 5-21) one area where national guidelines would be both appropriate and helpful is arbitration under the Act. Specifically, such proceedings should be confined to the issues as presented for arbitration by the two negotiating parties, and only those parties should be allowed to participate in the proceeding.

It is crystal clear that Congress intended for arbitration cases under the Act to be limited to only "the issues set forth in the petition and in the response" (47 U.S.C. § 252(b)(4)(A)) Thus, the jurisdiction of a state (or of this Commission, if acting in the place of a state commission under § 252(e)(5)) is statutorily restricted to the issue(s) as presented for arbitration by the parties. A specific FCC guideline for the states on this point would be helpful to the industry.

Although the Act makes no mention of either "final offer" or "open ended" arbitration, the former would be more consistent with the above-cited provision limiting the issue(s). SBC's Comments explained why final offer arbitration is the better approach (SBC, pp. 101-103), and several other parties agree.⁶⁵

TimeWarner opposes final offer arbitration because it assertedly is "overly simplistic," disregards the "complexity" and "number of issues likely to be raised," and would constitute "abdication to the negotiating parties the responsibility to make public interest determinations." (TimeWarner, p. 110) To the contrary, final offer arbitration specifically contemplates complexity

⁶⁵ See, e.g., USTA, pp. 94-95; TCG, pp. 86-87

and the challenge of numerous issues by giving the arbitrator a straightforward way in which to rule on the issues presented. The claim that final offer arbitration would "abdicate" to the negotiating parties the responsibility for making public interest determinations misses the mark for two reasons. First, the terms and conditions of an interconnection agreement entered into after arbitration under the Act, although available to other interested parties under § 252(i), are not binding on anyone except the parties to that specific agreement. Congress has determined that such negotiated agreements are in the public interest. Second, Congress has already made the determination that private arbitration cases -- limited to only those issues upon which agreement cannot be reached through negotiation -- are also generally in the public interest.

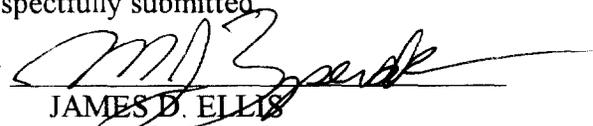
It is also readily apparent that Congress intended for arbitration cases under the Act to be limited to only the two negotiating parties. (SBC, pp. 104-105, citing 47 U.S.C. §§ 252(h) and 252(b)(2) and (3)) CompTel urges the Commission to establish a national policy that literally any "interested party" should be permitted to participate in arbitration cases under the Act (CompTel, p. 108), but TCG recognizes how inconsistent such an approach would be with the Congressional goal of expediting the growth of telecommunications competition. (TCG, p. 85) It is beyond question that permitting any and all "interested" parties to participate in state arbitration proceedings conducted under the Act would add substantial complexity and delay. That result clearly would be at odds with the Congressional intent to expedite the process and create a more competitive telecommunications industry as quickly as possible.

XI. CONCLUSION

SBC respectfully requests that the Commission issue its Order in this proceeding in conformance with the recommendations made herein and in SBC's May 16, 1996, Comments in order to most quickly realize the pro-competitive goals that Congress, the Commission and SBC share.

Respectfully submitted,

By



JAMES D. ELLIS
ROBERT M. LYNCH
DAVID F. BROWN

ATTORNEYS FOR
SBC COMMUNICATIONS INC.
175 E. Houston, Room 1254
San Antonio, Texas 78205

DURWARD D. DUPRE
MICHAEL J. ZPEVAK
DARRYL W. HOWARD

ATTORNEYS FOR
SOUTHWESTERN BELL
TELEPHONE COMPANY
One Bell Center, Suite 3520
St. Louis, Missouri 63101
(314) 235-2507

May 30, 1996

Affidavit of Joseph H. Weber

My name is Joseph H. Weber. I am a partner in the telecommunications consulting firm of Weber Temin & Co. I have over 30 years of experience as a network planner at AT&T and Bell Labs. More recently, I have prepared telecommunications network plans in a number of states, at the behest of legislative committees, regulatory commissions and telephone companies. At Bell Labs in the 1970s and AT&T in the early 1980s I was responsible for all the technical issues associated with both terminal equipment and competitive carrier interconnection. I was also responsible for developing network interfaces between the separate subsidiaries of AT&T required by CI-II. At the time of the AT&T divestiture in 1982-1984, I developed the plan for separating the networks of AT&T and the Bell Operating Companies, and the arrangements for subsequent interconnection. Many of these issues are similar to those addressed in the NPRM.

One of the important issues addressed in the Act and the NPRM is that of unbundling and access to "network elements". Although the Commission has indicated that it only wishes to identify a minimal set of such elements at this time, and the Act has specified that interconnection must be allowed at any "technically feasible" point, there is some disagreement over the size and composition of that minimal set of network elements and the appropriate interconnection points. It should be made clear at the outset, however, that almost anything is "technically feasible" given enough time and money. Hence, cost and time must be considered in determining technical feasibility.

It may be instructive, in developing such a set of elements, to examine the ways in which the national telecommunications network has evolved during the last 30 years to illustrate the issues involved in defining and implementing a set of interfaces where parties can connect to that network.

For most of this century the telephone network in the United States was designed, built and operated as a seamless, integrated entity. There were, of course, a number of companies

participating, but virtually all interactions were bilateral, and the Bell System, with the concurrence of the independent companies, set standards and defined operating arrangements. The earliest cases of interconnection of so-called "customer provided equipment" were large customer switching systems and specialized equipment such as data sets, which were interconnected behind well-defined standard interfaces. This was expanded to include all terminal equipment in the 1970s with the ubiquitous deployment of the telephone jack and the development of detailed technical standards for terminal equipment. In all events, the interface was clear, and access was controlled. The end user controlled the equipment on his side of the network interface, the telephone company on its side. Questions of who pays for repair and maintenance were and are resolved on a case-by-case basis, although controversies continue to occur if the cause of a problem is unclear.

As competition developed in other areas of the industry, functional interconnection took place at various points in the network - piecing out of private lines, trunk side connections to switching systems, etc., but initially all interconnection between telephone company and interconnector's systems took place at the interconnector's location. Interestingly, unbundled network elements, particularly switches, were never an issue during this period. AT&T's principal rival in long distance service, MCI, clearly wanted and needed to provide its own switching equipment, which allowed it to have maximum control over its own service offerings and customers. (The switch, after all, is where network intelligence resides.) All they wanted from AT&T was access to the local exchange, and the ability to resell AT&T's long distance services to reach locations where they had not yet built a network - and they never got the latter at a discount.

The implementation of CI-II, and, most notably, the Bell System divestiture in 1984 required additional interfaces, in many cases at telephone company premises. At this point, as AT&T and the BOCs separated, it was necessary to define, physically and functionally, where the

interfaces were. This was a complex task, and took the full two years from the signing of the decree in 1982 to the actual divestiture in 1984 to complete. The result was a plan which specified a minimum number of interface points (all within central office buildings) and access arrangements carefully crafted to ensure that neither company's equipment and services would be disrupted.

Despite these precautions, the private line provisioning process collapsed immediately after divestiture. This process had always involved both the telephone companies and AT&T Long Lines, and when the communication links changed from internal and informal to external and formal, it was no longer workable. It took over a year before an interLATA private line could be installed in a reasonable time interval and be expected to work reliably.

The point of this discussion is that these issues are complex and can have important consequences. As we approach the next stage of network disaggregation, it is vital that we maintain at least the same degree of care and discipline as was taken in the past. Network interface points, whether used for interconnection or access to unbundled elements, must be defined both physically and functionally. Specifically, network elements should be defined in terms of physical access points and functional capability. They should be independent of technology, so that the ILEC can continue to upgrade its network without interfering with the operations of a connecting carrier.

One technically feasible point for interconnection is the telephone company central office. Such offices typically contain cross-connect frames designed for flexibility and for ease of access. It is a straightforward matter to arrange for access to, for example, a customer loop, at the central office while maintaining adequate security, ensuring that no undue service disruptions occur, and curtailing additional expense. (This is the case whether or not the CLEC is collocated.)

The same cannot be said for so-called "mid-loop" access, which has been specifically identified by AT&T, MCI, DCJ and others. This interface, typically at the point where the large-

capacity feeder system meets the lower capacity distribution system, has entirely different characteristics than a central office. First of all, these points encompass a large variety of physical arrangements ranging from large huts to simple splice boxes, and technology ranging from copper wires to fiber optic digital carrier systems. Secondly, they have never been designed for multiple access, so arranging for the insertion of the terminations of multiple carriers will require modification of the equipment, the extent depending upon the particular configuration. Thirdly, there is currently no way of physically separating the activities of the ILEC from those of the CLEC at such locations, which is necessary to preserve network integrity.

None of these problems need preclude the ultimate development of "mid-loop" interconnection arrangements, given sufficient time and resources. They do suggest, however, that such arrangements should not be ordered in the heat of the immediate accelerated proceeding. The most prudent and orderly means of effecting these arrangements is to utilize an industry group, such as the Network Reliability Council, charged with developing a detailed set of standards, which would include cost estimates for modifying remote terminals to accommodate multiple carriers, according to the particular situation encountered.

It should be clear that the costs of these arrangements should be borne by the interconnectors. This will cause such unbundling to take place only where it is economically beneficial to the competitive carrier. Clearly, if the competitive carrier can provide service more economically by building its own facilities or connecting at a different point rather than requiring the ILEC to modify its network, it will do so. No public good is served by paying more money to be spent on an interconnection arrangement than it would cost for an alternative arrangement.

Another controversy concerning the definition of "network element" arises in the area of switching. Provision of a "port" or access point to a central office switch has been offered by

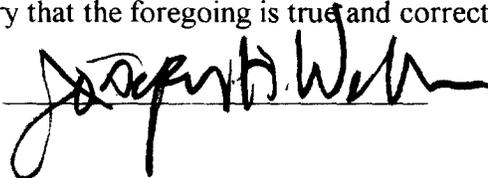
ILECs in several states, and is clearly within the definition of "network element". AT&T, MCI, DOJ and others are endorsing the concept of a "platform" which appears to encompass, as a single element, all of the functions that a switch performs.

This question gets to the issue of the definition of a "network element" as contrasted with a "service", a distinction which is important because of the different pricing standards used for service resale and unbundled facilities. The Act defines a Network Element as "...a facility or equipment..." including "features, functions and capabilities that are provided by means of such facilities or equipment..." and a Telecommunications Service as "the offering of telecommunications for a fee directly to the public"

Under a reasonable interpretation of these definitions, functions and facilities such as switch ports, switch traffic capacity, and signaling network access would be network elements; while vertical services such as call waiting, operator access, and caller ID would be services available for resale. A switching "platform" would thus include a hopelessly confused melange of services and unbundled facilities. Furthermore, if the "platform" is adopted as proposed, full switching functionality may be available to CLECs at prices which will inhibit them from building their own networks, a result which will neither provide the full benefits of competition nor meet the objectives of the Act. Since the switches are the points in any network where most service functionality is located, it is important to develop an unbundling paradigm which encourages CLECs to provide their own switches. Indeed, Time Warner¹ proposes a pricing arrangement for switching and related items which would have exactly that effect.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 29, 1996.

A handwritten signature in black ink, appearing to read "Joseph B. Welch", written over a horizontal line.

¹ Comments of Time Warner Communications Holdings, Inc., P. 52

Affidavit of Peter Temin

My name is Peter Temin. I am the Elisha Gray II Professor of Economics at the Massachusetts Institute of Technology (MIT), where I have been a full professor since 1970. I also am a partner in the telecommunications consulting firm of Weber Temin & Co. I received my Ph.D. in Economics from MIT in 1964. My fields of specialization are economic history and telecommunications. My work has included studies of the economics and economic history of the telecommunications industry in the United States. I have published ten books and more than sixty scholarly articles. These publications include *The Fall of the Bell System: A Study in Prices and Politics* (Cambridge University Press, 1987, with Louis Galambos) and various articles concerning the regulation of the American telephone industry before and after the breakup of the Bell System.

The FCC states that, "Economists generally agree that rates based on LRIC give appropriate signals to producers and consumers and ensure efficient entry and utilization of the telecommunications infrastructure."¹ But the economic theory relied on by these economists does not include treatment of joint and common costs. The theorem that all prices should equal marginal costs for efficiency is no longer valid when there are joint costs (or economies of scale). The FCC recognizes this problem elsewhere when it refers to Ramsey pricing, that is, efficient prices based on criteria other than marginal cost.

The comments of AT&T, DOJ, and MCI propose lease prices equal to LRIC, more specifically to TSLRIC. This position makes no sense legally, historically, economically, or in a business or construction framework. It is inconsistent with the 1996 Telecommunications Act (1996 Act) and with any reasonable view of the telecommunications industry.

¹ NPRM, p. 43.

These organizations support the suggestions in the NPRM that TSLRIC should be the correct pricing standard for leasing unbundled network elements from the ILECs. AT&T and MCI further argue that the estimates of TSLRIC made by Hatfield Associates and included with MCI's comments be used as the standard TSLRIC by the FCC. The DOJ combines its support of TSLRIC with the unsupported assertion that the 1996 Act requires the FCC to authorize leasing enough of an ILEC for a lessee to offer local service on its own.

The essence of this view can be seen in Hatfield's estimate that the sum of TSLRIC to provide the local service now provided by the Tier One companies is 44 percent of their current revenue, \$36 billion as compared to \$82 billion.² If the FCC adopts these standards, AT&T, for example, can lease the Tier One companies for half of their current revenues. The Bell System will have been reconstructed. It will be leaner and meaner, but AT&T stockholders will not have suffered any losses. Only the ILECs will pay the cost. This is the true meaning of the assertion in these comments that the MF is no more.

The argument by AT&T, DOJ and MCI makes no legal sense. It clearly is inconsistent with the 1996 Act. The FCC recognizes this in its NPRM (Para. 11): "Congress plainly intended for ILECs in the future to be vigorous competitors." If the IXC's lease the ILECs at Hatfield rates, the ILECs will find their revenue reduced by half. (The comments argue they will save an estimated \$15 billion in billing costs, far less than the projected revenue loss of \$46 billion.) This will not produce vigorous competitors; it is far more likely to produce ILEC bankruptcies.

I have provided the Hatfield numbers for the extreme case of a reconstructed Bell System, but the same argument applies to smaller units as well. Each time the IXC's lease a network

² MCI Comments, Hatfield Associates Attachment, Table 5.

element from an ILEC at a reduced rate, it threatens the viability of the ILEC. It is easy to miss this point in the discussion of specific elements like switch ports, just as the point was missed in the 1970s when the FCC asserted that their OCC decision affected only a tiny part of the Bell System and could not possibly affect the switched network. This made little sense then; it makes no sense now.

The argument by AT&T, DOJ and MCI makes no historical sense. It reproduces FCC policy from the 1970s of subsidizing new entrants. Leases of network elements at Hatfield rates would be at rates far below the current cost of production of telecommunications services. As explained by Hatfield, the estimated TSLRIC applies to the cost of operating a hypothetical optimized telecommunications system, not any actual network. The Hatfield estimates are lower than current costs by definition.

The lessees therefore would be getting a subsidy. MCI asserts its right to such a subsidy when it opens its comments by asserting that regulators must ensure "that competition thrives in all telecommunications markets."³ In this view the FCC must not simply create a level playing field, but must support competitors until they thrive. This was the position taken by MCI when it was a tiny company over twenty years ago. It cannot apply to MCI, much less AT&T, now.

The frequent reference to asymmetric bargaining power derives from the same ahistorical view. AT&T had bargaining power relative to the OCCs in the 1970s. But AT&T is now the entrant. MCI is now a major corporation, as are other potential entrants into local service. The view that the RBOCs possess all the cards flies in the face of common sense. It also ignores the 1996 Act which substitutes the carrot of interexchange business for the stick of regulatory control.

³ MCI Comments, p. 1.