

expiration of LEC amortizations of depreciation reserve deficiencies.²⁰³

AT&T's argument is misplaced. It fails to recognize that the Commission also excluded from exogenous treatment additional costs that the LECs would incur to implement new and continuing equal access obligations (such as for pay phone providers) which were not embedded in the initial equal access rates.²⁰⁴ Having treated all equal access costs as endogenous, including those incurred after the start of price caps, the Commission cannot now treat the expiration of the amortization of EANR costs as exogenous.²⁰⁵

MCI asks that the Commission delete from its list of exogenous costs, tax and "other" exogenous changes which the Commission has discretion to allow.²⁰⁶ The Commission has already rejected an argument by MCI that increased utility-

²⁰³ AT&T Comments, p. 48.

²⁰⁴ See Order on Reconsideration, CC Docket No. 87-313, supra at ¶¶ 65-66. ("We decline to carve out exceptions to our requirement that equal access costs be treated as endogenous.")

²⁰⁵ This principle was recognized just five days ago in 1994 Annual Access Tariff Filings, Memorandum Opinion and Order Suspending Rates, DA 94-706, released June 24, 1994, ¶ 54. The Order further stated that the "exogenous treatment of the EANR amortization would undercut the Commission's goal that the rates permitted under the price cap indices be driven by competition and market economies." Id. at ¶ 56.

²⁰⁶ MCI Comments, p. 43.

specific taxes should be denied exogenous treatment absent a specific showing that the tax change is not reflected in the GNP-PI.²⁰⁷ MCI presents no new arguments on this issue.

MCI also argues that absent waiver, exogenous cost treatment should be limited to "Commission-ordered cost changes that shift costs between the interstate and intrastate jurisdictions or between regulated and non-regulated operations."²⁰⁸ As an example, MCI states that had its proposal been in place, "exogenous cost treatment would not have been extended to regulatory fees and costs associated with the Telecommunications Relay System."²⁰⁹ MCI claims that other segments of the telecommunications industry also pay fees, and "they have no mechanism for automatically passing them through to their customers."²¹⁰

Firms like MCI do not have a "mechanism" because they do not need one. MCI's prices are not constrained as LECs'

²⁰⁷ See Bell Atlantic Telephone Companies, Tariff FCC No., Transmittal Nos. 492 and 501, 7 FCC Rcd 2165 (1992).

²⁰⁸ MCI Comments, p. 45. OCCO goes further claiming that all cost changes are "endogenous." OCCO states, however, that if the Commission retains exogenous cost treatment, "it should be limited to material factors impacting only the LEC" OCCO Comments, p. 10.

²⁰⁹ MCI Comments, p. 47.

²¹⁰ Id. MCI correctly observes that it would be difficult for the Commission to administer its proposed "economic cost" criterion for determining exogenous cost treatment. See id. at 45, n. 78.

are under price caps.²¹¹ MCI and the other IXCs can, and do, raise prices to recover new costs.²¹² Because price cap LECs cannot increase their prices to recover additional costs (except to the extent that prices are below the cap), it is critical that LECs continue to be allowed to adjust their price cap indices to reflect all costs that are beyond their control.²¹³

Finally, AT&T argues that the Commission should require exogenous cost treatment associated with the sale of

²¹¹ The fact that MCI operates in what it might consider to be a "competitive" market, does not constrain MCI's ability to pass on industry-wide cost increases that are beyond its control. This is so because all firms in the market will likely raise their prices accordingly. (When crude oil prices increase, consumers see an almost immediate increase in the price of gasoline even though the retail gasoline business is highly competitive.)

²¹² This is underscored by the recent "lock-step" price increases in the IXC industry. For example, AT&T proposed increases to its rates to reflect, among other items, the impact of the Commission's new regulatory fees. (See AT&T 1994 Annual Filing, letter dated May 17, 1994, from M.F. Del Casino, AT&T's Administrator - Rates and Tariff, to William F. Caton, Acting Secretary of the Commission, Attachment, pp. 9-10.) MCI and Sprint have been quick to match AT&T's increases. See *Business Communications Review*, "Network Services Pricing Update," February 1993, p. 16.

²¹³ MCI states that the Commission should not grant exogenous cost treatment for SFAS-106 costs because it does not meet MCI's new exogenous cost "standard." MCI Comments, p. 46, n. 79. USTA notes that AT&T treats certain OPEB-related expenses, such as SFAS-106 costs, as exogenous. See *Telecommunications Reports*, "AT&T Letter Details Access Expense Reductions," May 30, 1994, p. 17. As noted above, MCI has generally followed AT&T's pricing patterns and, thus, is able to recover its own SFAS-106 costs.

exchanges.²¹⁴ Specifically, AT&T states that where a LEC selling a high-cost exchange is subject to price cap regulation, it should reflect the decrease in its overall costs through an exogenous change to its price cap indices.²¹⁵ Similarly, MCI states that in granting a waiver of its "all-or-nothing" merger and acquisition rule, the Commission should "require LECs either to demonstrate that there will be no effect on interstate rates as a result of the sales, or to take exogenous adjustments to offset the increases."²¹⁶

As USTA stated in its comments (p. 93), no changes are necessary in the existing price cap rules covering the sales and trades of exchanges. The exogenous cost adjustments proposed by AT&T and MCI could unnecessarily discourage transactions that would otherwise have substantial public interest benefits.²¹⁷ Moreover, the sale and swap of exchanges between LECs raise complex issues concerning universal service funding (USF) and the impact on other cost

²¹⁴ AT&T Comments, p. 46.

²¹⁵ Id. at 51.

²¹⁶ MCI Comments, p. 61.

²¹⁷ USTA Comments, p. 93; see Comments of the National Telephone Cooperative Association, pp. 9-10; Comments of the Organization for the Protection and Advancement of Small Telephone Companies, p. 3. Even MCI recognizes that these transactions often are supported by "sound public interest reasons." MCI Comments, p. 59.

recovery mechanisms.²¹⁸ USTA believes that these issues are best addressed in the upcoming proceeding on USF.²¹⁹ In the interim, the Commission can address specific issues raised by sales and swaps of exchanges on a case-by-case basis.

B. Service Quality and Infrastructure Reporting Should Not Be Made More Onerous.

Although it concedes that "overall service quality does not appear to have suffered under price cap regulation,"²²⁰ the Tele-Communications Association (TCA) proposes several significant changes to existing service quality and infrastructure reporting. Specifically, TCA asks that LECs be required to list in their quarterly service quality reports "any wire center that falls within the lowest ten percent of actual performance" in any of several identified service categories for three consecutive quarters.²²¹

The Commission should reject TCA's proposal. Indeed, the Commission recently rejected a similar proposal by TCA for disaggregated service quality reporting by wire center, concluding that the reported data "would place on the filing carriers and on Commission resources a burden that could not

²¹⁸ Among other issues, USTA disagrees with MCI's statement that the acquiring LECs receive windfall profits from increased DEM-weighting and USF payments. MCI Comments, p. 61.

²¹⁹ See USTA Comments, p. 94; Ad Hoc Comments, p. 32.

²²⁰ TCA Comments, p. 2.

²²¹ Id. at 7.

be justified."²²² While the Commission indicated that it would revisit this issue in the instant proceeding,²²³ for the reasons set forth below, USTA sees no reason to depart from the Commission's earlier conclusion.²²⁴

TCA's service quality proposal would be excessively burdensome for both price cap LECs and the Commission.²²⁵ TCA has proposed 14 specific measurement categories for exception reporting at the wire center level. For each measurement category, LECs would have to (1) collect the necessary data, (2) calculate the specified measurement, (3) rank order the results by entity, (4) correlate the results with similar data from previous periods to identify the exceptions, and (5) prepare the relevant reports. These tasks would consume significant human and data processing resources that are not presently devoted to these efforts.

²²² See Policy and Rules Concerning Rates for Dominant Carriers, AAD 92-47, Memorandum Opinion and Order, 8 FCC Rcd 7474, ¶ 12 (1993).

²²³ Id.

²²⁴ USTA points out that there will always be a "lowest ten percent" under TCA's proposal, even if all wire centers are exceeding objective performance criteria.

²²⁵ Although the NPRM (Baseline Issue 7a) requests that commenters "submit data identifying the administrative and business costs associated with their proposals," TCA provides no such analysis other than the state, incorrectly, that its exception reporting proposal would be "minimally burdensome." TCA Comments, p. 8.

The Commission would also face a daunting task to process and digest the volume of data that LECs would file. USTA submits that the added burden is hardly justified by the anecdotal evidence that TCA offers in support of its service quality reporting proposal.²²⁶

TCA also asks that the infrastructure development reports "be modified to provide for exception reporting of individual MSA or non-MSA areas that lag behind in development" of such technologies as digital switching, ISDN capabilities, SS7 and fiber optic transmission.²²⁷ If an area falls within the lowest quartile in any technology category for more than four quarters, the LEC would have to disclose its plans for deploying the technology.²²⁸

TCA's call for additional infrastructure reporting by the price cap LECs is simply not justified.²²⁹ While USTA shares TCA's concern that rural areas do not become the "have nots" of the Information Age,²³⁰ the fact is that rural areas served by price cap LECs are not falling behind

²²⁶ See TCA Comments, pp. 6-7.

²²⁷ Id. at 8.

²²⁸ Id.

²²⁹ Again, there will always be a "lowest quartile" under TCA's proposal, even if all areas are exceeding objective infrastructure criteria.

²³⁰ See TCI Comments, p. 7.

urban areas.²³¹ For instance, overall, non-MSA areas have higher percentage of lines served by digital switches than MSA areas.²³² SS7 deployment is rapidly increasing in all areas, with non-MSA offices having access through tandem switches when it is not economical to deploy SS7 in individual end offices. ISDN deployment started slowly but has grown significantly in both urban and rural areas over the past two years. Fiber penetrations have also progressed rapidly, especially in the interoffice network. In short, the additional burdens on both LECs and the Commission that would be imposed by TCA's proposal is not justified by in the infrastructure development of rural areas served by price cap LECs.²³³ If anything, as LEC markets become more competitive, reporting requirements should be reduced.

VI. CONCLUSION.

For all of the foregoing reasons and those set forth in USTA's Comments, the Commission should adopt USTA's proposal for price cap and access reform and reject the arguments of

²³¹ USTA also notes that many non-price cap LECs serving rural areas are aggressively upgrading their facilities so that their subscribers will have access to the same modern telecommunications services that will be made available to urban customers.

²³² ARMIS 43-07 Report, year end 1992.

²³³ Pacific Bell suggests expansion of certain infrastructure reports. See Comments of Pacific Bell and Nevada Bell, p. 56. While these additional reporting requirements may be appropriate where the additional information is requested by state PUCs, these requirements should not be imposed on all LECs.

those parties which would frustrate the attainment of meaningful local access competition, and which would create severe disincentives to infrastructure investment, network efficiency and new service introduction.

Respectfully submitted,

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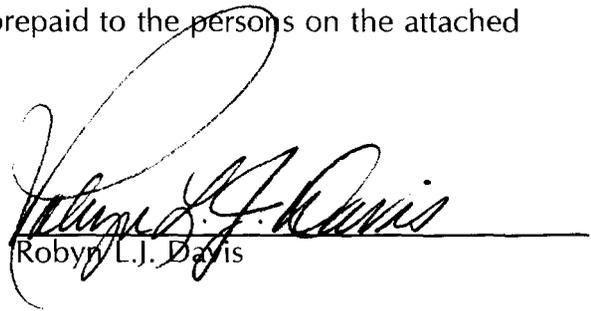
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June 29, 1994

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I, Robyn L.J. Davis, do certify that on June 29, 1994 copies of the Reply Comments of the United States Telephone Association were either hand-delivered, or deposited in the U.S. Mail, first-class, postage prepaid to the persons on the attached service list.


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ATTACHMENT 1

**Reply Report on LEC Price Cap Reforms:
United States Telephone Association**

by

Robert G. Harris

Reply Report on LEC Price Cap Reforms:

United States Telephone Association

by

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University of California, Berkeley, and
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June 24, 1994

Federal Communications Commission

Notice of Proposed Rulemaking

In the Matter of
Price Cap Performance Review
for Local Exchange Carriers
CC Docket No. 94-1

A. INTRODUCTION

The report I submitted with the May 9 comments of the United States Telephone Association (USTA) in this proceeding encouraged the Commission to adopt progressive policy reforms that will:

- *increase incentives for efficiency, innovation in new services, and appropriate investment in the National Information Infrastructure by local exchange carriers (LECs) and others;*
- *shift the risks of investing in advanced communications technologies from ratepayers to shareholders of service providers;*
- *ensure that all customers benefit from balanced, efficient competition in access services; and*
- *facilitate responsiveness by access service providers to customers' needs and market demand.*

The report recommended that the Commission could best achieve these policy goals and serve the nation's interests in a healthy, vibrant telecommunications sector by adopting LEC price cap reforms that would:

- *end earnings regulation (eliminate sharing, low-end adjustment and depreciation prescription);*
- *remove obstacles to LECs' new access service offerings;*
- *employ a productivity offset based on historical experience, with no additive factor;*
- *embody competitively neutral principles in the regulation of pricing and new service offerings; and*
- *incorporate transition mechanisms that facilitate adaptation to changing market conditions by allowing LECs increased flexibility as competition develops further.*

Unfortunately, but predictably, many parties filed comments urging the Commission to do, effectively, just the opposite: reduce incentives for LEC investment, efficiency and innovation and continue the anachronistic regulatory restraints that prevent LECs from meeting the access competition that is growing at a phenomenal rate. The prescriptions for "reactive" regulatory policies are unfortunate because they stand directly in the path of the National Information Infrastructure; at best they will slow the pace of change, at worst, they will impede it. The arguments for reactive policies are so predictable because they so directly benefit those who advance them: competitors who seek competitive advantage by advocating regulatory policies designed to inhibit real competition in access services.

This report, which supports the Reply Comments of the United States Telephone Association, explains why the Commission should reject the self-serving arguments of LEC competitors and adopt LEC price cap reforms in this proceeding. ***The rate of change is much too fast for the Commission to take a "wait and see" attitude, which inevitably means reacting to changes in the market after they have occurred. Instead, the Commission should implement adaptive policies that anticipate the direction of change and conform to those changes as they occur.***

The next four sections of this report address the need for, and benefits of, adaptive regulations and price cap reforms. Section B emphasizes the need for adaptive regulatory policies, given that change is occurring at an accelerating rate and the costs of regulatory lag are increasing. The policy reforms proposed by USTA have inherent adaptive qualities which would facilitate the transition to fully competitive telecommunications markets. Section C reviews the "effective competition" standards embodied in the Commission's cable rate regulations and explains why corresponding treatment of LECs is necessary. Section D briefly reviews the history of surface freight transport regulation -- a classic case of regulatory policies that caused great harm to the public interest by failing to adapt to evolving competitive conditions -- and warns the Commission against repeating those errors in local exchange and access competition policies. Section E explains how adaptive regulatory policies will promote the development of the National Information Infrastructure by providing the necessary incentives for private investment and by reducing the regulatory risks by adopting a transition strategy now for access competition policy.

Section F shows how the measures of competition used by cable operators, CAPs, and IXC's in their comments underestimate the true level of access competition faced by LECs. Section G is an attempt to update competitive conditions since my May 9 report. "Attempt" is the apt term because, before this report is filed, it too will be out of date, because competitors are emerging and expanding so quickly. Section H analyzes the comments of cable operators, competitive access providers (CAPs) and interexchange carriers (IXCs) from the perspective of "economic rent-seeking" by LEC competitors, whose policy recommendations are designed to promote the interests of competitors, rather than the public interest in competition. This section then contrasts the stark differences between the recent corporate actions and public statements of these competitors to their comments in this proceeding. At the same time that competitors are insisting that there is very little access competition, they are investing substantial sums, upgrading and expanding their networks and touting their bright futures. In addition, the extraordinarily rapid growth and market valuations of these companies belie their assertions here that they are at a substantial competitive disadvantage *vis á vis* LECs.

Section I counters the arguments of competitors that, before granting regulatory flexibility to LECs, the Commission should adopt numerous "transition conditions," many of which are not germane to this proceeding or are even beyond the Commission's authority. Section J articulates the importance of growing competition between LECs and cable systems operators for the regulation of each industry. Given the certain prospect of head-to-head cable-LEC competition in telecommunications and video delivery services, it is imperative that the Commission adopt consistent policies toward these two classes of competitors.

The next two sections address issues related to the price cap formula. Section K explains why the Commission should correct the productivity offset by lowering, not raising, it in the LEC price cap formula. Opponents' arguments that LECs are earning high profits is fallacious. LEC profits are not significantly higher than companies of comparable risk and competitive vulnerability. Moreover, reported LEC profits are upwardly biased, because they are based upon uneconomic depreciation rates. The productivity offset should be based solely on the historic rate of productivity gains. The additional .5% "consumer dividend" should be removed from the price cap formula. Through July 1, 1995, consumers have already received a "consumer dividend" of \$975 million, and will continue to receive an annual dividend of \$394 million from the embedded current rates. Section L explains that the common line adjustment formula should be eliminated because historic "total factor productivity" already incorporates the effects of growth.

Finally, Section M addresses the relevance of the "new institutional economics" to access reforms. The inferences and policy recommendations made by the Association for Local Telecommunications Services are directly at odds with the major theoretical findings of transactions cost analysis. As a complement to "structure-conduct-performance" analysis, transactions cost analysis fully supports liberalizing price caps and granting flexibility to LECs, and does not support the efforts of CAPs to gain artificial competitive advantage by imposing excessive regulatory requirements on LECs.

B. THE COMMISSION SHOULD ADOPT ADAPTIVE TRANSITION MECHANISMS NOW

Many of the commenters argue that the LECs' proposed reforms are premised -- or should be premised -- on full competition in access and local exchange services. That argument is wrong: ***the need for regulatory reform is based not only on the state of the market,¹ but on the rate of change in the market.*** LEC competitors would have the Commission maintain the regulatory controls of the past well into the future, even though LECs currently face a significant amount of competition for some services in some areas and the degree of competition is expected to grow at a rapid rate. While the current price cap policy of the Commission represents an improvement over traditional rate of return regulation, it retains much of the static character of traditional regulation. The prescription of depreciation, adherence to rate of return controls through earnings sharing, prohibitions on pricing flexibility and obstacles to new service introductions all serve to limit the adaptiveness of price caps to changing conditions.

When changes are occurring rapidly and at an accelerating rate, policies need to aim at a moving target. The Commission should be asking three fundamental questions: (1) what will the market look like a few years ahead? (2) what do we want the market to look like a few years ahead? and (3) what can and should the Commission do to promote the realization of that vision? The price cap reforms adopted now should be based on the answers to those questions, not "what did the market look like in the last year for which data are available?" Of course, regulators cannot know the future, but they can reasonably predict the direction and rate of change, because on those counts, there is great certainty: the direction of change is toward more competition; and the rate of change is fast.

For those reasons, the costs of regulatory lags and delays are increasing. The allocative inefficiency effects of lagging policies increase as entry continues to occur, and competition continues to increase. When LECs are required to charge prices that are at odds with the cost of and demand for services, competitors have benefited from and will continue to exploit their vulnerability by targeting the effected customers. Pricing inflexibility also causes technical inefficiency because distorted price signals cause customers to buy from higher cost providers. Moreover, pricing inflexibility causes dynamic inefficiencies by inducing uneconomic entry and investment, when a LEC could serve customers at a lower cost. Delays and obstacles to new service introductions also cause dynamic inefficiencies, by slowing the revenue streams from new

¹ Actually, the opponents of change do not even base their arguments on the current state of the market, but on the historical state of the market. They continually cite two, three or more year-old data to support their claims, knowing full well how misleading those data are given the accelerating changes that are occurring.

services, which lowers the present value of, and thereby investments in, new network technologies.

Commenters argue that, because the Commission cannot know exactly how the future will unfold, it should "wait and see," then act. One cannot imagine these same companies following that principle in developing and implementing their own corporate policies, for it is a premise sure to fail. Managers regularly plan and act toward the future; managers who merely react to events after they unfold take their companies down with them.

In any case, the idea that policy commitments made now must necessarily be predicated on knowledge of the future is wrong. Good policies -- whether corporate or public -- utterly depend on their ability to adapt to the future as events and conditions unfold. This is a simple architectural principle, applied to office buildings (movable walls, open access wiring conduits); personal computers ("plug and play" peripherals; central processing unit and software upgradeability); and telecommunications networks (modularity of switches; software upgrades to switches). In each of these cases, ***adaptive designs are replacing the "hard-wired" versions of days past precisely because the rate of change has increased so markedly.*** When one cannot reasonably predict future office space needs and employee work functions, one designs buildings that can adapt to changing conditions. ***This architectural principle applies with no less force to designing price caps and access competition policies.***

Consider three of the major adaptive provisions of the USTA proposal:

- ending depreciation prescription and earnings sharing causes profitability to vary with a LEC's efficiency and market effectiveness (versus a static rate of return based on regulated depreciation rates and regulatory determination of cost of capital);
- removing delays and obstacles to new services enables LECs to better and more quickly respond to fast-changing market demands and customer needs (versus a regulatory determination of which new services should be approved);
- increasing the degree of LEC pricing flexibility by changing the classification of geographic areas or access services as competitive conditions warrant provides customers with more competitive alternatives (versus postponing the regulatory transition to competition to some uncertain date in the future).

By design, self-adapting policy mechanisms cannot "get ahead of the market"; the transition mechanism is designed to be implemented only when actual market conditions change. USTA's proposed market classification system does not change anything until a LEC can demonstrate that competitive conditions justify a reclassification under the system. Whether that happens now (because LECs already face competition for some services in some geographic areas) or later (as competition expands to other services and geographic areas), the classification mechanism automatically adapts to the situation. The Commission need not know exactly when the reclassification will occur in order to design and implement a system of reclassification now.

There are substantial benefits to acting in anticipation that competition will develop even further than it already has. ***By adopting a policy framework that will facilitate and accommodate changing technological, competitive and market conditions, the Commission will be sending valuable signals to investors, competitors and customers.*** In areas where LECs already face competition, LECs can request to change their classification immediately and be

able to respond to competition. In addition, by establishing these self-adaptive mechanisms now, the Commission will reduce the degree of uncertainty and risk concerning the effects of increased future competition, giving competitors, potential entrants and customers the information they need to make long-term business decisions, such as long-lived capital investments and long-term supply contracts. Adoption of transition mechanisms can also help "fulfill the future." By adopting effective transition mechanisms now, the Commission would provide assurance that, as competition develops, LECs will be allowed increasing flexibility to respond and compete fairly.

C. THE "EFFECTIVE COMPETITION" STANDARD IN CABLE REGULATION IS A TRANSITION MECHANISM

In its cable rate regulation decisions, the Commission has adopted exactly the kind of transition mechanism that is needed in access services. The Cable Act of 1992 provides that, where a cable operator does not face effective competition, cable rates are to be regulated to protect the interests of subscribers. The premise of that Act, and the presumption of the Commission, is that, generally speaking, cable operators do not face effective competition, at least not for the "basic service tier" or the "cable programming service tier."

In its orders implementing the Cable Act, the Commission has developed a highly adaptive transition mechanism that anticipates, and provides for "automatic" change in regulatory policy as effective competition develops. The Commission decided to "presume that the cable operator is not subject to effective competition..." based on its finding that cable rates are significantly lower, on average, where effective competition exists than when it does not. The cable operator will then be required to rebut this presumption with evidence of effective competition. If and when a cable operator can demonstrate that it faces effective competition, it will be relieved of rate regulation.²

There are several aspects of the Commission's approach to cable regulation that are directly applicable to LEC price cap reforms. First, USTA proposes a similar, but much more modest transition mechanism to adapt regulation to competition as it develops. In the cable order, there is a simple dichotomy: if no effective competition, then rate regulation; if effective competition, then no regulation. USTA proposed three levels of classifying markets: Initial, Transition and Competitive. As a LEC can demonstrate that it faces sufficient competition to justify moving a market or service into a more competitive category, it would gain more flexibility commensurate with that level of competition.³ Indeed, it is even more important that the LEC price cap plan provide for a regulatory transition to competition because competition in access services has already developed far further, and is developing far faster, than cable competition. Cable revenues are widely distributed across their potential customer base. Therefore, to compete effectively with a cable operator in a given franchise area, the new entrant has to make service available to most, if not all of the potential customers in that area. Access revenues, in contrast, are very highly concentrated, so an entrant can target a very large share of

² Report and Order and Further Notice of Proposed Rulemaking, MM Docket 92-266, May 3, 1994, par. 8, page 5669.

³ USTA has not proposed complete deregulation of services under the transition mechanism; it is thus considerably more conservative than the cable approach, which provides for complete deregulation.

the potential revenues by serving only a very small percentage of the customers. The more highly revenues are concentrated in a market, the more vulnerable an incumbent is to entry.

Second, in assessing modes of competition to cable operators, the Commission takes an appropriately broad view. It considers not only cable "overbuilds," but also many other forms of "multi-channel video program distribution" as competitive to cable operators. The Commission specifically identifies video dialtone by local exchange carriers,⁴ and satellite master antenna television service (SMATV) as offering effective competition to cable operators, if and when they become available to subscribers in a given franchise area. The Commission should, in designing an adaptive price cap plan for LECs, define competition broadly, to include any mode or means of serving customers' needs for access, whether functionally equivalent or not.

Third, the Commission correctly defines the geographic focus of effective competition as local. As argued by the National Cable Television Association, "regulation on a system-wide basis might have the effect of merging for regulatory purposes competitive and non-competitive franchise areas."⁵ Thus, the Commission decided that "the effective competition determination will be made on a franchise-area basis," because for cable operators, the franchise area is the smallest geographic area for measuring costs or setting prices.⁶ That finding is directly analogous to the USTA proposal for assessing access competition at the wire center or larger local geographic area. LECs face even more "localized" competition than cable operators do, because entrants target the most highly concentrated revenues and profits.

Fourth, the Commission's definition of "comparable programming" in assessing effective competition imposes a minimal requirement of just "twelve channels of programming, including at least one channel of non-broadcast service programming."⁷ Given that most cable operators offer far more than twelve channels, often including many "premium" video services, it is instructive that the Commission did not require "equality" in number of channels for there to be effective competition. The Commission should likewise reject the argument of LEC competitors that there must be full competition in all local exchange and access services before there can be competition in any of these services.

Fifth, the Commission acknowledged that cable operators are disadvantaged in demonstrating effective competition because they "do not have access to information necessary to mount a meaningful challenge to the presumption of no competition." Hence, the Commission "will require competitors to respond within 15 days to requests from the cable

⁴ Interestingly, the Commission finds that telephone companies "could establish significant competition to existing cable operators even though [they]... are generally prohibited under the Commission's cross-ownership rules from packaging and offering video programming directly to households." *Ibid.*, par. 20, pp. 5649-50.

⁵ *Ibid.*, par. 49, pp. 5673-74.

⁶ It should be noted, in this regard, that the size of a typical cable franchise area is much smaller than the franchise areas served by large LECs. That is why the wire center or other local market area is the appropriate focus for assessing competition in access services.

⁷ *Ibid.*, par. 38, pp. 5666-67.

operator for relevant information regarding reach and penetration if such information is not otherwise available."⁸ The same problem exists, and a similar solution is appropriate, for a LEC to demonstrate that a local access market or service should be reclassified as more competitive. Currently, the LECs have far more extensive reporting requirements than their competitors, which greatly inhibits their ability to demonstrate the degree of competition they actually face (and enables competitors to continue to argue that there is little competition). To increase the adaptive capacity of its price cap reforms, the Commission should incorporate adequate reporting or access to relevant information on competition.

D. THE FAILURE OF THE US RAILROAD INDUSTRY WAS DUE TO NON-ADAPTIVE REGULATION

In the late 1970's and early 1980's, I was substantially involved in the transformation of transportation regulatory policies in the United States. My research on surface freight transportation was influential in the rationalization of the U.S. railroad industry and the adoption of progressive regulatory policies by the U.S. Congress and the Interstate Commerce Commission.⁹ I served as an advisor to the U.S. Department of Transportation and the General Accounting Office on transportation legislation. From 1980-81, I was a Deputy Director at the Interstate Commerce Commission, where I played a leadership role in implementing the railroad and motor carrier regulatory reform acts passed by Congress in 1980. There are significant parallels between the policy changes in transportation then and the recent and pending policy changes in telecommunications now. In both cases, after several decades of stable regulatory policies that relied heavily on administrative controls, the nation opted to pursue a different course: the development and implementation of regulatory policies that promote competition and speed the transition from a heavily regulated environment to a less regulated competitive environment.

⁸ Ibid., par. 44, pp. 5670.

⁹ See, for example, the following articles and papers by Robert G. Harris, all of which addressed the benefits of rationalizing the rail freight industry and public policies toward the industry:

"Revitalization of the U.S. Freight Industry: An Organizational Perspective," *INTERNATIONAL RAILWAY ECONOMICS*, edited by K. Button & D. Pitfield; Croom Helm, London: 1985 (with Curtis M. Grimm).

"Structural Economics of the U.S. Rail Freight Industry: Concepts, Evidence and Merger Policy Implications," *TRANSPORTATION RESEARCH*, 17A(4), July 1983 (with Curtis M. Grimm).

"Potential Benefits of Rail Mergers: An Econometric Analysis of Network Effects on Service Quality," *REVIEW OF ECONOMICS AND STATISTICS*, 65(1), February 1983 (with Clifford Winston).

Rationalizing the Rail Freight System: Costs and Benefits of Branch Line Abandonments. U.S. Department of Transportation, Washington, D.C.: 1981.

"Determinants of Railroad Profitability: An Econometric Study," Economic Regulation: Essays in Honor of James R. Nelson, William G. Shepherd and Kenneth D. Boyer (eds.); Michigan State University Press, 1981 (with Theodore E. Keeler).

"Rationalizing the Physical Structure of the U.S. Rail Freight Industry," National Railroad Policy, Joint Economic Committee, U.S. Congress. Washington, D.C.: Government Printing Office, 1979.

The record of the success of surface freight transportation under reformed regulatory policies came, unfortunately, much too late. Indeed it was the drastic failures of non-adaptive regulatory policies which generated the force for finally changing policies in the late 1970's and early 1980's.¹⁰ By the 1970's, the US railroad industry was in financial and physical ruin. Approximately half of the rail mileage was owned by carriers in bankruptcy. In addition to billions of dollars in Federal subsidies to protect essential rail services and bail out bankrupt carriers, there was an enormous negative effect on workers, communities and investors, due to the long-term decline of rail service. The impact on the regional economies of the Northeast and the Midwest was especially devastating.

While many observers cited the "natural decline" of railroads as a competitively viability industry, unable to compete with motor carriers, water carriers and pipelines, the current health of the rail freight industry belies that explanation. The decline was caused by obsolete regulatory policies, thanks in no small part to the major competitor of railroads, the trucking industry. In one proceeding after another, motor carriers argued strenuously that railroads should be prevented from responding to truck competitors, because that would harm competitors. Truckers argued that rail carriers should price at or above "fully distributed costs," even though railroad's incremental costs on traffic they were losing to trucks was far lower.¹¹

The Interstate Commerce Commission was, frankly, blinded by an anachronistic view of the railroads as "monopolies," eager and able to destroy their highway competitors unless regulators stood vigilant by preventing rail carriers from pricing their services economically and by inhibiting the development of new rail services. In reality, the trucking companies rapidly stole the most profitable, high valued traffic, leaving the railroads to serve unprofitable customers and low density rural areas. Regulators failed to allow railroads pricing flexibility in response to growing competition from motor carriers, yet forced railroads to continue subsidies to agricultural shippers and rural areas with no source of subsidies.¹²

¹⁰ The watershed year in the reform process was 1980, with the passage of the Staggers Act, which liberalized railroad regulation, and the Motor Carrier Act. The impetus for change came from President Jimmy Carter, who appointed Dr. Darius Gaskins, a professor of economics at the University of California, Berkeley, as Chair of the Interstate Commerce Commission. Even as Congress deliberated over the reform legislation, Chairman Gaskins immediately moved to modify Commission policies within the limits of the then existing statutes.

¹¹ Keeler, T.D., Railroads, Freight, and Public Policy Brookings, Washington, D.C., 1983, pp. 28-29 discusses this policy. Evidence that rail costs are substantially lower than truck costs for many commodities is provided by Keeler (same cite) p. 76. Moreover, using short-run variable costs will provide even lower estimates of rail costs. The formula designed by the Interstate Commerce Commission produces cost variability in the 50 to 60 percent range

¹² Since the Smith Act of 1926, the Commission enforced low rail rates for agricultural commodities, subsidized - in theory - by high rates on high value commodities. Commission policy also made it extremely difficult, and, hence, extremely rare, for a rail carrier to abandon low density branch lines, no matter how much money it was losing on the service. In other words, the Commission continued to enforce a "universal service obligation" on rail carriers, even though competition eroded, then eliminated, the means of meeting that obligation. See Robert G. Harris, "Economic Analysis of Light Density Rail Lines." *THE LOGISTICS AND TRANSPORTATION REVIEW*, 16(1), Winter 1980.

After a decade or more of physical decline and financial strife, Congress and the Interstate Commerce Commission finally responded to the changed economic conditions and competitive realities. Those regulatory reforms have revitalized the rail industry, brought down rail rates in real terms, restored the industry's financial health, induced substantial investment in network upgrades, stimulated rapid technological innovation and deployment, and shifted large volumes of truck traffic off the highways and on to far more efficient intermodal trains.¹³ Shipper surveys reveal that most customers are delighted with their newfound freedom to bargain, negotiate and contract for services, and with the significant and continuing improvements in rail service quality.¹⁴

The parallels between the regulation of railroads and local exchange carriers provide some important lessons for telecommunications policies and price cap reforms. First, the myth of monopoly pervaded the rail industry long after the demise of its monopoly power, just as it apparently is in the case of local exchange carriers. Second, the competitors of railroads played a major role in sustaining regulatory policies long after they had become counter-productive because those policies were a crucial source of competitive advantage for motor carriers, just as LEC competitors now seek to retain policies that inhibit LECs from meeting them fairly in the marketplace. Third, the structure of rail rates, incorporating rate averaging, fully distributed costs and cross-subsidies, was not sustainable in a competitive environment, just as the current structure of telephone prices are not. Fourth, while regulators based their policies on intramodal competition, the most powerful market forces were intermodal competition, just as it is likely to be in telecommunications, as LECs, IXC's, cable operators, cellular carriers, satellite systems and other modes of communications compete to meet customers needs.

¹³ See Clifford Winston, Thomas M. Corsi, Curtis M. Grimm, and Carol A. Evans, The Economic Effects of Surface Freight Deregulation Brookings, Washington, D.C., 1990. These authors have conducted the most comprehensive study of the effects of both rail and truck deregulation, employing a counterfactual methodology. According to this source, the railroads reaped annual profit gains of \$2.9 billion dollars per year (1988 dollars) from deregulation, with cost savings of over \$3 billion dollars due to deregulation (pp. 15-41).

From 1971-1980, railroad return on equity averaged less than 3%. By 1979, almost one-fourth of Class I rail mileage was in bankruptcy. Since Staggers, not one major railroad has gone bankrupt and the financial condition of the industry has improved dramatically. See Mitchell E. MacDonald, "Rails Climb Back into the Ring," *TRAFFIC MANAGEMENT*, December 1993, pp. 40-41.

In addition, according to the Interstate Commerce Commission, ROE for Class I railroads in 1993 was 9.38%. See "Class I Railroad Financial Data," ICC, Office of Economic and Environmental Analysis, May 1994.

¹⁴ See Curtis M. Grimm and Ken G. Smith "The Impact of Rail Regulatory Reform on Rates, Service Quality, and Management Performance: A Shipper Perspective," *LOGISTICS AND TRANSPORTATION REVIEW* vol. 22, No. 1, 1986, pp. 57-68. Shippers rated rail rates and service quality in terms of speed of service, reliability, loss and damage and car supply significantly higher in the Post-Staggers period as compared to Pre-Staggers. Also, according to the Winston, et al study cited above, p. 28, shippers have received economic benefits from rail deregulation of more than \$6 billion dollars annually (1988 dollars), driven by improvement in service quality.

The final lesson from the rail experience is the importance of modifying policies before it is too late and thus, too costly. Market forces will, sooner or later, simply overpower obsolete policies. In a market economy, investors, customers, managers and employees will "vote with their dollars" against policies that distort market outcomes. As the rail case shows, however, the difference between changing policies sooner rather than later is enormous. To be sure, local exchange carriers are, for the foreseeable future, financially healthy and able to fund investments in upgrading their networks. The cautionary lesson of the rail experience is that we cannot merely assume that this will continue to be true. Nor is there any need to wait: the Commission can and should act now by adopting effective transition mechanisms that smooth the way for full and open competition.

E. ADAPTIVE PRICE CAP REFORMS WILL PROMOTE THE NATIONAL INFORMATION INFRASTRUCTURE

In surface freight transportation, the harmful effects of non-adaptive regulation were enormous, but largely domestic. In the 1990's, "domestic" telecommunications will have enormous impact on the competitiveness of US industries as well. ***By adopting policies that stimulate healthy competition and private investment, the Commission can help the nation achieve both the upstream and downstream benefits,*** as explained by Dr. Laura Tyson, Chair of the President's Council of Economic Advisors:

"Many of the industries that are the strongest candidates for strategic status are high-technology industries that generate significant knowledge and technological spillovers for the entire economy. These spillovers mean that the total economic benefits of the industries in question exceed the private benefits. In the absence of government promotional policies, there is no reason to assume that private decision makers, motivated by market signals and private concerns, will invest enough or move quickly enough to capture the social benefits that result from these spillovers."¹⁵

In the context of a global economy, Dr. Tyson articulates the rationale for government policies to stimulate investment in strategic, high technology industries (including, specifically, telecommunications):¹⁶

"As theory suggests and empirical evidence confirms, success in high technology industries bestows national benefits on productivity, technology development, and high wage job creation. As a consequence, such industries are major building blocks of national competitiveness."¹⁷

My own work agrees with Dr. Tyson's policy rationale for strategic industries and the identification of telecommunications as a strategic industry, while cautioning against a misinterpretation of the policy implications:

¹⁵ Tyson, Laura, "Business, Economics, and the Oval Office - Advice to the New President and Other CEOs," *HARVARD BUSINESS REVIEW*, 1988, v.66, n.6, p.106.

¹⁶ Tyson, Laura, Who's Bashing Whom? Trade Conflict in High Technology Industries, Institute for International Economics, Washington, D.C., November 1992, p. 21.

¹⁷ *Ibid.*, p.2.