costs out of their networks. Kahn Decl. at 5. Moreover, the whole point of the Act is to encourage entry by competitors who can provide service more efficiently than the LECs: if the LECs are inefficient, setting prices based on their actual costs will encourage more efficient providers to deploy their own facilities. Id. at 4

3. LECs must be allowed to recoup unrecovered historical costs. AT&T and its allies argue that LECs should be denied any ability to recoup unrecovered historical costs. In essence, having profited when it sold the LECs the equipment for their networks, AT&T wants to force them to write off that cost. Even apart from the fact that forcing the LECs to forego recovery of these costs is a classic 5th Amendment violation, see below, their arguments make no economic sense. Barring LECs from recovering legitimately incurred historical costs would merely deter future investment. Kahn Decl. at 8. And it would increase costs to consumers by driving up the cost of capital needed to fund any investment that is undertaken. Id.

4. LECs must be allowed to earn a reasonable profit. Some parties also claim that, because the TSLRIC of an individual service or network element includes a cost of capital component, a price set at TSLRIC includes a profit. But as Professor Kahn and Dr. Tardiff explain, profit has no economic meaning in the context of a single service or network element, but only as the difference between total revenues and total costs for the firm as a whole. Kahn Decl. at 10. And since setting all prices at TSLRIC will necessarily fail to recover the total costs of the firm. it does not provide the LECs an opportunity to earn a reasonable profit on their total costs. Id.

5. Mandating prices below total costs would violate the 5th Amendment. As demonstrated in the attached declaration of Professor Richard Epstein -- one of the country's foremost 5th Amendment scholars -- mandating prices that would prevent LECs from

recovering their total costs would constitute an unauthorized taking of the LECs' property. Epstein Decl. at 2 (attached as Exh. 2). Nonetheless, the proponents of incremental cost pricing claim that there can be no taking when revenues are lost to competition. Perhaps so. But that is not the issue here. The issue here is whether government regulators can mandate prices that deny LECs the ability to recover costs they have actually incurred. They cannot. See, e.g., Duquesne Light Co. v. Barasch, 488 U.S. 299, 308 (1989); Jersey Central Power & Light Co. v. FERC, 810 F.2d 1168, 1178 (D.C. Cir. 1987) (en banc)

VII. Prices for Reciprocal Compensation Cannot Be Set At Zero

The most blatant example of a plea for a government handout comes from those parties who urge the Commission to adopt a reciprocal compensation price of zero, which they euphemistically refer to as "bill and keep." A more appropriate name, however, would be "bilk and keep," since it will bilk the LECs' customers out of their money in order to subsidize entry by the likes of AT&T, MCI, and TCG. As we demonstrated in our opening comments, a regulatorily mandated price of zero -- by any name -- would violate the Act, the Constitution, and sound economic principles. See Bell Atlantic Br. at 40-42.

Indeed, the proponents of bill and keep appear to recognize the flaws in their proposal, and shift their focus here to arguing that the FCC should mandate bill and keep as an "interim" pricing mechanism, and as a default price when parties do not agree to a different rate. AT&T Br. at 69; MCI Br. at 52-53; TCG Br. at 83-84.[19] This will create a "threat point," so the

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[19] Some parties also have suggested that the cost to terminate calls during off-peak periods is very low, and that setting prices at zero during those periods is close enough. In reality, while setting different peak and off-peak prices may make sense in some contexts, here it would merely encourage providers to find ways to modify their traffic flows -- and thereby effectively change the peak -- in order to take advantage of the zero rates while forcing LECs to incur peak load costs. Under these circumstances, peak and off-peak users must share the costs

argument goes, that will encourage LECs to negotiate reasonable rates for reciprocal compensation. But whether they are termed interim or permanent, mandatory bill and keep arrangements suffer from the same flaws, and simply cannot be squared with the Act's mandate that LECs be permitted to recover their costs absent a voluntary waiver of that right. Bell Atlantic Br. at 42. Nor will adopting bill and keep as a mandatory solution encourage parties to negotiate a reasonable price. It will do the opposite So long as competitors know that they can get a zero rate if they do not agree to something else, the result will be bill and keep in <u>every</u> case.

Moreover, the notion that bill and keep is necessary to prevent LECs from demanding too high a rate reflects a fundamental misunderstanding of the market. If these rates are set too high, the result will be that new entrants, who are in a much better position to selectively market their services, will sign up customers whose calls are predominantly inbound, such as credit card authorization centers and internet access providers. The LEC would find itself writing large monthly checks to the new entrant. By the same token, setting rates too low will merely encourage new entrants to sign up customers whose calls are predominantly outbound, such as telephone solicitors. Ironically, under these circumstances, the LECs' current customers not only would subsidize entry by competitors, but would subsidize low rates for businesses they may well not want to hear from.

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of capacity, and it would be irrational to set a price of zero during <u>any</u> period. <u>See</u> Kahn, <u>The Economics of Regulation</u>, Vol. 1 at 91-93.

VIII. The Commission Should Not Adopt Resale Guidelines That Contravene Legislative Requirements

A number of parties ask the Commission to dictate the terms of resale in a manner that forecloses any meaningful negotiations and oversteps the Act's requirements. These requests should be rejected.

A. The Commission Should Not Set Wholesale Discounts That Ignore The Act

A number of parties ask the Commission to dictate wholesale pricing rules that are contrary to the Act's requirement that prices be set based on retail rates less the "costs that will be avoided by the local exchange carrier." 47 U.S.C. § 252(d)(3).[20] For example, AT&T argues that avoided costs should be calculated without any offset for expenses the LECs "incur to provide wholesale services." AT&T Br. at 83, n.128. But the correct standard is net avoided costs. LECs will incur marketing, billing, collection and other costs in order to provide wholesale services just as AT&T does in its own resale operations -- and these costs will not therefore be avoided. Requiring LECs to absorb those costs contradicts both the Act and AT&T's own admission that the LEC should receive "the same net revenue whether it acts as a retailer or wholesaler." AT&T Br. at 80 n.119; see also MCI Br. at 89 (the LEC should "not lose any net revenue").

Similarly, several parties argue that avoided cost calculations should include some portion of shared, common and general overhead costs. See, e.g., AT&T Br. at 84. By definition, a LEC will incur joint, shared and common costs regardless of whether it provides its

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[20] But see NCTA Br. at 29 ("Deep resale discounts would distort the economic decisions of new entrants to buy services or build facilities by undermining the ability of facilities-based entrants to compete with resale providers"); accord Time Warner Br. at 69-70; MFS Br. at 74-75.

services on a wholesale or a retail basis. Therefore, these are not "costs that will be avoided by the local exchange carrier." 47 U.S.C. § 252(d)(3).

CompTel asks the Commission to declare that all of the expenses in certain USOA accounts will be avoided. CompTel Br. at 97; see also AT&T Br. at 84 n.130. This methodology will overstate the costs that will be avoided and must be rejected. For example, CompTel claims that USOA accounts 6611 (Product Management), 6623 (Customer Service), and 6613 (Product Advertising) will be entirely avoided. CompTel Br. at 97. CompTel is wrong. Account 6611 includes the costs of developing new telecommunications services and forecasting demand, which are incurred to provide services on either a wholesale or retail basis. Account 6623 includes the costs of interexchange carrier access billing and order processing systems which are not even associated with retail telecommunications services and are not included in retail rates to start with. Account 6613 includes product advertising expenses, and even AT&T acknowledges that "the expenses an [incumbent LEC] incurs in advertising its retail services will not be shed by the [incumbent LEC] when it begins to provide services for resale . . . ." AT&T Br. at 84, n.129. As a result, CompTel's methodology is inconsistent with the Act's pricing standard.

AT&T argues that wholesale discounts must be provided for every LEC rate, regardless of whether it is customized for a single customer, or offered on a short-term promotional basis. AT&T Br. at 77, 82-83. The Act contains no such requirement. It simply provides that wholesale rates shall be determined "on the basis of retail rates charged to subscribers . . . ." 47 U.S.C. § 252(d)(3). Competitive promotions are not retail rates themselves, but rather are discounts from or waivers of retail rates. Likewise, customized pricing arrangements for a single customer are not retail rates because they are not charged to more than one subscriber.[21] Moreover, requiring that these discounted rates serve as the basis for calculating a further wholesale discount would discourage LECs from offering such discounts in the first place, to the ultimate detriment of consumers.

Finally, AT&T asks the Commission to abandon entirely the Act's prescribed wholesale pricing standard. For example, AT&T suggests that: 1) "a [wholesale] discount that does not permit viable competition should be presumed . . . not to comply with [the Act]," 2) "the discount may include an additional amount intended to reflect differences, if any, in the quality of service (including operational interfaces) provided to the reseller compared to what the ILEC provides to its own retail operations," and 3) states are not precluded "from increasing the level of the wholesale discount above that which would be derived based solely on 'avoided costs.'" AT&T Br. at 85-86. None of these suggestions complies with the Act's wholesale pricing standard of "costs that will be avoided by the local exchange carrier," and the Commission has no authority to adopt them.

B. The Commission Cannot Expand The Services That Must Be Offered For Resale Under the Act

Several parties ask the Commission to impose resale requirements for non-telecommunications services. For example, MCI asks the Commission to require resale of voice messaging and calling card services. MCI Br. at 84. These requests should be rejected. The resale obligation imposed by the Act extends only to "telecommunications services." 47 U.S.C. § 251(c)(4)(A). By definition, these services provide "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form

21 See also Time Warner Br. at 73 ("[I]f every discounted or promotional rate were to be made available at wholesale rates for resale to telecommunications carriers, the result would be a proliferation of resold service offerings at rates well below any reasonable measure of cost of providing service").

or content of the information as sent and received." 47 U.S.C. § 3(43). LEC offerings such as voice mail and calling cards do not meet this definition and therefore are outside the Act's resale requirements.[22]

AT&T also complains that Bell Atlantic is "conditioning the resale of its local service on AT&T's agreement to resell Bell Atlantic's operator services." AT&T Br. at 81, n.123. This is completely false. Bell Atlantic has never stated that AT&T must resell Bell Atlantic's operator services when it resells Bell Atlantic's dial tone line. Bell Atlantic will allow AT&T to resell Bell Atlantic's dial tone lines while Bell Atlantic continues to provide its operator services. The real issue is that AT&T does not want to resell Bell Atlantic's retail services as they are currently offered. Instead, AT&T wants Bell Atlantic to reconfigure its dial tone line service to reroute "O-" and "O+" traffic to AT&T's platform.[23] The services that AT&T wants to resell are not retail services that Bell Atlantic currently provides to anyone. AT&T's request, therefore, is inconsistent with the statutory requirement to offer for resale only a "telecommunications service that the carrier provides at retail . . . ." 47 U.S.C. § 251(c)(4).[24]

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22 AT&T complains that Bell Atlantic refused to disclose the services that it will make available for resale. AT&T Br. at 77 n.111, 87 n.133. Bell Atlantic has repeatedly stated that it will make available for resale all retail telecommunications services as required by the Act and that it is currently compiling a comprehensive list of those services for each of its jurisdictions. Bell Atlantic also offered to answer AT&T's questions regarding resale of any specific services. The only specific service that AT&T has inquired about is Centrex and Bell Atlantic responded that all Centrex services would be available for resale.

23 It is unclear whether AT&T's request is technically feasible at this time or whether AT&T is willing to compensate Bell Atlantic for reconfiguring its retail services.

24 See NCTA Br. at 57 ("an [incumbent LEC] should not be required to provide customized resale services (e.g., residential or business exchange access service without operator or directory assistance"). CompTel Br. at 90 ("the carrier is not free to design its own local services, as it simply resells the retail services offered by the [incumbent LEC"].

CONCLUSION

The Commission should adopt rules consistent with the foregoing.

Respectfully submitted,

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Before the
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In the Matter of	)	
	)	CC Docket No. 96-98
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	

Declaration of Alfred E. Kahn and Timothy J. Tardiff

Dated: May 30, 1996

I. INTRODUCTION

1. The purpose of this submission is to respond to certain arguments made in the comments on the pricing of inputs sold by incumbent LECs to other carriers—unbundled network elements, termination of local traffic, toll carrier access and the sale of retail services for resale—by expounding what we see as the main applicable economic and regulatory principles. In this commentary, we are guided by two major considerations.

2. The first is the overriding purpose of the Act, to establish "a pro-competitive, de-regulatory national policy framework" for the telecommunications industry. We agree unreservedly with the Commission's own interpretation of that purpose, namely, that it

> is not to ensure that entry shall take place irrespective of costs, but to remove... barriers...that inefficiently retard entry, and to allow entry to take place where it can occur efficiently. (NPRM, par. 12)

3. The second is a recognition—clearly reflected in the Act and in the NPRM—that encouragement and achievement of efficient competition must take into account the fact that the industry is in transition from a regime of comprehensive regulation. Entirely apart from considerations of equity, the promotion of efficient competition itself requires—and the Act itself explicitly provides for—a reconciliation of that regulatory heritage with the ultimate goal of deregulated competition.

II. EFFICIENT PRICING OF INPUTS MUST RECOVER MORE THAN TSLRIC—AND TSLRIC MUST BE CORRECTLY DEFINED

4. Some parties here—notably the interexchange carriers and some competitive LECs (CLECs)—have flatly asserted that the rates for inputs provided by the LECs to other carriers should recover only "direct economic cost," which they equate to total service long-run incremental cost, or TSLRIC. These parties generally define TSLRIC as the total ongoing and future costs that would have to be incurred to provide a given service or network element using a hypothetical network that might be constructed today by a carrier starting with a completely blank slate (which we will therefore refer to as TSLRIC-BS). In view of their contention also that prices equal to TSLRIC already "include a reasonable profit," it is clear that they would permit no contribution over and above TSLRIC to be included in the rates for unbundled

network elements and terminations. In our view, that position is incorrect both on purely economic grounds and, in the present situation, in terms of good regulatory policy.

5. The failure to include contribution above TSLRIC-BS would exclude from recovery at least four other categories of costs:

a. Ongoing costs or burdens asymmetrically borne by the LECs but not their challengers by virtue of such public utility obligations as providing services—particularly basic telephone service to residential customers and particularly in rural areas—at rates below economically efficient levels, the consequent revenue deficiencies of which have heretofore been made good by contributions incorporated in the prices of such services as interexchange access, toll and vertical services such as local usage and custom calling;

b. ongoing costs of the LECs to the extent their actual, prudently incurred incremental costs of providing individual services or unbundled network elements exceed those of a hypothetical network;

c. ongoing fixed and common costs, including overheads, such as, in industries characterized by widespread economies of scale and scope, efficient competitors must recover in charges above incremental costs if they are to continue in business; and

d. sunk costs, taking the form of a return on and of assets whose costs have not yet been fully recovered.

6. The ongoing costs of ubiquity. The Commission requires no reminder of the first of these cases for permitting LECs to incorporate a markup above incremental costs in their charges to competitors for use of their essential facilities. It has historically clearly recognized the underpricing of basic residential service and corresponding overpricing of such services as interexchange access and toll, which it took a substantial step to redress by imposing the subscriber line charge on end-users. And it has also recognized that so long as these rates are not fully rebalanced those distorted charges justify incorporation of a markup (such as its own

carrier common line charges) in the LECs' switched carrier access charges—a case applicable equally to the their charges for unbundled network elements.[1]

7. The parity of the cases for incorporating a contribution in the LECs' charges for the basic network elements, on the one side, and (interexchange carrier) access, on the other, is not one of logic alone; the two are inextricably linked functionally as well. If there is continued legitimacy in incorporating a markup in the latter charge—and we believe there is until the LECs' prices can be fully rebalanced to recover any necessary contribution currently provided by access charges and other rates—it becomes essential to incorporate it also in the charge for network inputs. Otherwise, the IXCs could readily bypass the FCC-legitimized carrier access charges by buying all the requisite network inputs at incremental cost, in this way bypassing the LECs' initiation and termination of interexchange calls

8. The basic fallacy of the proposed TSLRIC-BS standard. Some commentors have insisted that the proper basis for the pricing of LEC services sold to competitors (and also for calculating any required universal service subsidies) is the TSLRIC—the total forward-looking cost of a hypothetical, ideally efficient system built by either the incumbent or some other carrier starting with a blank slate, using the most efficient current technology. In our judgment, the only correct basis is the TSLRIC of the incumbent telephone companies themselves. This is for so the following reasons:

a. The rationale of its proponents is that TSLRIC-BS is the level to which competition would drive prices. They are mistaken In a world of continuous technological progress, it would be irrational for firms constantly to update their facilities in order completely to incorporate today's lowest-cost technology, as though starting from scratch: investments made today, totally embodying today's most modern technology, would instantaneously be outdated tomorrow and, in consequence, never earn a return sufficient to justify the investments

[1] Presumably this deficiency in basic residential service rates could be made good by the constitution of a separately-financed universal service fund; but as the NPRM recognizes, the later statutorily-scheduled completion of the universal service reform proceeding clearly suggests, as we would strongly affirm, the legitimacy of the LEC's continuing to recover the requisite contribution in their charges for inputs during the transition period (par. 145).

in the first place. For this reason, as Professor William J. Fellner pointed out many years ago,[2] firms even in competitive industries would systematically practice what he calls "anticipatory retardation," adopting the most modern technology only when the progressively declining real costs had fallen sufficiently below currently prevailing prices as to offer them a reasonable expectation of earning a return on those investments over their entire economic life. In consequence even perfectly competitive prices would not be set at the level of these (totally) current costs—unless, to put it another way, the calculated costs of the new plan included an extremely high rate of return and of depreciation, in reflection of the exposure of any such investments to costs and prices progressively declining in real terms over their life.

b. The Commission is not writing on a blank slate. The LECs already have a ubiquitous network serving their entire franchise territories and are constantly providing service to new customers within those territories. The economic purpose of having prices set at incremental cost is to inform buyers—and make them pay—the cost that society will actually incur or would actually save in these several circumstances: these can only be the costs of the supplier whose prices are being set.

c. The proponents of the TSLRIC-BS standard clearly imply that it will provide a cost basis for LEC charges lower than their own TSLRICs—that is, that the latter costs embody inefficiencies that would be avoided by a hypothetical totally new network. We have already cited reasons for doubting that inference: indeed, if that factual premise of the TSLRIC-BS proponents were valid, efficiency would require that the incumbent company be totally replaced, instantaneously, by a wholly new venture or scrap its entire existing plant and start over from the ground up. For this very reason, considerations of economic efficiency <u>require</u> that the prices charged to competitors be based upon the LECs' <u>actual</u> costs; to the extent competitors can provide these inputs more efficiently than the LECs, this will fully preserve their incentive to do so and thereby promote efficient facilities-based entry. In any event, it has always been their actual costs that the incumbent LECs have traditionally been entitled to

[2] William J. Fellner, "The Influence of Market Structure on Technological Progress," in Amer. Econ. Ass'n. *Readings in Industrial Organization and Public Policy* (Homewood: Richard D. Irwin, 1958), as described also in Kahn, *The Economics of Regulation*, Vol. 1, pp. 199-20, note 91.

recover—if not fully in rates for underpriced services, then in the regulatorily-approved inefficiently high rates for other services, including carrier access. And where states have moved from rate base/rate of return to price cap regulation, they have typically set the initial caps and indexation formulas in such a way as to give the regulated companies a fair opportunity to recover their actual prudently incurred costs, provided they achieve the productivity goals implicit or explicit in the indexation formulas.

d. Proponents of the TSLRIC-BS standard contend that basing prices and revenue recoveries on the actual TSLRICs of the incumbent LEC's imposes on consumers the costs of inefficient existing network configurations and operations. As critics of traditional cost-plus regulation, we cannot deny the likelihood of inefficiencies under such schemes. On the other hand, assertions about their existence by critics of the LECs (1) are pure assertion; (2) ignore the fact that in the majority of states the LEC's are now subject to price cap regulation—and have been for some five years in the federal jurisdiction—which has given them strong incentives to improve their efficiency; and (3) in any event, if, in departure from past regulatory practice, costs are to be disallowed on grounds of inefficiency, it surely would be up to the state regulators to do so.

e. Finally, it is prices based on the actual incremental costs of the incumbent LEC that are the proper target for comparison by rivals contemplating entering the market. If, as its proponents seem to assume, the TSLRIC-BS were lower than the TSLRIC of the incumbent LEC, basing the LEC's charge for network elements—below its own costs—on the former measure would offer rivals a smaller reward for deploying their own facilities than the superiority of their costs would justify. If, instead, the TSLRIC of the incumbent LEC were lower than TSLRIC-BS (<u>correctly measured</u>, as we have explained, to take into account future obsolescence), then LEC charges based on the latter measure would overcompensate entrants—that is to say, would encourage entry of firms imposing incremental costs on society greater than are imposed by the incumbent suppliers.

9. <u>The recovery of joint, common and overhead costs</u>. The Commission explicitly recognizes the third possible justification we have listed for incorporating a markup in these several charges for unbundled elements and call terminations—the fact that in industries characterized by ubiquitous economies of scope and scale, giving rise to costs common to or

shared by a variety of services or products, prices for each of them set at bare incremental cost will in the aggregate fail to recover total costs, even when the latter are defined in purely economic (ongoing and future) terms (par. 129).

10. AT&T purports to refute this case for a markup above incremental cost by asserting that such network elements as loops, switching, transport and signaling are discrete physical elements of local networks, which, if costed separately, would leave "few if any shared facilities costs" that would not be recovered in their TSLRIC prices. That is to say, without denying that charges for such end services as toll or local calling at bare incremental costs would fail to recover such costs common to those two services as switching and transport--the sharing of which among such services is the primary source of economies of scope—AT&T is saying that there are virtually no such costs shared by the several network elements that LECs would be required under the new law to offer and therefore no problem of charges at bare TSLRIC failing to recover them. We are not in a position to appraise that factual contention; but we point out that even if it is correct, it fails to respond to the (a) undeniable presence of economies of scope among the LECs' own retail services; (b) the necessity of their recovering those costs—confining our attention to strict economic costs—via varying markups above incremental costs in their charges for those services--just as AT&T does itself[3] and (c) the certainty that if competitors such as AT&T were free to acquire network elements at bare incremental costs, they could confidently be expected to use those loops to compete away LEC sales of the high-margin services and so undermine the rate structure that enables the incumbent companies to recover their total costs, as we observe more fully at pars. 7 and 19.

11. There is another way in which a requirement that LECs sell unbundled network elements to their competitors could distort competition --this time competition with facilities-

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[3] AT&T uses its network to produce and sell services to high- and low-volume users of long-distance service. The latter pay rates several times incremental cost; large users pay rates much closer to incremental cost. AT&T recovers the costs shared across these services (low and high volume customers) on the basis of what the respective markets will bear. This example directly contradicts the assertion of Professors Baumol, Ordover and Willig that "prices in competitive markets converge to incremental cost" (par. 12). While this statement describes hypothetically *perfectly* competitive markets, it certainly does not describe telecommunications. For example, when AT&T's incremental cost (including access charges) was about $0.07 per minute, its average revenue per minute was about $0.18.

based third party rivals. There will inevitably be a great deal of cost averaging in measures of TSLRIC for individual network elements: loops as a group presumably share the costs of poles, trenching, loop testing equipment and excess loop capacity to allow for growth (such as the growth in demand that might result from entry of competitors using unbundled loops). Presumably those shared costs could be fully recovered by charges equal to average TSLRIC—that is to say, by charges embodying a proportionate share of those shared costs. If then an LEC were required to sell those elements to AT&T—let us say—at that average TSLRIC and were in addition subjected to an imputation rule, requiring it to impute that average to its own retail services, in order to ensure competitive parity, it could then be undercut by a facilities-based competitor that, for competitive reasons, chose to charge retail prices that recovered a lower-than-average markup on sales in particular markets. This is by no means a remote possibility: AT&T of course obtains lower markups on toll service to high-volume than to low-volume users. Yet an incumbent LEC would be precluded from meeting the competition for such customers from CLECs, who would not be bound by the cost-averaging rule implicit in AT&T's demanded TSLRIC pricing of network elements. The mixing together of average cost pricing in the mandated charge by LECs to some competitors for unbundled network elements and market-based pricing such as is routinely practiced by facilities-based competitors would thus be another source of distortion.

12. The recovery of sunk costs. The NPRM explicitly recognizes also the possible legitimacy of a markup contribution to the recovery of the sunk costs of incumbent LECs—item (d) on our list above—in par. 144. The answers to the questions it raises there, we suggest, are best supplied by the state regulatory commissions. It is they that have determined the revenue entitlements of the several LEC's under their jurisdiction, in conjunction with the FCC, prescribed the depreciation policies that have determined the residual amount of embedded costs legitimately recoverable and specified the mechanisms for their recovery—whether, as has been the historical practice, in cost-of-service, rate base/rate of return proceedings or, more recently, in determining the structure of "just and reasonable rates" serving as the beginning point for price caps, rate freezes, indexations and other kinds of incentive regulation. And it is their responsibility to ensure that the markups above incremental costs that they allow are no more than sufficient to recover these costs that constitutes the full

response to the demagogic contention by Professors Baumol, Ordover and Willig that such markups would "lock in the ILECs' monopoly profits..." (par. 23).

13. It would be difficult to measure the costs (in the form of the disincentive it creates for the LECs to invest futher in their networks and the higher costs of capital in the future if investors are to make their funds available) of any such denial by government regulators of the entitlement of investors to recovery of costs prudently incurred and recoverable under previously prevailing regulatory policies. These costs are real, however, and cannot be ignored. Entirely apart from the inescapable question of equity that such denials would raise, it is a reasonable economic (as well, perhaps, as constitutional) question whether a market system can survive if governments feel free opportunistically to change the rules of the regulatory game at the expense of investors, when it is temporarily to the advantage of consumers to do so. Indeed, AT&T's lead witness here has suggested that regulated companies must be allowed to recover their historical costs during the transition to competition for these very reasons.[4]

14. It would indeed be preferable on grounds of pure economic efficiency if these several justified costs were made good not by markups in the charges for inputs but in the prices of final products or services only. The reason is that markups above incremental cost in the prices of inputs introduce the possibility of productive inefficiencies: so long as the demand for these inputs is not totally inelastic, the markups will result in some inefficient substitution of other inputs (with higher incremental costs) for the marked-up ones.

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[4] On page 10 Baumol, Ordover and Willig state: "Book costs are unlikely to reflect economic costs accurately, and basing the prices of network elements on book cost would be dangerously counterproductive." (See their many other such statements e.g., in pars. 5, 7, and 8.)

To the extent that book costs exceed forward-looking costs, the difference between the two measures would be "stranded." Unless these witnesses have in mind some vehicle for recovery of historical costs other than the prices of inputs sold to competitors, their position here is starkly inconsistent with the position that Professor Baumol has taken in the electric industry. For example, in association with Professors Joskow and Kahn, he has asserted forthrightly: "A failure now of policy makers to ensure the companies at least some reasonable level of recovery of their regulatorily approved costs in any transition to competition would leave investors, in effect, with part ...of the value of their property expropriated by the change in the rules of the game. "The Challenge for Federal and State Regulators: Transition from Regulation to Competition in Electric Power," December 9, 1994, p. 34. Similarly, in collaboration with Sidak, he said: "Failure to allow recoupment of stranded costs will clearly violate this implicit regulatory compact. And aside from inequity, the failure to recoup could also deter capital investment." "Stranded Cost Recovery: Fair and Reasonable," *Public Utilities Fortnightly*, May 15, 1995, p. 22.

15. So long, however, as governments or regulatory agencies (1) feel bound, as we believe they should, to respect their commitments to afford public utility companies a reasonable opportunity to recover their legitimately-incurred costs, past and ongoing, and (2) are unwilling to do so by rebalancing final product or service prices, markups on inputs may be the best method available—at least during the interval (as brief as possible) over which high book values are written down and either rates are rebalanced or alternative methods of universal service funding installed.

16. The meaning of "a reasonable profit." We interpret the provision of the Telecommunications Act that charges for network elements must be based on cost but may include a "reasonable profit" as, at the very least, consistent with the foregoing statements of economic and regulatory principle, if not explicitly endorsing them. Some parties have argued, on the contrary, that the statutory standard is satisfied where the prices of inputs provided to other carriers are priced at bare TSLRIC, on the ground that economic cost already includes a "reasonable profit."

17. Entirely apart from the justifications we have already provided for the recovery of contribution there are the following responses to these assertions:

a. The Act says that these charges must be "based on costs." This clearly does not mean that they must be equated to cost.

b. In strict economic terms, the requisite return on incremental investments that is indeed included in measures of LRIC is a cost—the cost of capital—emphatically not a "profit."[5] In strict economic logic, therefore, the permissibility of incorporating a "reasonable profit" contemplates charges above pure LRIC or TSLRIC.

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[5] A typical statement of this elementary proposition is, from Professor Paul A. Samuelson's standard and celebrated text:

> We have already encountered...examples of true economic costs that do not show up in business accounts. The return to an owner's effort, the normal return on contributed capital to a firm, a risk premium on highly leveraged owner's equity—these are all elements that should figure into a broadly conceived set of economic costs but do not enter business accounts. An economist would insist that the wages of management or the return on contributed capital are real economic costs: They use real, live managers and tangible capital. Samuelson and Nordhaus, *Economics*, Twelfth edition, New York: McGraw-Hill, 1985, p. 469.

c. "Profit" has no economic meaning as applied to the price or revenues from any single service—or network element—supplied in common with other services. It has economic meaning only as the difference between total revenues and total costs (including in the latter the cost of capital) for an entire firm or accounting entity.

d. In the presence of economies of scope and scale, the sum total of revenues flowing from prices uniformly set at TSLRIC will—as the NPRM explicitly recognizes (par. 129) and as we have already pointed out—fall short of total economic costs. This is precisely why second-best pricing, with markups above TSLRIC, are required.

e. The costs of regulatorily-prescribed underpricing of basic residential service would clearly have to be recovered if the LEC were to show a profit in purely economic terms: if the prices of some of its services are prevented by regulation from recovering their incremental cost, firms will not earn a profit if all other charges are at incremental cost.

f. Finally, if the "reasonable profit" that the Act permits is intended to be understood in traditional accounting terms, rates would have to recover book as well as purely economic costs. These are, after all, the costs that the carrier actually has incurred in order to provide service.

18. The relationship between charges for unbundled inputs and the present rate structure. We have already cited the fact that the present rate structures of the LECs embody long-standing regulatory policies of deliberately pricing some services markedly above incremental costs in order to hold the prices of other services either at or below those costs and the FCC's acknowledgment of the consequent constraint on it to permit the LECs to incorporate a carrier common line charge and other public policy rate elements in their access charges to long-distance carriers. It has of course not been mere coincidence that the former services—incorporating these public policy add-ons—are the very ones that have become subject to increasing competition.

19. In these circumstances, the NPRM's "tentative conclusion that carriers can request unbundled elements for purposes of originating and terminating interexchange toll traffic" (par. 163) could not be intended to give them the right to obtain those elements at bare cost unless the Commission were intending now to abandon the existing access charge regime. If the long-distance carriers were now free to purchase and assemble all the network elements necessary to

originate and terminate their calls at incremental cost. they could and would circumvent those charges and undermine the present balance between over- and under-priced retail services. by reducing the market prices of the former.

20. The NPRM poses the same question in another way (par. 85): Do the unbundling requirements in effect provide entrants with an alternative way to "resell" the various retail services of the incumbent LECs, apart from the specific statutory rules for resales? If a competitor could order and combine network elements at bare incremental cost in such a way as to offer the same or similar retail services as it is entitled to purchase under the resale provision, there would be no point to the resale provision as it might apply to retail services (such as toll) that are compensatory or supercompensatory.

21. Other things equal. such a charge for inputs would conduce to economic efficiency, for reasons we have already expounded. But until the pertinent rates are fully rebalanced or some alternative method devised for supplementing revenues from the underpriced services. the recommendation of the IXCs here with the respect to pricing of unbundled inputs would undermine long-established regulatory policies. including the FCC's own carefully balanced interexchange carrier access charges.

III. RECOVERY OF THESE COSTS WOULD NOT PRECLUDE EFFICIENT COMPETITION

22. The final argument of the parties who insist that the rates for unbundled network elements or other inputs provided to competitors must be set at TSLRIC is that any rates in excess of that level would impede competition. What these parties fail to recognize is that the incorporation of markups in the charges for inputs has in itself only an indirect bearing on whether efficient competitors are able to challenge the incumbent firms.[6]

23. <u>The rules of competitive parity</u>. The relationship between the charges for inputs and the opportunities for efficient competitive entry—it is essential to understand—has two vital aspects. One—which is <u>totally ignored by the comments</u>—is that in the present circumstances in the telephone business. markups in the charges for essential LEC network services are

[6] We explain this indirect effect at note 8. below.

necessary in order to ensure that competition is efficient. So long as the present regulatorily-imposed rate structures of the LECs, reflecting the historical practices of pricing basic residential service residually and averaging costs geographically, necessarily embody charges for some services above incremental costs, there is absolutely no assurance that the competition that the latter rates have attracted—and continue to attract—is efficient. Those rates indisputably create an opportunity for entry by rivals less efficient—that is, with incremental costs higher—than the incumbents. We see no recognition in the comments of the necessity for markups to equalize the competition that would otherwise be to the disadvantage of the incumbent LECs.[7]

24. The other side of the coin, assertedly, is of course the one emphasized by the proponents of setting rates at incremental cost—that if rates are too high, efficient competitive entry may be deterred. This second view, we respectfully suggest, reflects a failure to comprehend the simple but absolutely fundamental fact that the critical determinant of the opportunity for competitive entry is not the level of the charge entrants pay incumbents for an essential input but the margin between it and the prices of the competitive services.[8] Consequently, a pricing method that permits markups in the charges for network elements or other inputs could not in itself constitute a barrier to efficient entry.

25. Essential to the conception of an entry barrier is that it confer on incumbents a competitive advantage over would-be rivals. As Professor George J. Stigler put it:

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[7] To be sure, that competition could be equalized also—and inefficient entry discouraged—by the incumbent companies reducing those subsidizing rates down to incremental costs. But that would involve a renunciation on their part of their historical entitlement to recovery of those unique costs and a violation of their obligations to their own shareholders. The more likely consequence of giving them freedom to reduce those rates would be that they would set them at levels holding an artificial umbrella over less efficient competitors, so long as it appeared that the benefits to their shareholders of retaining the margins outweighed the consequent losses in market share.

[8] The level of the charges does, because of the elasticity of demand for the final products, determine the size of the total market and therefore the number of minimally efficient competitors that it will support. This is one reason why that absolute level is by no means a matter of indifference; and it argues, specifically, that the level be subject to regulatory determination that such markups as they contain are no more than necessary to fulfill regulatory obligations to the incumbent companies and to guard against inefficient entry that would otherwise be attracted by the inflated prices of the end services. Transferring the burden of recovery of these contributions from those end service prices to the charges to competitors for essential inputs in no way constricts the market additionally, however.

> a barrier to entry may be defined as a cost of producing...which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry.[9]

The markups above incremental cost in the charges to competitors for network elements would confer no such advantage. Far from imposing a cost on would-be rivals that would not be borne by the incumbents, permitting the latter to recover embedded and ongoing costs associated with their unique service obligations would restore a balance in a situation in which it is the incumbents that have incurred and/or continue to incur costs that are not borne by their challengers.

26. In the most famous case involving an asserted use of market power in the supply of an essential input to deny rivals a fair opportunity to compete, the antitrust suit under Section 2 of the Sherman Act against the Aluminum Company of America, the condemnation of Alcoa for exclusionary practices directed against competing fabricators depended not to the slightest extent on the level of its charge for the ingot that they had to purchase from it. It was based, instead, on the courts' finding that the margin between Alcoa's charges for ingot and for fabricated products—within which competing fabricators had to survive—was narrower than Alcoa's own incremental costs of fabrication. The rules of competitive parity explicitly preclude that possibility. By requiring—other circumstances being equal—that the prices charged for the competitive services by incumbent LECs be high enough to recover both the charges for the basic network elements that their rivals pay and their own incremental costs, they ensure that competitors with incremental costs equal to or lower than those of the incumbent will indeed be able to enter and survive.

27. The inapplicability of competitive parity rules to non-compensatory services. As the NPRM clearly recognizes, application of such a competitive parity rule to the relationship between (wholesale) charges for unbundled inputs and the retail prices of services that are priced below cost is unnecessary to permit efficient competition. This is so because the

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[9] The Organization of Industry (Homewood: Richard D. Irwin, 1968, p. 67. See the fuller discussion in W. Kip Viscusi, John M. Vernon and Joseph E. Harrington, Jr., *Economics of Regulation and Antitrust*, 2d ed., Cambridge: The MIT Press, 1995, p. 159; see also pp. 158-62

unbundled inputs give competitors and LECs alike access to the retail market not just for the underpriced services, but also for the

> relatively overpriced revenues for toll service, interstate access, vertical features, and other offerings to make up for the underpricing of basic residential local exchange service. (par. 186)

It correctly recognizes also the additional objections to application of an imputation rule in these circumstances—which would "require[s] that unbundled elements be priced below cost"—namely (1) that (unless and until some competitively-neutral method were installed for providing the subsidies) the competitors would in those circumstances be enabled to undermine the regulatorily-prescribed rate structure making possible the underpricing of the politically sensitive services, and (2) "if unbundled elements were priced at less than cost, then efficient facility-based entry would be deterred...." (par. 186)

28. <u>The rule governing sales for resale and efficient competition</u>. We strongly endorse the Act's resale provisions: by enacting the principles of competitive parity,[10] they invite efficient competition in the retailing of the particular services resold, with the outcome determined by comparative efficiency in performing the retailing functions. Where the resold services are priced non-compensatorily, however, these requirements pose the same threat of undermining regulatorily-prescribed rate structures and discouraging facilities-based competitive entry as would a requirement that the relationship between the prices of unbundled network elements and those retail prices satisfy the imputation or competitive parity tests. For this reason, as the NPRM recognizes, the statute permits state commissions, subject to FCC regulations, to place restrictions on resales of such services to categories of customers not eligible for the subsidized retail rates. Unless and until the relevant rates are rebalanced, therefore, respectively down closer to and up to compensatory levels, or competitively-neutral sources of funding developed to subsidize rates that continue to be held below incremental costs plus an efficient markup,

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[10] Those principles require that the incumbent's retail price for the competitive services (these would be the prices for fabricated aluminum products in the <u>Alcoa</u> situation) must be no lower than the wholesale charge for the essential input (read: aluminum input) plus its incremental costs of performing the retail function (read: Alcoa's fabricating costs). The resale rule says that the wholesale price of the competitive service must be no higher than the retail price minus the avoided costs of retailing (i.e., Alcoa's fabricating costs). These two requirements are identical

such restrictions on resale make good economic sense and, for the reasons the Commission itself supplies, deserve to be incorporated in any rules adopted at the Federal level.

29. So far as services whose retail prices are compensatory are concerned, manifestly no such restrictions on the markets in which they may be resold are either necessary or desirable. On the other hand, precisely because these services will be selling at both retail and therefore also at wholesale at prices in excess of incremental costs, the resale provisions of the Act provide further refutation of the demand by the interexchange carriers that the capabilities for providing various retail services be provided to them in the form of unbundled network elements priced at bare incremental cost. As we have already pointed out, if that demand were to prevail, it would make the resale provisions of the Act irrelevant. Would-be challengers would always find it to their interest to purchase and assemble all the necessary inputs themselves, at incremental costs, rather than avail themselves of the more costly resale option that provides contribution to help cover the LECs' total costs. From the standpoint of ensuring both efficient competition and regulatory consistency, the correct prescription would be to require the IXCs to purchase these retail services under the pricing standard in the resale provision.